

Anlage 38	Kurz-Vitae der beteiligten Lehrenden: Bachelor-Studiengang Biologie	Seite 939
Anlage 39	Kurz-Vitae der beteiligten Lehrenden: Bachelor-Studiengang Psychologie	Seite 1007
Anlage 40	Kurz-Vitae der beteiligten Lehrenden: Master-Studiengang International Nature Conservation	Seite 1023
Anlage 41	Kurz-Vitae der beteiligten Lehrenden: Master-/Promotionsstudiengang Molekulare Biologie	Seite 1049
Anlage 42	Kurz-Vitae der beteiligten Lehrenden: Master-/Promotionsstudiengang Neurowissenschaften	Seite 1183
Anlage 43	Kurz-Vitae der beteiligten Lehrenden: Promotionsstudiengang Behaviour and Cognition	Seite 1281
Anlage 44	Kurz-Vitae der beteiligten Lehrenden: Master-/Promotionsstudiengang Molecular Medicine	Seite 1315
Anlage 45	Absolventinnen und Absolventen im Promotionsstudiengang „Molecular Medicine“	Seite 1381
Anlage 46	Akkreditierungsbescheide der vorangegangenen Akkreditierungsverfahren	Seite 1393

Anlage 38:

Lebensläufe der Lehrenden in den Bachelorstudiengängen der Biologie

Modulübersicht: (Dozent/Modul)

(eingerückt: sind nicht direkt im BSc beteiligt)

Bartels	Humangenetik B.Bio.124, B.Bio.160
Bögeholz	Didaktik der Biologie B.Bio.200
Braus	Genetik B.Bio.129, B.Bio.161
Brosenne	Informatik B.Inf.102 und 103
Bucher	Entwicklungsbiologie
Clever	Anorg. Chemie, Org. Chemie, Chemie für 2F-BA B.Che.7401, B.Che.7403, B.Che.8403
Damm	Informatik B.Inf.101
Daniel	Ring II B.Bio.102, Mikrobiologie B.Bio.118 und 155
Diederichsen	Org. Chemie B.Che.8403
Feußner	Biochemie B.Bio.111, B.Bio.151
Fiala	Neurobiologie B.Bio.119-2, B.Bio.123, B.Bio.156
Ficner	Biochemie B.Bio.111, B.Bio.151
Fischer, C	Zoologie B.Bio.104
Fischer, J.	B.Bio.190-1, Anthropologie B.Bio.150
Friedl	Ring I B.Bio.106, Botanik, SK.Bio.310 und 330
Gatz	Ring II B.Bio.102, Zell- und Molbio. Pflanze B.Bio.125, B.Bio.159
Göpfert	Ring I B.Bio.105, Neurobiologie B.Bio.123 und 156
Großkopf	Anthropologie B.Bio.111, 150, SK.Bio.320 und 321 und 322
Heineke	Ring II B.Bio.102
Heinrich	Neurobiologie
Hertel	Pflanzenökologie B.Bio.126, B.Bio.163
Heymann	Anthropologie B.Bio.111 und 150
Hoppert	Mikrobiologie B.Bio.118, B.Bio.155
Hörandl	Botanik B.Bio.127 und 157, B.Bio.210
Hornung	Biochemie B.Bio.111, B.Bio.151
Höxtermann	Wissenschaftsgeschichte SK.Bio.335
Hoyer-Fender	Ring II B.Bio.102, Entwicklungsbiologie

Hummel	Ring I B.Bio.106, Anthropologie B.Bio.111 und 150
Janhoff	Phys. Chemie B.Che.8001
Kappeler	Ring I B.Bio.106, Anthropologie B.Bio.111 und 150
Klatt	Botanik B.Bio.103, B.Bio.127, B.210, B.Bio.157
Kramer	Genetik B.Bio.129, B.Bio.161
Krebber	Genetik B.Bio.129 und 161
Kriete	Zell Molbio Pflanze B.Bio.125, B.Bio.159
Leuschner, C.	Pflanzenökologie B.Bio.126, B.Bio.163
Lipka	Ring I B.Bio.106, Zell und Molbio Pflanze B.Bio.159
Majer	Philosophie SK.Bio.316
Maraun	Tierökologie B.Bio.126, B.Bio.162
Meinicke	Bioinformatik B.Bio.114, B.Bio.115
Miral	Scientific English
Morgenstern	Bioinformatik, Statistik B.Bio.302, B.Bio.114, B.Bio.115, SK-Bio.305 und 306
Pöggeler	Ring II B.Bio.102, Genetik B.Bio.129, B.Bio.161
Rowlett	Mathematik B.Bio.302
Scheu	Ring I B.Bio.106, Tierökologie B.Bio.126, B.Bio.162
Spaak	SK.Bio.340 und 341
Stalke	Anorg. Chemie B.Che.7401
Holmer	Philosophie SK.Bio.315 (Bioethik)
Stülke	Mikrobiologie B.Bio.118, B.Bio.155
Stumpner	Neurobiologie B.Bio.123 und 156
Tech	Bioinformatik B.Bio.114
Thorow	Zell Molbio Pflanze B.Bio.125, B.Bio.159
Tilgner	Physik B.Phy.715
Treue	Neurobiologie B.Bio.119, B.Bio.156
Tröster	Zoologie B.Bio.128
Valerius	Genetik B.Bio.129
Weingarten	Physik B.Phy.715
Willmann	Ring I B.Bio.105, Zoologie B.Bio.128, B.Bio.158
Wimmer	Entwicklungsbiologie B.Bio.116 und 153
Wörgötter	Biophysik B.Bio.119

Lebensläufe der Dozenten

Name:	Bartels, Iris
Titel:	apl. Prof. Dr. rer. nat.
Lehrgebiet:	Humangenetik
Beruflicher/akademischer Werdegang:	
1972-1979	Georg-August-Universität, Göttingen, 1979 Diplom in Biologie, Hauptfach Mikrobiologie; 1982: Staatsexamen Lehramt an Gymnasien, Biologie/Chemie
1979-1982	Dissertation mit dem Thema: "Kritische Reaktionen des 3-Chlorbenzoat-Abbaus in Benzoat und Chlorbenzoat verwertenden Bakterienpopulationen"
1982-1984	DFG-Stipendiatin am Institut für Humangenetik, Göttingen zur Ausbildung in der klinischen und experimentellen Humangenetik
1984-1986	Wissenschaftliche Mitarbeiterin
1986	Produktmanagerin für klinisch-chemische Forschungsreagenzien bei der Fa. Boehringer, Mannheim
seit 1987	Hochschulassistentin/ wiss. Mitarbeiterin Humangenetik
seit 1990	Fachhumangenetikerin (GfH)
2000	Habilitation für Humangenetik an der Medizinischen Fakultät
derzeit	Leiterin der zytogenetischen und molekular-zytogenetischen Diagnostik

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Bartels I, Starke H, Argyriou L, Sauter SM, Zoll B, Liehr T (2007) An exceptional complex chromosomal rearrangement (CCR) with eight breakpoints involving four chromosomes (1;3;9;14) in an azoospermic male with normal phenotype. Eur. J. Med. Genet. 50:133-138

Auber B, Bruemmer V, Zoll B, Burfeind P, Boehm D, Liehr T, Brockmann K, Wilichowski E, Argyriou L, Bartels I. (2009) Mol Cytogenet 10. [Identification of subtelomeric genomic imbalances and breakpoint mapping with quantitative PCR in 296 individuals with congenital defects and/or mental retardation.](#)

Shoukier M, Klein N, Auber B, Wickert J, Schröder J, Zoll B, Burfeind P, Bartels I, Alsat E, Lingen M, Grzmil P, Schulze S, Keyser J, Weise D, Borchers M, Hobbiebrunken E, Röbl M, Gärtner J, Brockmann K, Zirn B. Clin Genet. 2012 [Array CGH in patients with developmental delay or intellectual disability: are there phenotypic clues to pathogenic copy number variants?](#)

Pauli S, Schmidt T, Funke R, Zoll B, Burfeind P, Dybowski U, Shoukier M, Bartels I. Eur J Med Genet. 2012 480-4. [Discordant phenotype in monozygotic twins with mosaic trisomy 12p in lymphocytes.](#)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Humangenetik (GfH), Berufsverband Deutscher Humangenetiker (BVDH)

Name: Susanne Bögeholz
Titel: Prof. Dr.
Lehrgebiet: Didaktik der Biologie
Beruflicher/akademischer Werdegang:
1985-1992 Universität des Sciences Humaines de Strasbourg, Rheinische Friedrich-Wilhelms-Universität Bonn; Studium Biologie, Pädagogik, Französisch
1992-1994 Referendariat am Studienseminar Köln I, Lehramt Sek. I/II; II. Staatsexamen für Unterrichtsfächer Biologie und Pädagogik
1995-1998 Promotionsstudium an der Christian-Albrechts-Universität, Kiel und DFG-Projektbearbeitung am IPN; Dr. nat. (Hauptfach: Didaktik der Biologie)
1998-2001 Postdoc am IPN an der Universität Kiel
2001 Universitätsprofessorin für „Didaktik der Biologie“ (C3; ab 2003 als C4)
2011 Erhard Friedrich Preis „Didaktik der Naturwissenschaften“ (verliehen durch die Gesellschaft für Fachdidaktik e.V [GFD])

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Gresch, H. & Bögeholz, S. (2012). Identifying Non-Sustainable Courses of Action: A Prerequisite for Decision-Making in Education for Sustainable Development. *Research in Science Education*

Holstermann, N., Ainley, M., Grube, D., Roick, T. & Bögeholz, S. (2012). The specific relationship between disgust and interest: Relevance during biology class dissections and gender differences. *Learning and Instruction*, 22(3), 185-192.

Gresch, H., Hasselhorn, M. & Bögeholz, S. (2011). Training in Decision-making Strategies: An approach to enhance students' competence to deal with socio-scientific issues. *International Journal of Science Education*

Eggert, S. & Bögeholz, S. (2010). Students' Use of Decision-Making Strategies With Regard to Socio-scientific Issues - An Application of the Rasch Partial Credit Model. *Science Education*, 94(2), 230-258.

Menzel, S. & Bögeholz, S. (2009). The loss of biodiversity as a challenge for Sustainable Development: How do pupils in Chile and Germany perceive resource dilemmas? *Research in Science Education*, 39(4), 429-447.

DFG-Graduiertenkolleg 1195 „Passungsverhältnisse schulischen Lernens“ (10/2005-03/2012; seit 03/2010 Bögeholz Sprecherin, vorher: Vorstand und stellv. Sprecherin)

DFG SPP 1293 „Kompetenzmodelle“: Projekt „Bewertungskompetenz“ in I., II. und III. Förderphase (2007-2013; Bögeholz, Eggert, Hasselhorn, Watermann).

DFG SPP 1409 „Wissenschaft und Öffentlichkeit“: Projekt „Concept-Mapping und Bewertungskompetenz“ in II. Phase (2011-2013; Eggert, Bögeholz, Nückles).

BMBF „Biologie im Kontext“ (2005-2008; Bayrhuber als Gesamtprojektleitung; Bögeholz als Leiterin des Göttinger Teilprojektes zur Bewertungskompetenz)

BMBF KOMEHS-052 „Kompetenzmodellierung und Erfassung im Hochschulsektor“: Projektverbund ExMo (2012- 2015; Hammann, Bögeholz, Carstensen); Göttinger Teilprojekt zu Beurteilungskompetenzen zum Experimentieren (Bögeholz)

MWK Niedersachsen: Promotionsstudiengang „Biodiversität und Gesellschaft“ (2010-2014, Marggraf [Leitung]; Bögeholz [stellv. Leitung], Bizer; Boos, Geldermann, Härtel, Isselstein, Mußhoff, Steinfath, Stoll, Tscharncke)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

2002-2012 (kommis.) Vorstand des Zentrums für empirische Unterrichts- und Schulforschung ZeUS;
seit 2005 Beiratsmitglied für *Biodiversity Education* in DIVERSITAS Deutschland

Verantwortliche Tätigkeiten außerhalb der Lehre:

seit 2012 Mentorin im Programm „Wissenschaftlerinnen in Führung – Karrieremanagement mit Mentoring“ der Universitätsmedizin Göttingen [UMG] (Kooperationseinrichtungen: GGNB und CMPB)

Name: Braus, Gerhard
Titel: Prof. Dr. (C4)
Lehrgebiet: Mikrobiologie und Genetik
Beruflicher/akademischer Werdegang:
1983 Diplom (Biologie) ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG I.
BR.
1987 Promotion (Dr. sc.nat. ETH) ETH ZÜRICH
1991 Habilitation ETH ZÜRICH.
1992 Department of Genetics, UNIVERSITY OF GEORGIA, ATHENS GA
(USA)
1993-1996 Professor (C3) (Biochemie) FRIEDRICH-ALEXANDER-UNIVERSITÄT
ERLANGEN
1996 Professor (C4) GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Padmanabhan N, Fichtner L, Dickmanns A, Ficner R, Schulz JB, Braus GH (2009) The Yeast HtrA orthologue Ynm3 is a protease with chaperone activity that aids survival under heat stress. *Mol. Biol. Cell.* 20, 68-77

Bayram Ö, Krappmann S, Ni M, Bok JW, Helmstaedt K, Valerius O, Braus-Stromeyer S, Kwon NJ, Keller NP, Yu JH, Braus GH (2008) VeIB/VeA/LaeA complex coordinates light signal with fungal development and secondary metabolism. *Science* 320, 1504-1506

Bayram Ö, Biesemann C, Krappmann S, Galland P, Braus GH (2008) More than a repair enzyme: *Aspergillus nidulans* photolyse-like CryA is a regulator of sexual development. *Mol. Biol. Cell.* 19, 3254-3262

Valerius O, Kleinschmidt M, , Rachfall N, Schulze F, Marin SL, Hoppert M, Streckfuss-Bömeke K, Fischer C, Braus GH (2007) The *S. cerevisiae* homolog of mammalian RACK1, CPC2/ASC1, is required for FLO11 dependent adhesive growth and dimorphism. *Mol. Cell. Proteomics.* 6, 1986-1979

Busch S, Schwier EU, Nahlik K, Bayram Ö, Draht OW, Helmstaedt K, Krappmann S, Valerius O, Lipscomb WN, Braus GH (2007) An eight-subunit COP9 signalosome with an intact JAMM motif is required for fungal fruit body formation. *Proc. Natl. Acad. Sci. USA.* 104, 8125-8130

Bömeke K, Pries R, Korte V, Scholz E, Herzog B, Braus GH (2006) Yeast Gcn4p stabilization is initiated by the dissociation of the nuclear Pho85/Pcl5 complex. *Mol. Biol. Cell.* 17, 2952-2962.

Galagan JE, , ..., Braus GH, Draht O, Busch S, ..., Birren B [50 authors] (2005) Sequencing of *Aspergillus nidulans* and comparative analysis with *A. fumigatus* and *A. oryzae*. *Nature.* 438, 1105-1115.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

American Association for the Advancement of Science (AAAS). American Society for Biochemistry and Molecular Biology (ASBMB). Akademie der Wissenschaften in Göttingen. Deutsche Gesellschaft für Biochemie und Molekularbiologie (GBM), Deutsche Gesellschaft für Genetik. Deutsche Techniongesellschaft. Faculty of 1000 (Mikrobiologie). Fellow of the American Academy of Microbiology. Genetics Society of America (GSA). Schweizerische Gesellschaft für Mikrobiologie (SGM). Union schweizerischer Gesellschaften für experimentelle Biologie (USGEB). Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM).

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied des Fakultätsrates der Biologischen Fakultät (1998-2009). Sprecher des DFG-Graduierten-kollegs GRK 227 *Chemische Aktivitäten von Mikroorganismen* (1999-2003). Direktor des Institutes für Mikrobiologie & Genetik (2000-2004). Vorsitzender des Studienausschusses des Internat. Master/-PhD.-Studienganges *Molecular Biology* (2000-2004). Mitglied des Vorstandes des *X-Lab (seit 2000)*. Mitglied des Vorstandes des DFG-*Forschungszentrums CMPB (seit 2002)*. Mitglied des Vorstandes des GZMB (seit 2003). Europäischer Vertreter im AGRPC (*Aspergillus Genomics Research Policy Committee*) (seit 2003). Mitglied der Habilitationskommission (seit 2003). Dekan der Biologischen Fakultät und

Sprecher des Mathematisch-Naturwissenschaftlichen Dekanekonzils der Uni Göttingen(2004-2006). Vorsitzender der Habilitationskommission der Biologischen Fakultät (2004-2006). Mitglied des Göttingen Research Council (*GRC*) (seit 2005). Prodekan der Biolog. Fakultät (2006-2008). Finanzdekan der Biolog. Fakultät (seit 2006). Senator der Uni Göttingen (seit 2009).

Name: Brosenne, Henrik
Titel: Dr. rer. nat.
Lehrgebiet: Grundlagen der Informatik
Beruflicher/akademischer Werdegang:
2000 Diploma degree in mathematics, University of Goettingen
2000-2001 System analyst, Bundesversicherungsanstalt, Berlin
2001-2006 Research assistant, Institute for Numerical and Applied Mathematics, University of Goettingen
2006 Project manager, butterfly-effected, Hannover
2006 Dr. rer. nat., University of Goettingen
2006–2007 Postdoctoral researcher, Institute of Computer Science, University of Goettingen
since 2007 Lecture, Institute of Computer Science, University of Goettingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Security Verification of Trust-based Authentication Handover in IP Networks. Proceedings of the 20th IEEE International Conference on Computer Communications and Networks (ICCCN 2011). With S. Al-Shadly, O. Alfandi, D. Hogrefe.
Performance Evaluation of PANA Pre-Authentication and PANA Context Transfer. Proceedings of the Fourth international Conference on Wireless and Mobile Communications (ICWMC 2008). With O. Alfandi, P. Chamuczynski, D. Hogrefe, C. Werner.
Enabling Pervasiveness by Seamless Inter-domain Handover: Performance Study of PANA Pre-authentication. Proceedings of the Sixth Annual IEEE International Conference on Pervasive Computing and Communications 2008 (PerCom 2008). With O. Alfandi, P. Chamuczynski, D. Hogrefe, C. Werner.
Performance Study of PANA Pre-authentication for Interdomain Handover. Proceedings of the Fourth International Conference on Networking and Services (ICNS 2008). With O. Alfandi, P. Chamuczynski, D. Hogrefe, C. Werner.
Fast Re-Authentication for Inter-Domain Handover using Context Transfer. Proceedings of the International Conference on Information Networking 2008 (ICOIN 2008). With O. Alfandi, D. Hogrefe, C. Werner.
On approximation by \oplus -OBDDs. Information Processing Letters, 102:17-21, Elsevier, 2007.
Nondeterministic ordered binary decision diagrams with repeated tests and various modes of acceptance. Information Processing Letters, 98:6-10, Elsevier, 2006. With M. Homeister, St. Waack.

Name: Bucher, Gregor
Titel: apl. Professor
Lehrgebiet: Entwicklungsgenetik
Beruflicher/akademischer Werdegang:
1990-1997 Studies: Ludwig-Maximilian-Universität München/Germany and Concepción/Chile: studies in zoology, genetics, developmental biology, immunology und human physiology
Diploma thesis: "Characterization of a Gap Gene Mutant in Tribolium castaneum" Zoologisches Institut der Ludwig-Maximilian-Universität München
1998-2002 Ph.D: "The Evolution of Gap Gene Orthologues" Zoologisches Institut der Ludwig-Maximilian-Universität
2004-2006: Postdoc in the department of Prof. Ernst Wimmer, Georg August Universität, Göttingen, Germany
since 2006 Junior Group Leader of the GZMB (Göttingen Center for Molecular Biology)
2006-2012: Juniorprofessor of developmental genetics in the department of developmental biology, Johann Friedrich Blumenbach Institut, Georg August Universität, Göttingen, Germany
since 2012 apl. Prof. of developmental genetics in the department of developmental biology, Johann Friedrich Blumenbach Institut, Georg August Universität, Göttingen, Germany
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Gesellschaft für Entwicklungsbiologie (GfE), Deutsche Zoologische Gesellschaft (DZG)

Name: Clever, Guido H.
Titel: Jun.-Prof. Dr.
Lehrgebiet: Anorganische Chemie
Beruflicher/akademischer Werdegang:
1997-2003 Studium der Chemie, Ruprecht-Karls Universität Heidelberg (gefördert durch die Studienstiftung des Deutschen Volkes)
2003-2006 Promotion in Chemie (Prof. Dr. T. Carell), zunächst Philipps-Universität Marburg, dann LMU München (gefördert durch ein Kekulé Stipendium des Fonds der Chemischen Industrie)
2007-2009 PostDoc (Prof. Dr. M. Shionoya), The University of Tokyo (gefördert durch die Alexander von Humboldt Stiftung und die Japanese Society for the Promotion of Science, JSPS)
2009-2010 Assistant Professor, The University of Tokyo
seit 2010 Junior-Professor (W1) an der Georg-August Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

1) Metall-DNA Interaktionen: a) "Metal-base pairing in DNA" G. H. Clever, M. Shionoya, *Coord. Chem. Rev.* 2010, 254, 2391; b) "Anti-ferromagnetic Coupling of stacked Cu(II) Salen Complexes in DNA" G. H. Clever, S. J. Reitmeier, T. Carell, O. Schiemann, *Angew. Chem. Int. Ed.* 2010, 49, 4927; c) "Direct Conductance Measurement of Individual Metallo-DNA Duplexes within Single-Molecule Break Junctions" S. Liu, G. H. Clever, Y. Takezawa, M. Kaneko, K. Tanaka, X. Guo, M. Shionoya, *Angew. Chem. Int. Ed.* 2011, 50, 8886.
2) Bindung funktioneller Anionen in Koordinationskäfigen: a) "Switchable host-guest interactions of supramolecular rings and cages" G. H. Clever in "Molecules at Work", B. Pignataro (Ed.); Wiley-VCH, 2012, ISBN-13: 978-3-527-33093-5; b) "Magnus' Salt-type Stacked Platinum Complexes inside a Coordination Cage" G. H. Clever, W. Kawamura, S. Tashiro, M. Shiro, M. Shionoya, *Angew. Chem. Int. Ed.* 2012, 51, 2606; c) "Light-Triggered Crystallization of a Molecular Host-Guest Complex" G. H. Clever, S. Tashiro, M. Shionoya, *J. Am. Chem. Soc.* 2010, 132, 9973.
3) Interpenetrierte Koordinationskäfige und Molekulare Knoten: a) "Allosteric Binding of Halide Anions by a New Dimeric Interpenetrated Coordination Cage" S. Freye, J. Hey, A. Torras-Galán, D. Stalke, R. Herbst-Irmer, M. John, G. H. Clever, *Angew. Chem. Int. Ed.* 2012, 51, 2191; b) "A push-and-pull model for allosteric anion binding in cage complexes" J. M. Dieterich, G. H. Clever, R. A. Mata, *Phys. Chem. Chem. Phys.* 2012, DOI: 10.1039/c2cp41793f; c) "NMR-Based Structure Determination of an Intertwined Coordination Cage resembling a Double Trefoil Knot" D. M. Engelhard, S. Freye, K. Grohe, M. John, G. H. Clever, *Angew. Chem. Int. Ed.* 2012, 51, 4747.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

1999- Gesellschaft Deutscher Chemiker (GDCh)
2007- Deutsche Gesellschaft der JSPS Stipendiaten
2007-2010 Chemical Society of Japan

Name: Damm, Carsten
Titel: Apl. Prof. Dr. rer. nat.
Lehrgebiet: Informatik
Beruflicher/akademischer Werdegang
1981–1986 Studium Humboldt-Universität zu Berlin (HUB)
1987–1991 Promotion (HUB)
1991–1992 Postdoc/wissenschaftlicher Mitarbeiter TU München
1993–1999 Postdoc/wissenschaftlicher Mitarbeiter Univ. Trier
Seit 2000 Wissenschaftlicher Mitarbeiter Universität Göttingen
2000 (2001) Habilitation Informatik Uni Trier (Umhabilitation Uni Göttingen)
2005 Apl. Professur, Informatik, Uni Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

2006: Score-based prediction of genomic islands in prokaryotic genomes using hidden Markov Models: BMC Bioinformatics Vol 7 (with: St. Waack, O.Keller, R. Asper et al.)
2007: On Approximation by XOR-BDDs: Information processing letters Vol 102, pp. 17-21 (with: H.Brosenne, M.Homeister, St. Waack).
2008: An introductory course on communication complexity, In: "New developments in formal languages and Applications", Vol 113, pp. 95-124.
2010: On Applications of Information Theory in Molecular Phylogenetics (extended abstract of invited talk at "Theorietag Automaten und Formale Sprachen", TR 3-2010, FB Informatik, Uni Kassel).

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Seit 1990 (ca.) Gesellschaft für Informatik

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2009 Mitglied im Fakultätsrat
Seit 2011 Mitglied der Senatskommission für Informationsmanagement

Name: Daniel, Rolf
Titel: Prof. Dr.
Lehrgebiet: Mikrobiologie
Beruflicher/akademischer Werdegang:
1984-1991 Studium der Biologie an der Universität Göttingen (Abschluss: Diplom)
1994 Promotion in Göttingen im Hauptfach Mikrobiologie und in den Nebenfächern Biochemie und Organische Chemie
1994-1995 Postdoc am Institut für Mikrobiologie, Universität Göttingen
1995-1996 Postdoc an der University of California (Berkeley, USA)
1996-2008 Arbeitsgruppenleiter, Institut f. Mikrobiologie u. Genetik, Universität Göttingen
2003 Habilitation in Mikrobiologie, Universität Göttingen
2008-2012 Kommissarische Leitung der Abteilung Genomische und Angewandte Mikrobiologie und des Göttingen Genomics Laboratory, Universität Göttingen
seit 2012 Professur (W3) Genomische und Angewandte Mikrobiologie Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- 1) Metagenomik und Metatranskriptomik von Bodenhabitaten und extremen Habitaten (Gletscher, Vulkanregionen)
- 2) Analyse der funktionellen Diversität von mikrobiellen Lebensgemeinschaften aus Bodenstandorten, Gletschergebieten und calcifizierenden Biofilmen
- 3) Isolierung und Charakterisierung von neuartigen Biokatalysatoren
- 4) Funktionelle Genomanalyse von Prokaryoten

Waschkowitz T, Rockstroh S, Daniel R (2009) Isolation and characterization of metalloproteases with an unusual domain structure by construction and screening of metagenomic libraries. *Appl. Environ. Microbiol.* 75: 2506-2516.

Nacke H, Will C, Herzog S, Nowka B, Engelhaupt M, Daniel R (2011) Identification of novel lipolytic genes and gene families by screening of metagenomic libraries derived from soil samples of the German Biodiversity Exploratories. *FEMS Microbiol. Ecol.* 78: 188-201.

Brzuszkiewicz E, Thürmer A, Schuldes J, Leimbach A, Liesegang H, Meyer F-D, Boelter J, Petersen H, Gottschalk G, Daniel R (2011) Genome sequence analyses of two isolates from the recent *Escherichia coli* outbreak in Germany reveal the emergence of a new pathotype: Enterotoxigenic *Escherichia coli* (EAHEC). *Arch Microbiol.* 193: 883-891.

Simon C, Daniel R (2011) Metagenome analyses: past and future trends. *Appl. Environ. Microbiol.* 77: 1153-1161.

Nacke H, Thürmer A, Wollherr A, Will C, Hodac L, Herold N, Schöning I, Schrupf M, Daniel R (2011) Pyrosequencing-based assessment of bacterial community structure along different management types in German forest and grassland soils. *PLoS ONE* 6: e17000.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Vereinigung für Allgemeine und Angewandte Mikrobiologie American Society for Microbiology

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied Editorial Board von *Applied and Environmental Microbiology* und *Biotechnology Letters*, Review für Zeitschriften (*JBAC*, *AMB*, *JMMB*, *Nature Rev. Microbiol*, *Nature Rev. Genetics*) und Forschungsorganisationen (DFG, NRF), Leiter des Organisationskomitees der „Fourth and Fifth European Conference on Prokaryotic Genomics“ (ProkaGENOMICS 2009 und 2011), Wissenschaftlicher Beirat "Greifswald Center for Functional Genomics of Microbes"

Name: Diederichsen, Ulf
Titel: Prof. Dr.
Lehrgebiet: Organische Chemie
Beruflicher/akademischer Werdegang:
1983-1988 Studium und Diplom Chemie, Albert-Ludwigs-Universität Freiburg i.Br.
1988-1993 Dissertation, [Eidgenössische Technische Hochschule Zürich](#), Schweiz
1993-1994 Postdoktorat, [Universität Pittsburgh](#), Pittsburgh, USA
1994-1999 Habilitation, Technische Universität München
1998-1999 Vertretung einer C3-Professur für Organische Chemie, LMU München
1999-2001 C3-Professor für Organische Chemie, [Universität Würzburg](#)
2000 Goering Visiting Professor, [University of Wisconsin](#) in Madison, USA
seit April 2001 Ordentlicher Professor für Organische Chemie, Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

1) Modifikation von Biomolekülen (Peptide/Proteine/Nukleinsäuren/Lipide) durch organische Synthese ermöglicht neue Funktionen, spezifische Erkennung oder molekulare Architektur
2) Organisation von Peptid-Helices in Lipid-Doppelschichten (Bildung von Membran Kanälen)
3) Peptid/Protein-vermittelte Membranfusion
4) Topologie und dynamische Sequenz Modifikation von Biomolekülen für die Katalyse
5) Design von DNA-bindenden Molekülen, Biegen von DNA-Doppel-strängen
6) Stabilisierung und Funktionalisierung von sekundären Strukturen (DNA und Peptide)

van den Bogaart, G., Meyenberg, K., Risselada, J. H., Amin, H., Willig, K. I., Hubrich, B. E., Dier, M., Hell, S. W., Grubmüller, H., Diederichsen, U., Jahn, R. Membrane protein sequestering by ionic protein-lipid interactions. *Nature* 2011, 479, 552-555.

Nadler, A., Strohmeier, J., Diederichsen, U. 8-vinyl-2'-deoxyguanosine as a fluorescent 2'-deoxyguanosine mimic for investigating DNA hybridization and topology. *Angew. Chem. Int. Ed.* 2011, 50, 5392-5396.

Lygina, A. S., Meyenberg, K., Jahn, R., Diederichsen, U. Transmembrane domain peptide/peptide nucleic acid hybrid as a model of a SNARE protein in vesicle fusion. *Angew. Chem. Int. Ed.* 2011, 50, 8597-8601.

Stoller, S., Sicoli, G., Baranova, T. Y., Bennati, M., Diederichsen, U. TOPP – a novel nitroxide-labeled amino acid for EPR distance measurements. *Angew. Chem. Int. Ed.* 2011, 50, 9743-9746.

Schneggenburger, P. E., Worbs, B., Müller, S., Steinem, C., Diederichsen, U. Molecular recognition at the membrane-water interface: Controlling integral peptide helices via off-membrane nucleobase pairing. *J. Am. Chem. Soc.* 2010, 132, 8020-8028.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Mitgliedschaft: seit 1988 Gesellschaft Deutscher Chemiker, seit 1998 Max-Bergmann-Kreis zur Förderung der peptidchemischen Forschung (seit 2008 Vorstand), seit 2008 DFG Review Board 305 Biologische Chemie und Lebensmittelchemie, seit 2011 Mitglied des DFG Exzellenzcluster Mikroskopie im Nanometerbereich, seit 2011 Mitglied des Vorstands der Hellmut-Bredereck-Stiftung, seit 2011 Editorial Advisory Board Mitglied ChemistryOpen, seit 2012 Mitglied der Göttinger Akademie der Wissenschaften, seit 2012 Deputy Editor in Chief for the *Journal of Peptide Science*
Auszeichnungen: 1993-1994 Postdoktoratsstipendium der DFG, 1994-1996 Liebig-Stipendium des Fonds der Chemischen Industrie, 1997 Preis der Dr. Otto Röhm Gedächtnisstiftung, 1999 Preis der Hellmut-Bredereck-Stiftung, 1999 – 2000 Stipendium der Karl Winnacker-Stiftung.

Verantwortliche Tätigkeiten außerhalb der Lehre:

2005-2007 Dekan der Fakultät für Chemie, seit 2008 Direktor des Instituts für Organische und Biomolekulare Chemie, seit 2002 Mitglied des Beirates der KFC (Konferenz der Fachbereiche Chemie) 2004 und seit 2010 Stellvertretender Sprecher der KFC und Beirat

der ADUC, 2006-2010 Sprecher der KFC, 2004 – 2010 Mitglied des Beirates im MNFT (Mathematisch-Naturwissenschaftlichen Fakultäten der Hochschulen in der Bundesrepublik Deutschland).

Name: Feußner, Ivo
Titel: Prof. Dr. rer. nat.
Lehrgebiet: Biochemie
Beruflicher/akademischer Werdegang:
1983–1990 Studium der Chemie
1990–1993 Promotion an der Philipps-Universität Marburg im Fach Biochemie
1993–1994 Wissenschaftlicher Mitarbeiter, Fb Pharmazie, Martin-Luther-Universität Halle-Wittenberg
1995–1996 Wissenschaftlicher Mitarbeiter, Institut für Pflanzenbiochemie, Halle/Saale
1997–1999 Arbeitsgruppenleiter, Institut für Pflanzenbiochemie, Halle/Saale
2000–2002 Arbeitsgruppenleiter, Institut für Pflanzengenetik und Kulturpflanzenforschung, Gatersleben
2000 Habilitation an der Martin-Luther-Universität Halle-Wittenberg
Seit 2002 C4-Professor für Pflanzenbiochemie, Georg-August-Universität, Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Heilmann M, Iven T, Ahmann K, Hornung E, Stymne S, Feussner I (2012) Production of wax esters in plant seed oils by oleosomal co-targeting of biosynthetic enzymes. *J Lipid Res*, doi: 10.1194/jlr.M029512.

Ternes P, Feussner K, Werner S, Lerche J, Iven T, Heilmann I, Riezman H, Feussner I (2011) Disruption of the ceramide synthase LOH1 causes spontaneous cell death in *Arabidopsis thaliana*. *New Phytol* 192: 841-854.

Andreou A, Göbel C, Hamberg M, Feussner I (2010) A bisallylic mini-lipoxygenase from cyanobacterium *Cyanothece* sp. that has an iron as cofactor. *J Biol Chem* 285: 14178-14186.

Stumpe M, Göbel C, Faltin B, Beike AK, Hause B, Himmelsbach K, Bode J, Kramell R, Wasternack C, Frank W, Reski R, Feussner I (2010) The moss *Physcomitrella patens* contains cyclopentenones but no jasmonates: mutations in allene oxide cyclase lead to reduced fertility and altered sporophyte morphology. *New Phytol* 188: 740-749.

Volkov A, Liavonchanka A, Kamneva O, Fiedler T, Göbel C, Kreikemeyer B, Feussner I (2010) Myosin cross-reactive antigen of *Streptococcus pyogenes* M49 encodes a fatty acid double bond hydratase that plays a role in oleic acid detoxification and bacterial virulence. *J Biol Chem* 285: 10353-10361.

Kim C, Lee KP, Baruah A, Nater M, Göbel C, Feussner I, Apel K (2009) O₂-mediated retrograde signaling during late embryogenesis predetermines plastid differentiation in seedlings by recruiting abscisic acid. *Proc Natl Acad Sci USA* 106: 9920-9924.

Mitgliedschaften in wissenschaftlichen Vereinigungen

American Society of Plant Biology (ASPB), American Oil Chemist Society (AOCS), Deutsche Botanische Gesellschaft (DBG), Deutsche Gesellschaft für Fettwissenschaften (DGF), Gesellschaft für Biochemie und Molekularbiologie (GBM), Gesellschaft Deutscher Chemiker (GDCh), Japanese Society of Plant Physiology (JSPP), Sächsische Akademie der Wissenschaften zu Leipzig

Verantwortliche Tätigkeiten außerhalb der Lehre

Direktor des Göttinger Zentrums für Molekulare Biowissenschaften (GZMB), Sprecher des BSc-Studiengangs „Biochemie“, Mitglied des Editorial Boards von *European Journal of Lipid Science and Technology*, *Plant Physiology and Biochemistry*, *Plant Signaling and Behavior*, *F1000 Research*, *PeerJ*, Mitglied des wissenschaftlichen Beirats der Deutschen Gesellschaft für Fettwissenschaft, Mitglied des wissenschaftlichen Beirats von EuroFedLipid

Name: Fiala, André
Titel: Professor Dr. rer. nat. habil.
Lehrgebiet: Molekulare Neurobiologie des Verhaltens
Beruflicher/akademischer Werdegang:
1991–1996 Studium der Biologie (Diplom) an der Freien Universität Berlin
1996–1999 Promotion am Institut für Neurobiologie der Freien Universität Berlin
2000–2001 Postdoktorand am Memorial-Sloan-Kettering-Institute, New York.
2001–2008 Wissenschaftlicher Mitarbeiter am Lehrstuhl für Genetik und Neurobiologie der Julius-Maximilians-Universität Würzburg. Habilitation im Mai 2008.
Seit Oktober 2008 Professor für Molekulare Neurobiologie des Verhaltens an der Georg-August-Universität Göttingen.

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- 1) Neuronale Grundlagen olfaktorischer Codierung, neuronale Grundlagen assoziativen Lernens
- 2) Weiterentwicklung von Optical-Imaging-Techniken mit genetisch codierten Sensoren.
Riemensperger T, et al. Optical calcium imaging in the nervous system of *Drosophila melanogaster*. *Biochim Biophys Acta* 1820, 1169-1178 (2012).
Störtkuhl KF, et al. The Smell of Blue Light: A New Approach toward Understanding an Olfactory Neuronal Network. *Front Neurosci* 5, 72 (2011).
Fiala A, et al. Optogenetic approaches in neuroscience. *Curr Biol* 20, 897-903 (2010).
Kamikouchi A, et al. Transcuticular optical imaging of stimulus-evoked neural activities in the *Drosophila* peripheral nervous system. *Nat Protoc* 5, 1229-1235 (2010).
Kamikouchi A, et al. The neural basis of *Drosophila* gravity-sensing and hearing. *Nature* 458, 165-171 (2009).

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Neurowissenschaftliche Gesellschaft, Deutsche Zoologische Gesellschaft, Society for Neuroscience.

Verantwortliche Tätigkeiten außerhalb der Lehre:

Beantragung und verantwortliche Durchführung von Drittmittel-basierten Forschungsvorhaben; Gutachter für Drittmittelgeber (u.a. Deutsche Forschungsgemeinschaft, Wellcome Trust, Neuroscience Foundation, CNRS Frankreich, Humboldt Foundation); Gutachter für wissenschaftliche Fachzeitschriften

Name: Ficner, Ralf
Titel: Prof. Dr.
Lehrgebiet: Biochemie und Strukturbiologie
Beruflicher/akademischer Werdegang:
1983-1989 Studium der Chemie Universität Erlangen-Nürnberg, Abschluss: Diplom
1989-1992 Doktorarbeit bei Prof. Dr. Robert Huber, Max-Planck-Institut für Biochemie, Martinsried
1992 Promotion (Dr. rer. nat.) Technische Universität München
1993 Wissenschaftlicher Mitarbeiter am Max-Planck-Institute für Biochemie (Abt. Prof. Dr. R. Huber)
1994-1996 Postdoctoral Fellow am European Molecular Biology Laboratory, Heidelberg (Arbeitsgruppe Dr. D. Suck)
1997-2000 Nachwuchsgruppenleiter am Institut für Molekularbiologie & Tumorforschung, Universität Marburg
2001 Arbeitsgruppenleiter am Max-Planck-Institut für Biophysikalische Chemie, Göttingen
Seit 2001 Professor für Molekulare Strukturbiologie am Institut für Mikrobiologie und Genetik, Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Khoshnevis, S., Hauer, F., Milon, P., Stark, H. & Ficner, R. (2012). Novel insights into the architecture and protein interaction network of yeast eIF3. RNA, *in press*.

Meyer, D., Neumann, P., Koers, E., Sjuts, H., Ludtke, S., Sheldrick, G.M., Ficner, R. & Tittmann, K. (2012). Unexpected tautomeric equilibria of the carbanion-enamine intermediate in pyruvate oxidase highlight unrecognized chemical versatility of thiamin. Proc Natl Acad Sci USA *109*, 10867-10872.

Schulz, E.C. & Ficner, R. (2011). Knitting and snipping: chaperones in beta-helix folding. Curr Opin Struct Biol *21*, 232-239.

Schulz, E.C., Dickmanns, A., Urlaub, H., Schmitt, A., Muhlenhoff, M., Stummeyer, K., Schwarzer, D., Gerardy-Schahn, R. & Ficner, R. (2010). Crystal structure of an intramolecular chaperone mediating triple-beta-helix folding. Nat Struct Mol Biol *17*, 210-215.

Güttler, T., Madl, T., Neumann, P., Deichsel, D., Corsini, L., Monecke, T., Ficner, R., Sattler, M. & Görlich, D. (2010). NES consensus redefined by structures of PKI-type and Rev-type nuclear export signals bound to CRM1. Nat Struct Mol Biol *17*, 1367-1376.

Khoshnevis, S., Gross, T., Rotte, C., Baierlein, C., Ficner, R., and Krebber, H. (2010). The iron-sulphur protein RNase L inhibitor functions in translation termination. EMBO Rep *11*, 214-219.

Monecke, T., Güttler, T., Neumann, P., Dickmanns, A., Görlich, D. & Ficner, R. (2009). Crystal Structure of the Nuclear Export Receptor CRM1 in Complex with Snurportin1 and RanGTP. *Science* *324*, 1087-1091.

Monecke, T., Dickmanns, A. & Ficner, R. (2009). Structural basis for m⁷G-cap hypermethylation of small nuclear, small nucleolar and telomerase RNA by the dimethyltransferase TGS1. *Nucleic Acids Res.* *37*, 3865-3877.

Mathew, R., Hartmuth, K., Mohlmann, S., Urlaub, H., Ficner, R. & Lührmann, R. (2008). Phosphorylation of human PRP28 by SRPK2 is required for integration of the U4/U6-U5 tri-snRNP into the spliceosome. Nature Struct Mol Biol *15*, 435-443.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Kristallographie (DGK), Gesellschaft für Biochemie und Molekularbiologie (GBM)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied des Nationalkomitees der Deutschen Gesellschaft für Kristallographie

Mitglied im International Advisory Board der „PhD School in Biochemical and Biomolecular Sciences“ der Università di Catania (Italien)

Name: Fischer, Christian
Titel: Dr.
Lehrgebiet: Zoologie, Evolutionsbiologie, Phylogenetik, Morphologie
Beruflicher/akademischer Werdegang:
1986–1993 Studium Diplom-Biologie an Freier Universität Berlin
1994–2002 Promotion an Freier Universität Berlin
1994–1999 wissenschaftlicher Mitarbeiter an FU Berlin
2001–2005 wissenschaftlicher Mitarbeiter an FU Berlin
1990-1993 Tutor (studentische Hilfskraft mit Lehraufgaben) am Institut für Zoologie, Freie Universität Berlin
1993–1994 mehrere Lehraufträge am Institut f. Zoologie d. FU Berlin, Universitätskrankenhaus Rudolf-Virchow Berlin, Deutsches Rotes Kreuz (Krankenhaus) Berlin-Wedding
2006–2007 Lehrbeauftragter an der Freien Universität Berlin, ehrenamtlicher Mitarbeiter am Museum für Naturkunde der Humboldt-Universität Berlin
seit 2007 wissenschaftlicher Mitarbeiter am Institut f. Zoologie der Georg-August-Universität Göttingen

Auszeichnungen / Forschungsaufenthalte:
Katharina-Heinroth-Preis der Gesellschaft Naturforschender Freunde zu Berlin, gegr. 1773 (1. Preis für Diplom-Arbeit, 1994)
längere Forschungsaufenthalte an/in British Museum of Natural History, London (1993), University of Connecticut, USA (1994), American Museum Natural History, New York und National Museum Natural History, Washington (1999), Institute of Biology and Zoological Museum, University of Copenhagen (2005), Namibia und Südafrika (2008), Bolivien (2011, 2012)

Mitgliedschaften in wissenschaftlichen Vereinigungen:
1992 Deutsche Zoologische Gesellschaft (DZG)
1992 Arbeitsgruppe Mitteleuropäischer Heteropterologen
1995 Gesellschaft Naturforschender Freunde zu Berlin e.V. 1773
1997 International Heteropterists Society

Verantwortliche Tätigkeiten außerhalb der Lehre:
2007 Editorial Board der Zeitschrift „Species, Phylogeny and Evolution“
2012 Stellvertr. Mitglied im Vorstand d. Instituts für Zoologie

Name: Fischer, Julia
Titel: Prof. Dr.
Lehrgebiet: Gute Wissenschaftliche Praxis, Vertiefungspraktikum
Neurobiologie und Verhalten
Beruflicher/akademischer Werdegang:
1993 Diploma Biology, Free University Berlin, Germany
1996 Ph.D. Dissertation, Free University Berlin, Germany
1997–2000 Postdoctoral Fellow, Department of Psychology, University of Pennsylvania, Philadelphia, USA
2000–2004 Postdoctoral Fellow, Department for Comparative and Developmental Psychology, MPI for evolutionary Anthropology, Leipzig, Germany
2004 Habilitation, University Leipzig, Germany
2004 Professor for Cognitive Ethology at the German Primate Center and the University Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Fischer, J. (2012) Affengesellschaft. Suhrkamp Verlag, Berlin.
Schmitt, V., Pankau, B., Fischer, J. (2012). Old World monkeys compare to apes in the Primate Cognition Test Battery. PLoS One 7(4): e32024.
Menzel, R. & Fischer, J. (eds.) 2011. Animal Thinking - Contemporary Issues in Comparative Cognition. MIT Press.
Patzelt, A., Zinner, D., Fickenscher, G., Diedhou, S., Camara, B., Stahl, D. & Fischer, J. (2011): Group composition of Guinea baboons (*Papio papio*) at a water place suggests a fluid fission-fusion social organisation. Int. J. Primatol., 32, 652-668.
Schell, A., Rieck, K., Schell, K., Hammerschmidt, K., & Fischer, J. (2011). Adult but not juvenile Barbary macaques spontaneously recognize group members from pictures. Anim. Cogn., 14, 503-509.
Schmitt, V., & Fischer, J. (2011). Representational format determines numerical competence in monkeys. Nat. Comm. doi: 10.1038/ncomms1262
Teufel, C., Gutmann, A., Pirow, R., & Fischer, J. (2010). Facial expressions modulate the ontogenetic trajectory of gaze-following among monkeys. Dev. Sci., 13, 913-922.
Henkel, S., Heistermann, M., & Fischer, J. (2010). Infants as costly social tools in male Barbary macaque networks. Anim. Behav., 79, 1199-1204.
Research Focus: Evolution of Communication and Cognition; Evolution of Social Complexity and Social Behaviour – Main Study System: Old World Monkeys (wild Guinea baboons and captive macaques).

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Primatologische Gesellschaft; European Federation of Primatology (president); Ethologische Gesellschaft; Internationale Primatologische Gesellschaft; Association for the Study of Animal Behaviour; Deutsche Zoologische Gesellschaft

Verantwortliche Tätigkeiten außerhalb der Lehre:

Speaker PhD Program Behaviour and Cognition, Göttingen; Speaker Graduate School "Foundations of Primate Social Behaviour", Leibniz Gemeinschaft; Panel Chair European Research Council Starting Grants (2012/2014) ; Panel Member European Research Council Starting Grants (2007-2010) ; President European Federation of Primatology (2009-2013); Scientific Advisory Board of the Ernst Strüngmann Forum (2010-present); Executive Board of the Ludwig-Maximilians-Universität München (2007-2011); Advisory Board BoschStiftung 'Women in Science' Program (2007-2011)

Name: Friedl, Thomas
Titel: Prof. Dr.
Lehrgebiet: Botanik, Phykologie (Algenkunde), Evolution, Systematik
Beruflicher/akademischer Werdegang:
1999–present Professor (C3), Head of Department, Experimental Phycology and Culture, Collection of Algae (EPSAG), University of Göttingen
1997–1999 Heisenberg Fellow of the German Science Foundation (DFG), Dept. Biology, Plant Ecology and Systematics, University of Kaiserslautern
1995–1997 Habilitation Fellow of the German Science Foundation (DFG), Dept. Plant Ecology and Systematics, University of Bayreuth
1997 Habilitation, University of Bayreuth, Germany, Dept. Plant Systematics and Ecology
1990–1996 Assistant and Instructor, Dept. Plant Ecology and Systematics, University of Bayreuth
1989 Ph.D., University of Bayreuth, Dept. Plant Systematics and Ecology
1985 Diplom (M.Sc.), University of Marburg, Germany, Dept. Botany

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Hodač L., Hallmann C., Rosenkranz H., Faßhauer F., & Friedl T. 2012. Molecular evidence for the wide distribution of two lineages of terrestrial green algae (Chlorophyta) over tropics to temperate zone. *ISRN Ecology*, Article ID 795924, doi:10.5402/2012/795924

Friedl T. & Rybalka N. 2011. Green Algal Systematics: a brief introduction to the current status. *Progress in Botany* 73: 259-280.

Lang I., Hodač L., Friedl T., Feussner I. 2011. Fatty acid profiles and their distribution patterns in microalgae: a comprehensive analysis of more than 2000 strains from the SAG culture collection. *BMC Plant Biology* 11:124.

Suutari M., Majaneva M., Fewer D.P., Voirin B., Aiello A., Friedl T., Chiarello A.G. & Blomster J. 2010. Molecular evidence for a diverse green algal community growing in the hair of sloths. *BMC Evolutionary Biology* 10:86 (<http://www.biomedcentral.com/1471-2148/10/86>)

Letsch M.R., Muller-Parker G., Friedl T. and Lewis L.A. 2009. *Elliptochloris marina* sp. nov. (Trebouxiophyceae, Chlorophyta), symbiotic green alga of the temperate pacific sea anemones *Anthopleura xanthogrammica* and *A. elegantissima* (Anthozoa, Cnidaria). *Journal of Phycology* 47: 1127 - 1135.

Rybalka N., Andersen R.A., Kostikov I., Mohr K.I., Massalski A., Olech M. and Friedl T. 2009. Testing for endemism, genotypic diversity and species concepts in Antarctic terrestrial microalgae of the Tribonemataceae (Stramenopiles, Xanthophyceae). *Environmental Microbiology* 11: 554 -565.

Mikhailyuk T.I., Sluiman H.J., Massalski A., Mudimu O., Demchenko E.M., Kondratyuk S.Y. & Friedl T. 2008. New streptophyte green algae from terrestrial habitats and an assessment of the genus *Interfilum* (Klebsormidiophyceae, Streptophyta). *Journal of Phycology* 44: 1586-1603.

2011-present: Production of algal biomass from industrial CO₂-rich flue gasses for biofuel and valuable compounds (Niedersachsen-Technion/Israel foundation); 2010-present: Acceleration of Biodiversity Assessment: Changes in the diversities of terrestrial microalgae and cyanobacteria (including lichen symbionts) along an altitudinal gradient in a tropical mountain forest (DFG Fr 905/17-1); 2009-2011: Taxonomy critical groups of microalgae with a high potential for applied research from the two culture collections of algae, ACKU (Kive, Ukraine) and SAG (Göttingen, Germany) (BMBF UKR 08/038)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Sektion Phykologie der Deutschen Botanischen Gesellschaft, mehrere internationale Phykologische Gesellschaften (USA, Japan, Europa)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Gutachter für diverse internationale peer-reviewed Zeitschriften und internationale funging

agencies (z.B. DFG, NSF)

Name: Gatz, Christiane
Titel: Prof. Dr. rer. nat.
Lehrgebiet: Pflanzenmolekularbiologie
Beruflicher/akademischer Werdegang:
1977–1982 Studium der Biologie
1982–1985 Promotion an der Technischen Hochschule Darmstadt
1985–1987 Postdoctoral Fellow, University of Madison, Wisconsin, USA
1987–1992 Arbeitsgruppenleiterin, Institut für Genbiologische Forschung, Berlin
1993 Habilitation an der Freien Universität Berlin
1983–1996 C3-Professorin für Pflanzliche Molekulargenetik, Universität Bielefeld
Seit 1996 C4-Professorin für Molekularbiologie und Physiologie der Pflanze, Georg-August-Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Ralhan A, Schottle S, Thurow C, Iven T, Feussner I, Polle A, Gatz, C. (2012) The vascular pathogen *Verticillium longisporum* requires a jasmonic acid-independent CO11 function in roots to elicit disease symptoms in *Arabidopsis* shoots. *Plant Physiol.* 159, 1192-1203

Zander M, Chen S, Imkampe J, Thurow C, Gatz C (2012) Repression of the *Arabidopsis thaliana*

jasmonic acid/ethylene-induced defense pathway by TGA-interacting glutaredoxins depends on their C-terminal ALWL motif. *Mol Plant.* 831-840

Zander M, La Camera S, Lamotte O, Metraux JP, Gatz C (2010) *Arabidopsis thaliana* class II TGA transcription factors are essential activators of jasmonic acid/ethylene-induced defense responses. *Plant J* 61: 200-210

Fode B, Siemsen T, Thurow C, Weigel R, Gatz C (2008) The *Arabidopsis* GRAS protein SCL14 interacts with class II TGA transcription factors and is essential for the activation of stress inducible promoters. *Plant Cell* 20: 3122-3135

Herde M, Gärtner K, Köllner TG, Fode B, Boland W, Gershenzon J, Gatz C*, Tholl D (2008) Identification and regulation of TPS04/GES an *Arabidopsis* geranylinalool synthase catalyzing the first step in the formation of the insect-induced volatile C16-homoterpene TMTT. *Plant Cell* 20:1152-1168 (*corresponding author)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM), Verband Deutscher Biologen und biowissenschaftlicher Fachgesellschaften (VdBIOL), Deutsche Botanische Gesellschaft, Gesellschaft für Biochemie und Molekularbiologie (GBM)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2002 Editor von „Plant Molecular Biology“
Seit 2002 Mitglied des Beirats der Alfried Krupp von Bohlen and Halbach Stiftung (Auswahlprogramm: Preis für Junge Hochschullehrer)
Seit 2004 Sprecher der DFG-Forschergruppe 546 (Verticillium-Brassicaceen Interaktion)
2003-2005 Geschäftsführende Direktorin des Albrecht-von-Haller Instituts für Pflanzenwissenschaften
2008-1010 Dekanin der Biologischen Fakultät
Seit 2010 Mitglied des Fachkollegiums Pflanzenwissenschaften der DFG

Name: Göpfert, Martin

Titel: Dr. rer. nat.

Lehrgebiet: Neurobiologie

Beruflicher/akademischer Werdegang

1988–1994 Studium

1994–1998 Promotion

1998–2003 Postdoc/wissenschaftlicher Mitarbeiter

2003–2008 Nachwuchsgruppenleiter

2003 Habilitation für Zoologie

seit 2008 Lehrstuhl für Zelluläre Neurobiologie

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Senthilan et al. (2012). Cell 150, 1042–1054.

Effertz et al. (2012). Nat Neurosci 15, 1198–1200.

Newton et al. (2012). Dev Cell, 22, 1221–1233.

Effertz et al. (2011). Curr Biol 21, 592–597.

Bechstedt et al. (2010). Nat Commun 1, 11.

Kamikouchi et al. (2010). Nat Protoc 5, 1229–1235.

Kamikouchi et al. (2009). Nature 458, 165–171.

Nadrowski et al. (2008). Curr Biol 18, 1365–1372.

Albert et al. (2007). Curr Biol 17, 1000–1006.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

NWG, DHV, DZG, etc.

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2012 Geschäftsführender Direktor, Blumenbach Institut

Seit 2011 Deputy Speaker, SFB 889

Name: Großkopf, Birgit

Titel: Dr.

Lehrgebiet: Anthropologie

Beruflicher/akademischer Werdegang:

1982–1989 Studium

2001-2004 Promotion

1996-1998 w.M. Institut für Zoologie und Anthropologie

2000-2001 w.M. Institut für Zoologie und Anthropologie

2005-2006 Postdoc MPI für Demografie Rostock

seit 2009 w.M. Institut für Zoologie und Anthropologie

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Herrmann B, Grosskopf B, Fehren-Schmitz L, Schoon R (2007) Knochen als Spurenläger. In: Herrmann B, Saternus K (eds) Biologische Spurenkunde. Bd.I: Kriminalbiologie. Springer, Heidelberg, pp 115-144

Grosskopf B (2007) Die menschlichen Überreste vom Oberesch in Kalkriese. In: Wilbers-Rost S, Uerpman H-P, Uerpman M, Grosskopf B, Tolksdorf-Lienemann E (eds) Kalkriese 3: Interdisziplinäre Untersuchungen auf dem Oberesch in Kalkriese. Römisch-Germanische Forschungen Band 65. Philipp von Zabern, Mainz, pp 157-178

Martiniakova M, Omelka R, Grosskopf B, and Jancova A. 2010. Yellow-necked mice (*Apodemus flavicollis*) and bank voles (*Myodes glareolus*) as zoomonitors of environmental contamination at a polluted area in Slovakia. *Acta Vet Scand* 52:58

Grosskopf B., McGlynn G. 2011: Age diagnosis based on incremental lines in dental cementum: A critical reflection. *Anthropol Anz/J Biol Clin Anthropol* 68, 275-289.

Grosskopf B, Rost A, and Wilbers-Rost S. 2012: The Ancient Battlefield at Kalkriese. In: Harbeck M, von Heyking K, and Schwarzberg H., *Sickness, Hunger, War, and Religion - Multidisciplinary Perspectives*. München, Rachel Carson Center Perspectives 2012/3. 91-111

Analyse der menschlichen Überreste des Fundortes Kalkriese (Varusschlacht)
Die spätbronze- und früheisenzeitliche Gesellschaft am Niederrhein im Spiegel ihrer Bestattungen—eine interdisziplinäre Untersuchung

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Ca. 1998 Gesellschaft für Anthropologie

Verantwortliche Tätigkeiten außerhalb der Lehre:

2001 Diverse Funktionen im Vorstand der Gesellschaft für Anthropologie

Name: Heineke, Dieter
Titel: Apl. Prof. Dr.
Lehrgebiet: Biochemie
Beruflicher/akademischer Werdegang:
1978-1984 Studium Biologie/Chemie LG (Univ. Hannover)
1984 -1986 wissenschaftliche Hilfskraft, ab 1986 wissenschaftlicher
Mitarbeiter der Georg-August-Universität Göttingen
1988 Promotion (Univ.Göttingen)
1998 Habilitation im Fach Biochemie (Univ. Göttingen)
Seit 2001 Fakultätsreferent und Studiendekan der Fakultät für Biologie
und Psychologie (früher: Biologische Fakultät)
2003 apl. Professor „Biochemie“, Georg-August Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
keine
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Deutsche Botanische Gesellschaft
Vertreter der Fakultät und Beiratsmitglied in der „Konferenz Biologischer Fachbereiche“
(KBF)
Vertreter der Fakultät im VBio
Vertreter der math.-nat. Fakultäten der Universität und Beiratsmitglied im „Mathematisch
Naturwissenschaftlichen Fakultätentag“ (MNFT)
Verantwortliche Tätigkeiten außerhalb der Lehre:
Studiendekan,
Fakultätsreferent

Name: Heinrich, Ralf
Titel: Prof. Dr.
Lehrgebiet: Biologie, Zoologie, Physiologie, Neuroethologie
Beruflicher/akademischer Werdegang:
1986–1992 Biologiestudium; Philipps Universität Marburg
1992–1995 Promotionsstudium; Georg-August-Universität Göttingen
1996–1997 Postdoc; Graduiertenkolleg; Georg-August-Universität Göttingen
1997–1999 Postdoc; Harvard Medical School, Boston, USA
2002–2008 Juniorprofessor; Georg-August-Universität Göttingen
2004 Habilitation für Zoologie
seit 2008 Apl. Prof.; Georg-August-Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Ostrowski D, Ehrenreich H, Heinrich R Erythropoietin promotes survival and regeneration of insect neurons *in vivo* and *in vitro*. *Neuroscience* 188: 95-108, 2011.
Gocht D., Wagner S., Heinrich R. Recognition, presence and survival of locust central nervous glia *in situ* and *in vitro*. *Microscopy Research and Technique* 72: 385-397, 2009.
Heck C., Kunst M., Härtel K., Hülsmann S., Heinrich R. *In vivo* labeling and *in vitro* characterisation of central complex neurons involved in the control of sound production. *J. Neuroscience Methods* 183: 202-212, 2009
Kunst M., Pförtner R., Aschenbrenner K., Heinrich R. Neurochemical architecture of the central complex related to its function in the control of grasshopper acoustic communication. *PLoS One* 6(9): e25613, 2011
Heinrich R., Kunst M., Wirmer A. Reproduction-related sound production of grasshoppers regulated by internal state and actual sensory environment. *Frontiers in Decision Neuroscience* 6, 89: 1-9, 2012.
Wirmer A., Bradler S., Heinrich R. Homology of insect corpora allata and vertebrate adenohypophysis? *Arthropod Structure & Development* 41: 409-417, 2012.
Farca Luna A.J., Hurtado-Zavala J.I., Reischig T. Heinrich R. Circadian regulation of agonistic behaviour in groups of parthenogenetic marbled crayfish, *Procambarus spec.* *J Biological Rhythms* 24: 64-72, 2009.

Mitgliedschaften in wissenschaftlichen Vereinigungen:
Seit 1993 Neurowissenschaftliche Gesellschaft
Seit 1995 International Society for Neuroethology
Verantwortliche Tätigkeiten außerhalb der Lehre:
Seit 2000 Prüfungsausschuss und Studienausschuss des Master/PhD Program Neurosciences
Seit 2003 Vorstand des Center for Systems Neuroscience

Name Hertel, Dietrich
Titel Dr.
Lehrgebiet Pflanzenökologie
Beruflicher/akademischer Werdegang
 1988-1995 Biologiestudium (Universitäten Karlsruhe und Göttingen)
 1995-1999 Doktorarbeit (Promotion in Biologie, Universität Kassel)
 1999-2000 Postdoc/wissenschaftlicher Mitarbeiter (Universitäten Kassel und Göttingen)
 seit 2001 Akademischer Rat (Universität Göttingen)
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre
 Hertel, D., Köhler, L., Rillig, M. 2011. Mycorrhizal, endophytic and ecomorphological status of tree roots in the canopy of a montane rain forest. *Biotropica* 43: 401-404.
 Tschardtke, T., et al. 2011. Multifunctional shade-tree management in tropical agroforestry landscapes – a review. *J. Appl. Ecol.* 48: 619-629.
 Moser, G., et al. 2011. Elevation effects on the carbon budget of tropical mountain forests (S Ecuador): the role of the belowground compartment. *Global Change Biol.* 17: 2211-2226.
 Hertel, D. 2011. Tree roots in canopy soils of old European beech trees - an ecological reassessment of a forgotten phenomenon. *Pedobiologia* 54: 119-125.
 Schwendenmann, L., et al. 2010. Effects of an experimental drought on the functioning of a cacao agroforestry system, Sulawesi, Indonesia. *Global Change Biol.* 16: 1515-1530.
 Hertel, D., Hartevelde, M.A., Leuschner, C. 2009. Conversion of a tropical forest into agroforest alters the fine root-related carbon flux to the soil. *Soil Biol. Biochem.* 41: 481-490.
 Meinen C, Hertel D, Leuschner, C. 2009. Biomass and morphology of fine roots in temperate broad-leaved forests differing in tree species diversity: is there evidence of below-ground overyielding? *Oecologia* 161: 99-111.
 Carbon sequestration in vegetation, and litter C input to the soil in lowland rainforest transformation systems on Sumatra (Indonesia). Teilprojekt SFB 990.
 Shade trees in cacao agroforestry systems: influence on roots and net primary production (DFG).
 Growth and vitality of fine roots of Norway spruce as influenced by experimental and natural drought. Teilprojekt DFG-Forschergruppe 562.
 Drought effects on vitality and activity of tree fine roots in natural forest and agroforestry systems. Teilprojekt SFB 552.
Mitgliedschaften in wissenschaftlichen Vereinigungen
 seit 1986 La Murithienne (naturwissenschaftliche Gesellschaft des Kanton Wallis, Schweiz)
 seit 1995 Gesellschaft für Ökologie (GfÖ)
 seit 2003 Gesellschaft für Tropenökologie (GTÖ)
 seit 2003 Association for Tropical Biology and Conservation (ATBC)
Verantwortliche Tätigkeiten außerhalb der Lehre
 2000-2004 Vorstandsmitglied Albrecht-von-Haller-Institut für Pflanzenwissenschaften
 seit 2003 Mitglied im Fakultätsrat der Fakultät für Biologie und Psychologie
 2008-2010 Editorial Review Board member *Tree Physiology*
 seit 2007 Editorial Board member *Plant Ecology & Diversity*
 seit 2012 Associate Editor *Plant Ecology & Diversity*

Name: Heymann, Eckhard W.
Titel: Prof. Dr.
Lehrgebiet: Anthropologie, Verhaltensbiologie
Beruflicher/akademischer Werdegang:
1975–1981 Studium der Biologie, Justus-Liebig-Universität Gießen
1982–1985 Promotion, Justus-Liebig-Universität Gießen
seit 1985 Wissenschaftlicher Mitarbeiter am Deutschen Primatenzentrum
1998 Habilitation für Ethologie und Primatologie (Univ. Gießen)
2004 Umhabilitation für Zoologie (Univ. Göttingen)
seit 2007 außerplanmäßiger Professor

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
1) The neglected sense in primate-plant interactions: do olfactory signals define a mammalian seed dispersal syndrome in the tropics? (DFG: He 1870/19-1)
2) Genetische Konsequenzen der Samenausbreitung von *Parkia panurensis* (Mimosaceae) durch die Primaten *Saguinus mystax* und *Saguinus fuscicollis* (Callitrichidae) (DFG: He 1870/15-1,2)
Heymann EW, Lüttmann K, Michalczyk IM, Pinedo Saboya PP, Ziegenhagen B, Bialozyt R. 2012. DNA fingerprinting validates seed dispersal curves from observational studies in the Neotropical legume *Parkia*. *PLoS ONE* 7:e35480.
Alvarez SJ, Heymann EW. 2012. Influence of fruit physical traits on frugivory in white-handed titi monkeys (*Callicebus lugens*). *Am J Phys Anthropol* 147:482-488.
Mataushek C, Roos C, Heymann EW. 2011. Mitochondrial phylogeny of tamarins (*Saguinus*, Hoffmannsegg 1807) with taxonomic implications for the *S. nigricollis* species group. *Am J Phys Anthropol* 144:564-574.
Stojan-Dolar M, Heymann EW. 2010. Vigilance of mustached tamarins in single-species and mixed-species groups—the influence of group composition. *Behav Ecol Sociobiol* 64:325-335.
Nyakatura JA, Heymann EW. 2010. Effects of support size and orientation on symmetric gaits in free-ranging tamarins of Amazonian Peru: implications for the functional significance of primate gait sequence patterns. *J Hum Evol* 58:242-251.

Mitgliedschaften in wissenschaftlichen Vereinigungen:
seit 1983 International Primatological Society
seit 1988 Gesellschaft für Primatologie
seit 1988 Gesellschaft für Tropenökologie
seit 2010 Association for Tropical Biology and Conservation

Verantwortliche Tätigkeiten außerhalb der Lehre:
seit 1998 Leiter der Feldstation des Deutschen Primatenzentrums in Peru
seit 2007 Leiter einer Netzwerk-Aktivität im Rahmen von EUPRIM-Net (www.euprim-net.eu/network/networkactivities_photo_banner.htm)
seit 2008 Associate Editor der Zeitschrift „Primates“
seit 2009 Sprecher des Beirats der Gesellschaft für Tropenökologie (gtö)

Name: Hoppert, Michael
Titel: PD Dr.
Lehrgebiet: Mikrobiologie
Beruflicher/akademischer Werdegang:
1983 Hochschulreife: (Einbeck)
1983-1989 Studium der Biologie (Diplom) an der Universität Göttingen
1989-993 Biologie (Promotion) an der Universität Göttingen
1993 Ernennung zum Akademischen Rat an der Universität Göttingen (Institut für Mikrobiologie und Genetik, Abt. Strukturelle Mikrobiologie, Prof. Dr. F. Mayer; seit April 2004 Abt. Allgemeine Mikrobiologie, Prof. Dr. J. Stülke)
2005 Verleihung der *venia legendi* für das Fach Mikrobiologie
seit 2006 AkadOR,
seit 2010 AkadD

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- 1) Biosignaturen chemosymbiontischer Bakterien in fossilen und rezenten marinen Metazoa
- 2) Biomineralbildung in anaerob Methan-oxidierenden mikrobiellen Lebensgemeinschaften
- 3) Struktur und Diversität von terrestrischen Mikroalgen-Biofilmen
- 4) Membranen in Essigsäurebakterien

Wrede, C., Krukenberg, V., Dreier, A., Reitner, J., Heller, C., Hoppert, M. (2012) Detection of metabolic key enzymes of methane turnover processes in cold seep microbial biofilms. *Geomicrobiol. J.* DOI: 10.1080/01490451.2012.665150.

Hoppert, M., Valdez, M., Enseleit, M., Theilmann, W., Valerius, O., Braus, G., Föst, C., Liebl, W. (2012) Structure-functional analysis of the *Dictyoglomus* cell envelope. *Syst. Appl. Microbiol.* 35, 279-290.

Dreier, A., Stannek, L., Blumenberg, M., Taviani, M., Sigovini, M., Wrede, C., Thiel, V., Hoppert, M. (2012) The fingerprint of chemosymbiosis: origin and preservation of isotopic biosignatures in the nonseep bivalve *Loripes lacteus* compared with *Venerupis aurea*. *FEMS Microbiol. Ecol.* 81, 480-493.

Lieberman, J.A., Frost, N.A., Hoppert, M., Fernandes, P.J., Vogt, S.L., Raivio, T.L., Blanpied, T.A., Donnenberg, M.S. (2012) Outer membrane targeting, ultrastructure, and single molecule localization of the enteropathogenic *Escherichia coli* type IV pilus secretin BfpB. *J. Bacteriol.* 194, 1646-1658.

Wrede, C., Brady, S., Rockstroh, S., Dreier, A., Kokoschka, S., Heinzelmann, S.M., Heller, C., Reitner, J., Taviani, M., Daniel, R., Hoppert, M. (2012) Aerobic and anaerobic methane oxidation in terrestrial mud volcanoes in the Northern Apennines. *Sediment. Geol.* 263/264, 210-219.

Petters, T., Zhang, X., Nesper, J., Treuner-Lange, A., Gomez-Santos, N., Hoppert, M., Jenal, U., Søgaard-Andersen, L. (2012) The orphan histidine protein kinase SgmT is a c-di-GMP receptor and regulates composition of the extracellular matrix together with the orphan DNA binding response regulator DigR in *Myxococcus xanthus*. *Mol. Microbiol.* 147-165.

Hallmann, C., Fritzl, D., Stannek, L., Hoppert, M. (2011) Ascomycete fungi on dimension stone of the "Burg Gleichen", Thuringia. *Environ. Earth Sci.* 63, 1713-1722.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Vereinigung für Allgemeine und Angewandte Mikrobiologie, Geochemical Society, European Geosciences Union

Verantwortliche Tätigkeiten außerhalb der Lehre:

seit 2009 Mitglied (stellv.) in Senatskommissionen (aktuell: Unters.-Komm.)
seit 2009 Mitglied (Projektleiter) im Courant-Forschungszentrum Geobiologie

Name: Hörandl, Elvira
Titel: Prof. Dr.
Lehrgebiet: Biologie, Botanik
Beruflicher/akademischer Werdegang:
1984–1991 Studium an der Universität Wien
1989–1991 Promotion an der Universität Wien
1991–2006 Wissenschaftlicher Mitarbeiter, Associate Editor
2006–2011 Adjunct associate Professor (Arbeitsgruppenleiter) Univ. Wien
2006 Habilitation für Botanik an der Universität Wien
2011 Lehrstuhl für Systematische Botanik, Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Hörandl, E., Emadzade K., 2012. Evolutionary classification: a case study on the diverse plant genus *Ranunculus* L. (*Ranunculaceae*). *Perspectives in Plant Ecology, Evolution and Systematics* 14: 310-324.
Hörandl E. 2009. A combinational theory for maintenance of sex. *Heredity* 103: 445–457.
Hörandl, E. 2006. The complex causality of geographical parthenogenesis. *New Phytologist* 171: 525–538.
Paun, O., Stuessy, T. F., Hörandl, E. 2006: The role of hybridization, polyploidization and glaciation in the origin and evolution of the apomictic *Ranunculus cassubicus* complex. *New Phytologist* 171: 223–236.
Hörandl, E., Paun, O., Johansson, J.T., Lehnebach, C., Armstrong, T., Chen, L., Lockhart, P. 2005: Phylogenetic relationships and evolutionary traits in *Ranunculus* s.l. (*Ranunculaceae*) inferred from ITS sequence analysis. *Molec. Phyl. Evol.* 36: 305-327.
The ecology of geographical parthenogenesis in alpine plants, DFG-FWF project, 2012-2015
Effects of hybridization on expression of apomixis in the *Ranunculus auricomus* complex, FWF-DFG project, 2009-2012
Geographical Parthenogenesis, FWF project, 2006-2009
Evolution of apomixis in the *Ranunculus cassubicus* complex, FWF project, 2002-2006
Evolutionary processes on alpine glacier forefields (ÖAW 2010-2012)
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Seit 1999 International Association for Plant Taxonomy
Seit 2008 European Society of Evolutionary Biology
Seit 2008 NOBIS Austria
Verantwortliche Tätigkeiten außerhalb der Lehre:
2011 Academic Editor PLOS One

Name: Hornung, Ellen
Titel: Dr. r
Lehrgebiet: Biologie
Beruflicher/akademischer Werdegang:
1984-1990 Studium
1991-1994 Promotion
1994-1996 Postdoc/wissenschaftlicher Mitarbeiter Uni Stuttgart
1997–1999 IPB-Halle
2000–2002 IPK-Gatersleben
Seit 2002 Akademische Rätin – Georg-August-Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

The lipoxygenase-dependent oxygenation of lipid body membranes is promoted by a patatin-type phospholipase in cucumber cotyledons, 2011 J.Exp. Botany

Identification of PpoA from *Aspergillus nidulans* as a fusion protein of a fatty acid heme dioxygenase/peroxidase and a cytochrome P450, 2009 JBC

Production of wax esters in plant seed oils by oleosomal co-targeting of biosynthetic enzymes 2012, J.Lipid Res.

PpoC from *Aspergillus nidulans* is a fusion protein with only one active haem. 2010 Biochem. J.

Physcomitrella patens has lipoxygenases for both eicosanoid and octadecanoid pathways. 2009, Phytochemistry J.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

2004 Deutsche Gesellschaft für Fettwissenschaften

Name: Ekkehard Höxtermann
Titel: Dipl.-Biol., Prof. Dr. rer. nat. habil.
Lehrgebiet: Geschichte und Theorien der Biologie
Beruflicher/akademischer Werdegang:
1953 Geb. in Sondershausen/Thüringen
1973–78 Studium der Biologie an der Humboldt-Universität zu Berlin (1978 Diplom, Fachrichtung Pflanzenphysiologie), anschließend wissenschaftlicher Aspirant, Assistent und Mitarbeiter in Berlin (1985 Promotion im Bereich Allgemeine Botanik der HU Berlin).
1990–93 wissenschaftlicher Assistent am Institut für Biochemie der Universität Köln.
1994 Habilitation für Geschichte der Naturwissenschaften, Friedrich-Schiller-Universität Jena.
1994–95 Förderpreisträger der Deutschen Akademie der Naturforscher Leopoldina Halle/Saale.
1994–2002 Lehrbeauftragter für Geschichte der Biochemie, der Biologie und der Pharmazie in Jena und Berlin.
1998–2001 Mitarbeiter der Historischen Arbeitsstelle des Museums für Naturkunde der HU Berlin.
2002 Privatdozent, 2003–07 außerplanmäßiger Professor für Geschichte der Naturwissenschaften am Fachbereich Biologie, Chemie, Pharmazie der FU Berlin.
Seit 2008 Programmleiter der Basilisken-Press Rangsdorf.
Seit 2009 Lehrbeauftragter für Geschichte der Biologie an der Biologischen Fakultät der Georg-August-Universität Göttingen.

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

(Hrsg., mit Hartmut Hilger) Lebenswissen. Eine Einführung in die Geschichte der Biologie. 2007, 456 S. (Hrsg., mit Armin Geus) Evolution durch Kooperation und Integration. Zur Entstehung der Endosymbiosetheorie in der Zellbiologie. 2007, 751 S.
(Hrsg.) 125 Jahre Deutsche Botanische Gesellschaft. 2007, 152 S.
(Hrsg., mit Jürg Stöcklin) Darwin und die Botanik. 2009, 248 S.
Die Biologen der Humboldt-Universität zu Berlin zwischen Illusion und Wirklichkeit (1945 bis 1968). In Wolfgang Girnus, Klaus Meier (Hrsg.): Die Humboldt-Universität Unter den Linden 1945 bis 1990. 2010, S. 277–294.
Die Entdeckung der zellfreien Gärung: 1871 oder 1896 – Eine Frage des Glaubens? Dahlemer Archivgespräche 14 (2012): im Druck.
Ilse Jahn (1922–2010): Ein Nachruf. Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin, N. F., (2012): im Druck.
Fritz (1822–1897) und Hermann Müller (1829–1883). Naturforschung „für Darwin“.
Elisabeth Schiemann (1881–1972): Vom Aufbruch der Genetik und der Frauen in den Umbrüchen des 20. Jahrhunderts.
Heinrich Dathe (1910–1991): Zoologe und Tiergärtner aus Leidenschaft.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Geschichte und Theorie der Biologie (1990, 1999–2003 stellv. Vorsitzender), Deutsche Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik (1992), Österreichische Gesellschaft für Wissenschaftsgeschichte (1995), Deutsche Botanische Gesellschaft (2001), Gesellschaft für Biochemie und Molekularbiologie (2004), Deutsche Gesellschaft für Geschichte der Pharmazie (2004)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Programmleiter der Basilisken-Press, Natur + Text GmbH, Friedensallee 21, 15834 Rangsdorf

Name	Hoyer-Fender, Sigrid
Titel	Prof. Dr.
Lehrgebiet	Entwicklungsbiologie/Zellbiologie
Beruflicher/akademischer Werdegang	
1975-76	Chemistry, University of Hannover, Germany
1976-81	Biology, University of Göttingen, Germany
1981	Diploma (Biology) with Prof. Dr. Ulrich Grossbach, University of Göttingen, Germany.
1985	PhD (Biology; majors: Zoology, Botany, Organic Chemistry) with Prof. Dr. Ulrich Grossbach, University of Göttingen, Germany (Dr. rer nat).
1983-1985	PhD grant from the Studienstiftung des Deutschen Volkes
1985-1991	Scientific assistant, Department of Human Genetics, University of Göttingen, Germany
1991	Akademische Rätin, III. Department of Zoology – Developmental Biology, University of Göttingen, Germany
2000	Venia legendi (Developmental Biology), University of Göttingen
2001–2003	provisional head of III. Department of Zoology – Developmental Biology, University of Göttingen, Germany
2006	Akademische Oberrätin
2007	Apl. Professur

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre

Hüber, D. and Hoyer-Fender, S. 2007. Alternative splicing of exon 3b gives rise to ODF2 and Cenexin. *Cytogenetic and Genome Research* 119. 68-73.

Hüber, D., Geisler, S., Monecke, S., and Hoyer-Fender, S. 2008. Molecular dissection of ODF2/Cenexin revealed a short stretch of amino acids necessary for targeting to the centrosome and the primary cilium. *Eur. J. Cell Biol.* 87, 137-146.

Schweizer, S. and Hoyer-Fender, S. 2009. Mouse Odf2 localizes to centrosomes and basal bodies in adult tissues and to the photoreceptor primary cilium. *Cell and Tissue Research* 338, 295-301.

Hoyer-Fender, S. 2010. Centriole maturation and transformation to basal body. *Sem. Cell Dev. Biol.* 21, 142-147.

Batsukh, T., Pieper, L., Koszucka, A. M., von Velsen, N., Hoyer-Fender, S., Elbracht, M., Bergman, J. E. H., Hoefsloot, L. H., and Pauli, S. 2010. CHD8 interacts with CHD7, a protein which is mutated in CHARGE syndrome. *Human Molecular Genetics* 19, 2858-2866.

Burnicka-Turek, O., Kata, A., Ebermann, L., Kramann, N., Buyandelger, B., Burfeind, P., Hoyer-Fender, S., Engel, W., Adham, I. M. 2010. Pelota interacts with HAX1, EIF3G, and SRPX and the resulting protein complexes are associated with the cytoskeleton. *BMC Cell Biology* 11:28.

Frohnert, C., Schweizer, S., Hoyer-Fender, S. 2011. SPAG4L/SPAG4L-2 are testis-specific SUN domain proteins restricted to the apical nuclear envelope of round spermatids facing the acrosome. *Mol. Hum. Reprod.* 17, 207-218.

Yang, K., Meinhardt, A., Zhang, B., Grzmil, P., Adham, I. M., Hoyer-Fender, S. The Small Heat Shock Protein ODF1/HSPB10 Is Essential for Tight Linkage of Sperm Head to Tail and Male Fertility in Mice. *Mol. Cell. Biol.* 32, 216-225.

Hoyer-Fender, S. Centrosomes in fertilization, early embryonic development, stem cell division, and cancer. Invited Deep Insight for The Atlas of Genetics & Cytogenetics in Oncology and Haematology Hoyer-Fender, S. 2011.

Mitgliedschaften in wissenschaftlichen Vereinigungen

Gesellschaft für Genetik

Verantwortliche Tätigkeiten außerhalb der Lehre

Beauftragte für die biologische Sicherheit, Strahlenschutzbeauftragte, Gutachterin für verschiedene Fachjournale und wissenschaftliche Förderorganisationen, Vertrauensdozentin der Studienstiftung des Deutschen Volkes, Mentorin der Universität Göttingen und der Universität Stuttgart

Name: Hummel, Susanne
Titel: Dr. rer.nat.
Lehrgebiet: Historische Anthropologie, Biologische Spurenkunde
Beruflicher/akademischer Werdegang:
1979-1984 Studium der Biologie
1984 Diplom mit Hauptfach Anthropologie
1984-1989 Wissenschaftliche Mitarbeiterin / Landesamt für Bodendenkmalpflege Schleswig Holstein
1990-1992 Promotion im Fach Anthropologie
1992-1996 Postdoc/wissenschaftlicher Mitarbeiter
Seit 1996 Akademische Rätin
Seit 2011 Vertretung der Professur in der Abteilung

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Hummel S Ancient DNA. In: Henke W Tattersal I (Eds.) Handbook of Paleoanthropology. Springer Berlin Heidelberg New York 2007

Hummel S Ancient DNA: Recovery and Analysis. In: Encyclopedia of Life Sciences (ELS). Nature John Wiley & Sons, Ltd, Chichester 2008

Grumbkow Pv, Zipp A, Seidenberg V, Fehren-Schmitz L, Kempf VAJ, Groß U, Hummel S (2011)

Evidence of Bartonella quintana infections in skeletons of a historical mass grave in Kassel, Germany. Am J Phys Anthropol 146: 148-151

Fehren-Schmitz L, Warnberg O, Reindel M, Seidenberg V, Tomasto-Cagigao E, Isla-Cuadrado J, Hummel S, Herrmann B. (2011) Diachronic investigations of mitochondrial an Y-chromosomal genetic markers in pre-Columbian Andean highlanders from South Peru. Ann Hum Genet. 75:266-83

Seidenberg V, Schilz F, Pfister D, Georges L, Fehren-Schmitz L, Hummel, S (2012) A heptaplex miniSTR system for the analysis of heavily degraded DNA. Journal of Archaeological Science

Sebastian Büsse, Philipp von Grumbkow, Susanne Hummel, Deep Narayan Shah, Ram Devi Tachamo Shah, Jingke Li, Xueping Zhang, Kazunori Yoshizawa, Sonja Wedmann, Thomas Hörnschemeyer (2012) Phylogeographic Analysis Elucidates the Influence of the Ice Ages on the Disjunct Distribution of Relict Dragonflies in Asia. PloS ONE

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Gesellschaft für Anthropologie

Verantwortliche Tätigkeiten außerhalb der Lehre:

Anleitung von Bachelor-/Masterarbeiten und Dissertationsvorhaben

Leitung von Forschungsprojekten (Lichtensteinhöhle, Kyffhäuserhöhle, Napoleonischer Friedhof Kassel)

Gutachterliche Tätigkeit zu Identifikationsfragen (STR-Typisierung und Morphologie)

Name: Janshoff, Andreas
Titel: Prof. Dr.
Lehrgebiet: Biophysikalische Chemie
Beruflicher/akademischer Werdegang:
1987-1989 Studies of Biology at the University of Münster
1989-1994 Studies of Chemistry at the University of Münster, with honor
1994-1997 PhD thesis (FCI fellowship) under supervision of Prof. Dr. H.-J. Galla, summa cum laude
1997-1998 Postdoctoral Researcher (DFG-fellow) at the Scripps Research Institute (La Jolla, CA, USA)
1999-2001 Habilitation in Biochemistry (DFG fellow) at the University of Münster in the group of Prof. Dr. H.-J. Galla and Prof. Dr. H. Fuchs
2001-2006 Associate Professor (C3) for Physical Chemistry at the University of Mainz
2006-2008 Full Professor (W3) for Biophysical Chemistry at the University of Mainz
2008 Full Professor (W3) for Biophysical Chemistry at the University of Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Rosman, C.; Pierrat, S.; Henkel, A.; Tarantola, M.; Schneider, D.; Sunnick, E.; Janshoff, A.; Sönnichsen, C. (2012) A New Approach to Assess Gold Nanoparticle Uptake by Mammalian Cells: Combining Optical Dark-Field and Transmission Electron Microscopy. *Small*
DOI: 10.1002/smll.201200853

Lazzara, T.D.; Lau, K.H.A.; Knoll, W.; Janshoff, A.; Steinem, C. (2012) Macromolecular shape and interactions in layer-by-layer assemblies within cylindrical nanopores. *Beilstein. J. Nanotechnol.* 3, 475-484

Mey, I.; Steinem, C.; Janshoff, A. (2012) Biomimetic functionalization of porous substrates: towards model systems for cellular membranes. *J. Mater. Chem.* 22, 19348-19356

Krick, R.; Busse, R.A.; Scacioc, A.; Stephan, M.; Janshoff, A.; Thumm, M.; Kühnel, K. (2012) Structural and functional characterization of the two phosphoinositide binding sites of PROPPINs. *Proc. Natl. Acad. Sci. USA* 109, E2042-9.

Michaelis, S.; Rommel, C.E.; Endell, J.; Goering, P.; Wehrspohn, R.B.; Steinem, C.; Janshoff, A.; Galla, H.-J.; Wegener, J. (2012) Macroporous Silicon Chips for Laterally Resolved, Multi-Parametric Analysis of Epithelial Barrier Function. *Lab Chip* 12, 2329-2336.

Lorenz, B.; Álvarez de Cienfuegos, L.; Oelkers, M.; Kriemen, E.; Brand, C.; Stephan, M.; Sunnick, E.; Yueksel, D.; Kalsani, V.; Kumar, K.; Werz, D.; Janshoff, A. (2012) A model system for cell adhesion mediated by weak carbohydrate-carbohydrate interactions. *J. Am. Chem. Soc.* 134, 3326-3329

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Biophysik, Gesellschaft Deutscher Chemiker e.V., Mitglied der Landesgraduiertenschule (Rheinland-Pfalz) POLYMAT, Mitglied der Bundesgraduiertenschule Material Science in Mainz – MAINZ, Universitäres Mitglied der International Max-Planck Graduate School (IMPRS) for Polymer Materials Science, Universitäres Mitglied der IMPRS for Biophysics and Complex Systems

Verantwortliche Tätigkeiten außerhalb der Lehre:

Fakultätsrat ab 2011; Diverse Hochschulgremien (Habitationskommissionen Physik, Chemie, Berufungskommissionen)

Name: Kappeler, Peter
Titel: Professor
Lehrgebiet: Verhaltensbiologie, Anthropologie

Beruflicher/akademischer Werdegang:
1992 PhD, Duke University, USA
1998 Habilitation, Universität Würzburg
2003 Verhaltensökologie (C3), Universität Leipzig
2004 Soziobiologie/Anthropologie (C4), Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Verhaltensbiologie. Springer Verlag. 3. Ausgabe 2011

60 begutachtete Fachpublikationen

Herausgabe von 6 Büchern

12 Drittmittelprojekt, davon 10 DFG gefördert

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Zoologische Gesellschaft, Ethologische Gesellschaft, Gesellschaft für Primatologie
Gesellschaft für Tropenökologie, Groupe d'Etude et de Recherche sur les Primates de Madagascar

International Primatological Society (lifetime member)

International Society for Behavioral Ecology

Verantwortliche Tätigkeiten außerhalb der Lehre:

2008-2015 Deutsche Forschungsgemeinschaft (Fachgutachter Zoologie
„Biologie des Verhaltens und der Sinne“)

ab 2013 Ethologische Gesellschaft (1. Vorsitzender)

2005-2010 International Primatological Society (Vice-President for Research)

Name: Klatt, Simone
Titel: Dr. rer. nat.
Lehrgebiet: Pflanzensystematik, Pflanzenanatomie- und -morphologie
Beruflicher/akademischer Werdegang:
1992–1998 Studium der Biologie, Universität Göttingen
2000–2006 Promotionsstudium und wissenschaftliche Mitarbeiterin,
Abteilung Geobotanik, Universität Trier
Seit 2007 wissenschaftliche Mitarbeiterin, Abteilung Systematische
Botanik, Universität Göttingen
2009–2011 Lehrbeauftragte für Allgemeine Botanik, Fachbereich
Ökologische Agrarwissenschaften, Universität Kassel

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Klatt S. (2008): Der Beitrag heimischer Leguminosen zur Stickstoffversorgung artenreicher Wiesen im westlichen Hunsrück (Rheinland-Pfalz). Dissertation Universität Trier. Cuvillier-Verlag, Göttingen.

Gradstein S. R., Klatt S., Normann F., Weigelt P., Willmann R., Wilson R. (eds.) (2008): Systematics 2008-Programme and Abstracts. Universitätsverlag Göttingen, 425 pp.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

2001 Gesellschaft für Ökologie (GfÖ)
2010 Floristisch-Soziologische Arbeitsgemeinschaft e.V. (FlorSoz)

Verantwortliche Tätigkeiten außerhalb der Lehre:

2007 Verwaltung der EDV der Abteilung Systematische Botanik
Abteilungsbeauftragte für UniVZ, Stud.IP und FlexNow

Name: Kramer, Wilfried
Titel: Privatdozent Dr. rer. nat.
Lehrgebiet: Genetik und Molekularbiologie
Beruflicher/akademischer Werdegang:
1976-1981 Studium der Biologie in Frankfurt und Köln
1982 Diplom an der Universität zu Köln
1986 Promotion an der Universität zu Köln am Institut für Genetik und
MPI für Biochemie Martinsried
1986-1989 Postdoc an der University of California in Berkeley, USA
1989-1993 Hochschulassistent am Institut für Genetik in Göttingen
2000 Habilitation im Fach Molekularbiologie und Genetik
1993-2005 Akademischer Rat an der Universität Göttingen
seit 2005 Akademischer Oberrat an der Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Ede, C., C. J. Rudolph, S. Lehmann, K. A. Schürer, W. Kramer. 2011. *DNA Repair* 10: 45-55.
Panico, E. R., C. Ede, M. Schildmann, K. A. Schürer, W. Kramer. 2010. *Yeast* 27: 11-27.
Schomacher, L., S. Smolorz, E. Ciirdaeva, S. Ber, W. Kramer, H.-J. Fritz. 2010. *Nucl. Acids Res.* 38: 5119-5129.
Schomacher, L., K. A. Schürer, E. Ciirdaeva, P. McDermott, J. P. J. Chong, W. Kramer, H.-J. Fritz. 2010. *DNA Repair* 9: 438-447.
Prakash, R., D. Satory, E. Dray, A. Papusha, J. Scheller, W. Kramer, L. Krejci, H. Klein, J. E. Haber, P. Sung, G. Ira. 2009. *Genes Dev.* 23: 67-79.
Schomacher, L. J. P. Chong, P. McDermott, W. Kramer, H.-J. Fritz. 2009. *Nucl. Acids Res.* 37: 2283-2293.
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Wo Deutsche Gesellschaft für DNA-Reparaturforschung (DGDR)
Verantwortliche Tätigkeiten außerhalb der Lehre:
Beauftragter für Biologische Sicherheit, Strahlenschutzbeauftragter

Name: Krebber, Heike
Titel: Prof. Dr.
Lehrgebiet: Molecular Genetics
Beruflicher/akademischer Werdegang:
1996 Dr. rer. nat., Deutsches Krebsforschungszentrum, DKFZ, Heidelberg (Germany)
1996 Visiting Scientist, Weizman Institute of Science, Rehovot (Israel)
1996-1999 Scientist, Dana-Farber Cancer Institute, Harvard Medical School, Boston (USA)
1999-2010 Junior group leader, Institute for Molecular Biology and Tumor Research, Philipps-Universität Marburg (Germany)
2005 Habilitation in Molecular Biology
2006 Heisenberg Fellow
since 2010 Professor for Molecular Genetics, Georg-August Universität Göttingen (Germany)

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Hackmann, A., Gross, T., Baierlein, C. and Krebber, H. (2011) The mRNA export factor Npl3 mediates the nuclear export of large ribosomal subunits. EMBO-Rep. 12(10): 1024-1031.
Baierlein C, Krebber H (2010) Translation termination: New factors and insights. RNA-Biology 7(5), RNA-Biology 7:issue 5: 548-550
Khoshnevis S, Gross T, Rotte C, Baierlein C, Ficner R, Krebber H (2010) The iron-sulfur protein Rli1 functions in translation termination. EMBO Rep 11:214-219
Gross T, Siepmann A, Sturm D, Windgassen M, Scarelli J, Cole CN, Seedorf M, Krebber H (2007) The DEAD-box RNA-helicase Dbp5 functions in translation termination. Science 315(5812):646-649

Mitgliedschaften in wissenschaftlichen Vereinigungen:

VAAM

Stipendien, Auszeichnungen und Ehrungen:

2009 Heinz Maier-Leibnitz Preis
2006 Fonds der chemischen Industrie
2005 Heisenberg-Fellow
1997 Stipend of the DFG for USA

Name: Kriete, Guido
Titel: Dr.
Lehrgebiet: Molekularbiologie und Physiologie der Pflanze
Beruflicher/akademischer Werdegang:
Studium der Biologie an der Universität Bielefeld
1995 Promotion am Lehrstuhl für Genetik von Prof. Alfred Pühler an der Universität Bielefeld
1995-1996 wissenschaftlicher Mitarbeiter an der Universität Bielefeld
1996 wissenschaftlicher Mitarbeiter an der Universität Göttingen
Seit 1997 Akademischer Rat an der Universität Göttingen
Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
keine
Mitgliedschaften in wissenschaftlichen Vereinigungen:
keine
Verantwortliche Tätigkeiten außerhalb der Lehre:
Strahlenschutzbeauftragter, Beauftragter für biologische Sicherheit, UniVz und StudIP-Administrator der Abteilung, Computer-Administrator, stellvertretendes Mitglied der Auswahlkommission des Masterstudienganges „Microbiology and Biochemistry“

Name: Leuschner, Christoph
Titel: Prof. Dr.
Lehrgebiet: Pflanzenökologie
Beruflicher/akademischer Werdegang:
1977-1982 Studium der Biologie (Dipl.) und Geographie (Dipl.)
1983-1986 Promotion in Biologie (Botanik, Ökologie)
1986-1998 Postdoc/wissenschaftlicher Mitarbeiter Univ. Kiel
1988-1994 Wiss. Mitarbeiter Univ. Göttingen
1994-1996 Hochschulassistent Univ. Göttingen
1994 Habilitation für Botanik, Göttingen
Seit 1996 Lehrstuhl für Ökologie Univ. Kassel, seit 2000 Univ. Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Storkey, J., Meyer, S., Mills, Leuschner, Ch. 2012. The impact of agricultural intensification and land use change on the European arable flora. Proc. Roy. Soc. London B. 279: 1421-1429.

Gebauer, T., Horna, V., Leuschner, Ch. 2012. Canopy transpiration of pure and mixed forest stands with variable abundance of European beech. J. Hydrol. DOI 2012.03.009.

Moser, G., Leuschner, Ch., Hertel, D., Graefe, S., Soethe, N., Iost, S. 2011. Elevation effects on the carbon budget of tropical mountain forests (S Ecuador): The role of the belowground compartment. Global Change Biology 17: 2211-2226.

Zach A., V. Horna and Ch. Leuschner. 2010. Patterns of wood carbon dioxide efflux across an 2,000-m elevation transect in an Andean moist forest. Oecologia 162: 127-137.

Meier, I.C., Leuschner, Ch. 2010. Variation of soil and biomass carbon pools in beech forests across a precipitation gradient. Global Change Biol. 16: 1035-1045.

Ellenberg, H., Leuschner, Ch. 2010. Vegetation Mitteleuropas mit den Alpen. 6. vollst. Neubearb. Aufl. von Ch. Leuschner. Ulmer Verlag, Stuttgart. 1334 p.

Steffan-Dewenter, I., Kessler, M., Barkmann, J., Bos, M., Erasmí, S., Faust, H., Gradstein, S.R., Kappas, M., Hartevelde, M., Hertel, D., Höhn, P., Leuschner, Ch., Marggraf, R., Migge-Kleian, S., Pitopang, R., Schaefer, M., Schwarze, S., Shahabuddin, Sporn, S., Woltmann, L., Zeller, M., Tschardtke, T. 2007. Tradeoffs between income, biodiversity, and ecosystem functioning during tropical rainforest conversion and agroforestry intensification. PNAS 104: 4973-4978.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

2008 Akademie der Wissenschaften Göttingen

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2000 Leiter des Experimentellen Botanischen Garten Göttingen

2000-2010 Co-Editor Journal of Vegetation Science

Name: Lipka, Volker
Titel: Prof. Dr.
Lehrgebiet: Plant Cell Biology
Beruflicher/akademischer Werdegang:
1999 Dr. rer.nat. at the Department for Plant Molecular Biology, Technical University Aachen
1999-2000 Postdoctoral fellow at the SainsburyLaboratory, John Innes Centre, Norwich, UK
2000-2004 Postdoctoral fellow at the Max-Planck Institute for Plant Breeding Research, Cologne
2004-2007 Leader of an independent research group at the Department for Plant Biochemistry, Centre for Plant Molecular Biology, University of Tübingen
2007-2009 Leader of an independent research group at the SainsburyLaboratory, John Innes Centre, Norwich, UK
2009 Professor at the University of Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Wiermer, M., Cheng, Y.T., Imkampe, J., Li, M., Wang, D., Lipka, V. and Li, X. (2012). Putative members of the Arabidopsis Nup107-160 nuclear pore sub-complex contribute to pathogen defense. *Plant Journal*, 70: 796-808.
Willmann, R., Lajunen, H.M., Erbs, G., Newman, M.A., Kolb, D., Tsuda, K., Katagiri, F., Fliegmann, J., Bono, J.J., Cullimore, J.V., Jehle, A.K., Götz, F., Kulik, A., Molinaro, A., Lipka, V., Gust, A.A., Nürnberger, T. (2011) Arabidopsis lysin-motif proteins LYM1 LYM3 CERK1 mediate bacterial peptidoglycan sensing and immunity to bacterial infection. *PNAS* 108(49):19824-19829
Petutschnig, E.K., Jones, A.M., Serazetdinova, L., Lipka, U., Lipka, V. (2010) The Lysin Motif Receptor-like Kinase (LYM-RLK) CERK1 Is a Major Chitin-binding Protein in Arabidopsis thaliana and Subject to Chitin-induced Phosphorylation. *Journal of Biological Chemistry* 285: 28902-28911
Gimenez-Ibanez S., Hann, D.R., Ntoukakis, V., Petutschnig, E., Lipka, V. *, Rathjen, J.P *. (2009) AvrPtoB targets the LysM receptor kinase CERK1 to promote bacterial virulence on plants. *Current Biology*19:423-429 * co-corresponding authors
Kwon, C., Neu, C., Pajonk, S., Yun, H.S., Lipka, U., Humphry, M.E., Bau, S., Straus, M., Rampelt, H., El Kasmi, F., Jürgens, G., Parker, J., Panstruga, R. *, Lipka, V. *, Schulze-Lefert, P.* (2008) Co-option of a default secretory pathway for plant immune responses. *Nature*451: 835-840 * co-corresponding authors
Lipka, U., Fuchs, R., Lipka, V. (2008) Arabidopsis non-host resistance to powdery mildews, *Current Opinion in Plant Biology*11: 404-411
Lipka, V., Kwon, C., Panstruga, R. (2007) SNARE-Ware: The Role of SNARE-Domain Proteins in Plant Biology, *Annual Reviews of Cell and Developmental Biology*23:147-74
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Deutsche Botanische Gesellschaft e.V., International Society for Plant-Microbe Interactions

Name: Majer, Ulrich
Titel: Dr. phil. nat., Dr phil. habil. , apl. Prof.
Lehrgebiet: Philosophie der exakten Wissenschaften, insbesondere der
Mathematik, Physik und Biologie
Beruflicher/akademischer Werdegang:
1972 Promotion in physikalischer Chemie
1987 Habilitation in Philosophie
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Herausgeber der nachgelassenen Schriften David Hilberts zu den Grundlagen der
Mathematik und Naturwissenschaften
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Leibniz-Gesellschaft-Hannover
Gesellschaft fuer analytische Philosophie

Name: Maraun, Mark
Titel: PD Dr.
Lehrgebiet: Tierökologie, Zoologie
Beruflicher/akademischer Werdegang:
1987 – 1994 Studium der Biologie (Diplom) / Uni Göttingen
1994 - 1997 Promotion/Biologie / Uni Göttingen
1995 DAAD Stipendium / Calgary/Canada
1998 - 2008 PostDoc / TU Darmstadt
2000 – 2001 Marie Curie Stipendium / Natural History Museum London
2005 Habilitation für Zoologie & Ökologie an der TU Darmstadt
Seit 2008 Wissenschaftlicher Assistent / Uni Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Pachl P, Domes K, Schulz G, Norton RA, Scheu S, Schaefer I, Maraun M (2012) Convergent evolution of defense mechanisms in oribatid mites (Acari, Oribatida) shows no “ghosts of predation past”. *Molecular Phylogenetics and Evolution*, in press

Maraun M, Erdmann G, Fischer BM, Pollierer MM, Norton RA, Schneider K, Scheu S (2011) Stable isotopes revisited: their use and limits for oribatid mite trophic ecology. *Soil Biology and Biochemistry* 43, 877-882

Maraun M, Erdmann G, Schulz G, Norton RA, Scheu S, Domes K (2009) Multiple convergent evolution of arboreal life in oribatid mites indicates the primacy of ecology. *Proceedings of the Royal Society B: Biological Sciences* 276, 3219-3227

Pollierer MM, Langel R, Körner C, Maraun M, Scheu S (2007) The underestimated importance of belowground carbon input for forest soil food webs. *Ecology Letters* 10, 729-736

Domes K, Norton RA, Maraun M, Scheu S (2007) Re-evolution of sex in oribatid mites breaks Dollo’s law. *Proceedings of the National Academy of Sciences of the United States of America* 104, 7139-7144

mehrere laufende DFG Projekt (e.g. Biodiversitäts- Exploratorien, Ecuador Projekt, Indonesien/Sumatra Projekt, molekulare Darminhaltsanalyse bei Wirbellosen)

Verantwortliche Tätigkeiten außerhalb der Lehre:

2010 Subject Editor für *Soil Biology and Biochemistry* und *Experimental and Applied Acarology*

Name: Peter Meinicke
Titel: Dr.
Lehrgebiet: Bioinformatik
Beruflicher/akademischer Werdegang:
1989-1995 Studium im Fach Naturwissenschaftliche Informatik mit naturwissenschaftlichem Schwerpunkt im Fach Biologie, Universität Bielefeld
1996-2000 Promotionsstudium (Informatik) im Rahmen des Graduiertenkollegs "Aufgabenorientierte Kommunikation" (GK 256)
2000-2003 Wissenschaftlicher Mitarbeiter im Sonderforschungsbereich "Situierete künstliche Kommunikatoren" (SFB 360), Universität Bielefeld
seit 2003 Wissenschaftlicher Mitarbeiter und Gruppenleiter in der Abteilung für Bioinformatik von Prof. Dr. Burkhard Morgenstern am Institut für Mikrobiologie und Genetik, Georg-August-Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

DFG Projekt ME3138/3 „Compositional descriptors for large-scale comparative metagenome analysis“
DFG Projekt ME3138/4 „Computational models for metatranscriptome analysis“

T. Lingner, K. P. Asshauer, F. Schreiber, and P. Meinicke. CoMet—a web server for comparative functional profiling of metagenomes. *Nucleic Acids Research*, 39(WebServer issue):W518–523, July 2011.

P. Meinicke, K. P. Asshauer, and T. Lingner. Mixture models for analysis of the taxonomic composition of metagenomes. *Bioinformatics* (Oxford, England) , 27(12):1618–1624, June 2011.

A. Kaefer, T. Lingner, K. Feussner, C. Goebel, I. Feussner, and P. Meinicke. MarVis: a tool for clustering and visualization of metabolic biomarkers. *BMC Bioinformatics*, 10:92, 2009.

P. Meinicke. UFO: a web server for ultra-fast functional profiling of whole genome protein sequences. *BMC Genomics*, 10:409, 2009.

K. Hoff, M. Tech, T. Lingner, R. Daniel, B. Morgenstern, and P. Meinicke. Gene prediction in metagenomic fragments: a large scale machine learning approach. *BMC Bioinformatics*, 9:217, 2008.

Verantwortliche Tätigkeiten außerhalb der Lehre:

Gutachter für zahlreiche Fachzeitschriften (z.B. *Bioinformatics*, *BMC Bioinformatics*, *BMC Genomics*, *Gene*, *Proceedings of the National Academy of Sciences*, *Journal of Biotechnology*, *IEEE Transactions on Neural Networks*, *Neurocomputing*)
Associate Editor des Open Access Journals „Algorithms for Molecular Biology“

Name: Miral, Darrin
Titel: Lehrkraft für besondere Aufgaben
Lehrgebiet: Scientific English
Beruflicher/akademischer Werdegang:
1996–2002 Bachelor of Arts, Michigan State University
2003–2006 Master of Arts, Universität Hildesheim
2005–2007 Studentischer Übersetzer, Delphi Fuba Reception Systems
seit 2007 Lehrbeauftragter, Universität Hildesheim und Universität
Göttingen
2007 Technischer Übersetzer, Volvo CE
2008 Technischer Übersetzer, Sartorius
seit 2008 Lehrkraft für besondere Aufgaben, Universität Göttingen

Name: Morgenstern, Burkhard
Titel: Prof. Dr.
Lehrgebiet: Bioinformatics
Beruflicher/akademischer Werdegang:
1993 Diploma (Mathematics), LMU München
1996 PhD (Dr. Math.), Universität Bielefeld
1997-1998 Visiting Scientist, North Carolina State University, Raleigh, NC, USA
1998-2000 RPR/Aventis, Dagenham, Essex, UK
2000-2001 MPI für Biochemie, Martinsried and GSF, Neuherberg
2001-2002 Group leader and faculty member at International Graduate School in Bioinformatics and Genome Research, Universität Bielefeld
Since 2002 Professor of Bioinformatics, Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Schultz A.K., Bulla I., Abdou-Chekarou M., Gordien E., Morgenstern B., Zoulim B., Dény P., Stanke M.
jpHMM: Recombination analysis in viruses with circular genomes such as the hepatitis B virus
Nuc. Acids Res. 40: W193–W198.
Lingner T, Kataya A.R., Antonicelli G.E., Benichou A., Nilssen K., Chen X.Y., Siemsen T., Morgenstern B., Meinicke P., and Reumann S. (2011)
Identification of New Plant Peroxisomal Targeting Signals by a Combination of Machine Learning Methods and In Vivo Subcellular Targeting Analyses
Plant Cell 23:1556-1572.
Corel E. Pitschi F. and Morgenstern B (2010) A min-cut Algorithm for the Consistency Problem in Multiple Sequence Alignment. *Bioinformatics* 26:1015-1021
Philippe et al (2009) Phylogenomics restores traditional views on deep animal relationships. *Curr Biol* 19:706-712
Subramanian AR, Kaufmann M, Morgenstern B (2008) DIALIGN-TX: greedy and progressive approaches for segment-based multiple sequence alignment. *Algorithms Mol Biol* 3:6
The Tribolium Genome Sequencing Consortium (2008) The genome of the beetle developmental model and pest *Tribolium castaneum*. *Nature* 452:949-955
Chen et al (2007) Comparative analysis of the complete genome sequence of the plant growth promoting *Bacillus amyloliquefaciens* FZB42. *Nat Biotechnol* 25:1007-1014
Verantwortliche Tätigkeiten außerhalb der Lehre:
BMC Bioinformatics, Section Editor
Algorithms for Molecular Biology, co-founder and co-Editor-in-Chief
Editorial Board: BMC Research Notes, Advances in Bioinformatics, PeerJ
Membership in conference program committees: Workshop on Algorithms in Bioinformatics (WABI), Combinatorial Pattern Matching (CPM), German Conference on Bioinformatics (GCB), Bioinformatics

Name: Pöggeler, Stefanie
Titel: Prof. Dr.
Lehrgebiet: Genetik, Mikrobiologie
Beruflicher/akademischer Werdegang:
1983-1989 Studium der Biologie an der Ruhr-Universität Bochum
1989 Abschluss des Studiums mit dem Diplom
1989-1993 Dissertation unter Anleitung von Prof. Dr. U. Kück an der Fakultät für Biologie der Ruhr-Universität Bochum
1993 Promotion
1989-1991 wissenschaftliche Hilfskraft am Lehrstuhl für Allgemeine Botanik der Ruhr-Universität Bochum
1991-1995 wissenschaftliche Mitarbeiterin
1995-2001 wissenschaftliche Assistentin (C1)
1997 Forschungsaufenthalt in Orsay/Frankreich bei Dr. Denise Zickler am Institut de Génétique et Microbiologie der Université Paris-Sud
2000 Habilitation
2001 Wissenschaftliche Ober-Assistentin (C2)
2001-2003 Vertretung einer C3-Professur „Botanik“ an der Westfälischen Wilhelms Universität Münster
2003-2004 wissenschaftliche Ober-Assistentin (C2) an der Ruhr-Universität Bochum
2004-2006 Hochschuldozentin (C2) an der Ruhr-Universität Bochum
seit 2006 W2 Professur für „Genetik eukaryotischer Mikroorganismen“ am Institut für Mikrobiologie und Genetik der Georg-August Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Storlazzi A, Tesse S, Ruprich-Robert G, Gargano S, Pöggeler S, Kleckner N, Zickler D (2008) Coupling meiotic chromosome axis integrity to recombination. *Genes Dev* 15: 796-809

Elleuche S, Pöggeler S (2009) β -Carbonic anhydrases play a role in fruiting body development and ascospore germination in the filamentous fungus *Sordaria macrospora* *PLoS One*: 4: e5177

Nowrousian M, Staich J, Engh I, Kamerewerd J, Kempken F, Kunstmann B, Kuo HC, Osiewacz HD, Pöggeler S, Read N, Seiler S, Smith S, Zickler D, Kück U, Freitag M (2010) Next-generation sequencing of the 40 Mb genome of the filamentous fungus *Sordaria macrospora*. *PLoS Genetics* 6: e1000891

Klix V, Nowrousian M, Ringelberg C, Lorros JJ, Dunlap JC, Pöggeler S (2010) Functional characterization of MAT1-1-specific mating type genes in the homothallic ascomycete *Sordaria macrospora* provides new insights into essential and non-essential sexual regulators. *Eukaryotic Cell* 9: 894-905

Bloemendal S, Bernhards Y, Bartho K, Dettmann A, Voigt O, Teichert I, Seiler S, Wolters DA, Pöggeler S, Kück U (2012) A homologue of the human STRIPAK complex controls sexual development in fungi. *Mol Microbiol* 84: 310-323

Name: Rowlett, Julie
Titel: Dr.
Lehrgebiet: Mathematik
Beruflicher/akademischer Werdegang:
1996-2001 Bachelorarbeit bei der Universität Washington
1999—2001 Teaching Assistant
2004 Assistentin bei der Eidgenössische Technische Hochschule Zürich
2006-2007 Postdoctoral Researcher and Instructor, Centre de Recherches Mathématiques and McGill University, Montréal, Canada
Summer 2006 and 2007 Instructor, Stanford University Education Program for Gifted Youth
2007-2009 Visiting Assistant Professor, University of California, Santa Barbara
2009-2010 Postdoc/Teaching Assistant, Hausdorff Center for Mathematics, Bonn
2011-2012 Researcher, Max Planck Institut für Mathematik, Bonn

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Spectral geometry and asymptotically conic convergence, *Comm. in Anal. and Geom.* 16, no. 4, (2008), 735--798.

Dynamics of asymptotically hyperbolic manifolds, *Pacific J. of Math.* 242, no. 2, (2009), 377--397.

Conformal deformations of conic metrics to constant scalar curvature, with T. Jeffres, *Math. Res. Lett.* 17, no. 3, (2010), 449--465.

La géométrie de Bakry-Émery et l'écart fondamental, *Séminaire de Théorie Spectrale et Géométrie*, vol. 28, (2009--2010), 147--157, (in French).

On the spectral theory and dynamics of asymptotically hyperbolic manifolds, *Ann. de l'Institut Fourier*, vol. 60, no. 7, (2010), 2461--2492.

On the discrete spectrum of quantum layers, with Z. Lu, *J. Math. Phys.* 53, 073519 (2012).

Zeta-regularized determinants of Laplacians on polygons, *Oberwolfach Report*, no. 25, doi: 10.4171/owr/2012/25, (2012), 36--38.

1) Eigenvalues of collapsing domains and drift Laplacians, with Z. Lu, accepted to appear in *Math. Research Letters*. 2) The fundamental gap of simplices, with Z. Lu, accepted to appear in *Communications in Mathematical Physics*. 3) A heat trace anomaly on polygons, with R. Mazzeo, accepted to appear in *Mathematical Proceedings of the Cambridge Philosophical Society*. 3) Dynamics and zeta functions on conformally compact manifolds, with P. Suarez-Serrato and S. Tapie, conditionally accepted pending revisions to appear in *Transactions of the American Mathematical Society*.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Reviewer, *MathSciNet Mathematical Reviews* : 15 Reviews written since 2008. Reviewer, *Zentralblatt Math* : 3 Reviews written since 2008. 2008 Research Member, *Mathematical Sciences Research Institute*, Berkeley California, USA. *Arbeitsgemeinschaft Mathematisches Forschungsinstitut Oberwolfach*, 9--14.10.2011

Verantwortliche Tätigkeiten außerhalb der Lehre:

Invited research lectures : [14.06.2012] *Mathematisches Kolloquium*, Universität Mainz, [12.01.2012] *Oberseminar Analysis*, Oldenburg, [26.07.2011] *Oberseminar Geometrie*, Jena, [02.12.2010] *London Analysis Seminar*, King's College, [15--16.04.2010] *Princeton University*, [3.11.2010] *Differential geometry/PDE seminar*, University of Washington, [8.10.2010 and 9.02.2010] *Seminaire de la géométrie*, Université de Nantes, (in French). [1.05.2010] *Seminaire de la géométrie*, Université de Provence, (in French). [18.03.2010] *MPI für Mathematik, Bonn. Workshop/Conference attendance and lecture given* : [07.05--11.05.2012] *Analysis and geometric singularities*, *Mathematisches Forschungsinstitut Oberwolfach*, [12--16.03.2012 and 07--11.03.2011] *Geometric and singular analysis*, Universität Potsdam, [18--19.02.2011] *Geometry Workshop*, University of Tsukuba, Japan, [9-13.08.2010] *Topics in spectral and scattering theory*, Penn. State University, [23--

26.10.2009] Microlocal analysis and spectral theory on singular spaces, Penn. State Univ. [1-
-5.06.2009] Spectral theory and geometry, Institut Fourier, Grenoble, France.

Name: Scheu, Stefan
Titel: Prof. Dr
Lehrgebiet: Tierökologie
Beruflicher/akademischer Werdegang:
1979 Hochschulreife am Herrmann-Hesse-Gymnasium Calw (Baden-Württemberg)
1986 Diplom, Universität Göttingen
1989 Promotion, Universität Göttingen
1995 Habilitation, Universität Göttingen
1997-2008 Professor (C3) für Zoologie und Ökologie, Technische Universität Darmstadt
Seit 2008 Professor (W3) für Tierökologie, Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Eisenhauer, N., H. Beßler, C. Engels, G. Gleixner, M. Habekost, A. Milcu, S. Partsch, A. C. W. Sabais, C. Scherber, S. Steinbeiss, A. Weigelt, W.W. Weisser, and S. Scheu. 2010. Plant diversity effects on soil microorganisms support the singular hypothesis. *Ecology* 91:485-496.
Jousset, A., L. Rochat, A. Lanoue, M. Bonkowski, C. Keel, and S. Scheu. 2011. Plants respond to pathogen infection by enhancing the antifungal gene expression of root-associated bacteria. *Molecular Plant - Microbe Interactions* 24:352-356
Pollierer, M., R. Langel, C. Körner, M. Maraun, and S. Scheu. 2007. The underestimated importance of belowground carbon input for forest soil animal food webs. *Ecology Letters* 10:729-736.
Scherber, C., N. Eisenhauer, W. W. Weisser, B. Schmid, W. Voigt, E.-D. Schulze, C. Roscher, A. Weigelt, E. Allan, H. Bessler, M. Bonkowski, N. Buchmann, F. Buscot, L. W. Clement, A. Ebeling, C. Engels, M. S. Fischer, S. Halle, I. Kertscher, A.-M. Klein, R. Koller, S. König, E. Kowalski, V. Kummer, A. Kuu, M. Lange, D. Lauterbach, C. Middelhoff, V. D. Migunova, A. Milcu, R. Müller, S. Partsch, J. S. Petermann, C. Renker, T. Rottstock, A. C W. Sabais, S. Scheu, J. Schumacher, V. M. Temperton, and T. Tschardtke. 2010. Bottom-up effects of plant diversity on biotic interactions in a biodiversity experiment. *Nature* 468:553-556.
Song, Y., B. Drossel, and S. Scheu. 2011. Tangled Bank dismissed too early. *Oikos* 120:1601-1607.
Mitgliedschaften in wissenschaftlichen Vereinigungen:
Gesellschaft für Ökologie (GfÖ), Deutsche Zoologische Gesellschaft (DZG), Deutsche Gesellschaft für allgemeine und angewandte Entomologie (DGaaE), British Ecological Society (BES), Ecological Society of America (ESA)
Verantwortliche Tätigkeiten außerhalb der Lehre:
1997-2010 Subject Editor von *Soil Biology and Biochemistry*
Seit 1998 Editor-in-Chief von *Pedobiologia*
Seit 1998 Mitglied im Editorial Board von *Oecologia*
Seit 1999 Mitglied im Editorial Board von *Basic and Applied Ecology*
2000-2002 Dekan des Fachbereichs Biologie, Technische Universität Darmstadt
2001-2008 Vorsitzender der Studiengruppe Ökologie innerhalb der Deutschen Zoologischen Gesellschaft
Seit 2007 Mitglied im Editorial Board von *Frontiers in Zoology*
2010-2012 Geschäftsführender Direktor des J.F.-Blumenbach-Instituts für Zoologie und Anthropologie
Seit 2012 Mitglied des Fachkollegs Zoologie der Deutschen Forschungsgemeinschaft

Name: Spaak, Johanna Maria
Titel: Master of Science
Lehrgebiet: E-Learning, Grundlagen des wissenschaftlichen Arbeitens
Beruflicher/akademischer Werdegang:
2004 Allgemeine Hochschulreife
2004–2008 Bachelorstudium der Fächer Biologie und Geografie mit dem Abschluss Bachelor of Science (Ruhr-Universität Bochum)
2008-2010 Masterstudium der Biologie (Ruhr-Universität Bochum) mit dem Abschluss Master of Science
Seit 2011 E-Learning für die Fakultät für Biologie und Psychologie im Rahmen von Campus Q Plus, Handlungsfeld V „Freiraum für Innovationen“
Seit 2012 Lehre: Blended-Learning Pilotseminar (Präsenzstudium + E-Learning Einheiten) „Einführung in das wissenschaftliche Arbeiten für Biologen“ (SK-Kurs, Bachelorstudium)
Seit 2012 Koordination der Lehrfilmproduktion für die Fakultät für Biologie und Psychologie
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
Kein Bezug zum Lehrgebiet E-Learning
Mitgliedschaften in wissenschaftlichen Vereinigungen:
-
Verantwortliche Tätigkeiten außerhalb der Lehre:
E-Learning und Lehrfilmproduktion für die Fakultät für Biologie und Psychologie

Name: Stalke, Dietmar
Titel: Prof. Dr. rer. nat.
Lehrgebiet: Anorganische Chemie
Beruflicher/akademischer Werdegang:
1985–1987 Anfertigung der Dissertation, Empfang der Doktorwürde Dr. rer. nat. (Universität Göttingen, Prof. U. Klingebiel), Titel: Lithiumfluorosilylamine – from the tricycle to the iminosilane
1989 und 1991 Postdoc-Aufenthalte bei Prof. P. v. R. Schleyer, Erlangen und Dr. R. Snaith sowie Dr. P. R. Raithby, Cambridge, Vereinigtes Königreich
1993 Habilitation. Beendigung der Habilitation im Arbeitskreis Prof. G. M. Sheldrick in Göttingen mit Arbeiten über die Synthese und die strukturelle Charakterisierung von reaktiven metallorganischen Intermediaten und die Entwicklung neuer Techniken in der Tieftemperatur-Kristallographie.
1995 Oberassistent an der Universität Göttingen
1996–2005 Professor an der Universität Würzburg
2003–2004 Vorsitzender des Diplomprüfungsausschusses der Universität Würzburg
2004 Ruf an die Georg-August-Universität Göttingen
seit 2005 Ordentlicher Professor an der Georg-August-Universität Göttingen
2007 bis 2009 Dekan der Fakultät für Chemie der Georg-August-Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

S. S. Sen, H. W. Roesky, K. Meindl, D. Stern, J. Henn, A. C. Stückl, D. Stalke, *Chem. Commun. (Hot Article)* 2010, 46, 5873.
J. Henn, K. Meindl, A. Oechsner, G. Schwab, T. Koritsanszky, D. Stalke, *Angew. Chem.* 2010, 122, 2472; *Angew. Chem. Int. Ed.* 2010, 49, 2422.
R. S. Ghadwal, H. W. Roesky, S. Merkel, J. Henn, D. Stalke, *Angew. Chem.* 2009, 121, 5793; *Angew. Chem. Int. Ed.* 2009, 48, 5683.
H. Ott, U. Pieper, D. Leusser, U. Flierler, J. Henn, D. Stalke, *Angew. Chem.* 2009, 121, 3022; *Angew. Chem. Int. Ed.* 2009, 48, 2978; classified as VIP paper and featured in a *Highlight* by Piero Macchi in *Angew. Chem.* 2009, 121, 5905; *Angew. Chem. Int. Ed.* 2009, 48, 5793.
U. Flierler, M. Burzler, D. Leusser, J. Henn, H. Ott, H. Braunschweig, D. Stalke, *Angew. Chem.* 2008, 120, 4393; *Angew. Chem. Int. Ed.* 2008, 47, 4321.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Seit 1988 Gesellschaft Deutscher Chemiker (GDCh)
Seit 1996 American Chemical Society (ACS)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Berater der *Zeitschrift für Naturforschung B – A Journal of Chemical Science*
Initiator und Koordinator des DFG-Schwerpunktprogramms 1178. Experimentelle Elektronendichte als Schlüssel zum Verständnis chemischer Wechselwirkungen

Name: Holmer Steinfath
Titel: Prof. Dr.
Lehrgebiet: Philosophie
Beruflicher/akademischer Werdegang:
Studium der Philosophie in Hamburg und Berlin
1988 Promotion an der FU Berlin im Fach Philosophie mit einer Arbeit zur Metaphysik des Aristoteles
Lehraufträge an der FU Berlin, Aufnahme des Studiums der Rechtswissenschaft
1994–2000 Wiss. Assistent an der Universität Konstanz
2000 Habilitation mit der Arbeit „Orientierung am Guten“ (2001 bei Suhrkamp erschienen)
2000–2002 Hochschuldozent in Konstanz
2001-2002 Lehrstuhlvertretung an der Georg-August-Universität Göttingen
2002 Professor für Praktische Philosophie an der RWTH Aachen
2002–2006 Professor für Philosophie an der Universität Regensburg
Seit 2006 Professor für Philosophie an der Georg-August-Universität Göttingen
2007-2008 Mitglied des Vorbereitungskomitees für das Lichtenberg-Kolleg an der Georg-August-Universität Göttingen
2008–2012 Mitglied des DFG Fachkollegiums Philosophie, seit 2010 Ordentliches Mitglied der Akademie der Wissenschaften zu Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

„Philosophie und gutes Leben“, in: K. Meyer (Hg.) *Texte zur Didaktik der Philosophie*. Stuttgart: Reclam 2010, 103-126.

„Subtraktionsgeschichten und Transzendenz. Zum Status der modernen moralischen Ordnung“, in: M. Kühnlein/ M. Lutz-Bachmann (Hg.), *Unerfüllte Moderne? Neue Perspektiven auf das Werk von Charles Taylor*, Suhrkamp 2011, S. 599–622.

„Moral als natürliche soziale Praxis“, in T. Schmidt/ T. Tarkian (Hg.), *Naturalismus in der Ethik. Perspektiven und Grenzen*, Paderborn: mentis 2011, S. 109-127.

„Igualdad e intereses. Sobre la fundamentación de la moral en Ernst Tugendhat“, *Dikaiosyne* 026 (2011) S. 91-109.

Studie zu Moral und Moralbegründungen, Studien zur Rolle von Autonomie im Kontext der modernen Medizin

Mitgliedschaften in wissenschaftlichen Vereinigungen:

2008-2012 Mitglied des Fachkollegiums Philosophie der DFG.
Seit März 2010 Ordentliches Mitglied der Akademie der Wissenschaften, Göttingen.

Verantwortliche Tätigkeiten außerhalb der Lehre:

Gutachtertätigkeit: a) Für Fachzeitschriften: *Allgemeine Zeitschrift für Philosophie*, *Erkenntnis*, *Ethical Theory and Moral Practice*, *GAIA*. *Ökologische Perspektiven in Natur-, Geistes- und Wirtschaftswissenschaften*, *Philosophical Explorations*, *zfwu* (Zeitschrift für Wirtschafts- und Unternehmensethik) b) Für Einrichtungen zur Forschungs- und Begabtenförderung:

Bayerische Elite-Akademie, Cusanuswerk, DAAD, Deutsche Forschungsgemeinschaft (DFG), Fachkollegium „Philosophie“, Deutsche Forschungsgemeinschaft (DFG), Friedrich-Naumann-Stiftung, Schweizer Nationalfond zur Förderung der Wissenschaftlichen Forschung, Studienstiftung des deutschen Volkes, VolkswagenStiftung, Wissenschaftsrat. Drittmittel: Promotionsstudiengang „Biodiversität und Gesellschaft“ an der Georg-August-Universität Göttingen (gefördert durch das Land Niedersachsen, Förderlaufzeit 2010 – 2013); Einwerbung von 2 Promotionsstipendien, Erstbetreuung von 3 Doktorandinnen.

Forschergruppe „Autonomie und Vertrauen in der modernen Medizin“ (Förderinitiative „Schlüsselthemen der Geisteswissenschaften“ der Volkswagenstiftung, Förderlaufzeit 2010 – 2013); Einwerbung einer wissenschaftlichen Mitarbeiterstelle (50 %) für zwei Jahre, einer einsemestrigen Forschungsprofessur und einiger zusätzlicher Gelder (Gesamtvolumen

Bewilligung: 992.900,- Euro, Teilprojekt Philosophie.: 120.800,- Euro)

Name: Stülke, Jörg
Titel: Prof. Dr.
Lehrgebiet: Allgemeine Mikrobiologie
Beruflicher/akademischer Werdegang:
1985-1990 Studium der Biologie an der Ernst-Moritz-Arndt-Universität in Greifswald
1994 Promotion am Institut für Mikrobiologie (Universität Greifswald)
1994-1996 Postdoc am Pasteurinstitut Paris, Labor von G. Rapoport,
seit Dezember 1996 Wissenschaftlicher Mitarbeiter mit eigenständiger Arbeitsgruppe am Lehrstuhl für Mikrobiologie der Universität Erlangen-Nürnberg bei Prof. Dr. Wolfgang Hillen
Mai 2000 Habilitation für das Fach Mikrobiologie
2003 Ernennung zum Professor und Leiter der Abteilung für Allgemeine Mikrobiologie am Institut für Mikrobiologie und Genetik der Georg-August-Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- 1) Mechanismen der Virulenz und Pathogenität bei *Mycoplasma pneumoniae*
 - 2) Das RNA-Degradosom von *Bacillus subtilis*
 - 3) Systembiologische Analyse des Stoffwechsels von *Bacillus subtilis*
- Görke, B. & Stülke, J. (2008) Carbon catabolite repression in bacteria: many ways to make most out of nutrients. *Nature Rev. Microbiol.* 6: 613-624.
Commichau, F. M., Rothe, F. M., Herzberg, C., Wagner, E., Hellwig, D., Lehnik-Habrink, M., Hammer, E., Völker, U. & Stülke, J. (2009) Novel activities of glycolytic enzymes in *Bacillus subtilis*: Interactions with essential proteins involved in mRNA processing. *Mol. Cell. Proteomics* 8: 1350-1360.
Schmidl, S. R., Gronau, K., Pietack, N., Hecker, M., Becher, D., & Stülke, J. (2010) The phosphoproteome of the minimal bacterium *Mycoplasma pneumoniae*: Analysis of the complete known Ser/Thr kinome suggests the existence of novel kinases. *Mol. Cell. Proteomics* 9: 1228-1242
Schmidl, S. R., Otto, A., Lluch-Senar, M., Pinol, J., Busse, J., Becher, D., & Stülke, J. (2011) A trigger enzyme in *Mycoplasma pneumoniae*: Impact of the glycerophosphodiesterase GlpQ on virulence and gene expression. *PLOS Pathogens* 7: e1002263.
Nicolas, P., Mäder, U., Dervyn, E., Rochat, T., Leduc, A., Pigeonneau, N., Bidnenko, E., Marchadier, E., Hoebeke, M., Aymerich, S., Becher, D., Bisicchia, P., Botella, E., Delumeau, O., Doherty, G., Denham, E. L., Devine, K. M., Fogg, M., Fromion, V., Goelzer, A., Hansen, A., Härtig, E., Harwood, C. R., Homuth, G., Jarmer, H., Jules, M., Klipp, E., Le Chat, L., Lecointe, F., Lewis, P., Liebermeister, W., March, A., Mars, R. A. T., Nannapaneni, P., Noone, D., Pohl, S., Rinn, B., Rügheimer, F., Sappa, P. K., Samson, F., Schaffer, M., Schwikowski, B., Steil, L., Stülke, J., Wiegert, T., Wilkinson, A. J., van Dijl, J. M., Hecker, M., Völker, U., Bessières, P., & Noirot, P. (2012) The condition-dependent whole-transcriptome reveals high-level regulatory architecture in bacteria. *Science* 335: 1103-1106.
Mäder, U., Schmeisky, A., G., Flórez, L. A., & Stülke, J. (2012) SubtiWiki – a comprehensive resource for the model organism *Bacillus subtilis*. *Nucleic Acids Res.* 40: D1278-D1287.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

VAAM, GBM

Verantwortliche Tätigkeiten außerhalb der Lehre:

Stellv. Direktor des Instituts für Mikrobiologie und Genetik, Mitglied des Fakultätsrates

Name: Stumpner, Andreas
Titel: Prof. (apl) Dr. rer. nat.
Lehrgebiet: Zoologie, Neurobiologie, Grundlehre Biologie für Humanmediziner

Beruflicher/akademischer Werdegang:

1988 Dr. rer. nat., Universität Erlangen
1990–1991 Postdoctoral fellow, Andrews University, Berrien Springs, USA
1997 Habilitation für Zoologie, Universität Göttingen
2002–2003 Gastprofessor, Universität Zürich, Schweiz
seit April 2003 Professor (apl) für Zoologie in der Abt. Neurobiologie (neu: Zelluläre Neurobiologie)

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Neuronale Grundlagen der Gesangserkennung bei Laubheuschrecken und Grillen
Stumpner A, Allen GR, Lakes-Harlan R (2007) Hearing and frequency dependence of auditory interneurons in the parasitoid fly *Homotrixa alleni* (Tachinidae: Ormiini). *J Comp Physiol A*, 193:113- 125
Stritih N, Stumpner A (2009) Vibratory interneurons in the non-hearing cave cricket indicate evolutionary origin of sound processing elements in Ensifera. *Zoology*, 112: 48-68
Creutzig F, Wohlgemuth S, Stumpner A, Benda J, Ronacher B, Herz AVM (2009) Time-scale invariant representation of acoustic communication signals by a bursting neuron. *J Neurosci* 29: 2575-2580
Ostrowski TD, Stumpner A (2010) Frequency processing at consecutive levels in the auditory system of bush crickets (Tettigoniidae). *J. Comp. Neurol.* 518: 3101-3116
Stout J, Stumpner A, Jeffery J, Samuel L, Atkins G (2011) Response properties of the prothoracic AN2 auditory interneurone to model calling songs in the cricket *Gryllus bimaculatus*. *Physiol. Entomol.* 36: 343-359

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Neurowissenschaftliche Gesellschaft, Deutsche Zoologische Gesellschaft

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied der Studienkommission der Biologischen Fakultät
Mitglied der Prüfungs- und Studienkommission des Masterprogrammes DNB
Laserschutzbeauftragter des JFB-Instituts für Zoologie und Anthropologie
Beauftragter für den CIP-Pool des JFB-Instituts für Zoologie und Anthropologie
Werkstattbeauftragter des JFB-Instituts für Zoologie und Anthropologie

Name: Tech, Maike
Titel: Dr.
Lehrgebiet: Bioinformatik

Beruflicher/akademischer Werdegang:

1997-2003 Studium
2003-2007 Promotion
Seit 2007 Postdoc/wissenschaftlicher Mitarbeiter

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

K. J. Hoff, T. Lingner, P. Meinicke, M. Tech (2009) Orphelia: predicting genes in metagenomic sequencing reads *Nucleic Acids Research*, Web server issue

K. J. Hoff, M. Tech, T. Lingner, R. Daniel, B. Morgenstern, P. Meinicke (2008) Gene prediction in metagenomic fragments: a large scale machine learning approach *BMC Bioinformatics*, 9:217

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2009 Elearning-Beauftragte der Fakultät
Seit 2009 Schwerpunktbeauftragte Bioinformatik
Seit 2007 IT-Beauftragte der Fakultät

Name: Thurow, Corinna
Titel: Dr.
Lehrgebiet: Molekularbiologie und Physiologie der Pflanze
Beruflicher/akademischer Werdegang:
1987–1997 Studium der Biologie an der Universität Bielefeld. Diplomarbeit „Wechselwirkung des bZIP-Transkriptionsfaktors PG13 mit Komponenten im pflanzlichen Zellextrakt“ am Lehrstuhl für Genetik.
1997–2001 Promotion „Biochemische Aufreinigung, funktionelle Analyse und Identifikation eines Interaktionspartners des an der Salicylsäure-induzierbaren Genexpression beteiligten SARP-Komplexes aus Tabak“ am Lehrstuhl für Allgemeine und Entwicklungsphysiologie der Pflanze (Georg-August-Universität Göttingen, Prof. C. Gatz)
2001–2007 Wissenschaftliche Assistentin am Lehrstuhl für Allgemeine und Entwicklungsphysiologie der Pflanze (Georg-August-Universität Göttingen, Prof. C. Gatz)
Seit 2007 Wissenschaftliche Mitarbeiterin am Lehrstuhl für Molekularbiologie und Physiologie der Pflanze (Georg-August-Universität Göttingen, Prof. C. Gatz)

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Ndamukong I, Abdallat AA, Thurow C, Fode B, Zander M, Weigel R, Gatz C (2007). SA-inducible Arabidopsis glutaredoxin interacts with TGA factors and suppresses JA-responsive *PDF1.2* transcription. *Plant J.* 50(1):128-39.

Fode B, Siemsen T, Thurow C, Weigel R, Gatz C (2008). The Arabidopsis GRAS protein SCL14 interacts with class II TGA transcription factors and is essential for the activation of stress-inducible promoters. *Plant Cell* 20(11):3122-35.

Pape S, Thurow C, Gatz C (2010). The Arabidopsis *PR-1* promoter contains multiple integration sites for the coactivator NPR1 and the repressor SNI1. *Plant Physiol.* 154(4):1805-1818.

Köster J, Thurow C, Kruse K, Meier A, Iven T, Feussner I, Gatz C (2012). Xenobiotic- and jasmonic acid-inducible signal transduction pathways have become interdependent at the *Arabidopsis thaliana* *CYP81D11* promoter. *Plant Physiol.* 159 (1): 391-402.

Ralhan A, Schöttle S, Thurow C, Iven T, Feussner I, Polle A, Gatz C (2012). The vascular pathogen *Verticillium longisporum* requires a jasmonic acid-independent COI1 function in roots to elicit disease symptoms in Arabidopsis shoots. *Plant Physiol.* 159 (3): 1192-1203.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Seit 1997 Gesellschaft für Biochemie und Molekularbiologie e.V.

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2002 Strahlenschutzbeauftragte

Name: Tilgner, Andreas
Titel: Prof. Dr.
Lehrgebiet: Geophysikalische Strömungsmechanik

Beruflicher/akademischer Werdegang:

1986 Vordiplom: Technische Hochschule Darmstadt
1988 DEA: Université de Grenoble
1991 Promotion: Université de Grenoble
1991-1993 Postdoc: Princeton University
2000 Habilitation: Universität Bayreuth
seit 2001 Professor: Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

V. Tanriverdi, A. Tilgner, 2011, Global fluctuations in magnetohydrodynamic dynamos. *New Journal of Physics*, Vol. 13, 033019.

E. Hage, A. Tilgner, 2010, High Rayleigh number convection with double diffusive fingers. *Phys. Fluids*, Vol. 22, 076603.

A. Tilgner, 2008, Dynamo action with wave motion. *Phys. Rev. Letters*, Vol. 100, 128501.

A. Tilgner, 2007, Rotational dynamics of the core. In: *Treatise on Geophysics*, G. Schubert editor, Elsevier.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Physikalische Gesellschaft, Deutsche Geophysikalische Gesellschaft, Gauss-Gesellschaft

Name: Treue, Stefan
Titel: Prof. Dr.
Lehrgebiet: Biologische Psychologie & Systemische Neurowissenschaften
Beruflicher/akademischer Werdegang:
1983-86 Studium der Biologie in Frankfurt/Main und Heidelberg
1986-87 'graduate student' am Department of Zoology, Duke University, Durham, NC, USA
1987-92 Doktorand am Department of Brain and Cognitive Science, Massachusetts Institute of Technology, Cambridge, USA
1992 Promotion zum Ph.D. of Neuroscience, Title: "Encoding Surfaces from Motion in the Primate Visual System"
1992-93 Postdoctoral Fellow bei Prof. Andersen, Massachusetts Institute of Technology, Cambridge, USA
1993-95 Postdoctoral Fellow bei Prof. Maunsell, Baylor College of Medicine, Houston, USA
1995-2000 Leiter einer unabhängigen Nachwuchsgruppe in der Neurologischen Uniklinik Tübingen im Rahmen des Förderprogramms Neurobiologie des Landes Baden-Württemberg
2000 Habilitation und Lehrbefugnis im Fach Tierphysiologie Fakultät für Biologie, Universität Tübingen
2000-01 Habilitation und Lehrbefugnis im Fach Tierphysiologie an der Fakultät für Biologie, Universität Tübingen
seit 2001 Direktor des Deutschen Primatenzentrums (DPZ), Leiter der Abteilung Kognitive Neurowissenschaften am DPZ, C4-Professor für Kognitive Neurowissenschaften und Biopsychologie, Fakultät für Biologie, Universität Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Niebergall R, Khayat PS, Treue S, Martinez-Trujillo J (2011) Multifocal attention filters out distracter stimuli within and beyond receptive field boundaries of primate MT neurons. *Neuron* 72:1067-1079.

Niebergall R, Khayat PS, Treue S, Martinez-Trujillo JC (2011) Expansion of MT neurons excitatory receptive fields during covert attentive tracking. *Journal of Neuroscience* 31:15499-15510.

Anton-Erxleben K, Stephan VM, Treue S (2009) Attention reshapes center-surround receptive-field structure in macaque cortical area MT. *Cerebral Cortex* 19: 2466-2478.

Busse L, Katzner S, Treue S (2008): Temporal dynamics of neuronal modulation during exogenous and endogenous shifts of visual attention in macaque area MT. *PNAS* 105(42): 16380-16385.

Womelsdorf T, Anton-Erxleben K, Treue S (2008): Receptive field shift and shrinkage in macaque area MT through attentional gain modulation. *Journal of Neuroscience* 28, 8934-8944.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Cognitive Neuroscience Society, USA; Society for Neuroscience, USA;
Neurowissenschaftliche Gesellschaft; Gesellschaft Deutscher Naturforscher und Ärzte, Gesellschaft für Primatologie

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied des Göttingen Research Council, Mitglied des Kuratoriums der Volkswagenstiftung; Sprecher des Center for Systems Neuroscience (CSN), Göttingen und Leiter des PhD-Programms 'Systems Neuroscience'; Vorstandsmitglied des Bernstein Center for Computational Neuroscience, Göttingen und des Bernstein Focus Neurotechnology, Göttingen; Sprecher der Sektion Systemneurobiologie der Neurowissenschaftlichen Gesellschaft; Mitglied der DFG-Senatskommission für tierexperimentelle Forschung; Sprecher des Netzwerkes der europäischen Primatenzentren 'EUPREN'
Koordinator: des EU-finanzierten europäischen Netzwerkes EUPRIM-NET ; der Leibniz

Graduate School for Primate Neurobiology (NEUROPRIM); des PhD program 'Integrative Neurosensory Sciences (NEUROSENSES)'; Vorsitzender bzw. Mitglied einer Vielzahl von Berufungskommissionen

Name Tröster, Gert
Titel Dr. rer. nat.
Lehrgebiet Zoologie
Beruflicher/akademischer Werdegang
1973-1983 Studium
1989 Promotion
Seit 1990 Postdoc/wissenschaftlicher Mitarbeiter
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre
keine
Verantwortliche Tätigkeiten außerhalb der Lehre
1994 Kustos der Zoologischen Sammlungen und wissenschaftlicher
Leiter des Zoologischen Museums
1994 PC-Admin. Abteilung Morphologie und Systematik
2009 Wahlbeauftragter der Fakultät

Name: Valerius, Oliver
Titel: Dr.
Lehrgebiet: Mikrobiologie & Genetik
Beruflicher/akademischer Werdegang:
1990–1996 Chemiestudium, Abschluss Diplom (Erlangen)
1996–2001 Promotion in Mikrobiologie & Genetik (Göttingen)
2001–2003 Postdoc/wissenschaftlicher Mitarbeiter am Institut f.
Mikrobiologie & Genetik (Göttingen)
Seit 2003 Akademischer Rat am Institut für Mikrobiologie & Genetik,
Abteilung Mol. Mikrobiologie & Genetik

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Rachfall, N., Heinemeyer, I., Morgenstern, B., Valerius, O.*, and Braus, G.H.* (2011). 5' TRU: Identification and analysis of translationally regulative 5'untranslated region in amino acid starved yeast cells. *Mol Cell Proteomics* 10, M110.003350. [* corresponding authors]
Guo, J., Wang, S., Valerius, O., Hall, H., Zeng, Q., Li, J.F., Weston, D.J., Elli, B.E., and Chen, J.G. (2011). Involvement of *Arabidopsis* RACK1 in protein translation and its regulation by abscisic acid. *Plant Physiol* 155, 370-383.
Bayram, O., Krappmann, S., Ni, M., Bok J.W., Helmstaedt, K., Valerius, O. Braus-Stromeier, S., Kwon, N.J., Keller, N.P., Yu, J.H., and Braus, G.H. (2008). Ve1B/VeA/LaeA complex coordinates light signal with fungal development and secondary metabolism. *Science* 320, 1504-1506.
Valerius, O.*, Kleinschmidt, M.*, Rachfall, N., Schulze, F., Lopez Marin, S., Hoppert, M., Streckfuss-Bömeke, K., Fischer, C., and Braus, G.H. (2007). The *Saccharomyces* homolog of mammalian RACK1, Cpc2/Asc1p, is required for *FLO11*-dependent adhesive growth and dimorphism. *Mol Cell Proteomics* 6, 1968-1979. [* contributed equally]
Busch, S., Schwier, E.U., Nahlik, K., Bayram, O., Helmstaedt, K., Draht, O.W., Krappmann, S., Valerius, O., Lipscomb, W.N., and Braus, G.H. (2007). An eight-subunit COP9 signalosome with an intact JAMM motif is required for fungal fruit body formation. *Proc Natl Acad Sci USA* 104, 8089-8094.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Seit 1997 Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2001 Leitung des Massenspektrometrie-Labors am Institut für Mikrobiologie & Genetik

Name: Weingarten, Jens
Titel: Dr. rer. nat.
Lehrgebiet: Physik
Beruflicher/akademischer Werdegang:
1998–2004 Studium der Physik, Universität Bonn
2004–2007 Promotion, Universität Bonn
2007–2009 Postdoc/wissenschaftlicher Mitarbeiter, Universität Dortmund
2009–heute Postdoc/wissenschaftlicher Mitarbeiter, Universität Göttingen
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
W. Adam, J. Weingarten et al. Radiation hard diamond sensors for future tracking applications. *Nucl. Instrum. Meth.*, A565:278–283, 2006. doi: 10.1016/j.nima.2006.05.127.
Jens Weingarten. ATLAS pixel detector system test and cosmics run. *IEEE Trans. Nucl. Sci.*, 56:2543–2548, 2009. doi: 10.1109/TNS.2009.2025174.
Jens Weingarten. Results from the commissioning of the ATLAS pixel detector with cosmics data. *Nucl. Instrum. Meth.*, A617:71–73, 2010. doi: 10.1016/j.nima.2009.10.143.
J. Weingarten et al. Planar Pixel Sensors for the ATLAS Upgrade: Beam Tests results, arXiv:1204.1266
A.Quadt, B. Schröder, M. Uhrmacher, J. Weingarten, B. Willenberg, H. Vennekate, On the Response of an OST to a Point-like Heat Source, arXiv:1111.5520
Mitgliedschaften in wissenschaftlichen Vereinigungen:
2004 Deutsche Physikalische Gesellschaft
Verantwortliche Tätigkeiten außerhalb der Lehre:
2010 Testbeam Koordinator,
ATLAS IBL Collaboration
2010 Testbeam Koordinator,
Diamond Pixel Sensors Collaboration

Name: Willmann, Rainer
Titel: Prof. Dr.
Lehrgebiet: Zoologie
Beruflicher/akademischer Werdegang:
Studium der Paläontologie, Geologie, Zoologie und Limnologie an der Universität Kiel
1974 Diplom (Geologie-Paläontologie; Gesamtnote: Sehr gut)
1974-1979 wiss. Mitarbeiter bzw. Promotionsstipendiat an der Universität Kiel
1979 Promotion (Note: Summa cum laude). Thema der Doktorarbeit: Evolution von Süßwassergastropoden im Tertiär Griechenlands. Dafür Preis der Mathematisch-naturwissenschaftlichen Fakultät der Universität Kiel.
ab 1979 Wissenschaftlicher Mitarbeiter an der Universität Kiel
1982-1984 Habilitanden-Stipendiums der DFG
1985 Habilitation und Verleihung der *venia legendi*
1985-1990 Heisenberg-Stipendium der Deutschen Forschungsgemeinschaft
1988-1990 Forschungstätigkeit überwiegend am Natural History Museum, London
1990 Ernennung zum Apl. Professor an der Universität Kiel
1990 Förderpreis der Greve-Stiftung der Joachim-Jungius-Gesellschaft der Wissenschaften zu Hamburg
1993 Berufung auf den Lehrstuhl für Zoologie an der Universität Göttingen. Direktor des dortigen Zoologischen Museums.
1999/2000 Dekan der Biologischen Fakultät der Universität Göttingen.
1999 Initiierung des „Zentrum für Biodiversitätsforschung und Ökologie“ an der Göttinger Universität.
Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:
1) Evolution und (Paläo-)Ökologie aquatischer Organismen 2) Phylogenie, Morphologie, Evolution und Biogeographie von Insekten. 3) Probleme der Artbildung und innerartlichen Differenzierung
4) Naturschutz; Biotopkartierungen 5) Geschichte der Biologie; Historische Biodiversitätsforschung
6) Theoretische Biologie mit Schwerpunkten in der Phylogenetischen Systematik und der Theorie der biologischen Art 7) Verhalten und jüngere Evolution der Equiden 8) Geologische Geschichte von Inselregionen
Ca. 150 Publikationen; darunter mehrere Bücher u. Lehrbuchbeiträge; Gesamtumfang ca. 2100 Druckseiten
Tätigkeit in wissenschaftlichen Gremien:
1983-1995 Mitglied im Beirat für Naturschutz und Landschaftspflege der Stadt Neumünster.
1990-1996 Mitglied im Beirat des Museums und Forschungsinstituts Alexander Koenig in Bonn.
Ab 1999 Mitglied im Beirat des Deutschen Entomologischen Instituts. Zeitweise Schriftführer und Beiratsmitglied der Paläontologischen Gesellschaft.
2001-2010 Mitglied des wissenschaftlichen Beirats des Museums für Naturkunde, Berlin.
2000 'Honorary Founding Fellow' der International Willi Hennig Society. Im „editorial board“ mehrerer wissenschaftlicher Zeitschriften
Seit 2011 Präsident der Deutschen Gesellschaft für allg. und angew. Entomologie

Name: Wimmer, Ernst A.
Titel: Prof. Dr.rer.nat.
Lehrgebiet: Entwicklungsbiologie
Beruflicher/akademischer Werdegang:
 1991 Diplom (Biologie), Ludwig Maximilians Universität, München
 1995 Dr. rer. nat., MPI für Biophysikalische Chemie, Göttingen, und Baylor College of Medicine, Houston, USA
 1995-1998 Postdoctoral Fellow und Associate, Howard Hughes Medical Institute, The Rockefeller University, New York, USA
 1998-2003 Wissenschaftlicher Assistent und Robert Bosch Stiftung "Juniorprofessor", Lehrstuhl Genetik, Universität Bayreuth, Bayreuth.
 seit 2003 C4-Professur für Entwicklungsbiologie am Blumenbach-Institute für Zoologie and Anthropologie, Georg-August-Universität, Göttingen

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Biological processes, their molecular basis, and their evolutionary conservation or diversification are studied in respect to: segmentation, head and leg development, olfaction as well as stink gland development and function. In addition, novel approaches to insect pest management are developed using developmental genes and molecular biology tools. The animal model systems used at the department include a series of diverse arthropods (insects, crustaceans, chelicerates).

The *Tribolium* Genome Consortium (2008). The genome of the model beetle and pest *Tribolium castaneum*. *Nature* 452, 949-955.

Scolari, F., Schetelig, M.F., Bertin, S., Malacrida, A.R., Gasperi, G. & Wimmer, E.A. (2008). Fluorescent sperm marking to improve the fight against the pest insect *Ceratitis capitata* (Wiedemann; Diptera: Tephritidae). *N. Biotechnol.* 25, 76-84.

Schetelig, M.F., Schmid, B.G.M., Zimowska, G. & Wimmer, E.A. (2008). Plasticity in mRNA expression and localization of *orthodenticle* within higher Diptera. *Evol. Dev.* 10, 700-704.

Schetelig, M.F., Caceres, C. Zacharopoulou, A., Franz, G. & Wimmer, E.A. (2009). Conditional embryonic lethality to improve the sterile insect technique in *Ceratitis capitata* (Wiedemann; Diptera: Tephritidae). *BMC Biology* 7, 4.

Schetelig, M.F., Scolari, F., Handler, A.M., Kittelmann, S., Gasperi, G. & Wimmer, E.A. (2009). Site-specific recombination for the modification of transgenic strains of the Mediterranean fruit fly *Ceratitis capitata*. *Proc. Natl. Acad. Sci.* 106, 18171–18176.

Trauner, J., Schinko, J., Lorenzen, M.D., Shippy, T.D., Wimmer, E.A.*, Beeman, R.W., Klingler, M., Bucher, G. & Brown, S.J. (2009). Large-scale insertional mutagenesis of a coleopteran stored grain pest, the red flour beetle *Tribolium castaneum*, identifies embryonic lethal mutations and enhancer traps. *BMC Biology* 7, 73. (* Corresponding author).

Schaeper, N.D., Prpic, N.M. & Wimmer, E.A. (2010). A clustered set of three Sp-family genes is ancestral in the Metazoa: evidence from sequence analysis, protein domain structure, developmental mRNA expression, and chromosomal location. *BMC Evol. Biol.* 10, 88.

Schaeper, N.D., Pechmann, M., Damen, W.G., Prpic, N.M. & Wimmer, E.A. (2010). Evolutionary plasticity of *collier* function in head development of diverse arthropods. *Dev. Biol.* 344, 363-76.

Ntini, E. & Wimmer, E.A. (2011). Second order regulator Collier directly controls intercalary-specific segment polarity gene expression. *Dev. Biol.* 360, 403-414.

Verantwortliche Tätigkeiten außerhalb der Lehre:

2006-2010 Geschäftsführender Direktor, Johann-Friedrich-Blumenbach-Institute für Zoologie and Anthropologie

seit 2011 Hearing Expert, GM insect working group, European Food Safety Authority (EFSA)

Name: Wörgötter, Florentin
Titel: Prof.
Lehrgebiet: Biophysik – Computational Neuroscience & Robotics
Beruflicher/akademischer Werdegang:
1979-1985 Studium
1985-1988 Promotion
1988-1995 Postdoc Universität Bochum, Inst. f. Physiologie
Jahr 1993 Habilitation für Theoretische und Experimentelle Neurowissenschaften
1995-2000 Heisenberg Stipendiat der DFG, Computational Neuroscience, Bochum
2000-2005 Professor für Computational Neuroscience, Stirling, UK
seit 2005 Univ. Göttingen Physik 3 – Biophysik, Prof. f. Computational Neuroscience

Wichtigsten Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Dellen B.K. and Wörgötter F. (2010) A local algorithm for the computation of image velocity via constructive interference of global Fourier components. *Int. J. Comp. Vis.* submitted.
Manoonpong, P., Geng, T., Porr, B., Kulvicius, T and Wörgötter, F. (2007). Adaptive, fast walking in a biped robot under neuronal control and learning, *PLoS Comp. Biol.*, e134
Markelic, I., Kjaer-Nielsen, A., Pauwels, K., Baunegaard With Jensen, L., Chumerin, N., Vidugiriene, A., Tamosiunaite, M., Van Hulle, M., Krüger, N., Rotter, A. and Wörgötter, F. (2010). The Driving School System: Learning Automated Basic Driving Skills from a Teacher in a Real Car. *IEEE Trans. Intelligent Transportation Systems* (in press).
Ning, K. and Wörgötter, F. (2009). A Novel Concept for Building a Hyper-Redundant Chain Robot. *IEEE Trans on Robotics* 25(6): 1237-1248.
Steingrube, S.; Timme, M.; Wörgötter, F. and Manoonpong, P. (2010) Self-Organized Adaptation of Simple Neural Circuits Enables Complex Robot Behavior. *Nature Physics* (Article) 6, 224-230.
Wörgötter, F., Agostini, A., Krüger, N., Shylo, N. and Porr, B. (2009). Cognitive Agents – A Procedural Perspective relying on “Predictability” of Object-Action Complexes (OACs). *Robotics and Autonomous Systems*, 57(4):420-432.
2008-2013 Germany Ministry of Science: Bernstein Focus Neurotechnology (BFNT), (ca. 11M€ including industrial contributions, Own: ca. 0.5M€, F.W.=Coordinator)
2010-2013 European Grant: GARNICS, (ca. 3.0M€, Own: 0.6M€, F.W.=Member of Board)
2010-2015 Bernstein Center for Computational Neuroscience 2 (BCCN2) (8.0M€, Own: 0.7M€, F.W.=Member of Board).
2012-2015 DFG/BMBF-JST/JSPP: Joint Japanese-German Computational Neuroscience Program: “Haptic Learning” (ca. 0.4M€, own 0.15M€, with ATR Labs, Kyoto and Univ. Bielefeld)
2013-2016 European Grant: ACAT (ca. 3.2M€, Own 0.9M€, F.W.=Coordinator) currently negotiated with the European Commission, start planned for March 2013.

Verantwortliche Tätigkeiten außerhalb der Lehre:

seit 2008 Koordinator des Bernstein Fokus für Neurotechnologie, Göttingen

Anlage 39
Kurz-Vitae der hauptamtlich Lehrenden und Lehrbeauftragten –Bachelor-Studiengang
Psychologie

Name: Dr. Thorsten Albrecht
Titel: Dr. rer. nat.
Lehrgebiet: Experimentelle Psychologie und Methodenlehre

Beruflicher/akademischer Werdegang:

2000: Diplom in Sozialarbeit/Sozialpädagogik an der FH Braunschweig/Wolfenbüttel
2005: Diplom in Psychologie an der TU Braunschweig
2005-2007: wissenschaftlicher Mitarbeiter am Institut für Psychologie, TU Braunschweig (Abteilung für Allgemeine Psychologie)
2008: Promotion an der TU Braunschweig
seit 2007: wissenschaftlicher Mitarbeiter am Institut für Psychologie der Universität Göttingen
2008: Ernennung zum akademischen Rat a.Z.

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Albrecht, T. & Mattler, U. (2012). Individual differences in metacontrast masking regarding sensitivity and response bias. *Consciousness and Cognition*, 21(3), 1222–1231.
- Albrecht, T. & Mattler, U. (2012). Individual differences in subjective experience and objective performance in metacontrast masking. *Journal of Vision*, 12 (5):5, 1 - 24. [www]
- Albrecht, T. & Vorberg, D. (2010). Long-Lasting Effects of Briefly Flashed Words and Pseudowords in Ultra-Rapid Serial Visual Presentation. *Journal of Experimental Psychology: Learning, Memory and Cognition*, Vol. 36(5), 1339–1345.
- Albrecht, T. & Mattler, U. (2010). Individual differences in metacontrast masking: A call for caution when interpreting group data. *Consciousness and Cognition*, 19(2), 672-673.
- Albrecht, T. Klapötke, S & Mattler, U. (2010). Individual differences in metacontrast masking are enhanced by perceptual learning. *Consciousness and Cognition*, 19(2), 656-666.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Keine

Verantwortliche Tätigkeiten außerhalb der Lehre:

bis 2012 stellvertretendes Mitglied im Vorstand des Georg-Elias-Müller-Instituts für Psychologie
Mitglied des Studienausschusses am Georg-Elias-Müller-Institut für Psychologie
Stellvertretendes Mitglied der Berufungskommission für die W2 Professur „Biologische Persönlichkeitspsychologie“ am Institut für Psychologie an der Universität Göttingen 2007

Name: Margarete Boos
Titel: Prof. Dr. phil.
Lehrgebiete: Sozialpsychologie, Wirtschaftspsychologie

Beruflicher/akademischer Werdegang:

1979 Erste Philologische Staatsprüfung in Sozialwissenschaften und Mathematik an der Universität Bonn
1983 Promotion zur Dr. phil. im Fach Soziologie an der Universität Bonn
1984 - 1986 Wissenschaftliche Untersuchungen für das Institut für angewandte Sozialwissenschaft (infas), Bonn-Bad Godesberg, in freier Mitarbeit
1985 - 1990 Wissenschaftliche Mitarbeiterin und stellvertretende Projektleiterin im Teilprojekt B4 „Entscheidungsprozesse in der öffentlichen Verwaltung“ des Sonderforschungsbereichs 221 "Verwaltung im Wandel" an der Universität Konstanz
1990 - 1995 Wissenschaftliche Assistentin (C1) am Lehrstuhl Sozialpsychologie, Universität Konstanz
1993 Habilitation an der Universität Konstanz *venia legendi* für das Fach Psychologie
seit 1995 Professur für Wirtschafts- und Sozialpsychologie (C3) an der Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Laufende Forschungs- und Entwicklungsvorhaben

Koordination und Leistung in Gruppen

- im Rahmen des Courant-Forschungszentrums Evolution of social behaviour: Comparative studies of humans and non-human primates, in Kooperation mit KollegInnen der Psychologie und Biologie
- in Kooperation mit dem Zentrum für Anästhesiologie und Rettungsmedizin (ZARI) der Universitätsmedizin Göttingen

Teamdiagnostik und Teamentwicklung in Start-up Teams

- Entwicklung einer Testbatterie zur Teamdiagnostik und
- Ausgründung der Malamut Teamcatalyst GmbH in Kooperation mit KollegInnen aus dem Bereich Entrepreneurship

Kompetenzentwicklung für Virtuelle Teams

- Projekt „Führung virtueller Teams“ in Zusammenarbeit mit der Kooperationsstelle Hochschulen und Gewerkschaften (EFRE-EU-Förderung)

Psychologie der Marke

- public-private-partnerships mit Marktforschungsunternehmen und Kommunikationsagenturen

Zivilcourage

- Entwicklung und Durchführung des Göttinger Zivilcourage-Impulstrainings (GZIT)

Ausgewählte Veröffentlichungen

- Boos, M., Kolbe, M., Ellwart, T. & Kappeler, P.M. (2011). Coordination in human and non-human primate groups. Heidelberg: Springer.
- Boos, M., Müller, A. & Cornelius, C. (2008). Online-Moderation und Teletutoring. Medienkompetenz für Lehrende. Stuttgart: Kohlhammer.
- Fernandez Castelao, E., Russo, S.G., Cremer, S., Strack, M., Kaminski, L., Eich, C., Timmermann, A. & Boos, M. (2011). Positive impact of crisis resource management training on no-flow time and team member verbalisations during simulated cardiopulmonary resuscitation: A randomised controlled trial. *Resuscitation*, 82, 1338-1343
- Jonas, K.J., Boos, M. & Brandstätter, V. (2007) (Hrsg.). Zivilcourage trainieren! Theorie und Praxis. Göttingen: Hogrefe.
- Riethmüller, M., Fernandez Castelao, E., Eberhardt, I., Timmermann, A. & Boos, M. (2012). Adaptive coordination development in student anaesthesia teams: a longitudinal study. *Ergonomics*, 55, 55-68.

Name: Annette Clüver
Titel: PhD
Lehrgebiet: Entwicklungspsychologie, Pädagogische Psychologie

Beruflicher/akademischer Werdegang:

2004-2010 Doktorandin im „Developmental Cognitive and Social Neurosciences Lab“ an der University of California, San Diego, Abteilung Psychologie.

2003-2004 Forschungspraktikum am Max-Planck-Institut für Kognitions- und Neurowissenschaften, Leipzig.

2002 Auslandssemester an den Universités de Paris, Paris IV und Paris VIII.

1999-2003 Bachelor Studium an der Brown University, Providence, RI. Hauptfach: Kognitive Neurowissenschaften.

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Carver, LJ & Cluver, AL (2009), Stress effects on the brain system underlying explicit memory. In R. Fivush & J. Quas (Eds.) *Emotion and Memory in Development: Biological, Cognitive, and Social Considerations*, (pp.278-312). New York, Oxford University Press.
- Cluver, AL, Heyman, G & Carver, LJ (under revision). Young children gate their own learning when solving problems.
- Rakoczy, H, Cluver, AL, Saucke, L, Stoffregen, N., Migura, J., Gräbener, A., & Call, J (under revision). Intuitive Statistics in non-human primates.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

- Society for Research in Child Development
- Cognitive Development Society

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Wissenschaftliche Mitarbeiterin der Abteilung für Biologische Entwicklungspsychologie.
- Betreuung von Bachelor- und Masterarbeiten in der Abteilung für Biologische Entwicklungspsychologie.

Name: Roland H. Grabner
Titel: Prof. Dr.
Lehrgebiet: Psychologie

Beruflicher/akademischer Werdegang:

bis 2005 Psychologie-Studium an der Karl-Franzens-Universität, Graz
2004 Forschungsaufenthalt Max-Planck-Institut für Bildungsforschung, Berlin
2005 Promotion an der Karl-Franzens-Universität Graz
bis 2007 Forschungs- und Lehrtätigkeit an der Karl-Franzens-Universität, Graz
2007 Wechsel zur ETH Zürich
2012 Promotion an der ETH Zürich
ab 2012 Georg-Elias-Müller-Institut für Psychologie, Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Schneider, M., Grabner, R. H. & Paetsch, J. (2009). Mental number line, number line estimation, and mathematical school achievement: Their interrelations in Grades 5 and 6. *Journal of Educational Psychology*, 101, 359-372.
- Grabner, R. H. & Stern, E. (2009). Begabung. In S. Andresen, R. Casale, T. Gabriel, R. Horstacher, S. Larcher Klee & J. Oelkers (Hrsg.), *Handwörterbuch Erziehungswissenschaft*. Weinheim: Beltz Verlag.
- Grabner, R.H. & Ansari, D. (2010). Promises and pitfalls of a 'cognitive neuroscience of mathematics learning'. *ZDM Mathematics Education*, 42, 655-660.
- Grabner, R.H. & De Smedt, B. (2011). Neurophysiological evidence for the validity of verbal strategy reports in mental arithmetic. *Biological Psychology*, 87, 128-136.
- Ansari, D., De Smedt, B. & Grabner, R.H. (2012). Neuroeducation - a critical overview of an emerging field. *Neuroethics*, 5, 105-117.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

- Deutsche Gesellschaft für Psychologie (DGPs)
- European Association for Research on Learning and Instruction (EARLI)
- Initiative Gehirnforschung Steiermark (INGE St)
- Organization for Human Brain Mapping (OHBM)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied des Rats der Zentralen Einrichtung für Lehrerbildung (ZELB), Georg-August-Universität Göttingen

Name: Willi Hager
Titel: Prof. Dr., Diplom-Psychologe
Lehrgebiet: Psychologische Methodenlehre und Evaluation

Beruflicher/akademischer Werdegang:

1077 Diplom
1978 Promotion
1990 Habilitation

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Testplanung zu statistischen Prüfung psychologischer Hypothesen. (2004, Göttingen: Hogrefe)
- Vorgehensweisen in der deutschsprachigen psychologischen Forschung. Psychologische Rundschau, 2005, 56, 191-200.
- Die Fallibilität empirischer Daten und die Notwendigkeit der Kontrolle der Wahrscheinlichkeiten falscher Entscheidungen. Zeitschrift für Psychologie, 2006, 214, 10-23.
- On the importance of the t and the unit normal distribution in hypotheses testing. A comment on Wolf (2006). Empirische Pädagogik, 2006, 20, 342-343.
- Some common features and some differences between the parametric ANOVA for repeated measures and the Friedman ANOVA for ranked data. Psychology Science, 2007, 209-222.
- Paradigmen der Evaluation und die Meta-Analyse von Lincoln, Suttner und Nestoriuc (2009). Psychologische Rundschau, 2009, 60, 28-31.

Forschung:

- Die Verwendung statistischer Tests in der Psychologie
- Evaluation der Forschung zur Therapie der PTBS

Mitgliedschaften in wissenschaftlichen Vereinigungen:

DGPs

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Betreuung von Diplomarbeiten
- Methodische Beratung

Name: Birgit Kröner-Herwig
Titel: Prof. Dr.
Lehrgebiet: Klinische Psychologie und Psychotherapie

Beruflicher/akademischer Werdegang:

1970 Diplom im Fach Psychologie
1974 Promotion im Fach Psychologie
1974 Wissenschaftliche Assistentin in der Arbeitseinheit für Vegetative Physiologie in der Abteilung für Naturwissenschaftliche Medizin der Ruhr-Universität Bochum
1981 Beendigung des Habilitationsverfahrens an der Ruhr-Universität Bochum mit Erlangung der *venia legendi* im Fach Psychologie
1982-1984/85 Lehrstuhlvertretung (C 4) für Biologische Psychologie an der Universität Düsseldorf
1985-1985/86 Professur für Verhaltensmedizin an der Ruhr-Universität Bochum (C 2)
1986-1995/96 Professur für Klinische Psychologie an der Universität Düsseldorf (C 3)
seit 1996 Professur für Klinische Psychologie und Psychotherapie (C 4) an der Universität Göttingen
1999 Approbation als Psychologische Psychotherapeutin

Forschungsprojekte der letzten 6 Jahre:

- Die Epidemiologie von Kopfschmerz bei Kindern und Jugendlichen - eine populations-basierte Longitudinalstudie (BMBF)
- Sekundärprävention einer Anpassungsstörung bei anhaltendem Tinnitus – Medien-basierte Programme vs. Gruppenschulung (BMBF)
- Entwicklung und Evaluation eines internet-basierten Selbstmanagement-Trainings zur Sekundärprävention von Kopfschmerzen bei Kindern und Jugendlichen (DFG)
- fMRI Studien zum Fear Avoidance Modell des Chronischen Rückenschmerzes
- Tinnitusbezogene Beeinträchtigung: fMRI Untersuchung zum neuropsychologischen Modell
- Hyperakusis: Untersuchungen zur Klärung eines Konstrukts
- Empathie bei Schmerz

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Kröner-Herwig, B., Heinrich, M. & Vath., N. (2011). The assessment of disability in children and adolescents with headache: Adopting PedMIDAS in an epidemiological study. *European Journal of Pain*, 14, 951-958.
- Kröner-Herwig, B. (2011). Chronischer Tinnitus. In M. Linden & M. Hautzinger (Hrsg.), *Verhaltenstherapiemanual* (S. 671-677). Heidelberg: Springer.
- Kröner-Herwig, B., Gaßmann, J., Tromsdorf, M. & Zahrend, E. (2012). The effects of sex and gender role on response to pressure pain. *GMS Psychosocial Medicine*, 9, Doc01.
- Barke, A., Baudewig, J., Schmidt-Samoa, C., Dechent, P. & Kröner-Herwig, B. (2012). Neural correlates of fear of movement in high and low fear-avoidant chronic low back pain patients: An event-related fMRI study. *Pain*, 153, 540-552.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Psychologie, Deutsche Gesellschaft für Psychologische Schmerztherapie und –forschung, Deutsche Gesellschaft zum Studium des Schmerzes, International Association for the Study of Pain, Deutsche Gesellschaft für Verhaltenstherapie, Deutsche Gesellschaft für Verhaltensmedizin und Verhaltensmodifikation, Deutsche Kopfschmerz und Migräne Gesellschaft

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Leiterin des Therapie- und Beratungszentrums
- Leitung des Weiterbildenden Studiengangs Psychologische Psychotherapie der Universität Göttingen in Kooperation mit der der Universität Braunschweig
- Vorsitzende der Ethikkommission des GEMI
- Mitglied der Untersuchungskommission zur Einhaltung der Regeln guter wissenschaftlicher Praxis

Name: Uta Lass
Titel: Prof. Dr.
Lehrgebiet: Experimentelle Psychologie, Allgemeine Psychologie, Kognitionspsychologie

Beruflicher/akademischer Werdegang:

1976 Erste Philologische Staatsprüfung an der Philosophischen Fakultät der Friedrich-Wilhelms-Universität Bonn
1982 Diplom für Psychologie an der Rheinisch-Westfälischen Technischen Hochschule Aachen
1982-1983 Forschungsassistentin an der Rheinisch-Westfälischen Technischen Hochschule Aachen
1983-1993 Wissenschaftliche Angestellte am Institut für Psychologie an der Georg-August-Universität Göttingen mit Aufgaben in Lehre und Forschung
1987 Promotion zum Dr. rer. nat. für das Fach Psychologie an der Georg-August-Universität Göttingen
1993 Ernennung zur Akademische Rätin
1995 Habilitation für das Fach Psychologie vor dem Fachbereich Biologie der Georg-August-Universität Göttingen
2000 Ernennung zur außerplanmäßigen Professorin
2002 Ernennung zur Akademischen Oberrätin

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Lass, U., Yan, S., Yang, Y., Chen, G., Sun, P., Becker, D., Fang, Y. & Lüer, G. (2006). Recognition of briefly exposed digits, Latin letters, and Chinese characters: Evidence for language-specific differences in encoding and rehearsal. *Zeitschrift für Psychologie*, 214, 24-26.
- Yan, S., Lüer, G. & Lass, U. (2007). Kulturvergleichende Wahrnehmungs- und Kognitionsforschung. In G. Trommsdorff & H. J. Kornadt (Hrsg.), *Enzyklopädie der Psychologie: Kulturvergleichende Psychologie*, Band 2: Erleben und Handeln im kulturellen Kontext (S. 1-58). Göttingen: Hogrefe.
- Lass, U., Yan, S., Chen, G., Becker, D. & Lüer, G. (2008). Position effects in encoding briefly exposed item matrices – evidence for a reading bias or merely a matter of the selection criterion? *Psychological Research*, 72, 641-647.
- Lüer, G. & Lass, U. (2012). Das Problem kognitiver Invarianten bei der Diagnose geistiger Leistungen. LIFIS ONLINE [23.01.12]. URL: www.leibniz-institut.de/archiv/lueer_23_01_12.pdf

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Seit 1984 Mitglied der Deutschen Gesellschaft für Psychologie e.V. (DGPs)
Seit 2003 Mitglied des Zentrums für Neurobiologie des Verhaltens (ZNV), Universität Göttingen
Seit 2009 Personal Instructor am Courant Forschungszentrum „The Multi-layered Text Protocol: Micro an Macro Level Structures in Written Discourse“, Universität Göttingen

Verantwortliche Tätigkeiten außerhalb der Lehre:

Seit 2005 Vorsitzende des Prüfungsausschusses für den Diplomstudiengang Psychologie
Seit 2006 Vorsitzende der Prüfungskommission für den Bachelor-Studiengang Psychologie
Seit 2009 Vorsitzende der Prüfungskommission für den Master-Studiengang Psychologie
Seit 2009 Auswahlkommission für den Master-Studiengang Psychologie
Studiengangsbeauftragte für den Bachelor- und den Master-Studiengang Psychologie

Name: Jia Li
Titel: Dr.
Lehrgebiet: English

Beruflicher/akademischer Werdegang:

Postdoc in Dept. Social and Communication Psychology

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Li, J. & Roe, R.A. (In press). Introducing an intra-team longitudinal approach in the study of team process dynamics. *European Journal of Work and Organizational Psychology*
- Li, J. (2011) Time in Teams: Methodological Issues in the Study of Temporal Dynamics (Doctoral dissertation, Maastricht University). Retrieve from <http://arno.unimaas.nl/show.cgi?fid=22081>
- Guenter, H., Emmerik, I.J.H., & Schreurs B., & Li, J. (2011), Explaining Temporal Dynamics in Team Coordination: The Influence of Team Planning and Conflict, the 2011 Eastern Academy of Management International (EAMI) Conference Proceedings

Mitgliedschaften in wissenschaftlichen Vereinigungen:

European Association of Work and Organizational Psychology
Interdisciplinary Network of Group Research

Verantwortliche Tätigkeiten außerhalb der Lehre:

ERASMUS coordinator for GEMI

Name: Dr. Uwe Mattler
Titel: Prof.
Lehrgebiet: Experimentelle Psychologie und Methodenlehre

Beruflicher/akademischer Werdegang:

bis 1991 Diplomstudium Psychologie mit Nebenfach Informatik an der Universität Tübingen
1995 Promotion an der Universität Konstanz
2001 Assistent C1 bei Prof. Dr. Vorberg und Habilitation an der Universität Braunschweig
bis 2004 Vertretungsprofessur C4 für Allgemeine Psychologie an der Universität Magdeburg
bis 2006 Wissenschaftlicher Mitarbeiter an der Universität Magdeburg
Seit 2006 W3 Professur für Experimentelle Psychologie an der Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Mattler, U. & Fendrich, R. (2010). Consciousness mediated by neural transition states: How invisibly rapid motions can become visible. *Consciousness & Cognition*, 19, 172-185.
- Mattler, U. & Palmer, S. (2012). Time course of free-choice priming effects explained by a simple accumulator model. *Cognition*, 123, 347 - 360.
- Albrecht, T., Klapötke, S. & Mattler, U. (2010). Individual differences in metacontrast masking are enhanced by perceptual learning. *Consciousness & Cognition*, 19, 656-666.
- Albrecht, T. & Mattler, U. (2012). Individual Differences in Subjective Experience and Objective Performance in Metacontrast Masking . *Journal of Vision*, 12, 1-24.
- Krüger, D., Klapötke, S., Bode, S. & Mattler, U. (2012). Neural correlates of control operations in inverse priming with relevant and irrelevant masks. *Neuroimage*. DOI:10.1016/ j.neuroimage.2012.09.018

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Experimental Psychology Society, Association for Psychological Science, Association for the Scientific Study of Consciousness

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Leitung der Abteilung Experimentelle Psychologie
- Mitglied im Zentrum für Statistik an der Universität Göttingen
- Mitglied im Vorstand des Center of Systems Neuroscience an der Uni Göttingen
- Mitglied der Ethikkommission am Institut für Psychologie
- Vertreter der Psychologie in der Habilitationskommission der Biologischen Fakultät
- Vorsitzender und Mitglied verschiedener Berufungskommissionen
- Principle Investigator im Courant-Research-Center "Textstrukturen"

Name: Hansjörg Neth
Titel: PhD (Dr.)
Lehrgebiet: Allgemeine Psychologie, Lerntheorie, Urteilen & Entscheiden

Beruflicher/akademischer Werdegang:

2011–aktuell Wissenschaftlicher Mitarbeiter, Kognitionswissenschaften und Entscheidungspsychologie, Universität Göttingen.
2008–2011 Wissenschaftlicher Mitarbeiter, Max-Planck-Institut für Bildungsforschung, Berlin.
2007–2008 Research Assistant Professor, Cognitive Science Department, Rensselaer Polytechnic Institute, Troy, NY, USA.
2003–2007 Post-Doctoral Research Associate, Cognitive Science Department, Rensselaer Polytechnic Institute, Troy, NY, USA.
1999–2003 Ph.D. in Psychology, Cardiff University, UK.
1998–1999 Graduate Student Research Collaborator, Princeton University, USA.
1998 Diplom in Psychologie, Universität Freiburg, Germany.

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Neth, H., & Payne, S. J. (2011). Interactive coin addition: How hands can help us think. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 279–284). Austin, TX: Cognitive Science Society.
- Neth, H., Schächtele, S., Duwal, S., & Todd, P. M. (2011). Competitive mate choice: How need for speed beats quests for quality and harmony. In L. Carlson, C. Hölscher, & T. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 699–704). Austin, TX: Cognitive Science Society.
- Neth, H., Khemlani, S. S., Oppermann, B., & Gray, W. D. (2008). Feedback design for the control of a dynamic multitasking system: Dissociating outcome feedback from control feedback. *Human Factors*, 50(4), 643–651.
- Payne, S. J., Duggan, G. B., & Neth, H. (2007). Discretionary task interleaving: Heuristics for time allocation in cognitive foraging. *Journal of Experimental Psychology: General*, 36 (3), 370–388.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Mitglied der Cognitive Science Society, Assoziiertes Mitglied der Psychonomic Society

Verantwortliche Tätigkeiten außerhalb der Lehre:

- 2009–2012 Mitglied des Programmkomitees der International Conference on Cognitive Modeling (ICCM).
- 2010–2011 Mitglied des Betriebsrats des Max-Planck-Institut für Bildungsforschung
- seit 2004 Reviewer zahlreicher Zeitschriften und Konferenzen (u.a., *Psychonomic Bulletin & Review*, *Cognitive Science*, *Human Factors*, *International Journal of Human-Computer Studies*)

Name: Hannes Rakoczy
Titel: Prof. Dr.
Lehrgebiet: Kognitionswissenschaft, Entwicklungspsychologie

Beruflicher/akademischer Werdegang:

2004 Promotion (Dr. rer. nat.), Universität Leipzig
Postdoctoral Fellow, Max-Planck-Institut für Evolutionäre Anthropologie, Leipzig
2004 – 2006 Wissenschaftlicher Mitarbeiter, Universität Leipzig
2006 – 2009 Wissenschaftlicher Mitarbeiter, Max-Planck-Institut für Evolutionäre Anthropologie, Leipzig
seit 2009 Professor für Biologische Entwicklungspsychologie, Georg-August-Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Rakoczy, H. (2012). Do infants have a theory of mind? *British Journal of Developmental Psychology*, 30(1), 59-74.
- Rakoczy, H. (2010). Executive function and the development of belief-desire psychology. *Developmental Science*, 13(4), 648-661.
- Rakoczy, H., & Tomasello, M. (2009). Done wrong or said wrong? Young children understand the normative directions of fit of different speech acts. *Cognition*, 13(2), 205-212.
- Rakoczy, H. (2008). Taking fiction seriously: Young children understand the normative structure of joint pretend games. *Developmental Psychology*, 44(4), 1195-1201.
- Rakoczy, H., Warneken, F., & Tomasello, M. (2008). The sources of normativity: Young children's awareness of the normative structure of games. *Developmental Psychology*, 44(3), 875-881.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Psychologie, European Society for Philosophy and Psychology

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Sprecher des Courant Research Centre „Evolution of social behavior“.
- Vorsitzender des Studienausschuss der Instituts für Psychologie

Name: Stefan Schulz-Hardt
Titel: Prof. Dr.
Lehrgebiet: Sozialpsychologie und Wirtschaftspsychologie

Beruflicher/akademischer Werdegang:

1993 Diplom in Psychologie an der Christian-Albrechts-Universität Kiel
1996 Promotion (Dr. phil.) an der Christian-Albrechts-Universität Kiel
2002 Habilitation an der Ludwig-Maximilians-Universität München
2003-2004 Professor für Sozial- und Finanzpsychologie (C3) an der TU Dresden
Seit 2004 Professor für Arbeits-, Wirtschafts- und Sozialpsychologie (W3) an der Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Schultze, T., Pfeiffer, F. & Schulz-Hardt, S. (2012). Biased information processing in the escalation paradigm: Information search and information evaluation as potential mediators of escalating commitment. *Journal of Applied Psychology*, 97, 16-32.
- Häusser, J. A., Mojzisch, A., Niesel, M. & Schulz-Hardt, S. (2010). Ten years on: A review of recent research on the Job-Demand-Control(-Support) Model and psychological well-being. *Work & Stress*, 24, 1-35.
- Mojzisch, A. & Schulz-Hardt, S. (2010). Knowing others' preferences degrades the quality of group decisions. *Journal of Personality and Social Psychology*, 98, 794-808.
- Schulz-Hardt, S., Thurow-Kröning, B. & Frey, D. (2009). Preference-based escalation: A new interpretation for the responsibility effect in escalating commitment and entrapment. *Organizational Behavior and Human Decision Processes*, 108, 175-186.
- Schulz-Hardt, S., Vogelgesang, F., Pfeiffer, F., Mojzisch, A. & Thurow-Kröning, B. (2010). When forewarning backfires: Paradoxical effects of elaborating social feedback on entrapment in a losing course of action. *Journal of Behavioral Decision Making*, 23, 404-420.
- DFG-Projekt „Verlusteskalationen“ (SCHU 1279/4-2)
- DFG-Projekt „Koordinationsgewinne durch Gruppenlernen“ (SCHU 1279/11-1)
- DFG-Projekt „Prozess- und Ergebnisverantwortlichkeit bei Gruppenentscheidungen“ (SCHU 1279/14-1)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Deutsche Gesellschaft für Psychologie (Fachgruppen Sozial- sowie AOW-Psychologie)

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Dekan der Biologischen Fakultät (2007-08 & 2010); aktuell Dekanatsvertreter Psychologie
- Geschäftsführender Direktor des Instituts für Psychologie (seit 2010)
- Mitherausgeber des *European Journal of Social Psychology* (2009-2011)
- Mitherausgeber des *Journal of Economic Psychology* (seit 2012)

Name: Stefan Treue
Titel: Prof. Dr.
Lehrgebiet: Biologische Psychologie & Systemische Neurowissenschaften

Akademischer / beruflicher Werdegang:

1983-86 Studium der Biologie in Frankfurt/Main und Heidelberg
1986-87 'graduate student' am Department of Zoology, Duke University, Durham, NC, USA
1987-92 Doktorand am Department of Brain and Cognitive Science, Massachusetts Institute of Technology, Cambridge, USA
1992 Promotion zum Ph.D. of Neuroscience, Title: "Encoding Surfaces from Motion in the Primate Visual System"
2000 Habilitation und Lehrbefugnis im Fach Tierphysiologie Fakultät für Biologie, Universität Tübingen
1992-93 Postdoctoral Fellow bei Prof. Andersen, Massachusetts Institute of Technology, Cambridge, USA
1993-95 Postdoctoral Fellow bei Prof. Maunsell, Baylor College of Medicine, Houston, USA
1995-2000 Leiter einer unabhängigen Nachwuchsgruppe in der Neurologischen Uniklinik Tübingen im Rahmen des Förderprogramms Neurobiologie des Landes Baden-Württemberg
2000-01 Habilitation und Lehrbefugnis im Fach Tierphysiologie an der Fakultät für Biologie, Universität Tübingen
seit 2001 Direktor des Deutschen Primatenzentrums (DPZ), Leiter der Abteilung Kognitive Neurowissenschaften am DPZ, C4-Professor für Kognitive Neurowissenschaften und Biopsychologie, Fakultät für Biologie, Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Niebergall R, Khayat PS, Treue S, Martinez-Trujillo J (2011) Multifocal attention filters out distracter stimuli within and beyond receptive field boundaries of primate MT neurons. *Neuron* 72:1067-1079.
- Niebergall R, Khayat PS, Treue S, Martinez-Trujillo JC (2011) Expansion of MT neurons excitatory receptive fields during covert attentive tracking. *Journal of Neuroscience* 31:15499-15510.
- Anton-Erxleben K, Stephan VM, Treue S (2009) Attention reshapes center-surround receptive-field structure in macaque cortical area MT. *Cerebral Cortex* 19: 2466-2478.
- Busse L, Katzner S, Treue S (2008): Temporal dynamics of neuronal modulation during exogenous and endogenous shifts of visual attention in macaque area MT. *PNAS* 105(42): 16380-16385.
- Womelsdorf T, Anton-Erxleben K, Treue S (2008): Receptive field shift and shrinkage in macaque area MT through attentional gain modulation. *Journal of Neuroscience* 28, 8934-8944.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Cognitive Neuroscience Society, USA; Society for Neuroscience, USA; Neurowissenschaftliche Gesellschaft; Gesellschaft Deutscher Naturforscher und Ärzte, Gesellschaft für Primatologie

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Mitglied des Göttingen Research Council
- Mitglied des Kuratoriums der Volkswagenstiftung
- Sprecher des Center for Systems Neuroscience (CSN), Göttingen und Leiter des PhD-Programms 'Systems Neuroscience'
- Vorstandsmitglied des Bernstein Center for Computational Neuroscience, Göttingen und des Bernstein Focus Neurotechnology, Göttingen
- Sprecher der Sektion Systemneurobiologie der Neurowissenschaftlichen Gesellschaft
- Mitglied der DFG-Senatskommission für tierexperimentelle Forschung
- Sprecher des Netzwerkes der europäischen Primatenzentren 'EUPREN'
- Koordinator des EU-finanzierten europäischen Netzwerkes EUPRIM-NET; der Leibniz Graduate School for Primate Neurobiology (NEUROPRIM); des PhD program 'Integrative Neurosensory Sciences (NEUROSENSES)'

Name: Michael Waldmann
Titel: Prof. Dr.
Lehrgebiet: Allgemeine Psychologie

Beruflicher/akademischer Werdegang:

1988 Promotion zum Dr. phil. (Universität München)
1987-1994 Wissenschaftlicher Mitarbeiter (Universität Frankfurt, Tübingen)
1995 Habilitation (Universität Tübingen)
1994-1998 Wissenschaftlicher Mitarbeiter (Max-Planck-Institut für psychologische Forschung, München)
1998 Professur (C3) für Allgemeine Psychologie und Methodenlehre (Universität Göttingen)
Seit 2005 Professur (W3) für Allgemeine Psychologie und Methodenlehre (Universität Göttingen)

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- Waldmann, M. R., Schmid, M., Wong, J., & Blaisdell, A. P. (in press). Rats distinguish between absence of events and lack of evidence in contingency learning. *Animal Cognition*.
- Nagel, J., & Waldmann, M. R. (in press). Deconfounding distance effects in judgments of moral obligation. *Journal of Experimental Psychology: Learning, Memory, and Cognition*.
- Waldmann, M. R., & Hagmayer, Y. (in press). Causal reasoning. In D. Reisberg (Ed.), *Oxford Handbook of Cognitive Psychology*. New York: Oxford University Press.
- Dhami, M. K., Schlotmann, A., & Waldmann, M. R. (Eds.)(2012). *Judgment and decision making as a skill. Learning, development and evolution*. Cambridge: Cambridge University Press.
- Waldmann, M. R., Nagel, J., & Wiegmann, A. (2012). Moral judgment. In K. J. Holyoak & R. G. Morrison (Eds.), *The Oxford handbook of thinking and reasoning* (pp. 364-389): New York: Oxford University Press.
- Blaisdell, A. P., & Waldmann, M. R. (2012). Rational rats: Causal inference and representation. In E. Wasserman & T. Zentall (Eds.), *The Oxford Handbook of Comparative Cognition* (pp. 175-198). Oxford: Oxford University Press.
- Hagmayer, Y., Meder, B., v. Sydow, M., & Waldmann, M. R. (2011). Category transfer in sequential causal learning: The unbroken mechanism hypothesis. *Cognitive Science*, 35, 842-873.
- Fenker, D. B., Schoenfeld, M. A., Waldmann, M. R., Schuetze, H., Heinze, H.-J., & Duzel, E. (2010). 'Virus and epidemic': Causal knowledge activates prediction error circuitry. *Journal of Cognitive Neuroscience*, 22, 2151-2163.
- Leising, K. J., Wong, J., Waldmann, M. R., & Blaisdell, A. P. (2008). The special status of actions in causal reasoning in rats. *Journal of Experimental Psychology: General*, 137, 514-527.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

- American Psychological Association
- Association for Psychological Science
- Cognitive Science Society
- Deutsche Gesellschaft für Psychologie
- Deutscher Hochschulverband
- Psychonomic Society

Verantwortliche Tätigkeiten außerhalb der Lehre:

keine

Anlage 40

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten Master-Studiengang "Internationaler Naturschutz"

Name: Niko Balkenhol

Titel: Prof. (W1); PhD

Lehrgebiet: Wildlife Management

Beruflicher/akademischer Werdegang:

Seit 10/ 2012: Juniorprofessor (tenure track) Wildlife Management, Fakultät für Forstwissenschaften und Waldökologie, Georg-August-Universität Göttingen

10/2009 – 09/2011: Postdoc am Leibniz-Institut für Zoo- und Wildtierforschung (IZW), Berlin

08/2005 – 05/2009: Fulbright-Stipendiat und Doktorand am Department of Fish & Wildlife Resources, University of Idaho, USA

10/2001 – 09/2004: Diplom-Student im Aufbaustudiengang Umweltmonitoring, Forschungszentrum für Geoinformatik und Fernerkundung, Hochschule Vechta

10/1998 – 09/2001: Bachelor-Student im Studiengang Forstwissenschaften und Waldökologie, Fakultät für Forstwissenschaften und Waldökologie, Georg-August-Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Landguth, E., **Balkenhol, N.** (in press): *Relative sensitivity of neutral versus adaptive genetic data for assessing population differentiation*. Conservation Genetics

Balkenhol, N., Landguth, E. (2011): *Simulation modeling in landscape genetics: on the need to go further*. Molecular Ecology 20: 667-670.

Spears, S., **Balkenhol, N.**, McRae, B., Scribner, K. Fortin, M.-J. (2010): *Modeling resistance surfaces for landscape genetics: considerations for parameterization and analysis*. Molecular Ecology 19: 3576-3591.

Balkenhol, N. & Waits, L.P. (2009) *Molecular road ecology: Exploring the potential of molecular genetics to investigate the impacts of transportation on wildlife*. Molecular Ecology 18: 4151-4164.

Balkenhol, N., Waits, L.P., Dezza ni, R. (2009) *Statistical approaches in landscape genetics: An evaluation of methods for linking landscape and genetic data*. *Ecography* 32: 818-830.

Balkenhol, N., Gugerli, F., Cushman, S., Waits, L., Coulon, A., Arntzen, J.W., Holderegger, R., Wagner, H. (2009) *Identifying future research needs in landscape genetics: where to from here?* Landscape Ecology 24: 455–463.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

The Wildlife Society (TWS), International Association of Landscape Ecologists (IALE)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Mitglied im „Editorial Review Board“ für Molecular Ecology

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Dr. Erwin Bergmeier

Titel: Professor

Lehrgebiet: Botanik, Vegetationsökologie

Beruflicher/akademischer Werdegang:

Ab Juni 2003 Universitätsprofessor, Universität Göttingen

Juli 1997 bis Mai 2003 Wiss.Assistent, Institut für Biologie, Universität Freiburg, Deutschland; Mai 2003 Habilitation

Januar 1993 bis Juni 1997 Forschungsstipendiat, Botan. Institut, Universität Kopenhagen, Dänemark

July 1989 bis Dezember 1992, Postdoc, Botanisches Institut, Universität Bochum, Deutschland

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Uğurlu, E., Roleček, J. & Bergmeier, E. 2012. Oak woodland vegetation of Turkey – a first overview based on multivariate statistics. – *Applied Vegetation Science*, Doi: 10.1111/j.1654-109X.2012.01192.x

Kalajnxhiu, A., Tsiripidis, I. & Bergmeier, E. 2011: The diversity of woodland vegetation in Central Albania along an altitudinal gradient of 1300 m. – *Plant Biosystems*, doi10.1080/11263504.2011.634446.

Krause, B., Culmsee, H. Wesche K., Bergmeier, E. & Leuschner, C. 2011: Habitat loss of floodplain meadows in north Germany since the 1950s. – *Biodiversity and Conservation* 20: 2347–2364.

Bauer, E.-M. & Bergmeier, E. 2011: The mountain woodlands of western Crete – plant communities, forest goods, grazing impact and conservation. – *Phytocoenologia* 41: 73-105.

Kallimanis, A. S., Panitsa, M., Bergmeier, E. & Dimopoulos, P. 2011: Examining the relationship between total species richness and single island palaeo- and neo-endemics. – *Acta Oecologica* 37: 65-70.

Bergmeier, E. 2010: *Filago wagenitziana* (Asteraceae, Gnaphalieae), a new species from western Crete, Greece. – *Willdenowia* 40: 183-188.

Bergmeier, E., Petermann, J. & Schröder, E. 2010. Geobotanical survey of wood-pasture habitats in Europe: diversity, threats and conservation. – *Biodiversity and Conservation* 19: 2995-3014.

Tsiripidis, I., Papaioannou, A., Sapounidis, V. & Bergmeier, E. 2010: Approaching the serpentine factor at a local scale – a study in an ultramafic area in northern Greece. – *Plant and Soil* 329: 35-50.

Bergmeier, E., Konstantinou, M., Tsiripidis, I. & Sýkora, K. V. 2009: Plant communities on metalliferous soils in northern Greece. *Phytocoenologia* 39: 411-438.

Willner, W., Di Pietro, R. & Bergmeier, E. 2009: Phytogeographical evidence for post-glacial dispersal limitation of European beech forest species. – *Ecography* 32: 1011-1018.

Tsiripidis, I., Bergmeier, E., Fotiadis, G. & Dimopoulos, P. 2009: A new algorithm for the determination of differential taxa. – *Journal of Vegetation Science* 20: 233-240.

Chaideftou, E., Thanos, C. A., Bergmeier, E., Kallimanis, A. & Dimopoulos, P. 2009: Seed bank composition and above-ground vegetation in response to grazing in sub-Mediterranean oak forests (NW Greece). – *Plant Ecology* 201: 255–265.

Bergmeier, E. & Dimopoulos, P. 2008: Identifying plant communities of thermophilous deciduous forest in Greece: Species composition, distribution, ecology and syntaxonomy. – *Plant Biosystems* 142: 228-254.

Tsiripidis, I., Bergmeier, E. & Dimopoulos, P. 2007: Geographical and ecological differentiation in Greek *Fagus* forest vegetation. – *Journal of Vegetation Science* 18: 743-750.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

International Association for Vegetation Science; European Vegetation Survey; Organization for the Phytotaxonomic Investigation of the Mediterranean Area; Netzwerk Phytodiversität Deutschland; Floristisch-soziologische Arbeitsgemeinschaft; Gesellschaft für Ökologie; Hellenic Botanical Society, Foreign Member; Gesellschaft zur Erforschung der Flora Deutschlands

Verantwortliche Tätigkeiten außerhalb der Lehre:

Prüfungskomitee Biologische Fakultät; Vorstand AvH-Institut; Komiteevorsitz Masterstudiengang Biodiversity, Ecology & Evolution; Komitee PhD-Studiengänge Biodiversity & Ecology und MINC

I. Curriculum vitae

Brose, Ulrich, Prof. Dr.

Address

J.F. Blumenbach Institute of Zoology and Anthropology, Faculty of Biology
Georg August University Göttingen
Berliner Straße 28, 37073 Göttingen
Phone: +49 (0) 551 39 9738
Fax: +49 (0) 551 39 5373
Email: ubrose@gwdg.de
Internet: <http://www.uni-goettingen.de/de/189430.html>

Personal Data

Year of Birth: 1970
Nationality: German
Sex: Male

Academic Education

2008 Habilitation, Zoology, Technische Universität Darmstadt
1997 - 2001 Dr. rer. nat., University of Potsdam
1990 - 1997 Study of Biology, University of Hamburg and Johann Wolfgang Goethe University Frankfurt

Professional Career

Since 2010 Professor of Systemic Conservation Biology, Georg August University Göttingen
2009 - 2010 Temporary Professorship, Technische Universität Darmstadt
2004 - 2009 Head of the Emmy-Noether Group "Complex Ecological Networks", Technische Universität Darmstadt
2001 - 2004 Postdoc (Leopoldina Fellowship), San Francisco State University, USA

Fellowships, Awards and Honours (incl. Honorary Memberships)

2009 Heisenberg Fellowship of the DFG
2004 - 2009 Emmy-Noether Fellow, Technische Universität Darmstadt
2008 Adolf-Messer Award of the Messer Foundation
2001 Leopoldina Fellowship

Editorials

Since 2008 Basic and Applied Ecology
Since 2007 Oikos

5 most important publications

Berlow, E.L., Dunne, J.A., Martinez, N.D., Stark, P.B., Williams, R.J., **Brose, U.** (2009) Simple prediction of interaction strengths in complex food webs. *PNAS* 106: 187-191.
Brose, U. (2008) Complex food webs prevent competitive exclusion among producer species. *Proceedings of the Royal Society B* 275: 2507-2514.
Otto, S., Rall, B.C.*, **Brose, U.** (2007) Allometric degree distributions facilitate food web stability. *Nature* 450: 1226-1229.
Brose, U., Williams, R.J., Martinez, N.D. (2006) Allometric scaling enhances stability in complex food webs. *Ecology Letters* 9: 1228-1236.

Brose, U., Ostling, A., Harrison, K., Martinez, N.D. (2004) Unified spatial scaling of species and their trophic interactions. *Nature* 428: 167-171.

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Dr Hannah Buckley

Title: Senior Lecturer

Field of teaching: Community ecology, theoretical ecology

Professional/academic career:

2009-present Senior Lecturer in Ecology, Lincoln University

2004-2008 Lecturer in Ecology, Lincoln University

2003 Ecology Research Associate/Technician, Lincoln University

2001-03 Postdoctoral Fellow in Ecology, Florida State University

Most important publications and research projects of the last 5 years:

Jonsson, M., **Buckley, H.L.**, Case, B.S., Wratten, S.D., Hale, R.J., Didham, R.K. 2012. Agricultural intensification drives landscape-context effects on host-parasitoid interactions in agroecosystems. *Journal of Applied Ecology*, Online Early doi: 10.1111/j.1365-2664.2012.02130.x

Buckley, H.L. 2011. Isolation affects tree-scale epiphytic lichen community structure on New Zealand mountain beech trees. *Journal of Vegetation Science* 22: 1062–1071.

Day, N. J., **Buckley, H.L.** 2011. Invasion patterns across multiple scales by *Hieracium* species over 25 years in tussock grasslands of New Zealand's South Island. *Austral Ecology* 36: 559–570.

Baiser, B., Gotelli, N.J., **Buckley, H.L.**, Miller, T.E., Ellison, A. 2011. Geographic variation in network structure of a nearctic aquatic food web. *Global Ecology and Biogeography* 21(5): 579-591.

Buckley, H.L., Miller TE, Ellison A, Gotelli NJ. 2010. Local- to continental-scale variation in the richness and composition of an aquatic food web. *Global Ecology and Biogeography* 19: 711-723.

Buckley, H.L., Freckleton, R.P. 2010. Understanding the role of species dynamics in abundance-occupancy relationships. *Journal of Ecology* 98: 645-638.

Miller, T. E. Gornish, E. and **H. L. Buckley.** 2010. Climate and coastal dune vegetation: disturbance, recovery and succession. *Plant Ecology* 206:97–104.

Diez, J.M., **Buckley, H.L.**, Case, B.S., Harsch, M.A., Sciligo, A.R., Wangen, S.R. and Duncan, R.P. 2009. Interacting effects of management and environmental variability at multiple scales on invasive species distributions. *Journal of Applied Ecology* 46: 1210–1218.

Professional functions and positions besides teaching:

Editorial Board Member, New Zealand Journal of Ecology

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

Name: Dr Timothy J. Curran

Title: Lecturer in Ecology

Field of teaching: Ecology of New Zealand, Principles of Ecology, Field Ecology, Plant Ecology, Plant Functional Ecology, Restoration Ecology, Tropical Ecology

Professional/academic career:

June 2011 – **Lecturer**, Department of Ecology, Faculty of Agriculture and Life Sciences, **Lincoln University**, Christchurch, New Zealand.
Sept 2010 – May 2011 **Associate Professor of Tropical Forest Management, School for Field Studies**, Centre for Rainforest Studies, Yungaburra, QLD, and **Lecturer, Boston University**.
Mar 2006 – Aug 2010 **Lecturer in Tropical Forest Management, School for Field Studies**, Centre for Rainforest Studies, Yungaburra, QLD, and **Lecturer, Boston University**.
June – Aug 2005 **Lecturer in Tropical Ecology, School for Field Studies**, Centre for Rainforest Studies, Yungaburra, QLD, and **Lecturer, Boston University**.
2001 – 2006 **PhD in Botany**, University of New England, Armidale, Australia
1993 – 1996 **BSc (Hons Class 1) in Environmental Science (Biology)**, University of New South Wales, Australia.

Most important publications and research projects of the last 5 years:

Deines, J.M., Hellmann, J.J. and **Curran T.J.** (2011) Traits associated with drought survival in three Australian tropical rainforest seedlings. *Australian Journal of Botany* **59**: 620-628
Berry, Z.C., Wevill, K. and **Curran, T.J.** (2011) The invasive weed *Lantana camara* increases fire risk in dry rainforest through alteration of fuel loads. *Weed Research* **51**: 525–533
Curran, T.J., Reid, E.M. and Skorik, C. (2010) Effects of a severe frost on riparian rainforest restoration in the Australian wet tropics: foliage retention by species and the role of forest shelter. *Restoration Ecology* **18(4)**: 408-413
Curran, T.J., Clarke, P.J. and Warwick, N.W.M. (2009) Water relations of woody plants on contrasting soils during drought: does edaphic compensation account for dry rainforest distribution? *Australian Journal of Botany* **57(8)**: 629-639
Curran, T.J., Brown, R. L., Edwards, E., Hopkins, K., Kelley, C., McCarthy, E., Pounds, E., Solan, R. & Wolf, J. (2008) Plant functional traits explain interspecific differences in immediate cyclone damage to trees of an endangered rainforest community in north Queensland. *Austral Ecology* **33(4)**: 451-61
Curran, T.J., Gersbach, L.N., Edwards, W. and Krockenberger, A. (2008) Wood density predicts plant damage and vegetative recovery rates caused by cyclone disturbance in tropical rainforest tree species of North Queensland, Australia. *Austral Ecology* **33(4)**: 442-50
Laurance, W.F. & **Curran, T.J.** (2008) Impacts of wind disturbance on fragmented tropical forests: A review and synthesis. *Austral Ecology* **33(4)**: 399-408

Professional functions and positions besides teaching:

Member of: Ecological Society of Australia, New Zealand Ecological Society, Ecological Society of America, INTECOL (International Association for Ecology).

Reviewer for: *New Phytologist*, *Ecology*, *Journal of Ecology*, *Annals of Botany*, *Plant Ecology*, *Austral Ecology*, *Australian Journal of Botany*, *Journal of Tropical Ecology*, *Caribbean Journal of Science*, *Tropical Ecology* and *Pacific Conservation Biology*.

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Nicholas Mark Dickinson

Title: Prof. Dr.

Field of teaching:

Applied Ecology, Soil Ecology, Plant Ecology

Professional/academic career:

2010 - Professor of Ecology, Lincoln University

1986- 2010 Senior Lecturer (1986-1998), Reader (1998-2003), Professor of Environmental Biology (2003-2010) Liverpool John Moores University, UK.

1981 - 1985 Lecturer (1981-81) and Senior Lecturer (1983-85), Kenyatta University, Nairobi, Kenya.

Most important publications and research projects of the last 5 years:

Beesley L. Dickinson N. Carbon and trace element fluxes in the pore water of an urban soil following greenwaste compost, woody and biochar amendments inoculated with the earthworm *Lumbricus terrestris*. *Soil Biology & Biochemistry* 43: 188-196. 2011.

Beesley L., Dickinson N. Carbon and trace element mobility in an urban soil amended with green waste compost. *Journal of Soils and Sediments* 10: 215-222. 2010.

Hartley W, Dickinson NM, Riby P, Leese E, Morton J, Lepp NW.(2010) Arsenic mobility and speciation in a contaminated urban soil are affected by different methods of green waste compost application. *Environmental Pollution*, 158, 3560-3570

Hartley W. Dickinson N (2010) Exposure of an anoxic and contaminated canal sediment: Mobility of metal(loid)s. *Environmental Pollution* 158: 649-657. 2010.

Ho L, Dickinson N, Chan G. Green procurement in the Asian public sector and the Hong Kong private sector. *Natural Resources Forum* 24-38. 2010.

Research Projects:

Ecological Remediation of Brownfield Soils (UK)

Rhizosphere Ecology of New Zealand Native Plants and Mediation of Groundwater Quality in Agricultural Landscapes (NZ)

Professional functions and positions besides teaching:

Head of Ecology Department, Lincoln University

Member of Faculty Management Group, Faculty of Agricultural and Life Sciences.

Member of Management Forum, Lincoln University

Editorial: *International Journal of Phytoremediation*; *Environmental Geochemistry and Health*

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Dr Crile Doscher

Title: Senior Lecturer

Field of teaching: Geographic Information Systems, Water Resources Engineering

Professional/academic career:

BA – English Literature, University of Illinois, USA, 1986

MS – Agricultural Engineering, Penn State, USA, 1992

PhD – Agricultural Engineering, Penn State, USA, 1996

Faculty of Environment, Society and Design, Lincoln University, New Zealand, 1996 - present

Most important publications and research projects of the last 5 years:

Czerepowicz, L, B S Case, C Doscher. 2012. Using satellite image data to estimate aboveground shelterbelt carbon stocks across an agricultural landscape. *Agriculture, Ecosystems and Environment*. 156: 142 – 150.

Collins, K E, C Doscher, H Rennie, J G Ross. 2012. The effectiveness of riparian ‘restoration’ on water quality – a case study of lowland streams in Canterbury, New Zealand. *Restoration Ecology*.

Marinov, M. and C Doscher. 2011. Spatial Modelling of Odonata Habitats in the Pacific, 1: Introduction to the techniques in spatial modeling. *Odonatologica*. 40(4): 287 – 304.

Silbermayr, K, K Hacklander, C Doscher, J Koefer and K Fuchs. 2011. A spatial assessment of culicoides spp. Distribution and bluetongue disease risk areas in Austria. *Berliner und Munchener Tierarztliche Wochenschrift*. 124(5/6): 228 – 235.

Christensen, K and C Doscher. 2010. The interaction of river engineering and geomorphology in the Lower Wairau River, Marlborough, New Zealand. *New Zealand Journal of Hydrology*. 49(2):79 – 98

Projects:

Agent-based modeling of tourism movements in New Zealand.

Physical modeling of a permanent outlet to Te Wairewa/ Lake Forsyth, Canterbury, New Zealand

Professional functions and positions besides teaching:

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Eckhard Gottschalk

Titel: Dr.

Lehrgebiet: Naturschutzbiologie

Beruflicher/akademischer Werdegang:

1985-1993: Studium der Biologie (Zoologie, Botanik) in Freiburg

1993-1998 Promotion an der Universität Würzburg

Seit 1995: Wissenschaftlicher Mitarbeiter an der Abteilung Naturschutzbiologie

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Seit 2005: Wie lässt sich das Aussterberisiko einer lokalen Rebhuhnpopulation minimieren? Management zur Verbesserung der demographischen Parameter

Seit 2009: Analyse der Rückgangsursachen beim Rotmilan.

Seit 1993: Langzeitstudie zur Populationsdynamik zweier Heuschreckenpopulationen

2007-2011: Einfluss von Insekten-Herbivoren auf die Verteilung von Wald und Grasland in der nördlichen Mongolei

Mitgliedschaften in wissenschaftlichen Vereinigungen:

DOG (Deutsche Ornithologen-Gesellschaft)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Forschung im Rahmen der Projekte

Durchführung von Naturschutz-Management

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Hermann Hondong

Titel: Dr.

Lehrgebiet: Naturschutzbiologie mit Schwerpunkt auf Naturschutzinventuren

Beruflicher/akademischer Werdegang: Studium Forstwissenschaften Uni Freiburg, Promotion in Biologie Uni Göttingen, Naturschutzfachlicher Mitarbeiter einer kommunalen Verwaltungsgemeinschaft 1988-1993, wissenschaftlicher Mitarbeiter Abt. Naturschutzbiologie der Uni Göttingen seit 1995, Koordinator Zentrum für Naturschutz Uni Göttingen 1995-2001

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre: Einfluss forstlicher Bewirtschaftung auf die Zusammensetzung, Struktur und Diversität von europäischen Rotbuchenwäldern

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Verantwortliche Tätigkeiten außerhalb der Lehre: Studienberater für das Fach Naturschutz seit 1995, Gremienarbeit

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

Name: Christoph Kleinn

Titel: Prof. Dr. rer. nat., Dipl.-Forstw.

Lehrgebiet: Waldinventur, Fernerkundung

Beruflicher/akademischer Werdegang:

04.10 - 03.12	Dekan, Fakultät für Forstwiss. und Waldökologie, Georg-August-Universität Göttingen
12.05 - 03.10	Direktor, Center for Tropical and Subtropical Agriculture and Forestry, Univ. Göttingen;
01.02 -	Professor, Abteilung Waldinventur und Fernerkundung, Universität Göttingen;
11.96 -12.01	Head Biostatistics Section, Associate Professor, CATIE, Costa Rica;
04.91 -10.96	Wiss. Assistant C1, Abteilung Forstliche Biometrie, Universität Freiburg;
07.87 - 03.91	Wiss. Angestellter, Abteilung Forstliche Biometrie, Univ. Freiburg.
10.85 - 06.87	Programmierer, Klinikrechenzentrum Freiburg (davon 16 Monate als Zivildienst).
04.84 - 09.85	Freiberuflich: Forstliche Softwareentwicklung.
12.1998	Habilitation, Universität Freiburg
01.1991	Promotion, Universität Freiburg
04.1984	Diplom-Forstwirt, Universität Freiburg

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- DFG: (gesamt: Eur 1.350.000) → 2 *Projekte* im SPP „Exploratories for large-scale and long-term functional biodiversity research“ (2011-2014)
→ 4 *Einzelprojekte* (1) Development of design unbiased estimators for the restricted *k*-tree sampling techniques PCM and T-square sampling (2008-2010); (2) The sensitivity of landscape metrics (2008-2010); (3) Development of integrated carbon monitoring approaches for tropical forests in Indonesia (2012-2015); (4) Fragmentation of information procurement from large area forest inventory and the link to the policy-making process (2012-2015)
→ Beteiligung SFB Indonesien mit Teilprojekt B05: Methodological approaches to the assessment of all tree resources in transition systems in forested tropical landscapes (2012-2016)
- BMZ (gesamt: Eur 1.100.000) (1) ALUCCSA – Adaptation of land use to climate change in Sub-Saharan Africa (2008-2011, Koordinator); (2) Strengthening Rural Institutions to Support Livelihood Security for Small-holders Involved in Industrial Tree-planting Programs in Vietnam and Indonesia (2008-2010); (3) Making Mekong Connected (MMC) - Development of Carbon Market and Conservation Financing Mechanisms for Multifunctional Landscape Bio-corridors in Upper Mekong (2009-2011); (4) Improving small farm production and marketing of bananas under trees: - Resource partitioning, living soils, cultivar choice and marketing strategies (2009-2012)
- BMBF (gesamt Eur 1.650.000): Verbundprojekt in China „Innovative Technologien und Dienstleistungen im Rahmen einer nachhaltigen und multifunktionalen Bewirtschaftung chinesischer Wälder“ (2012 -2015)
- Kleinn C and F Vilčko. 2006. Design unbiased estimation for point to tree distance sampling. Canadian Journal of Forest Research 36(6): 1407-1414.
- Fehrmann L, A Lehtonen, C Kleinn and E Tomppo. 2008. Comparison of linear and mixed-effect regression models and a *k*-nearest neighbour approach for estimation of single-tree biomass. Canadian Journal of Forest Research 38(1): 1-9.
- Lam TY and C Kleinn. 2008. Estimation of tree species richness from large area forest inventory data: evaluation and comparison of Jackknife estimators. Forest Ecology and Management 255 (3/4): 1002-1010.
- Fuchs H, P Magdon, C Kleinn and H Flessa. 2009. Estimating aboveground carbon in a catchment of the Siberian forest tundra: Combining satellite imagery and field inventory. Remote Sensing of Environment 113(3): 518-531.
- Kleinn C, G Kändler and S Schnell. 2011. Estimating forest edge length from forest inventory sample data. Canadian Journal of Forest Research 41(1): 1-10.
- Fischer C, C Kleinn, L Fehrmann, H Fuchs and O Panferov. 2011. A national level forest resource assessment for Burkina Faso – A field based forest inventory in a semiarid environment combining small sample size with large observation plots. Forest Ecology and Management 262(8): 1532-1540

Mitgliedschaften in wissenschaftlichen Vereinigungen: -

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

Verantwortliche Tätigkeiten außerhalb der Lehre:

Dekan 2010-2012; Mitglied des Fakultätsrat Forst seit 2006

Mitglied Fachkollegium 207 der DFG (seit 2007); Leiter des Kompetenzteams 4a von GIZ/BEAF (BMZ) seit 2007; Mitglied des Technical Advisory Board zum NFMA Programm der FAO; Honorary Member of the Advisory Panel to the Forest Survey of India.

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Holger Kreft

Titel: Prof. Dr.

Lehrgebiet: Ökologie, Biogeographie

Beruflicher/akademischer Werdegang:

2009-: Junior Research Group Leader (Juniorprofessor W1), Biodiversity, Macroecology & Conservation Biogeography, Georg-August-Universität Göttingen

2009: Postdoctoral fellow, University of Bonn

2008-2009: Postdoctoral fellow, University of California San Diego

2007: Postdoctoral researcher, Academy of Sciences and Literature, Mainz

2007: Promotion in Biologie / Botanik (Dr. rer. nat.), summa cum laude, Rheinische Friedrich-Wilhelms Universität Bonn

2002: Diplom in Biologie (Dipl. Biol.), Rheinische Friedrich-Wilhelms Universität Bonn

1996-2002: Studium der Biologie und Geographie, , Rheinische Friedrich-Wilhelms Universität Bonn, Boston University

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Kreft, H. & Jetz, W. (2010): A framework for delineating biogeographical regions based on species distributions. - *Journal of Biogeography* 37: 2029–2053.

Kier, G., Kreft, H., Lee, T.M., Jetz, W., Ibsch, P.I., Nowicki, C., Mutke, J. & Barthlott, W. (2009): A global assessment of endemism and species richness across island and mainland regions. - *Proceedings of the National Academy of Sciences* 106: 9322–9327.

Kreft, H., Jetz, W., Mutke, J., Kier, G. & Barthlott W. (2008): Global diversity of island floras from a macroecological perspective. - *Ecology Letters* 11: 116-127.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Ecological Society of America (ESA), International Biogeography Society (IBS), Gesellschaft für Ökologie (GfÖ), Gesellschaft für Tropenökologie (GTÖ)

Verantwortliche Tätigkeiten außerhalb der Lehre:

Gleichstellungsbeauftragter Fakultät für Forstwissenschaften und Waldökologie

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Dr. Laura Molles

Title: Lecturer in Vertebrate Ecology

Field of teaching: Behavioural Ecology and Conservation

Professional/academic career: Lecturer – Lincoln University (2006-present); NSF International Research Fellow – University of Waikato (2001-2004); PhD – University of California, San Diego (1999); BA – Yale University (1994)

Most important publications and research projects of the last 5 years: vocal behaviour of North Island kokako; acoustic anchoring in terrestrial bird translocations; translocation of tui to Banks Peninsula, Canterbury; behaviour and conservation of little blue penguins.

Publications:

L.E. Molles, A. Calcott, D. Peters, G. Delamare, J.D. Hudson, J. Innes, I. Flux & J. Waas. 2008. “Acoustic anchoring” and the successful translocation of North Island kokako (*Callaeas cinerea wilsoni*) to a mainland management site within continuous forest. Notornis 55(2): 57–68.

W. Allen, F. Helps & L. Molles (2011). Factors affecting breeding success of the Flea Bay white-flipped penguin (*Eudyptula minor albosignata*) colony. *New Zealand Journal of Ecology*, 35(3), 199-208. New Zealand Ecological Society.

S.C. Mouterde, D.M. Duganzich, L.E. Molles, S. Helps, F. Helps & J.R. Waas (2012). Triumph displays inform eavesdropping little blue penguins of new dominance asymmetries. Animal Behaviour 83: 605-611.

D.W. Bradley, L.E. Molles, S.V. Valderrama, S. King & J.R. Waas (2012). Factors affecting post-release dispersal, mortality, and territory settlement of endangered kokako translocated from two distinct song neighborhoods. Biological Conservation 147: 79-86.

S.V. Valderrama, L.E. Molles & J.R. Waas (in press). Population size affects singing behavior of a rare duetting songbird. Conservation Biology.

Professional functions and positions besides teaching:

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: MICHAEL MÜHLENBERG

Titel: Universitätsprofessor, Dr. rer. nat. , Honorary Professor zweier Universitäten

Lehrgebiet: Naturschutzbiologie, Ökologie, Umweltwissenschaften

Beruflicher/akademischer Werdegang: Promotion (Zoologie) 1970 Univ. Heidelberg, Habilitation (Zoologie) 1977 Univ. Heidelberg, PD/Oberassistent Univ. Würzburg ab 1978, Universitätsprofessor für Tierökologie Univ. Würzburg ab 1980, 1994 Berufung an die Universität Göttingen als Universitätsprofessor (C4) Naturschutzbiologie, Direktor des Zentrums für Naturschutz an der Universität, 2009 – heute: weiter vertraglich beschäftigt an der Univ. Göttingen, Abt. Naturschutzbiologie, (Vertretung der eigenen Professorenstelle)

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

- ASTARAS, C, MÜHLENBERG, M. & WALTERT, M. (2008): Note on drill (*Mandrillus leucophaeus*) ecology and conservation status in Korup National Park, Southwest Cameroon. – *American Journal of Primatology* 70: 306-310
- BAI, M.-L. & MÜHLENBERG, M. (2008): Sequential use of holes by birds breeding in a natural boreal forest in Mongolia. – *Bird Study* 55: 161-168
- DULAMSUREN, CH., HAUCK, M. & MÜHLENBERG, M. (2008): Insect and small mammal herbivores limit tree establishment in northern Mongolian steppe. – *Plant Ecology* 195: 143-156
- KIFFNER, C., MEYER, B., MÜHLENBERG, M. & WALTERT, M. (2009): Plenty of prey, few predators: what limits lions in Katavi National Park, Western Tanzania. – *Oryx* 43: 52-59
- MÜHLENBERG, M. & SPELLERBERG, I. 2010: Nature Conservation as a science., p. 74-94 in: Spellerberg, I., Slowik, J., Mühlenberg, M., and Dgebuadze, Y.Y. (eds): *Biological Diversity and Nature Conservation: Theory and Practice for Teaching*. Moscow. 266p.
- MÜHLENBERG M., APPELFELDER J., HOFFMANN H., AYUSH E., AND WILSON K.J. 2012: Structure of the Montane Taiga Forests of West Khentii, Northern Mongolia. - *Journal of Forest Science* 58 (2): 45–56.
- PANGAU-ADAM, M., NOSKE R., MUEHLENBERG, M. 2012: Wildmeat or Bushmeat? Subsistence Hunting and Commercial Harvesting in Papua (West New Guinea), Indonesia. – *Hum. Ecol.* DOI 10.1007/s10745-012-9492-5; published online Springer.
- WALTERT, M., MEYER, B., SHANYANGI, M.W., BALOZI, J.J., KITWARA, O., QOLLI, S., KRISCHKE, H. & MÜHLENBERG, M. (2008): Foot surveys of large mammals in the woodlands of western Tanzania. – *Journal of Wildlife Management* 72: 603-610

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Verantwortliche Tätigkeiten außerhalb der Lehre: Leitung einer ökologischen Forschungsstation im Norden der Mongolei (seit 1997), Leitung einer ökologischen Forschungsstation in West-Papua (seit 2009).
Leitung einer Hochschulpartnerschaft „Networking in teaching modules of linking ecosystems in Indonesia“ (BMZ/DAAD).

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

Name: Adrian Paterson

Title: Senior Lecturer in Zoology

Field of teaching: Animal behavior, evolutionary biology, research methods

Professional/academic career:

1994-2012 Lecturer, Lincoln University
1990-94 PhD, University of Otago
1989 B.Sc.(hons, first class) Zoology, University of Otago

Most important publications and research projects of the last 5 years:

Landis, C. A., Campbell, H. J., Begg, J. G., Mildenhall, D.C., **Paterson, A. M.**, Trewick, S. A. 2008. The Waipounamu erosion surface: questioning the antiquity of the New Zealand land surface and terrestrial fauna and flora. *Geological Magazine* 145: 173-197.

Washington, C.M., **Paterson, A.M.**, Sixtus, C.R., Ross, J.G. 2008. Roadside Behaviour of *Porphyrio porphyrio melanotus* (Aves: Rallidae). *N Z Natural Sciences* 33: 33-41.

Banks, J.C., Cruickshank, R.C., Drayton, G.M., **Paterson, A.M.** 2008. Few genetic differences between Victorian and Western Australian blue penguins. *N Z Journal of Zoology* 35: 265-270.

Goldberg, J., Trewick, S.A., **Paterson, A.M.** 2008. Evolution of New Zealand's terrestrial fauna: a review of molecular evidence. *Philosophical Transactions of the Royal Society B* 363: 3319-3334.

Vargas, M.L., Cruickshank, R.H., Ross, J.G., Holyoake, A.J., Ogilvie, S.C., **Paterson, A.M.** 2009. Non-invasive recovery and detection of possum (*Trichosurus vulpecula*) DNA from bitten bait interference devices (WaxTags®). *Molecular Ecology Resources* 9: 505-515.

Troup, C., Sixtus, C.R., **Paterson, A.M.** 2009. The long commute: Southern Royal Albatross (*Diomedea epomophora*) foraging trips during incubation. *N Z Natural Sciences* 34: 19-28.

Morgan, S.A., Hansen, C.M., Ross, J.G, Hickling, G.J, Ogilvie, S.C, and **Paterson, A.M.** 2009. Urban cat (*Felis catus*) movement and predation activity associated with a wetland reserve in New Zealand. *Wildlife Biology* 36: 574-580.

MacLeod, C.J., **Paterson, A.M.**, Tompkins, D.M., Duncan, R.P. 2010. Parasites lost? Do invaders miss the boat or drown on arrival? *Ecology Letters* 13: 516-527.

Heenan, P.B., Mitchell, A.D., de Lange, P.J., Keeling, J., **Paterson, A.M.** 2010. Late-Cenozoic origin and diversification of Chatham Islands endemic plant species revealed by analyses of DNA sequence data. *New Zealand Journal of Botany* 48: 83-136.

Saxton, V.P., Mulder, I., Creasy, G.L., **Paterson, A.M.**, Ross, J.G., Trought, M.C.T. 2011. Comparative behavioural responses of silvereyes (*Zosterops lateralis*) and European blackbirds (*Turdus merula*) to secondary metabolites in grapes. *Austral Ecology* 36: 233-239.

Lattimore, V.L., Vink, C.J., **Paterson, A.M.**, Cruickshank, R.H. 2011. Unidirectional introgression within the genus *Dolomedes* in southern New Zealand. *Invertebrate Systematics* 25: 70-79.

Malumbres-Olarte, J., Vink, C.J., Ross, J.G., Cruickshank, R.H., **Paterson, A.M.** In press. The role of habitat complexity on spider communities in native alpine grasslands of New Zealand. *Insect Conservation and Diversity*

Professional functions and positions besides teaching:

Associate editor for Systematic Biology

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Matin Qaim

Titel: Professor

Lehrgebiet: Welternährungswirtschaft und RURale Entwicklung

Beruflicher/akademischer Werdegang:

2000	Promotion (Dr. agr.), Universität Bonn
2001-2003	Postdoc, University of California at Berkeley
2003	Habilitation, Universität Bonn (Fach: Agrar- und Entwicklungsökonomie)
2003-2007	Professor, Universität Hohenheim, Stuttgart
Seit 2007	Professor, Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Ausgewählte Publikationen:

- Kathage, J., M. Qaim (2012). Economic Impacts and Impact Dynamics of Bt (*Bacillus thuringiensis*) Cotton in India. *Proceedings of the National Academy of Sciences USA* 109: 11652-11656.
- Rao, E.J.O., B. Brümmer, M. Qaim (2012). Farmer Participation in Supermarket Channels, Production Technology, and Efficiency: The Case of Vegetables in Kenya. *American Journal of Agricultural Economics* 94: 891–912.
- de Haen, H., S. Klasen, M. Qaim (2011). What Do We Really Know? Metrics for Food Insecurity and Undernutrition. *Food Policy* 36: 760-769.
- Qaim, M. (2009). The Economics of Genetically Modified Crops. *Annual Review of Resource Economics* 1: 665-693.
- Qaim, M., A. Subramanian, P. Sadashivappa (2009). Commercialized GM Crops and Yield. *Nature Biotechnology* 27: 803-804.

Ausgewählte Forschungsvorhaben:

- DFG-Graduiertenkolleg (GRK 1666) "Transformation of Global Agri-Food Systems" (Sprecher)
- DFG-Sonderforschungsbereich (SFB 990) "Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems (Sumatra, Indonesia) (Vizesprecher)

Mitgliedschaften in wissenschaftlichen Vereinigungen:

- Akademie der Wissenschaften zu Göttingen
- American Agricultural Economics Association (AAEA)
- European Association of Agricultural Economists (EAAE)
- International Association of Agricultural Economists (IAAE)
- Arbeitsgemeinschaft Tropische und Subtropische Agrarforschung (ATSAF)
- Verein für Socialpolitik, Ausschuss für Entwicklungsländer

Verantwortliche Tätigkeiten außerhalb der Lehre:

- Wissenschaftlicher Beirats für Agrarpolitik des Bundesministeriums für Ernährung, Landwirtschaft und Verbraucherschutz (BMELV)
- Aufsichtsrat des International Maize and Wheat Improvement Center (CIMMYT)
- Aufsichtsrat von Africa Harvest International Foundation
- Golden Rice Humanitarian Board
- Associate Editor der Zeitschrift "Agricultural Economics"
- Editorial Board der Zeitschrift "Food Policy"

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Rall, Björn Christian

Titel: Dr.

Lehrgebiet: Statistik, Tierökologie, Theoretische Ökologie, (Naturschutz)

Beruflicher/akademischer Werdegang:

2006 erwerb des Diploms in Biologie an der Technischen Universität Darmstadt

2010 erwerb des Doktorgrades in Biologie an der Technischen Universität Darmstadt

seit 2010 Wissenschaftlicher Mitarbeiter der Arbeitsgruppe "Systemischer Naturschutz" an der Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Otto, S., **Rall, B.C.** & Brose, U. (2007): Allometric degree distributions facilitate food web stability. *Nature* 450: 1226-1229.

Rall, B.C., Guill, C. & Brose, U. (2008): Food-web connectance and predator interference dampen the paradox of enrichment. *Oikos* 117: 202-213.

Rall, B.C., Vucic-Pestic, O., Ehnes, R.E., Emmerson, M. & Brose, U. (2010): Temperature, predator-prey interaction strength and population stability. *Global Change Biology* 16: 2145-2157.

Petchey, O.L., Brose, U. & **Rall, B.C.** (2010): Predicting the effects of temperature on food web connectance. *Philosophical Transactions of the Royal Society B* 365: 2081-2091.

Vucic-Pestic, O., Ehnes, R., **Rall, B.C.**, & Brose, U. (2011): Warming up the system: higher predator feeding rates, but lower energetic efficiencies. *Global Change Biology* 17: 1301-1310.

Ehnes, R.B., **Rall, B.C.**, Brose, U. (2011): Phylogenetic grouping, curvature and metabolic scaling in terrestrial invertebrates. *Ecology Letters*, 14: 993-1000, doi: 10.1111/j.1461-0248.2011.01660.x

Mitgliedschaften in wissenschaftlichen Vereinigungen:

seit 2007: Gesellschaft für Ökologie

seit 2007: Ecological Society of America

seit 2010: British Ecological Society

Verantwortliche Tätigkeiten außerhalb der Lehre:

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: James Ross

Title: Senior Lecturer

Field of teaching: Biometrics and Wildlife Management

Professional/academic career:

2010-present Senior Lecturer, Lincoln University.

2003-07 Lecturer, Lincoln University and University of Canterbury.

Most important publications and research projects of the last 5 years:

Eason, C.T, Murphy, E., Ross, J., Hix, S., Arthur, D, MacMorran, D., Broome, K. & Fairweather, A. (submitted). First generation anticoagulant persistence in pigs, cattle, deer and implications for wildlife management. *New Zealand Journal of Zoology*.

Eason, C., Ross, J., Blackie, H. & Fairweather, A. (*In press*). A review of the toxicology and ecotoxicology of zinc phosphide in relation to its use as a pest control tool in New Zealand. *New Zealand Journal of Ecology*.

Malumbres-Olarte¹, J. Vink, C., Ross, J, Cruickshank, R., Paterson, A. (2012). The role of habitat complexity on spider communities in native alpine grasslands of New Zealand. *Insect Conservation and Diversity*.

Collins. K.E., Doscher, C., Rennie, H.G. & Ross, J.G. (2012). The effectiveness of riparian 'restoration' on water quality – A case study of lowland streams in Canterbury, New Zealand. *Restoration Ecology*.

Keye, C., Roschak, C. & Ross, J. (2011). Summer home range size and population density of great spotted kiwi (*Apteryx*) in the North Branch of the Hurunui River, New Zealand. *Notornis* 58: 22-30.

Saxton, V., Mulder, I., Creasy, G., Paterson, A., Ross, J., & Trought, M. (2010). Comparative behavioural responses of silvereyes (*Zosterops lateralis*) and European blackbirds (*Turdus merula*) to secondary metabolites in grapes. *Austral Ecology*.

Ogilvie, S.C., Ataria, J.M., Waiwai, J. Doherty, J., Miller, A.A., Ross, J.G., Eason, C.T. (2010) Vertebrate pesticide risk assessment by indigenous communities in New Zealand. *Integrative Zoology* 1: 37-43.

Morgan, S.A., Hansen, C.M., Ross, J.G., Hickling, G.J. Ogilvie, S.C. & Paterson, A.M. (2009). Urban cat (*Felis catus*) movement and predation activity associated with a wetland reserve in New Zealand. *Wildlife Research* 36: 1-7.

Vargas, M. L., Cruickshank, R. H., Ross, J. G. Paterson, A. M. and Ogilvie, S. C. (2009). Non-invasive recovery and detection of possum (*Trichosurus vulpecula*) DNA from bitten bait interference devices (WaxTags®). *Molecular Ecology Resources* 9 (2): 505-516 & 9(4) 1273.

Professional functions and positions besides teaching:

1) I provide advice for the Banks Peninsula Conservation and Quail Island Restoration Trusts on cost-effective and humane pest control. Recently I helped to coordinate an aerial control operation on Quail Island that attempted to eradicate mice.

2) I provide statistical advice for private sector research partners. This advice assists with study designs and data analysis techniques. Accordingly, this work helps to assist private-funded research in developing new pest control tools (e.g. Connovation Ltd., Epro Ltd., Central Districts Pest Control Ltd.).

3) I provide expert advice to regulatory authorities such as the New Zealand Food Safety Authority. Most recently this advice took the form of a report that reviewed current buffer zones specifications for the consumption of wild animals obtained from poison control areas.

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

Name: Stefan Scheu

Titel: Prof. Dr.

Lehrgebiet: Tierökologie

Beruflicher/akademischer Werdegang:

1979	Hochschulreife am Herrmann-Hesse-Gymnasium Calw (Baden-Württemberg)
1986	Diplom, Universität Göttingen
1989	Promotion, Universität Göttingen
1995	Habilitation, Universität Göttingen
1997-2008	Professor (C3) für Zoologie und Ökologie, Technische Universität Darmstadt
Seit 2008	Professor (W3) für Tierökologie, Universität Göttingen

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Eisenhauer, N., H. Beßler, C. Engels, G. Gleixner, M. Habekost, A. Milcu, S. Partsch, A. C. W. Sabais, C. Scherber, S. Steinbeiss, A. Weigelt, W.W. Weisser, and **S. Scheu**. 2010. Plant diversity effects on soil microorganisms support the singular hypothesis. *Ecology* **91**:485-496.

Jousset, A., L. Rochat, A. Lanoue, M. Bonkowski, C. Keel, and **S. Scheu**. 2011. Plants respond to pathogen infection by enhancing the antifungal gene expression of root-associated bacteria. *Molecular Plant - Microbe Interactions* **24**:352-356

Pollierer, M., R. Langel, C. Körner, M. Maraun, and **S. Scheu**. 2007. The underestimated importance of belowground carbon input for forest soil animal food webs. *Ecology Letters* **10**:729-736.

Scherber, C., N. Eisenhauer, W. W. Weisser, B. Schmid, W. Voigt, E.-D. Schulze, C. Roscher, A. Weigelt, E. Allan, H. Bessler, M. Bonkowski, N. Buchmann, F. Buscot, L. W. Clement, A. Ebeling, C. Engels, M. S. Fischer, S. Halle, I. Kertscher, A.-M. Klein, R. Koller, S. König, E. Kowalski, V. Kummer, A. Kuu, M. Lange, D. Lauterbach, C. Middelhoff, V. D. Migunova, A. Milcu, R. Müller, S. Partsch, J. S. Petermann, C. Renker, T. Rottstock, A. C W. Sabais, **S. Scheu**, J. Schumacher, V. M. Temperton, and T. Tscharrntke. 2010. Bottom-up effects of plant diversity on biotic interactions in a biodiversity experiment. *Nature* **468**:553-556.

Song, Y., B. Drossel, and **S. Scheu**. 2011. Tangled Bank dismissed too early. *Oikos* **120**:1601-1607.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Gesellschaft für Ökologie - GfÖ
Deutsche Zoologische Gesellschaft - DZG
Deutsche Gesellschaft für allgemeine und angewandte Entomologie - DGaaE
British Ecological Society - BES
Ecological Society of America - ESA

Verantwortliche Tätigkeiten außerhalb der Lehre:

1997-2010	Subject Editor von Soil Biology and Biochemistry
Seit 1998	Editor-in-Chief von Pedobiologia
Seit 1998	Mitglied im Editorial Board von Oecologia
Seit 1999	Mitglied im Editorial Board von Basic and Applied Ecology
2000-2002	Dekan des Fachbereichs Biologie, Technische Universität Darmstadt
2001-2008	Vorsitzender der Studiengruppe Ökologie innerhalb der Deutschen Zoologischen Gesellschaft
Seit 2007	Mitglied im Editorial Board von Frontiers in Zoology
2010-2012	Geschäftsführender Direktor des J.F.-Blumenbach-Instituts für Zoologie und Anthropologie
Seit 2012	Mitglied des Fachkollegs Zoologie der Deutschen Forschungsgemeinschaft

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Ian Spellerberg

Title: Professor

Field of teaching: Ecology, nature conservation and sustainability

Professional/academic career:

– 1993 Director Environmental Sciences, University of Southampton, U.K.

1994 - Director, Centre for Resource Management then Director Isaac Centre for Nature Conservation, Lincoln University, New Zealand.

Most important publications and research in last five years.

Publications.

2007. Buchan, Spellerberg & Blum. *Education for sustainability*. International Journal of Sustainability in Higher Education, 8, 4-15.

2007. Spellerberg, Loiskandl & Buchan. *A joint, international masters degree in sustainability*. International Journal of Environment and sustainability, 6, 67-80.

2008. Spellerberg & Given. *Trees in urban and city environments: a review of the selection criteria*. Landscape Review, 12, 19-31.

2008. Spellerberg. *Shannon-Wiener Index*. ScienceDirect, Encyclopaedia of Ecology. Elsevier.

2009. Kolandai, Spellerberg, Buchan & Early. Sustainability in Journalism Education. Applied Environmental Education and Communication, 8, 204-215.

2010. Spellerberg & McNeely. *International year of biodiversity*. Guest Editorial. Australasian Journal of Environmental Management, 17, 200-2001.

2010. Spellerberg, Slowik, Muhlenberg & Dgebuadze. *Biological Diversity and nature conservation*. KMK Scientific Press, Moscow.

2011. Spellerberg & Frey. *Restoring the amenity and nature conservation values of gravel pits*. Australasian Journal of Environmental Management, 18, 33-46.

2011. Spellerberg & Frey. *Native by design: landscape design with New Zealand native plants*. Canterbury University Press, Christchurch.

Research.

Education for sustainable development.

Urban ecology.

Ecology and biogeography of Greenways.

Professional functions and positions besides teaching:

Honorary Fellow of the Environment Institute of Australia and New Zealand.

Trustee on local environmental and nature conservation trusts.

Associate Editor Australasian Journal of Environmental Management.

Editor and reviewer for the Berkshire Encyclopaedia of Sustainability.

Annex to the application for reaccreditation of the Master-program „International Nature Conservation“ in Göttingen, Germany

Curriculum Vitae of the main lecturers

PLEASE DO ONLY FULL OUT THIS ONE PAGE.THANK YOU.

Name: Glenn H Stewart

Title: Associate Professor

Field of teaching: Ecology, Environmental Monitoring, Conservation Biology

Professional/academic career:

1976 B.Sc. (Hons) (Botany), University of Canterbury, Christchurch, New Zealand

1978 M.Sc. (Hons) (Botany), University of Canterbury, Christchurch, New Zealand

1985 PhD. (Forest Ecology), Oregon State University, Corvallis, Oregon, U.S.A.

1977-1992 Scientist, New Zealand Forest Research Institute

1993- present Professor, Lincoln University

Most important publications and research projects of the last 5 years:

Hurst, J., Stewart, G.H., Perry, G., Wiser, S.K., & D.A. Norton. (2012). Determinants of tree mortality in mixed old-growth *Nothofagus* forest. *Forest Ecology & Management* 270: 189-199.

Ignatieva, M.E., Stewart, G.H. & C.D. Meurk (2011). Planning and design of ecological networks in urban areas. *Landscape and Ecological Engineering* 7: 17-25.

Doody, B.J., Sullivan, J.J., Meurk, C.D., Stewart, G.H., & H.C. Perkins (2010). Urban realities: the contribution of residential gardens to the conservation of urban forest remnants. *Biodiversity & Conservation* 19: 1385-1400.

Stewart, G.H. (2010). Invasive mammalian species impacts on the indigenous biodiversity of New Zealand. Chapter 3, Pages 35-47, In: Spellerberg, I.F., Slowik, J., Muehlenberg, M. & Y.Y. Dgebuadze (eds). *Biological Diversity and Nature Conservation: theory and practice for teaching*. KMK Scientific Press Ltd, Moscow.

Stewart, G.H., Ignatieva, M.E., & C.D. Meurk (2010). Multivariate approaches to the study of urban biodiversity and vegetation: an example from a southern temperate colonial city, Christchurch, New Zealand. Pages 291-308, In: *Urban Biodiversity and Design*, Müller, N., Werner, P., & J.G. Kelcey (eds), Wiley-Blackwell. ISBN 978-1-4443-3266-7

Stewart, G.H., Meurk, C.D., Ignatieva, M.E., Buckley, H.L., Magueur, A., Case, B.S., Hudson, M., & M. Parker (2009). URban Biotopes of Aotearoa New Zealand (URBANZ) II: Floristics, biodiversity and conservation values of urban residential and public woodlands, Christchurch. *Urban Forestry & Urban Greening* 8: 149-162.

Stewart, G.H., Ignatieva, M.E., Meurk, C.D., Buckley, H., Horne, B., & T.Braddick (2009). URban Biotopes of Aotearoa New Zealand (URBANZ) I: Composition and diversity of temperate urban lawns in Christchurch. *Urban Ecosystems* 12: 233-248.

Stewart, G.H., Meurk, C.D., & M.E. Ignatieva (2009). Nature conservation strategies: urban design with ecological priorities. *Landscape Architecture Design*. №3 (26): 44-47 (In Russian, with English summary).

Professional functions and positions besides teaching:

Deputy Director, Issac Centre for Nature Conservation; Associate Editor, *Plant Ecology*; Member of Editorial Board, *Urban Forestry & Urban Greening*; Member of URBio Advisory Board; President of Southern Connection.

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Teja Tschardtke

Titel: Prof. Dr.

Lehrgebiet: Agrarökologie

Beruflicher/akademischer Werdegang:

- 1973-1981: Studies in sociology and biology at the universities in Marburg and Gießen
- 1978: Diploma (MSc) in Sociology, University of Marburg
- 1981: Diploma (MSc) in Biology, University of Marburg
- 1986: PhD in Biology, University of Hamburg
- 1992: Habilitation (venia legendi) in Zoology, University of Karlsruhe

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

T Tschardtke et al. (2012): Landscape moderation of biodiversity patterns and processes - eight hypotheses. *Biological Reviews* 87: 661-685.

T Tschardtke et al. (2012) Global food security, biodiversity conservation and the future of agricultural intensification. *Biological Conservation* 151: 53-59.

T Tschardtke et al. (2011): Multifunctional shade-tree management in tropical agroforestry landscapes – a review. *Journal of Applied Ecology* 48: 619-629.

Clough Y, (...) Tschardtke T (2011): Combining high biodiversity with high yields in tropical agroforests. *Proceedings of the National Academy of Sciences (PNAS)* 108: 8311-8316.

Tylianakis JM, Rand TA, Kahmen A, Klein AM, Buchmann N, Perner J, Tschardtke T (2008) Resource heterogeneity moderates the biodiversity-function relationship in real world ecosystems. *PLoS Biology* 6: e122, 947-956.

Tschardtke T, Sekercioglu CH, Dietsch TV, Sodhi NS, Hoehn P, Tylianakis JM (2008) Landscape constraints on functional diversity of birds and insects in tropical agroecosystems. *Ecology* 89: 944-951.

Steffan-Dewenter I, (...) Tschardtke T (2007): Tradeoffs between income, biodiversity, and ecosystem functioning during tropical rainforest conversion and agroforestry intensification. *Proceedings of the National Academy of Sciences (PNAS)* 104: 4973-4978.

Tylianakis JM, Tschardtke T, Lewis OT (2007) Habitat modification alters the structure of tropical host-parasitoid food webs. *Nature* 445 202-205.

Verantwortliche Tätigkeiten außerhalb der Lehre:

- since 2000: Editor-in-Chief of *Basic and Applied Ecology* (the official journal of the Ecological Society of Germany, Austria and Switzerland, GfOe)
- 2002-2010: Member of the federal scientific board for biodiversity and genetic resources (Federal Ministry of Agriculture, BMELV)
- since 2008: Member of the Science Committee of the agroBIODIVERSITY network of DIVERSITAS (chaired by L. Jackson & L. Brussaard)

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Matthias Waltert

Titel: Dr. rer.nat

Lehrgebiet: Naturschutzbiologie, Wildtiermanagement, Tropische Biodiversität

Beruflicher/akademischer Werdegang:

Diplom in Biologie (Tierökologie, Geobotanik, Geologie, Genetik), Promotion in Internationalem Naturschutz (Tropical Forest Management)

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Forschung:

- Managing Forest Wildlife for Human Livelihoods in Cameroon and Nigeria (VolkswagenFoundation, 2008-2013)
- Improving wildlife assessments in Western Tanzania (GTZ, 2004-2008)
- Ecology and conservation of the drill (*Mandrillus leucophaeus*) (Multiple donors, 2004-2008)

Veröffentlichungen:

Laurance, W.F., Useche, D.C., Rendeiro, J. et al. (2012) Averting biodiversity collapse in tropical protected areas. *Nature* (2012) doi:10.1038/nature11318

Astaras, C., Krause, S., Mattner, L., Rehse, C. & Waltert, M. (2011). Associations between the drill (*Mandrillus leucophaeus*) and sympatric monkeys in Korup National Park, Cameroon. *American Journal of Primatology* 73:127-143. doi: 10.1002/ajp.20877

Waltert, M., Bobo, K.S., Kaupa, S., Montoya, M.L., Nsanyi, M.S. & Fermon, H. (2011). Assessing conservation values: biodiversity and endemism in tropical land use systems. *PLoS ONE* 6: e16238. doi:10.1371/journal.pone.0016238 This paper was evaluated at the "faculty of 1000"....

Astaras, C. & Waltert, M. (2010). What does seed handling by the drill (*Mandrillus leucophaeus*) tell us about the ecological services of terrestrial cercopithecines in African forests? *Animal Conservation* 13:568-578. doi: 10.1111/j.1469-1795.2010.00378.x

Waltert, M., Meyer, B. & Kiffner, C. (2009): Habitat availability, hunting or poaching: what affects distribution and density of large mammals in western Tanzanian woodlands? *African Journal of Ecology* 47: 737-746. DOI: 10.1111/j.1365-2028.2009.01080

Waltert, M., Meyer, B., Shanyangi, M.W., Balozzi, J.J., Kitwara, O., Qolli, S., Krischke, H. & Mühlenberg, M. (2008): Foot surveys of large mammals in the woodlands of western Tanzania. *Journal of Wildlife Management* 72: 603-610.

Waltert, M., Abegg, C., Ziegler, T., Hadi, S., Priata, D., Hodges, K (2008): Abundance and community structure of Mentawai primates in the Peleonan Forest, north Siberut, Indonesia. *Oryx* 42: 375-379.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

Gesellschaft für Tropenökologie, Deutsche Ornithologische Gesellschaft

Verantwortliche Tätigkeiten außerhalb der Lehre:

Umweltgutachter, Gutachter für Peer-Reviews, Editorial Board Mitgliedschaften

Anlage zum Akkreditierungsantrag für den Master-Studiengang „International Nature Conservation“ in Göttingen

Vitae der hauptamtlich Lehrenden und Lehrbeauftragten

BITTE MAXIMAL NUR DIESE EINE SEITE AUSFÜLLEN. DANKE.

Name: Kerstin Wiegand
Titel: Prof. Dr.
Lehrgebiet: Ökosystemmodellierung

Beruflicher/akademischer Werdegang:

2009- Professur für Ökosystemmodellierung
2003-2009 Juniorprofessur für Ökologie/Biomathematik, Friedrich-Schiller-Universität Jena
2001-2003 Fachbereich Agrarwissenschaften, Justus -Liebig-Universität Giessen
1999-2001 Dept. of Ecology and Evolutionary Biology, Princeton University, USA
1999 Promotion (Dr.rer.nat., Philipps-Universität Marburg)

Wichtigste Veröffentlichungen und Forschungsvorhaben der letzten fünf Jahre:

Ecological and socioeconomic functions of tropical lowland rainforest transformation systems (Sumatra, Indonesia) (SFB 990)

Skalenprobleme in der Statistik (GRK 1644)

Getzin, S., Wiegand, K. & Schoning, I. (2012) Assessing biodiversity in forests using very high-resolution images and unmanned aerial vehicles. *Methods in Ecology and Evolution* 3, 397-404.

Rodriguez-Perez, J., Wiegand, K. & Ward, D. (2011) Interaction between ungulates and bruchid beetles and its effect on Acacia trees: modeling the costs and benefits of seed dispersal to plant demography. *Oecologia* 167, 97-105.

Getzin, S., Wiegand, T., Wiegand, K. & He, F. (2008) Heterogeneity influences spatial patterns and demographics in forest stands. *Journal of Ecology* 96, 807-820.

Meyer, K.M., Wiegand, K., Ward, D. & Moustakas, A. (2007) The rhythm of savanna patch-dynamics. *Journal of Ecology* 95, 1306-1315.

Mitgliedschaften in wissenschaftlichen Vereinigungen:

British Ecological Society (BES)

Ecological Society of Germany, Austria and Switzerland (GFÖ)

Ecological Society of America (ESA)

Verantwortliche Tätigkeiten außerhalb der Lehre:

2012- Vorstand Sektion Tropical and Subtropical Agriculture and Forestry (SeTSAF), Zentrum für Biodiversität und Nachhaltige Landnutzung, U Göttingen
2012- SFB 990, stellvertretende Sprecherin
2010- GRK 1644, stellvertretende Sprecherin
2009- Journal of Vegetation Science, Member of Editorial Board
2009- Berufungsbeauftrage

Anlage 41 - Teaching faculty of the MSc/PhD Program "Molecular Biology" - Overview

Title	Faculty member	Institution	faculty member since	Research field
Prof.	Bähr, Mathias	Uni-Med	2001	Neurology
Prof.	Bastians, Holger	Uni-Med	2011	Molecular Oncology
Prof.	Beißbarth, Tim	Uni-Med	2012	Statistical Bioinformatics
Prof.	Braus, Gerhard	Uni-Bio	2000	Molecular Microbiology & Genetics
Prof.	Brenig, Bertram	Uni-Agr	2000	Molecular Biology of Livestock
Prof.	Brose, Nils	MPI-em	2001	Molecular Neurobiology
Prof.	Daniel, Rolf	Uni-Bio	2012	Uni-Bio
Prof.	Dobbelstein, Matthias	Uni-Med	2005	Molecular Oncology
Dr.	Dosch, Roland	Uni-Med	2010	Developmental Biochemistry
Dr.	Eimer, Stefan	ENI-G	2007	Molecular Neurogenetics
Prof.	Enderlein, Jörg	Uni-Phy	2012	Biophysics
Prof.	Engel, Wolfgang	Uni-Med	2000	Human Genetics
Prof.	Feußner, Ivo	Uni-Bio	2002	Plant Biochemistry
Prof.	Ficner, Ralf	Uni-Bio	2001	Molecular Structural Biology
Dr.	Fischle, Wolfgang	MPI-bpc	2005	Chromatin Biochemistry
Prof.	Gatz, Christiane	Uni-Bio	2000	Plant Molecular Biology and Physiology
Dr.	Görke, Boris	Uni-Bio	2011	General Microbiology
Prof.	Görlich, Dirk	MPI-bpc	2007	Cellular Logistics
Prof.	Griesinger, Christian	MPI-bpc	2001	NMR-based Structural Biology
Prof.	Groß, Uwe	Uni-Med	2000	Medical Microbiology
Prof.	Großhans, Jörg	Uni-Med	2008	Developmental Biochemistry
Prof.	Grubmüller, Helmut	MPI-bpc	2012	Theoretical & Computational Biophysics
Dr.	Grüne, Tim	Uni-Che	2011	Structural Chemistry
Prof.	Hahn, Heidi	Uni-Med	2002	Molecular Developmental Genetics
Prof.	Hell, Stefan	MPI-bpc	2012	NanoBiophotonics
Dr.	Höbartner, Claudia	MPI-bpc	2008	Nucleic Acid Chemistry
Prof.	Jäckle, Herbert	MPI-bpc	2000	Molecular Developmental Biology
Prof.	Jahn, Reinhard	MPI-bpc	2000	Neurobiology
Prof.	Jakobs, Stefan	MPI-bpc/Uni-Med	2012	High Resolution Microscopy
Prof.	Janshoff, Andreas	Uni-Che	2012	Biophysical Chemistry
Prof.	Johnsen, Steven	Uni-Med	2009	Molecular Oncology

Prof.	Kessel, Michael	MPI-bpc	2000	Developmental Biology
Dr.	Klopfenstein, Dieter	Uni-Phy	2004	Biophysics
Dr.	Kramer, Wilfried	Uni-Bio	2005	Molecular Genetics
Prof.	Krebber, Heike	Uni-Bio	2010	Molecular Genetics
Prof.	Lipka, Volker	Uni-Bio	2008	Plant Cell Biology
Prof.	Lührmann, Reinhard	MPI-bpc	2000	Cellular Biochemistry
Prof.	Mansouri, Ahmed	MPI-bpc/Uni-Med	2002	Molecular Developmental Genetics
Dr.	Marquardt, Till	ENI-G	2011	Developmental Neurobiology
Prof.	Morgenstern, Burkhard	Uni-Bio	2003	Bioinformatics
Prof.	Moser, Tobias	Uni-Med	2011	Auditory Neuroscience
Prof.	Nave, Klaus-Armin	MPI-em	2005	Neurogenetics
Prof.	Neher, Erwin	MPI-bpc	2000	Membrane Biophysics
Prof.	Neumann, Heinz	Uni-Bio	2011	Applied Synthetic Biology
Prof.	Pieler, Tomas	Uni-Med	2000	Developmental Biochemistry
Prof.	Pöggeler, Stefanie	Uni-Bio	2007	Genetics Eukary. Microorganisms
Prof.	Rehling, Peter	Uni-Med	2008	Biochemistry
Prof.	Rizzoli, Silvio	ENI-G	2007	STED Microscopy of Synaptic Function
Prof.	Rodnina, Marina	MPI-bpc	2008	Physical Biochemistry
Dr.	Rossner, Moritz	MPI-em	2011	Gene Expression
Dr.	Schlüter, Oliver	ENI-G	2012	Molecular Neurobiology
Prof.	Schuh, Reinhard	MPI-bpc	2005	Molecular Organogenesis
Prof.	Schwappach, Blanche	Uni-Med	2010	Biochemistry
Dr.	Shcherbata, Halyna	MPI-bpc	2008	Gene Expression and Signaling
Prof.	Sheldrick, George	Uni-Che	2000	Structural Chemistry
Prof.	Simons, Mikael	MPI-em/Uni-Med	2008	Molecular and Cellular Neurobiology
Prof.	Stark, Holger	MPI-bpc/Uni-Bio	2007	3D-Cryo Electron Microscopy
Prof.	Steinem, Claudia	Uni-Che	2012	Biomolecular Chemistry
Prof.	Stülke, Jörg	Uni-Bio	2003	General Microbiology
Prof.	Thumm, Michael	Uni-Med	2003	Molecular Cell Biology
Prof.	Tittmann, Kai	Uni-Bio	2008	Bioanalytics
Prof.	Urlaub, Henning	MPI-bpc/Uni-Med	2006	Bioanalytical Mass Spectrometry
Prof.	Walter, Lutz	DPZ	2004	Primate Genetics
Prof.	Wienands, Jürgen	Uni-Med	2005	Cellular and Molecular Immunology
Prof.	Wimmer, Ernst	Uni-Bio	2003	Developmental Biology
Prof.	Wodarz, Andreas	Uni-Med	2005	Stem Cell Biology

NAME	POSITION / TITLE
BÄHR, Mathias	Head, Department of Neurology, University of Göttingen Medical Center, Germany

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Department of Neurology, Eberhard Karls University, Tübingen, Germany	M.D.	1986	Medicine
Residency in the Departments of Neurology, Universities of Düsseldorf and Tübingen, Germany	Board Certification in Neurology	1993	Neurology
Department of Neurology, Eberhard Karls University, Tübingen, Germany	Habilitation	1993	Neurology

B. Positions / Academic Appointments

1986-1987	Department of Neurology, University Düsseldorf (Prof. H.J. Freund), Research Assistant
1987-1989	Max Planck Institute for Developmental Biology, Tübingen, (Prof. F. Bonhoeffer), DFG-Fellow
10/1988-4/1989	Washington University St. Louis, Department of Anatomy and Neurobiology (Prof. R.P. Bunge), Max-Planck-Fellowship
1993	Board Certification in Neurology Qualification as a Lecturer for Neurology (Habilitation)
1994-1996	Department of Neurology, University of Tübingen, Registrar (Oberarzt)
1996-2001	Department of Neurology, University of Tübingen, Associate Professor (Schilling-Foundation-Professorship)
1998-2001	Department of Neurology, University of Tübingen, Vice chairman (Leitender Oberarzt und Stellvertreter des ärztlichen Direktors)
2001-	Department of Neurology, University of Göttingen Medical Center, Germany, Head

C. Major research interests

The main interest of the research in my lab has been the analysis of axonal and neuronal degeneration in stroke, aggregation disorders and inflammation. In the latter field we have established new model systems to mimic human optic neuritis in various rat and mouse strains, analyse the cellular and molecular pathophysiology and develop new neuroprotective therapy strategies. We have evaluated current established immunomodulatory and immunosuppressive therapies and combined them with new treatment concepts. We could show that a combination of immunosuppressive and protective therapies may lead to improved functional outcome after optic neuritis, i.e. recovery of visual functions measured by ERG and VEP.

D. Selected peer-reviewed publications

Frank T, Klinker F, Falkenburger BH, Laage R, Lühder F, Göricke B, Schneider A, Neurath H, Desel H, Liebetanz D, **Bähr M**, Weishaupt JH (2012) Pegylated granulocyte colony-stimulating factor conveys long-term neuroprotection and improves functional outcome in a model of Parkinson's disease. *Brain*. 2012 Mar 16. [Epub ahead of print]

Koch JC, Knöferle J, Tönges L, Michel U, **Bähr M**, Lingor P. Imaging of rat optic nerve axons in vivo. *Nat Protoc* 6(12), 1887-96.

Krumova P, Meulmeester E, Garrido M, Tirard M, Hsiao HH, Bossis G, Urlaub H, Zweckstetter M, Kügler S, Melchior F, **Bähr M**, Weishaupt JH (2011) Sumoylation inhibits alpha-synuclein aggregation and toxicity. *J Cell Biol* 194(1), 49-60.

Knöferle J, Koch JC, Ostendorf T, Michel U, Planchamp V, Vutova P, Tönges L, Stadelmann C, Brück W, **Bähr M**, Lingor P (2010) Mechanisms of acute axonal degeneration in the optic nerve *in vivo*. *Proc Natl Acad Sci USA* 107(13), 6064-9.

Lingor P, Tönges L, Pieper N, Bermel C, Barski E, Planchamp V, **Bähr M** (2008) ROCK inhibition and CNTF interact on intrinsic signalling pathways and differentially regulate survival and regeneration in retinal ganglion cells. *Brain* 131 (Pt 1), 250-63.

E. Research Support (selection)

1. DFG / FZT 103: "Research Center Molecular Physiology of the Brain" and DFG / EXC 171: Cluster of Excellence "Microscopy at the nanometer range", since 11/2006. Co-coordinator (together with S. Hell and D. Schild) and PI on several projects.

2. EU / FP7 Collaborative project: "Neugene – advanced gene therapy tools for treatment of CNS specific disorders", since 8/2008. Co-Coordinator (together with S. Kügler). PI.

3. Schilling Foundation, Professor for Clinical and Experimental Neurology, University of Tübingen.

4. BMBF: German Center for Neurodegenerative Disorders (DZNE), Göttingen.

F. Other activities

Member of the DFG panel Neurosciences; member of the National Stem cell approval committee.

G. Memberships and awards

Memberships: GIF Board; Leopoldina; Göttingen Academy of Neurosciences; Royal Society of Physicians; ENI-G steering committee (since 2001); Chair of the Institute for Multiple Sclerosis Research Göttingen (2002-06); President of the German Neuroscience Society (2006-08).

Awards: DFG-Fellowship (1987), Max-Planck-Fellowship (1988), Attempto Award of the University of Tübingen (1994), Award of the Kuratorium CNS und the Hannelore-Kohl-Foundation (1995), Young Investigator Award of the Ministeriums für Wissenschaft, Forschung und Kunst Baden-Württemberg (1995), Herrmann und Lilly Schilling Foundation Professorship (1996), Heinrich-Pette-Award, German Society for Neurology (1998), Elected Member of the Leopoldina (2005), Elected Member of the Senate of the Georg-August-University (2005)

NAME	POSITION / TITLE
BASTIANS, Holger	Professor, University of Göttingen Medical Center

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Osnabrück, Germany	Diploma	1993	Biology
German Cancer Research Center, Heidelberg	Dr. rer.nat.	1996	Cancer Research
Harvard Medical School, Boston, USA	Postdoctoral fellow	1996-1999	Cancer Research
Philipps University Marburg, Germany	Habilitation	2006	Molecular Biology

B. Positions / Academic Appointments

1999-2008	Junior Group Leader, Phillips University Marburg, Germany
2008-2010	Heisenberg Fellow, Philipps University Marburg, Germany
2010-2011	Heisenberg Fellow, University of Göttingen, Germany
2011-	Heisenberg Professor of Cellular Oncology, University of Göttingen, Germany

C. Major research interests

Our group is interested in mitotic signaling pathways that are often deregulated in human cancer and are directly associated with the missegregation of sister chromatids resulting in chromosomal instability (CIN) and aneuploidy. In fact, CIN represents a major characteristic of human cancer and can directly contribute to tumorigenesis. We aim to identify and to characterize those cancer associated pathways that mediate the CIN phenotype and to unravel how the perpetual gain and loss of whole chromosomes during mitosis can contribute to tumorigenesis and tumor progression.

A second line of research includes the investigation of the molecular mechanisms of therapy induced tumor cell death. We wish to understand how tumor cells respond to chemotherapy targeting mitosis. This work aims to unravel the molecular basis of therapy resistance towards frequently used drugs including taxanes and various Vinca alkaloids.

Further, we aim to development of new therapeutic concepts for the treatment of human cancer. Thereby, we aim to exploit the fact that most cancer cells exhibit the CIN phenotype and we are identifying signaling pathways that can be targeted during therapy in order to induce lethal chromosome missegregation selectively in cancer cells with CIN.

D. Selected peer-reviewed publications

Stolz A, Ertych N, Kienitz A, Vogel C, Schneider V, Fritz B, Jacob R, Dittmar G, Weichert W, Petersen I, **Bastians H** (2010) The CHK2-BRCA1 tumor suppressor pathway ensures chromosomal stability in human somatic cells. *Nature Cell Biology* 12, 492-499.

Kaestner P, Stolz A, **Bastians H** (2009) Determinants for the efficiency of anti-cancer drugs targeting either Aurora-A or Aurora-B kinases. *Mol Cancer Ther* 8, 2046-2056.

Stolz A, Vogel C, Schneider V, Ertych N, Kienitz A, Yu H, **Bastians H** (2009) Pharmacologic abrogation of the mitotic spindle checkpoint by an indolocarbazole discovered by cellular screening efficiently kills cancer cells. *Cancer Research* 69, 3874-3883.

Vogel C, Hager C, **Bastians H** (2007) Mechanisms of mitotic cell death induced by chemotherapy mediated G2 checkpoint abrogation. *Cancer Research* 67, 339-345.

Kienitz A, Vogel C, Morales I, Müller R, **Bastians H** (2005) Partial downregulation of MAD1 causes spindle checkpoint inactivation and aneuploidy, but does not confer resistance towards taxol. *Oncogene* 24, 4301-4310.

E. Research Support (selection)

1. KFO179 (DFG): "The role of the AURORA-A oncogene in tumorigenesis and in the therapy response in colorectal and rectal cancer", 2/2011 - 2/2014. PI on one project.

2. FOR942 (DFG): "The role of the Wnt signaling pathway for the maintenance of chromosomal stability", 3/2011 - 3/2014. PI on one project.

3. DFG grant: "Functional cross-talk of mitosis and apoptosis", 12/2009 - 12/2012. PI on the project.

F. Other activities

Member of the advisory board of 4SC Pharma, Martinsried, Germany.

Reviewer for the DFG, Cancer Research UK, Research Grant Council, Hong Kong, Spanish National Agency for Science, Netherlands Organisation for Scientific Research, etc.

G. Memberships and awards

Memberships: German Society for Cell Biology

Awards: DFG postdoctoral fellowship (1996), DFG Heisenberg Fellowship (2007), DFG Heisenberg Professorship (2010).

NAME	POSITION / TITLE
BEISSBARTH, Tim	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Cologne, Germany	<i>Diplom</i>	1998	Biology (Computer Science)
University of Heidelberg, Germany	Dr. rer. nat.	2001	Bioinformatics

B. Positions / Academic Appointments

1998-2001	Research fellow, German Cancer Research Center, Dept. of Theoretical Bioinformatics (Martin Vingron), Heidelberg, Germany
2001-2002	Postdoctoral fellow, Max Planck Institute for Molecular Genetics, Dept. of Computational Biology, Berlin, Germany
2002-2005	Postdoctoral fellow, Walter & Eliza Hall Institute of Medical Research, Dept. of Bioinformatics (Terry Speed), Melbourne, Australia
2005-2008	Group leader, Bioinformatics and Modeling Group, German Cancer Research Center (DKFZ), Dept. Molecular Genome Analysis, Heidelberg, Germany
2008-	Professor of Biostatistics, group leader Statistical Bioinformatics, Dept. Medical Statistics, Göttingen, Germany

C. Major research interests

The Statistical Bioinformatics group of the Department of Medical Statistics is developing statistical applications and methods for biomedical research. We are closely working together with other biostatisticians/bioinformaticists as well as clinical and biological researchers. The focus of the group is the development of methods and tools to analyze biomedical data and to reconstruct biological networks. These methods are implemented mostly in the statistical computing environment of R.

D. Selected peer-reviewed publications

Bender C, Heyde S, Henjes F, Wiemann S, Korf U, **Beißbarth T** (2011) Inferring signalling networks from longitudinal data using sampling based approaches in the R-package 'ddepn'. BMC Bioinformatics 12, 291.

Johannes M, Fröhlich H, Sültmann H, **Beißbarth T** (2011) pathClass: an R-package for integration of pathway knowledge into support vector machines for biomarker discovery. Bioinformatics 27(10), 1442-3.

Jung K, Becker B, Brunner B, **Beißbarth T** (2011) Comparison of Global Tests for Functional Gene Sets in Two-Group Designs and Selection of Potentially Effect-causing Genes. Bioinformatics 27(10), 1377-83.

Bender C, Henjes F, Fröhlich H, Wiemann S, Korf U, **Beißbarth T** (2010) Dynamic Deterministic Effect Propagation Networks: learning signalling pathways from longitudinal protein array data. Bioinformatics 26(18), i596-602.

Johannes M, Brase JC, Fröhlich H, Gade S, Gehrman M, Fälth M, Sültmann H, **Beißbarth T** (2010) Integration Of Pathway Knowledge Into A Reweighted Recursive Feature Elimination Approach For Risk Stratification Of Cancer Patients. Bioinformatics 26(17), 2136-44.

E. Research Support (selection)

1. BMBF / e:Bio: "MetastaSys: Analysis of Molecular Markers and Pathways in Cancer Cells and Microenvironment that determine the Fate and Localization of Tumor Metastases", 2013-2016. Leader of the consortium; PI of WP1, 9 and 11.

2. BMBF / MedSys: "BreastSys : Identifying novel therapeutic strategies for breast cancer by data-driven modeling of tumor progression", 2009-2013, Leader of the consortium; PI of WP6.

3. DFG / SP8: "Development of statistical and computational methods, tools, and infrastructure" in the Clinical Research Group 179 "Biological Basis of Individual Tumor Response in Patients with Rectal Cancer" (Consortium leader Prof. Dr. Michael Ghadimi), 2011-2013. PI.

4. DFG / SP8: "Bioinformatics approach to establish a new graph-based WNT model for metastasis formation in breast cancer cells" in the Research Group 942 „Wnt Signaling in Development and Tumor Progression" (Spokesperson Prof. Dr. Lorenz Trümper), 2011-2013. PI.

5. Helmholtz Initiative on Systems Biology: Project V.9 "Analysis of RNAi and screening data to identify novel network components" in the consortium "Systems Biology of Signaling in Cancer (SBCancer)" (Consortium leader Prof. Dr. Roland Eils), 2008-2012. PI.

F. Other activities

Associate Editor of BMC Bioinformatics (since 2008); associate Editor of BMC Cancer (since 2009); leader of the joint work group "Statistical Method in Bioinformatics" of the associations *IBS* and *GMDS* (since 2009).

G. Memberships and awards

Member of the International Biometrical Society (IBS), the German Society for medical Informatics, Biometry and Epidemiology (GMDS) and the International Society on Computational Biology (ISCB).

NAME	POSITION / TITLE
BRAUS, Gerhard	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Freiburg, Germany	Diploma	1983	Biology
ETH, Zürich, Switzerland	Dr. sc. nat. ETH	1987	Microbiology
Biocenter, Basel, Switzerland	Visiting Scientist	1987	Biophysics
ETH, Zürich, Switzerland	Habilitation	1991	Microbiology

B. Positions / Academic Appointments

1987-1992	Junior Group Leader, ETH, Zürich, Switzerland
1992	Visiting Professor, University of Georgia, Athens GA, USA
1993-1996	Associate Professor of Biochemistry, University of Erlangen, Germany
1997-	Professor of Microbiology (since 2002 Microbiology and Genetics), University of Göttingen

C. Major research interests

The laboratory focuses on eukaryotic microorganisms (yeasts and filamentous fungi). The interplay between development (adhesion, filament formation, tissue formation) and secondary metabolism (acting as benign or toxic bioactive molecules) is analysed. A second line of research examines the impact of fungal pathogens on human health and agriculture. Research topics include:

- (i) From single cells to filaments (yeast vs. pseudohyphae).
- (ii) Control of fungal development & secondary metabolism.
- (iii) The ubiquitin family, the COP9 signalosome & fungal development.
- (iv) Fungal pathogenicity and human health: the opportunistic pathogen *Aspergillus fumigatus*.
- (v) Fungal pathogenicity and agriculture: the vascular plant pathogen *Verticillium longisporum*.
- (vi) Fungi as models for neurodegenerative diseases (Morbus Parkinson).

D. Selected peer-reviewed publications

Rachfall N, Heinemeyer I, Morgenstern B, Valerius O, Braus GH (2011) 5' TRU: Identification and analysis of translationally regulative 5' translated regions in amino acid starved yeast cells. *Mol Cell Proteomics* 10, M110.0033350.

Helmstaedt K, Schwier EU, Christmann M, Nahlik K, Westermann M, Harting R, Grond S, Busch S, Braus GH (2011) Recruitment of the inhibitor Cand1 to the cullin substrate adaptor site mediates interaction to the neddylation site. *Mol Biol Cell* 22, 153-164.

Bayram ÖS, Bayram Ö, Valerius O, Park HS, Irniger S, Gerke J, Ni M, Han KH, Yu JH, Braus GH (2010) LaeA control of velvet family regulatory proteins for light-dependent development and fungal cell-type specificity. *Plos Genet* 6, e1001226 [Journal Cover].

Bayram Ö, Krappmann S, Ni M, Bok JW, Helmstaedt K, Valerius O, Braus-Stromeier S, Kwon NJ, Keller NP, Yu JH, Braus GH (2008) VelB/VeA/LaeA complex coordinates light signal with fungal development and secondary metabolism. *Science* 320, 1504-1506 [Comment to the paper in *Perspectives: Science* 320, 1430-1431].

Busch S, Schwier EU, Nahlik K, Bayram Ö, Draht OW, Helmstaedt K, Krappmann S, Valerius O, Lipscomb WN, Braus GH (2007) An eight-subunit COP9 signalosome with an intact JAMM motif is required for fungal fruit body formation. *Proc Natl Acad Sci USA* 104, 8125-8130.

E. Research Support (selection)

1. SFB 860 (DFG) "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 2010-2014. PI on one project.

2. FOR 1334 (Germany-Mexico: DFG) "Determinants of Polarized Growth and Development in Filamentous Fungi", 2010-2013. PI on one project.

3. SPP1365 (DFG) "The regulatory and functional network of ubiquitin family proteins", 2011-2014. Steering Committee and PI on one project.

4. BioFung (BMBF) "Integrative study of the biotrophic growth of the fungus *Verticillium longisporum* on its host oilseed rape (*Brassica napus*) (BioFung)", 2010-2014. Consortium leader.

5. Consortium ERA-NET PathoGenoMics (EU/BMBF) "Transcriptional networks controlling virulence in filamentous fungal pathogens (TRANSPAT)", 2009-2012. Consortium partner.

F. Other activities

Senator of the University of Göttingen (2009-). Member Göttingen Research Council (GRC) (2005-). Dean of the Biological Faculty (2004-2006). Review Committee Kluyver Center, Netherlands (2011). Elected Member of *Aspergillus* Genomics Research Policy Committee (AGRPC) (2003-). Editorial Boards (FEMMRE, CurrGenet, AMB, FGB).

G. Memberships and awards

Memberships: Fellow of the American Academy of Microbiology (2009-), Akademie der Wissenschaften Göttingen (2009-).

Awards: ETH medal for PhD thesis (1987), SGM-Förderpreis (Swiss Society of Microbiology Award) (1992), Offer of Chair of Genetics, LMU München (2002).

NAME	POSITION / TITLE
BRENIG, Bertram	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Ludwig Maximilians University Munich, Germany	Staatsexamen	1979-1984	Veterinary Medicine
Ludwig Maximilians University Munich, Max Planck Institute of Biochemistry, Martinsried, Germany	Dr. med. vet.	1985-1987	Molecular Genetics
Ludwig Maximilians University Munich, Max Planck Institute of Biochemistry, Martinsried, Germany	Dr. med. vet. habil.	1988-1993	Molecular Genetics

B. Positions / Academic Appointments

1987-1988	PostDoc, Ludwig Maximilians University Munich, Germany
1988-1993	Junior Group Leader, Ludwig Maximilians University Munich, Germany
1993-	Director/Professor, Institute of Veterinary Medicine, Georg-August University Göttingen, Germany

C. Major research interests

Our main focus is on genome analysis in animals with a special emphasis on the elucidation of disorders. Currently we are working on bovine laminitis, early embryonal death, and development of cataract. Besides that we are performing phylogenetic studies in Thai pig breeds.

Since about ten years we are also interested in circulating nucleic acids (CNA) in animals and humans. Currently we are working on CNAs in early pregnancy in cattle, the development of canine mamma carcinoma, and bovine spongiform encephalopathy (BSE).

D. Selected peer-reviewed publications

Breyer J, Wemheuer WM, Wrede A, Graham C, Benestad SL, **Brenig B**, Richt JA, Schulz-Schaeffer WJ (2011) Detergents modify proteinase K resistance of PrP(Sc) in different transmissible spongiform encephalopathies (TSEs). *Vet Microbiol*, in press.

Fromm-Dornieden C, von der Heyde S, Lytovchenko O, Salinas-Riester G, **Brenig B**, Beissbarth T, Baumgartner BG (2012) Novel polysome messages and changes in translational activity appear after induction of adipogenesis in 3T3-L1 cells. *BMC Mol Biol* 13, 9.

Gordon PM, Schutz E, Beck J, Urnovitz HB, Graham C, Clark R, Dudas S, Czub S, Sensen M, **Brenig B**, Groschup MH, Church RB, Sensen CW (2009) Disease-specific motifs can be identified in circulating nucleic acids from live elk and cattle infected with transmissible spongiform encephalopathies. *Nucleic Acids Res* 37, 550-556.

Kolodziejczak D, Da Costa Dias B, Zuber C, Jovanovic K, Omar A, Beck J, Vana K, Mbazima V, Richt J, **Brenig B**, Weiss SF (2010) Prion interaction with the 37-kDa/67-kDa laminin receptor on enterocytes as a cellular model for intestinal uptake of prions. *J Mol Biol* 402, 293-300.

Wemheuer WM, Benestad SL, Wrede A, Wemheuer WE, **Brenig B**, Bratberg B, Schulz-Schaeffer WJ (2011) PrPSc spreading patterns in the brain of sheep linked to different prion types. *Vet Res* 42, 32.

E. Research Support (selection)

1. FUGATO-Plus (BMBF 0315135D). Genetic causes of a pre-disposition for diseases of the feet and leg system in cattle, swine, horse and sheep (GENE-FL).
2. EFRE (W2-2-221-2007-0022). Entwicklung molekularer Marker zur Trächtigkeitsfrühdiagnose beim Rind.
3. ALMA (2010R082R). Identification of DNA patterns from circulating nucleic acids related to bovine spongiform encephalopathy (BSE).

F. Other activities

Associate Editor of "Genetics and Molecular Biology".

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, Göttingen Academy of Science

Awards: Science Award of the Heinrich Stockmeyer-Foundation (2006), Lushan Friendship Award (2012).

NAME	POSITION / TITLE
BROSE, Nils	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Tübingen, Germany	Pre-Diploma	1983	Biochemistry
University of Oxford, UK	M.Sc.	1987	Physiology
University of Munich (LMU), Germany	Dr. rer. nat.	1990	Biology
Salk Institute, La Jolla, CA, USA	Postdoc	1991-1993	Neuroscience
UTSW Medical Center, Dallas, TX, USA	Postdoc	1993-1995	Neuroscience

B. Positions / Academic Appointments

1995-2001	Research Group Leader, Departments of Molecular Neurobiology and Neurogenetics, Max Planck Institute of Experimental Medicine, Göttingen, Germany
since 2001	Director, Department of Molecular Neurobiology, Max Planck Institute of Experimental Medicine, Göttingen, Germany
since 2002	Adjunct Professor of Biochemistry, University of Göttingen Medical Center, Germany
since 2005	Adjunct Professor of Biochemistry, Faculty of Biology, University of Göttingen, Germany

C. Major research interests

We combine biochemical, cell biological, mouse genetics, and physiological approaches to explore the molecular basis of nerve cell development and function. In this regard, (i) we study the role of protein ubiquitylation and SUMOylation as key regulatory principles in nerve cell differentiation and function, (ii) we study the role of synaptic cell adhesion proteins in the maturation, function, and plasticity of synapses between nerve cells, and (iii) we examine the molecular mechanisms by which presynaptic transmitter release is regulated. In several instances, we explore the role that aberrations of these processes play in neuropsychiatric disorders such as autism or schizophrenia.

D. Selected Peer-Reviewed Publications

Herzog E, Nadrigny F, Silm K, Biesemann C, Helling I, Bersot T, Steffens H, Schwartzmann R, Nägerl UV, El Mestikawy S, Rhee J-S, Kirchhoff F, **Brose N** (2011) *In vivo* imaging of inter-synaptic vesicle exchange using VGLUT1^{Venus} knock-in mice. *J Neurosci* 31, 15544-15559.

Kawabe H, Neeb A, Dimova K, Young SM Jr, Takeda M, Katsurabayashi S, Mitkovski M, Malakhova OA, Zhang D-E, Umikawa M, Kariya K, Goebbels S, Nave K-A, Rosenmund C, Jahn O, Rhee J-S, **Brose N** (2010) Regulation of Rap2A by the ubiquitin ligase Nedd4-1 controls neurite development in cortical neurons. *Neuron* 65, 358-372.

Jamain S, Radyushkin K, Hammerschmidt K, Granon S, Boretius S, Varoqueaux F, Ramanantsoa N, Gallego J, Ronnenberg A, Winter D, Frahm J, Fischer J, Bourgeron T, Ehrenreich H, **Brose N** (2008) Reduced social interaction and ultrasonic communication in a mouse model of monogenic heritable autism. *Proc Natl Acad Sci USA* 105, 1710-1715.

Jockusch W, Speidel D, Sigler A, Sørensen J, Varoqueaux F, Rhee J-S, **Brose N** (2007) CAPS-1 and CAPS-2 are essential synaptic vesicle priming proteins. *Cell* 131, 796-808.

Varoqueaux F, Aramuni G, Rawson RL, Mohrmann R, Missler M, Gottmann K, Zhang W, Südhof TC, **Brose N** (2006) Neuroligins determine synapse maturation and function. *Neuron* 51, 741-754.

E. Research Support (Current)

1. Consortium EUROSIN (EU): "Synaptic protein networks in neurological and psychiatric diseases", 01/01/2010-12/31/2013. PI (Consortium Coordinator).

2. Consortium SynSys (EU): "Synaptic systems: dissecting brain function in health and disease", 07/01/2010-06/30/2014. PI (Consortium Partner).

3. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Co-PI on one project (with J.-S. Rhee).

4. SPP 1365 (DFG): "Ubiquitin family network", 05/01/2011-04/30-2014. Co-PI on one project (with H. Kawabe).

5. IMI Consortium EU-AIMS (EU): "Autism research in Europe", 04/01/2012-03/31/2017. PI (Consortium Partner).

F. Other Activities (Current)

Minerva Foundation Fellowship Committee (Chair) (since 2005), Alexander von Humboldt Foundation Central Selection Committee (since 2010), Scientific Advisory Board of the Institute of Biology at Ecole Normale Supérieure Paris (since 2011), EMBO Membership Committee (since 2012), Scientific Advisory Board of the Leibniz Institute of Molecular Pharmacology Berlin (since 2012).

G. Memberships and Awards

Memberships: EMBO

Awards: E.P. Abraham Cephalosporin Fund Fees Scholarship, The Queen's College, Oxford, UK (1986), Florey European Scholarship, The Queen's College, Oxford, UK (1986), Helmholtz Fellowship 'Neurobiology', German Federal Ministry for Research and Technology, Bonn, Germany (1995-1997), Gerhard Hess Prize of the DFG, Bonn, Germany (1997-2002), Heisenberg Fellowship of the DFG, Bonn, Germany (1998-2001).

NAME	POSITION / TITLE
DANIEL, Rolf	Head of Department and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma	1991	Biology
University of Göttingen, Germany	Dr. rer. nat.	1994	Microbiology
University of Göttingen, Department of General Microbiology, Germany	Postdoctoral fellow	1994-1995	Microbiology
University of California, Institute of Molecular and Cell Biology, Berkeley, USA	Postdoctoral fellow	1995-1996	Cell Biology
University of Göttingen, Germany	Habilitation	2003	Microbiology

B. Positions / Academic Appointments

1996-2008	Group Leader, Institute of Microbiology and Genetics, University of Göttingen, Germany
2008-2012	Acting Director of the Department of Genomic and Applied Microbiology and Head of the "Göttingen Genomics Laboratory", University of Göttingen, Germany
since 2012	Full Professor (W3), Department of Genomic and Applied Microbiology, Institute of Microbiology and Genetics, University of Göttingen, Germany

C. Major research interests

One research focus is on metagenomic analysis of complex microbial assemblages and culture-independent recovery of novel genes and gene products from environmental samples. This comprises the development of methods for direct isolation of high-quality nucleic acids from various microbial habitats and the construction of metagenomic libraries. High-throughput function-based as well as sequence-based approaches were performed. This work has led, *i.e.*, to the successful identification and characterization proteases, chitinases, oxidoreductases, B₁₂-dependent dehydratases, lipases, and DNA polymerases from metagenomes. To gain insights into the genomes of the uncultivated microorganisms and to deduce the metabolic potential and to determine key functions of the microbial community present in the studied environments direct sequencing, annotation of metagenomic DNA and mRNA (cDNA), and comparative genomics are carried out.

Other lines of research include whole-genome sequencing, transcriptomics and functional genomics of archaea, bacteria, and microbial communities. The majority of the analyzed organisms was of industrial importance or pathogenic. The latter group comprised, *i.e.*, pathogenic *Escherichia coli*, *Listeria*, *Burkholderia*, and *Staphylococcus* strains as well as *Propionibacterium acnes*. The group also develops novel bioinformatic tools for data analysis and visualization.

D. Selected peer-reviewed publications

Brzuszkiewicz E, Thürmer A, Schuldes J, Leimbach A, Liesegang H, Meyer F-D, Boelter J, Petersen H, Gottschalk G, **Daniel R** (2011) Genome sequence analyses of two isolates from the recent *Escherichia coli* outbreak in Germany reveal the emergence of a new pathotype: Entero-Aggregative-Haemorrhagic *Escherichia coli* (EAHEC). Arch Microbiol 193, 883-891.

Nacke H, Will C, Herzog S, Nowka B, Engelhaupt M, **Daniel R** (2011) Identification of novel lipolytic genes and gene families by screening of metagenomic libraries derived from soil samples of the German Biodiversity Exploratories. FEMS Microbiol Ecol 78, 188-201.

Nacke H, Thürmer A, Wollherr A, Will C, Hodac L, Herold N, Schöning I, Schrupf M, **Daniel R** (2011) Pyrosequencing-based assessment of bacterial community structure along different management types in German forest and grassland soils. PLoS ONE 6, e17000.

Simon C, Wiezer A, Strittmatter A, **Daniel R** (2009) Phylogenetic diversity and metabolic potential revealed in a glacier ice metagenome. Appl Environ Microbiol 75, 7519-7526.

Waschkowitz T, Rockstroh S, **Daniel R** (2009) Isolation and characterization of metalloproteases with a novel domain structure by construction and screening of metagenomic libraries. Appl Environ Microbiol 75, 2506-2516.

E. Research Support (selection)

1. Medizinische Infektionsgenomik (BMBF). a) "The Microbiota of the Human Nose Habitats: Metagenomic analyses of their composition and dynamics", b) "Metagenomics and host-pathogen interactomics in diabetic foot infections", 09/01/2010-08/30/2013. PI (consortium partner).

2. GenoMik-Transfer (BMBF): a) "Development and application of new comparative 'Omics' technologies for industrially relevant organisms", b) Technology platform, 01/02/2010-31/01/2013. PI.

3. Da 374/6-1 (DFG): "Assessment of structure and function of soil bacterial communities along land use and management gradients in the Biodiversity Exploratories", 1/4/2011-31/03/2014.

4. SFB990 (DFG): "Ecological and socioeconomic functions of tropical lowland rainforest transformation systems (Sumatra, Indonesia)", 1/1/2012 -12/31/2015. PI on one project.

5. TRR51 (DFG): "Ecology, Physiology and Molecular Biology of the Roseobacter clade: Towards a Systems Biology Understanding of a Globally Important Clade of Marine Bacteria", 1/1/2010-12/31/2013. PI.

F. Other activities

Coordinator of the GenoMik-Transfer initiative, Head of organizing committee of the Fourth and Fifth European Conference on Prokaryotic Genomics (ProkaGENOMICS), Editorial Board of Biotechnol Lett & Appl Environ Microbiol, Advisory Board of Greifswald center for functional genomics of microbes.

G. Memberships and awards

Memberships: American Society for Microbiology - ASM, Association for General and Applied Microbiology – VAAM.

Awards: Research Stipend of the DFG(1995).

NAME	POSITION / TITLE
DOBBELSTEIN, Matthias	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Munich, Germany	State Board Exam	1992	Medicine
University of Munich, Germany	Dr. med.	1993	Biochemistry
Princeton University, NJ, USA	Postdoctoral Fellow	1993-1996	Molecular Biology
University of Marburg, Germany	Habilitation	2004	Tumor Biology and Virology

B. Positions / Academic Appointments

2004-2005	Professor of Molecular Oncology and Cell Biology, University of Southern Denmark
2005-	Director of a division committed to experimental and translational oncology

C. Major research interests

We are trying to understand the molecular basis of cancer chemotherapy. In particular, we are studying how chemotherapeutics induce a DNA damage response, and how this can be modulated by interfering with specific signaling targets.

One focus of our studies is represented by the tumor suppressor p53. p53 operates as a transcription factor and prevents uncontrolled cell proliferation. This activity is regulated through a sophisticated regulatory network that responds to DNA damage. Despite our knowledge concerning the molecular biology of p53, an integrated concept of its regulation, and its translation into rational diagnostics and therapy, are still in their infancy. The same is true for the p53-homologues p63 and p73, and the p53-regulator Mdm2.

A related area of research in our laboratory is described as "replicative stress", a condition preferentially found in tumor cells. We are identifying factors and signaling intermediates that confer replicative stress and modulate the DNA damage response during the S phase in the cell cycle. Again, the idea is to fortify available therapies by interfering with stress-related signaling pathways.

D. Selected peer-reviewed publications

Beyer U, Moll-Rocek J, Moll UM, **Dobbelstein M** (2011) Endogenous retrovirus drives hitherto unknown proapoptotic p63 isoforms in the male germ line of humans and great apes. *Proc Natl Acad Sci USA* 108(9), 3624-3629, highlighted in the "this week in PNAS" section, and in the "Editors' Choice" chapter of the journal *Science*.

Braun CJ, Zhang X, Savelyeva I, Wolff S, Moll UM, Schepeler T, Orntoft TF, Andersen CL, **Dobbelstein M** (2008) p53-Responsive micrnas 192 and 215 are capable of inducing cell cycle arrest. *Cancer Res* 68, 10094-10104.

Kranz D, Dohmesen C, **Dobbelstein M** (2008) BRCA1 and Tip60 determine the cellular response to ultraviolet irradiation through distinct pathways. *J Cell Biol* 182, 197-213.

Kranz D, **Dobbelstein M** (2006) Nongenotoxic p53 activation protects cells against S-phase-specific chemotherapy. *Cancer Res* 66, 10274-10280.

Contente A, Dittmer A, Koch MC, Roth J, **Dobbelstein M** (2002) A polymorphic microsatellite that mediates induction of PIG3 by p53. *Nat Genet* 30, 315-320.

E. Research Support (selection)

EU / LSHC-CT-2004-503576: "δNp73/63 and tumor growth. Manipulation tumor suppression - a key to improve cancer therapy", 2004-2009. Spokesperson: G. Blandino, Rome, Italy.

DFG / Do 500/4-1: „TP 5 Interaktion und Kooperation des Tumorsuppressor-Homologen p63 mit Faktoren der LEF/TCF-Familie. Wnt assoziierte Signalwege in Entwicklung und Tumorprogression, 2007-2010. Spokesperson: L. Trümper.

DFG / Do 500/5-1: "TP 5 Chemoresistance as a consequence of Wnt-induced epithelial-mesenchymal transition", 2011-2014.

Deutsche Krebshilfe / 108775: "The Role of p63 in Cancer", 2009-2012, with Prof. U. Moll.

Deutsche Krebshilfe / 109428: "P53-regulating micro-RNAs", 2011 – 2014.

Wilhelm Sander Stiftung / 2008.009.1: "The histone acetyl transferase Tip60 in the cellular response to chemotherapy", 2008-2010.

Wilhelm Sander Stiftung / 2010.009.1: "The kinase MK2/MAPKAPK2 as a determinant of the response to gemcitabine treatment", 2010-2012.

José Carreras Stiftung: „Die Kinase MK2 in der Therapie akuter Leukämien mit Cytarabin“, 2011-2014.

F. Other activities

Vice-dean of GGNB; Spokesman, GGNB program *Molecular Biology of Cells*; Spokesman PhD program *Molecular Medicine*.

G. Memberships and awards

Memberships: Arbeitsgemeinschaft experimentelle Krebsforschung der Deutschen Krebsgesellschaft (Vorstandsmitglied)

Awards: Robert Koch Prize for postdoctoral fellows 1999

NAME	POSITION / TITLE
DOSCH, Roland	Group leader and Ph.D.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1989-1994	Biology
German Cancer Research Center (DKFZ), Heidelberg, Germany	Dr. rer. nat.	1994-1999	Molecular Embryology
University of Pennsylvania, Philadelphia, USA	Postdoctoral fellow	1999-2003	Developmental genetics
University of Geneva, Geneva, Switzerland	Junior group leader	2003-2010	Developmental genetics

B. Positions / Academic Appointments

2003-2010	Junior group leader, University of Geneva, Geneva, Switzerland
2010	Group leader, University of Göttingen, Germany

C. Major research interests

Reproduction is a fundamental principal of all biological systems. Our goal is to understand the molecular mechanisms controlling the formation of the female reproductive cell, the oocyte. To find key genes regulating oogenesis in vertebrates, we exploit the easily accessible genetics of the zebrafish. Currently we have focused on two processes during oogenesis:

- I) Endocytosis of yolk protein during vitellogenesis
- II) Assembly of germ plasm

In a forward genetic screen for maternal-effect mutants, we previously identified mutations in regulatory genes of these processes. Using genetics, genomics and bioinformatics, we identify the molecular lesions in the mutated genes. Then, we characterize the mutated control genes using cell-biology, biochemistry and embryological techniques. For instance, we isolated the first vertebrate gene termed *bucky ball*, which is necessary and sufficient for germ plasm assembly. Bucky ball is a novel protein without characterized protein domains and exclusively detected in vertebrate genomes. Currently, we investigate the cellular and molecular mechanisms whereby Buck ball forms germ plasm, which then specifies the formation of novel germ cells in the next generation during embryogenesis.

D. Selected peer-reviewed publications

Bontems F, Baerlocher L, Mehenni S, Bahechar I, Farinelli L, **Dosch R** (2011) Efficient mutation identification in zebrafish by microarray capturing and next generation sequencing. *BBRC* 405(3): 373-376.

Fort A, Fish RJ, Attanasio C, **Dosch R**, Visel A, Neerman-Arbez M (2011) A liver enhancer in the fibrinogen gene cluster. *Blood* 117(1), 276-82.

Bontems F, Stein A, Marlow F, Lyautey J, Mullins MC, **Dosch R** (2009) Bucky ball organizes germ plasm assembly in zebrafish. *Curr Biol* 19 (5), 414-22.

Dosch R*, Wagner DS*, Mintzer KA, Runke G, Wiemelt AP, Mullins MC (2004) Maternal control of vertebrate development before the midblastula transition: mutants from the zebrafish I. *Dev Cell* 6, 771-780, *equal authorship.

Wagner DS*, **Dosch R***, Mintzer KA, Wiemelt AP, Mullins MC (2004) Maternal control of vertebrate development at the midblastula transition and beyond: mutants from the zebrafish II. *Dev Cell* 6, 781-790, *equal authorship.

E. Research Support (selection)

1. DO740/2-1 (DFG) "Molecular Control of Germ Plasm Formation in Zebrafish", 01/11/2011-30/10/2013, PI.

2. "Forschungsförderungsprogramm" – research advancement program (University of Göttingen Medical Center) "Endocytosis - From zebrafish mutants towards human therapy", 01/01/2011-31/12/2012, PI.

3. SER No. C08.0126 (Staatssekretariat für Bildung und Forschung, Switzerland), "Molecular-Genetic Analysis of Oogenesis in Fish", 01/01/2009-31/12/2010, PI.

4. 3100A0-113352 (Swiss National Foundation) "Characterization and Molecular Identification of Egg Polarity Genes in Zebrafish", 01/01/2007-31/12/2009, PI.

F. Other activities

2008-2010 Swiss Delegate of the management committee for COST-Action FA0702 "Maternal Interaction With Gametes and Embryo (GEMINI)", <http://www.cost-gemini.eu/>

G. Memberships and awards

Memberships: German Society for Developmental Biology (GFE)

NAME	POSITION / TITLE
EIMER, Stefan	Independent group leader/ Dr. rer. nat.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Bayreuth, Germany	Diploma	1998	Biochemistry
Ludwig Maximilians University, Munich, Germany	Dr. rer. nat.	2003	Biochemistry
Ecole Normale Superieure, Paris, France	Postdoctoral Fellow	2003-2005	Field 3

B. Positions / Academic Appointments

2005-2012	Junior group leader, European Neuroscience Institute, Göttingen, Germany
2012-	W2 Professor for cellular structural biology, University of Freiburg, Germany

C. Major research interests

My group is interested in understanding how neurons maintain their physiological states by dynamic regulation of intracellular trafficking. We are using this knowledge to analyze how this neuronal physiology and membrane trafficking is changed or affected by neurotoxic processes that lead to neurodegeneration or by aging. Furthermore, we are studying how Parkinson's disease associated genes like α -synuclein cause neurotoxicity and what morphological and functional changes are associated with it. Using *Caenorhabditis elegans* as our main model system we are also analyzing the cellular function of Parkinson's disease associated genes by studying their homologs in the worm.

Furthermore, we try to understand how changes in the physiological states of neurons affect the network and ultimately the behavior of the whole animal. For example, we are studying how neuronal activity is modulated by neuropeptide secretion and dense core vesicle signaling. To find new molecules and dissect molecular mechanisms involved in neuronal fitness and degeneration, we are using a combination of genetic and molecular cell biology approaches as well as electrophysiology and modern imaging techniques. In particular, we have established a "high pressure freeze" (HPF) electron microscopy (EM) facility, which allowed us to study cellular morphology and protein localization at ultra high resolution by immuno-EM and EM tomography.

D. Selected peer-reviewed publications

Sumakovic M, Hegermann J, Luo L, Husson S, Olendrowitz C, Schwarze K, Schoofs L, Richmond J, **Eimer S**. (2009) The small GTPase RAB-2 and its effector RIC-19 are involved in dense core vesicle maturation in *C. elegans*. *JCB* 186(6), 897-914.

Karpinar P, Babu GBM, Kügler S, Opazo P, Rezaei-Ghaleh N, Wender N, Kim HY, Taschenberger G, Falkenburger BH, Heise H, Kumar A, Riedel D, Fichtner L, Voigt A, Braus GH, Giller K, Becker S, Herzig A, Baldus M, Jäckle H, **Eimer S***, Schulz JB*, Griesinger C*, Zweckstetter M* (2009) Pre-fibrillar α -synuclein variants with impaired β -structure increase neurotoxicity in Parkinson`s disease models. *EMBO J* 28(20), 3256-68 (*corresponding authors).

Kamp F, Exner N, Lutz AK, Wender N, Hegermann J, Brunner B, Nuscher B, Bartels T, Giese A, Beyer K, **Eimer S**, Winklhofer KF, Haass C (2010) Inhibition of mitochondrial fusion by α -synuclein is rescued by PINK1, Parkin, and DJ-1. *EMBO J* 29(20), 3571-89.

Witte K, Schuh AL, Sarkeshik A, Hegermann J, Mayers JR, Schwarze K, Yates III JR, **Eimer S**, Audhya A (2011) Mechanisms by which TFG functions in protein secretion and oncogenesis. *Nat. Cell Biol* 13(5), 550-8.

Luo L, Hannemann M, Koenig S, Hegermann J, Ailion M, Cho M-K, Sasidharan N, Zweckstetter M, Rensing SA, **Eimer S** (2011) The *C. elegans* GARP complex contains the conserved Vps51 subunit and is required for lysosomal morphology. *MBoC* 22(14), 2564-78.

E. Research Support (selection)

1. International research and training network grant SyMBaD (EU): "Synapses: from Molecules to Brain and Diseases", 12/2010-11/2014. PI (consortium partner).

F. Other activities

Co-coordinator of the Network of European Neuroscience Institutes (ENINET) since 2005, Coordination of the Göttingen Electron Microscopy network (GöNEM) since 2006.

G. Memberships and awards

Memberships: GMB

Awards: Elisabeth Gateff Award of the German Genetics Society (2003)

NAME	POSITION / TITLE
ENGEL, Wolfgang	Professor, Head of Department

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Freiburg	Dr. med.	1967	Medicine
Hospital Schorndorf	Physician	1966-1968	
University of Freiburg	Habilitation	1974	Human Genetics

B. Positions / Academic Appointments

1968-1977	Posdtco, Institute of Human Genetics and Anthropology, University of Freiburg
1977	Professor of Human Genetics and Director of the Institute, University of Göttingen

C. Major research interests

Our research is focused on the molecular analysis of normal human variability and genetic disturbances of development and differentiation.

Isolated genes are being analysed in detail with respect to their functional properties by animal models (transgenic and knock-out-mice). For suitable genetic diseases therapeutic strategies (substitution; gene therapy) are being developed and initial evaluation of such strategies is done in the mouse. We are working on the genotype-phenotype correlations in neurological and cardiovascular diseases (e. g. Spastic paraplegia, Rett syndrome, Morbus Osler, mental retardation by subtelomeric microdeletions, molybdenum cofactor deficiency; cardiomyopathies, Noonan syndrome) and several genetically determined malformation syndromes. We are also engaged in the molecular and cellular basis of initiation events of cancer, specifically in prostate cancer, medulloblastoma and rhabdomyosarcoma. One main interest in our institute is the analysis of structure, expression and function of genes involved in differentiation of male gametes. The knowledge of the function of those genes can help us to clarify the genetic causes of male infertility.

We have isolated spermatogonial stem cells (SSCs) from adult mouse testis and demonstrated that these cells are as pluripotent as embryonic stem cells (ESCs). Our main interest is now to isolate and proliferate SSCs from adult human testis. These cells would be of great interest for regenerative medicine.

D. Selected peer-reviewed publications

Xu X, Pantakani K, Lührig S, Tan X, Khromov T, Nolte J, Dressel R, Zechner U, **Engel W** (2011) Stage-specific germ-cell marker genes are expressed in all mouse pluripotent cell types and emerge early during induced pluripotency. PLoS ONE 6 (7), e22413. doi: 10.1371/journal.pone.0022413

Glaser T, Opitz T, Kischlat T, Konang R, Sasse P, Fleischmann BK, **Engel W**, Nayernia K, Brüstle O (2008) Adult germ line stem cells as a source of functional neurons and glia. Stem Cells 26, 2434-2443

Zovoilis A, Nolte J, Drusenheimer N, Zechner U, Hada H, Guan K, Hasenfuß G, Nayernia K, **Engel W** (2008) Multipotent adult germline stem cells and embryonic stem cells have similar microRNA profiles. Molecular Human Reproduction 14, 521-529

Guan K, Wagner S, Unsöld B, Maier LS, Kaiser D, Hemmerlein B, Nayernia K, **Engel W**, Hasenfuss G (2007) Generation of functional cardiomyocytes from adult mouse spermatogonial stem cells. Circulation Research 100, 1615-1625

Nayernia K, Nolte J, Michelmann HW, Lee JH, Rathsack K, Drusenheimer N, Dev A, Wulf G, Ehrmann IE, Elliott DJ, Okpanyi V, Zechner, Haaf T, Meinhardt A, **Engel W** (2006) In vitro-differentiated embryonic stem cells give rise to male gametes that can generate offspring mice. Developmental Cell 11, 125-132

NAME	POSITION / TITLE
ENDERLEIN, Jörg	Professor, Head of Department

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Ilya-Mechnikov University, Odessa, Ukraine	Diploma	1981-1986	Physics
Humboldt University, Berlin, Germany	Ph.D.	1991	Physical Chemistry
University of Regensburg, Germany	Habilitation	2000	Physical Chemistry

E. Positions / Academic Appointments

1996-1997	Postdoctoral Fellow, Los Alamos National Laboratory, USA
1997-2000	Assistant Professor, University of Regensburg, Germany
2007-2008	Professor of Biophysical Chemistry, University of Tübingen, Germany
2008-	Professor of Biophysics, University of Göttingen, Germany

F. Major research interests

The core research interest of our group is the development of new methods of single molecule fluorescence spectroscopy and imaging and their application to biophysics and the physics of complex systems. In recent years, we have developed several advanced methods such as dual-focus fluorescence correlation spectroscopy (2fFCS), fluorescence lifetime correlation spectroscopy (FLCS), and defocused image analysis of single molecules (DIAM). We use these methods in studying, for example, fast conformational dynamics of proteins and peptides, protein folding, protein-protein interactions, protein aggregation, and the interaction of proteins with water, ions and lipids.

A second important research topic is the development and application of new advanced fluorescence microscopy methods. In particular, we have developed the super-resolution techniques Stochastic Optical Fluctuation Imaging (SOFI) and Image Scanning Microscopy (ISM) which allow doubling of the spatial resolution in all directions, together with contrast enhancement, background suppression, three-dimensional sectioning and multi-color imaging capability, in an easy and robust way.

A third, purely physics-inspired research topic is the study of the electromagnetic interaction of single fluorescing molecules with metallic nanostructures, which is an important both from a fundamental-physics point of view as well as for many applications in nanooptics and plasmonics.

G. Selected peer-reviewed publications

Weiß K, **Enderlein J** (2012) Lipid diffusion within black lipid membranes measured with dual-focus fluorescence correlation spectroscopy. *Chem Phys Chem* 13, 990-1000.

Pieper C, **Enderlein J** (2011) Fluorescence correlation spectroscopy as a tool for measuring the rotational diffusion of macromolecules. *Chem. Phys. Lett.* 516, 1-11.

Müller CB, **Enderlein J** (2010) Image scanning microscopy *Phys Rev Lett* 104, 198101.

Berndt M, Lorenz M, **Enderlein J**, Diez S (2010) Axial nanometer distances measured by fluorescence lifetime imaging microscopy. *Nano Lett* 10, 1497-1500.

Dertinger T, Colyer R, Iyer G, Weiss S, **Enderlein J** (2009) Fast, background-free, 3D superresolution optical fluctuation imaging (SOFI). *Proc Natl Acad Sci USA* 106, 22287-22292.

H. Research Support (selection)

1. SFB 755 / TP A5 (DFG): "Nanoscale dynamics of proteins and their interaction". PI.

2. SFB 803 / TP A10 (DFG): "Quantifying the translational and rotational diffusion of membrane proteins and peptides". PI.

3. SFB 860 / TP A6 (DFG): "Single-molecule fluorescence spectroscopy of the structure and dynamics of macromolecular assemblies". PI (in close collaboration with R. Lührmann (MPI-bpc), M. Rodnina (MPI-bpc), and K. Tittmann (Uni-Bio).

4. SFB 963 / TP 11 (DFG): "Pattern formation of the force network in motile cells: the actin cortex". Co-PI (together with E. Bodenschatz (MPI-bpc) and T. Salditt (Uni-Phy).

5. BCCN / TP A2 (BMBF): "Mapping neuronal ion channel distributions with single channel resolution". PI (in close collaboration with A. Neef (Uni-Med).

6. CMPB / A2-5 (DFG): "Superresolution microscopy of neurons". PI.

7. BMBF: "Spectral Fluorescence Lifetime Imaging". Coordinator of this project, done together with PiocoQuant, ibidi and AttoTec companies, M. Sauer (University of Würzburg) and F. Wouters (Uni-Med).

8. SFB 937 / TP A7 (DFG): "Lateral membrane organization in response to external forces". Co-PI (together with M. Müller (Uni-Phy) and T. Salditt (Uni-Phy).

9. SFB 937 / TP A5 (DFG): "Polymer brushes in motion". Co-PI (together with M. Müller (Uni-Phy) and P. Vana (Uni-Che).

I. Other activities

Co-organizer of the Annual International Workshop "Single Molecule Spectroscopy: Basics and Applications in Life Sciences," Berlin. Co-chair of the conference "Ultrasensitive and Single-Molecule Detection Techniques" international workshops and conferences at the Annual BIOS West Meeting (San Jose, USA). Co-organizer of the Annual "4th *Advanced Practical Course* on Optical Spectroscopy in Biology," Jülich. Lecturer of the "International Helmholtz-Research School on Biophysics and Soft Matter".

J. Memberships and awards

Memberships: German Physical Society (DPG), Biophysical Society of the USA.

Awards: Fellowship (1 year), German Academic Exchange Service (DAAD), 1996-1997. G. Märkl-Award of the Novartis Foundation for outstanding work in the field of single molecule fluorescence detection and spectroscopy, 2001. Heisenberg Fellow (DFG), Forschungszentrum Jülich. 2001-2006.

NAME	POSITION / TITLE
FEUSSNER, Ivo	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Philipps University, Marburg, Germany	Diploma	1990	Chemistry
Philipps University, Marburg, Germany	Dr. rer. nat.	1993	Chemistry
Martin-Luther University Halle-Wittenberg, Halle (Saale), Germany	Postdoctoral Fellow	1993-1994	Biochemistry
Institute for Plant Biochemistry (IPB), Halle (Saale), Germany	Postdoctoral Fellow	1995-1996	Biochemistry
Martin-Luther University Halle-Wittenberg, Halle (Saale), Germany	Habilitation	2000	Biochemistry/ Biotechnology

B. Positions / Academic Appointments

1997-1999	Junior group leader, Dept. Hormone Research, Institute for Plant Biochemistry (IPB), Halle (Saale), Germany
2000-2002	Junior group Leader, Dept. Molecular Cell Biology, Institute for Plant Genetics and Crop Plant Research (IPK), Gatersleben, Germany
2002-	Full Professor, Dept. Plant Biochemistry, Georg-August-University, Göttingen, Germany

C. Major research interests

The group is currently studying different aspects of the lipid metabolism of plants, algae, mosses and fungi. In this context we are primarily interested in the metabolism of polyenoic fatty acids and lipid-derived signal transduction processes. For this purpose, we make use of both classical techniques as analytical chemistry and biochemistry as well as of modern approaches in the area of lipidomics and molecular genetics, including the generation of transgenic organisms („gain-of-function“) or mutants („loss-of-function“) of plants, mosses, fungi or bacteria. Two other projects deal with the biochemistry and function of sphingolipids in plants and fungi as well as with wax ester forming enzymes. In addition we use metabolomics approaches to identify new enzyme functions in plants and we aim to identify chemical signals that are exchanged during the interaction of plants with pathogens.

D. Selected peer-reviewed publications

Djamei A, Schipper K, Rabe F, Ghosh A, Vincon V, Kahnt J, Osorio S, Tohge T, Fernie AR, **Feussner I**, Feussner K, Meinicke P, Stierhof Y-D, Schwarz H, Macek B, Mann M, Kahmann R (2011) Metabolic priming by a secreted fungal effector. *Nature* 478, 395-398.

Ternes P, Feussner K, Werner S, Lerche J, Iven T, Heilmann I, Riezman H, **Feussner I** (2011) Disruption of the ceramide synthase LOH1 causes spontaneous cell death in *Arabidopsis thaliana*. *New Phytol* 192, 841-854.

Stumpe M, Göbel C, Faltin B, Beike AK, Hause B, Himmelsbach K, Bode J, Kramell R, Wasternack C, Frank W, Reski R, **Feussner I** (2010) The moss *Physcomitrella patens* contains cyclopentenones but no jasmonates: mutations in allene oxide cyclase lead to reduced fertility and altered sporophyte morphology. *New Phytol* 188, 740-749.

Andreou A, Göbel C, Hamberg M, **Feussner I** (2010) A bisallylic mini-lipoxygenase from cyanobacterium *Cyanothece* SP. That has an iron as cofactor. *J Biol Chem* 285, 14178-14186.

Volkov A, Liavonchanka A, Kamneva O, Fiedler T, Göbel C, Kreikemeyer B, **Feussner I** (2010) Myosin cross-reactive antigen of *Streptococcus pyogenes* M49 encodes a fatty acid double bond hydratase that plays a role in oleic acid detoxification and bacterial virulence. *J Biol Chem* 285, 10353-10361.

E. Research Support (selection)

1. FOR 546 (DFG): "Chemical signalling between *Verticillium longisporum* and *Arabidopsis thaliana*", 08/01/2007-08/31/2010. PI on one project.

2. GRK 1422 (DFG): "Metal Sites in Biomolecules: Structures, Regulation and Mechanisms", 10/01/2006-04/30/13. PI (Consortium partner).

3. Consortium GIAVAP (EU): "Genetic Improvement of Agae for Value Added Products", 01/01/2011-12/31/2013. PI (Consortium partner).

4. Consortium BioFung (BMBF): "Integrative study of the biotrophic growth of the fungus *Verticillium longisporum* on its host oilseed rape (*Brassica napus*)", 04/01/2010-03/31/2013. PI (Consortium partner).

5. Consortium BioÖl (BMBF): "Biotechnologische Sink-Regulation zur Erhöhung und Optimierung der Kapazität der Rapsölproduktion", 02/01/2009-02/29/2012. PI (Coordinator).

F. Other activities

Scientific Advisory Board of the German Society of Fat Research and of EuroFedLipids (since 2002), Founding chair of the Bachelor program "Biochemistry" (since 2011), Elected member of the DFG Panel on Plant Sciences (since 2003), Director of the "Göttingen Center for Molecular Biosciences (GZMB)" (since 2009), Member of the Fakultätsrat (Biology; since 2005).

G. Memberships and awards

Memberships: Fellow of the Saxonian Academy of Sciences, Leipzig, Germany.

Awards: Young Investigator Award of the German Society for Biochemistry and Molecular Biology (2001); Terry Galliard Award of the International Symposium on Plant Lipids (2012).

NAME	POSITION / TITLE
FICNER, Ralf	Dean and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Erlangen, Germany	Diploma	1989	Chemistry
Technical University Munich, Germany	Dr. rer. nat.	1992	Biochemistry
EMBL Heidelberg	Postdoctoral Fellow	1993-1996	Structural Biology

B. Positions / Academic Appointments

1997-2001	Junior Group Leader, IMT, University of Marburg, Göttingen
2001-2001	Group Leader, Max Planck Institute for Biophysical Chemistry, Göttingen
2001 -	C4-Professor for Molecular Structural Biology, University of Göttingen

C. Major research interests

The research activities of the Department of Molecular Structural Biology are focussed on the structure determination of proteins, functional protein-protein- and protein-RNA complexes by means of X-ray crystallographic methods. The general goal of our work is to understand structure-function relationships on a atomic level.

In order to obtain more detailed insight into the structure and function of the spliceosome we are determining three-dimensional structures of spliceosomal ribonucleoprotein complexes. Our recent work has been focused on the biochemical characterization and crystallization of the spliceosomal DEAD/H-box proteins Prp2, Prp28, and Prp22. These proteins are essential for several steps in pre-mRNA splicing, like spliceosome assembly and activation, rearrangements between the first and second transesterification reaction, or product release and spliceosome disassembly.

Furthermore we are interested in the biogenesis of spliceosomal UsnRNPs, which requires a nucleocytoplasmic transport cycle comprising the export of UsnRNA from the nucleus to the cytoplasm, the reimport of snRNP-core complexes regulated by the hypermethylation of the RNA 5'-m7G-cap, and the recycling of the UsnRNP-specific import adaptor snurportin1 by the general exportin CRM1. We determined the crystal structure of the CRM1-RanGTP-Snurportin1 complex, which revealed the structural basis for the recognition of the NES (nuclear export signal) by CRM1. Furthermore we solved the crystal structure of the dimethyltransferase TGS1, which hypermethylates the 5'-cap of the UsnRNAs, but also of snoRNAs and telomerase RNA.

D. Selected peer-reviewed publications

Lehwess-Litzmann A, Neumann P, Parthier C, Lüttke S, Golbik R, Ficner R, Tittmann K (2011) Twisted Schiff base intermediates and substrate locale revise transaldolase mechanism. *Nat Chem Biol* 7(10), 678-684.

Schulz E-C, Dickmanns A, Urlaub H, Schmitt A, Mühlenhoff M, Stummeyer K, Schwarzer D, Gerardy-Schahn R, **Ficner R** (2010) Crystal structure of a novel intramolecular chaperone mediating triple β -helix folding. *Nature Struct Mol Biol* 17, 210-215.

Güttler T, Madl T, Neumann P, Deichsel D, Corsini L, Monecke T, **Ficner R**, Sattler M, Görlich D (2010) NES consensus redefined by structures of PKI-type and Rev-type nuclear export signals bound to CRM1. *Nature Struct Mol Biol* 17, 1367-1376.

Monecke T, Güttler T, Neumann P, Dickmanns A, Görlich D, **Ficner R** (2009) Crystal structure of the nuclear export receptor CRM1 in complex with snurportin1 and RanGTP. *Science* 324, 1087-1091.

Monecke T, Dickmanns A, **Ficner R** (2009) Structural basis for m⁷G-cap hypermethylation of small nuclear, small nucleolar and telomerase RNA by the dimethyltransferase TGS1. *Nucleic Acids Res* 37, 3865-3877.

E. Research Support (selection)

1. FOR 855 (DFG): "Crystallographic studies on UNR, a protein important for translation and decay of mRNA, and on the RNA-induced silencing complex RISC", 2007-2010.
2. SPP 1258 (DFG): "X-ray crystallographic structure analysis of the RNA thermometer ROSE and the preQ1-specific riboswitch", 2007-2010.
3. SFB 860 (DFG) TP A1: "Crystallographic studies on molecular motors of the spliceosome", 2010-2014.
4. SFB 860 (DFG), TP B3: "Cargo recognition by the exportin CRM1", 2010-2014. Co-PI (with D. Görlich).
5. SFB 889 (DFG), TP A4: "Analysis of structure and interaction partners of otoferlin, a synaptic multi-C2-domain protein", 2011-2014. Co-PI (with E. Reisinger).

F. Other activities

Coordinator/Spokesperson of the Collaborative Research Center (SFB 860) "Integrative Structural Biology of Dynamic Macromolecular Assemblies"

G. Memberships and awards

Elected Member of the "Fachkollegium" (Study Section) Biochemistry and Biophysics (DFG); Member of the Priority Committee of the EMBL Outstation Hamburg at DESY; Member of the Beam Time Committee at Berlin Synchrotron BESSY.

NAME	POSITION / TITLE
FISCHLE, Wolfgang	Max Planck Research Group Leader

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Tübingen, Germany	Diploma	1996	Biochemistry
University of Tübingen, Germany University of California, San Francisco, USA	Dr. rer. nat.	2002	Biochemistry
University of Virginia, Charlottesville, USA	Postdoctoral Fellow	2002-2003	Biochemistry Molecular Biology
The Rockefeller University, New York, USA	Postdoctoral Fellow	2003-2005	Biochemistry Molecular Biology

B. Positions / Academic Appointments

2006- Max Planck Research Group Leader, Laboratory of Chromatin Biochemistry, MPI
for Biophysical Chemistry, Göttingen, Germany

C. Major research interests

Epigenetic phenomena are due to inheritable changes in gene expression without changes in DNA sequence or content. These are adding large complexity to the surprisingly very similar genomes of different organisms. Biochemically, epigenetic processes are manifested on the level of chromatin, which is the natural "packaging" state of DNA in complex with histone proteins within a eukaryotic cell nucleus. Different chemical DNA and histone modifications are associated with distinct functional states of chromatin and are therefore thought to direct different chromatin conformations and structures. Our research group aims to gain molecular understanding of the processes that read single and patterns of such chromatin marks and that translate these into biological function. In particular, we want to understand how chromatin marks direct the local status of chromatin and how these structures are connected to defined functional domains of chromatin as well as larger chromatin areas such as eu- and heterochromatin. To this end, we are applying a combination of biochemistry, biophysics, molecular biology and cell biology approaches.

D. Selected peer-reviewed publications

Seeliger D, Soeroes S, Klingberg R, Schwarzer D, Grubmüller H, **Fischle W** (2012) Quantitative Assessment of Protein Interaction with Methyl-Lysine Analogues by Hybrid Computational and Experimental Approaches. *ACS Chem Biol* 7, 150-154.

Nikolov M, Stützer A, Mosch K, Krasauskas A, Soeroes S, Stark H, Urlaub H, **Fischle W** (2011) Chromatin Affinity Purification and Quantitative Mass Spectrometry Defining the Interactome of Histone Modification Patterns. *Mol Cell Proteomics* 10, M110.005371.

Koester-Eiserfunke N, **Fischle W** (2011) H3K9me2/3 Binding of the MBT Domain Protein LIN-61 Is Essential for *Caenorhabditis elegans* Vulva Development. *PLoS Genet*, 7:e1002017.

Mosch K, Franz H, Soeroes S, Singh PB, **Fischle W** (2011) HP1 recruits activity-dependent neuroprotective protein to H3K9me3 marked pericentromeric heterochromatin for silencing of major satellite repeats. *PLoS One* 6, e15894.

Franz H, Mosch K, Soeroes S, Urlaub H, **Fischle W** (2009) Multimerization and H3K9me3 binding is required for CDYL1b heterochromatin association. *J Biol Chem*, 284:35049-35059.

E. Research Support (selection).

1. Niedersachsen-Israeli Research Cooperation Program: "The role of H2B ubiquitination in mammalian transcription" 01/01/2011-31/12/2013. Co-PI with Philippa Melamed, Technion, Haifa, Israel.

2. DFG Research Grant: "Combinatorial epigenetic readout of methylated-DNA and histone methylation marks by ICBP90/UHRF1", 01/04/2009-31/03/2012. PI.

3. DFG Research Grant: "Role of CDYL in translating histone modification patterns for chromatin organization and regulation", 01/04/2009-31/03/2012. PI.

4. Minerva grant of the Minna James Heineman Foundation: "Systematic analysis of chromatin marks in defining heterochromatin" 01/04/2009-30/04/2012. Co-PI with Eran Segal, Weizmann Institute, Rehovot, Israel.

5. Marie Curie International Reintegration Fellowship: "Complex chromatin systems in the test tube" 01/01/2007-31/12/2009. PI.

F. Other activities

Faculty member: GGNB Programs Genes and Development, Biomolecules: Structure-Function-Dynamics, Molecular Biology Cells, IMPRS Physics of Biological and Complex Systems; Guest editor for *ChemBioChem* special issue on "Biochemistry of Epigenetics" (2010).

G. Memberships and awards

Memberships: Gesellschaft für Biochemie und Molekularbiologie, AAAS

Awards: GIF Young Scientist (2010), NET Fellow of the European Network of Excellence "The Epigenome" (2006), Robert Black Fellow of the Damon Ranyon Cancer Research Foundation (2003).

NAME	POSITION / TITLE
GATZ, Christiane	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Technical University Darmstadt, Germany	Diploma	1982	Biology
Technical University Darmstadt, Germany	Dr. rer. nat.	1985	Biochemistry
University of Wisconsin, Madison, USA	Postdoctoral Fellow	1985-1987	Molecular Plant Sciences
Free University Berlin	Habilitation	1992	Molecular Genetics

B. Positions / Academic Appointments

1987-1992	Junior group leader, Institut für Genbiologische Forschung GmbH, Berlin, Germany
1993-1996	Professor (C3) of Plant Molecular Biology, Bielefeld University, Germany
1997-	Professor (C4) of Plant Molecular Biology and Physiology, Georg-August-University Göttingen

C. Major research interests

The research of the department of plant molecular biology and physiology is currently studying different aspects signal transduction processes elicited in the course of biotic interactions between plants and pathogens. Molecular and genetic methods are applied.

1. Response to chemical stress

Plants are challenged by toxic chemicals that are either released by man, neighboring plants or pathogenic microbes. Moreover, endogenous reactive molecules accumulate under conditions of oxidative stress generated under adverse abiotic conditions or pathogen attack. Inactivation and elimination of harmful xenobiotic or endogenous substances is facilitated by an inducible set of detoxifying enzymes and transporters. We aim to obtain further insight into transcriptional control mechanisms in chemically stressed plants and to determine the importance of this pathway for the restriction of disease or stress symptoms.

2. Response to salicylic acid, jasmonic acid and ethylene

With this project, we are interested in the role of TGA transcription factors in orchestrating plant defense responses mediated by the plant hormones salicylic acid, jasmonic acid and ethylene.

*3. Response to *Verticillium longisporum**

Verticillium longisporum is a soil-born fungus that infects Brassicaceae. We study the signal transduction processes activated in the plant when the fungus has colonized the xylem vessels.

D. Selected peer-reviewed publications

Köster J, Thurow C, Kruse K, Meier A, Iven T, Feussner I, **Gatz C** (2012) Xenobiotic- and jasmonic acid-inducible signal transduction pathways have become interdependent at the *Arabidopsis thaliana* CYP81D11 promoter. *Plant Physiol*, Mar 27 [Epub ahead of print].

Zander M, Chen S, Imkampe J, Thurow C, **Gatz C** (2011) Repression of the *Arabidopsis thaliana* jasmonic acid/ethylene-induced defense pathway by TGA-interacting glutaredoxins depends on their C-Terminal ALWL motif. *Mol Plant*, Dec 29 [Epub ahead of print].

Pape S, Thurow C, **Gatz C** (2010) The *Arabidopsis thaliana* PR-1 promoter contains multiple integration sites for the co-activator NPR1 and the repressor SNI1. *Plant Physiol* 154, 1805-1818.

Zander M, La Camera S, Lamotte O, Metraux JP, **Gatz C** (2010) *Arabidopsis thaliana* class-II TGA transcription factors are essential activators of jasmonic acid/ethylene-induced defense responses. *Plant J* 61, 200-210.

Fode B, Siemsen T, Thurow C, Weigel R, **Gatz C** (2008) The *Arabidopsis* GRAS protein SCL14 interacts with class II TGA transcription factors and is essential for the activation of stress-inducible promoters. *Plant Cell* 20, 3122-3135.

E. Research Support (selection)

1. DFG (FOR546) GA330/14-3: "Analysis of *Verticillium longisporum*-induced gene expression in *Arabidopsis thaliana*", 1/9/2007-31/8/2010.

2. DFG Normalverfahren GA330/19-1: "Analysis of the function of plant-specific CCMC-type glutaredoxins that interact with the bZIP transcription factors of the TGA family", 1/5/2007-30/4/2010.

3. DFG Normalverfahren GA330/20-1: "Function and transcriptional regulation of a plant detoxification program", 1/5/2009-30/4/12.

4. DFG Normalverfahren GA330/22-1: "Molecular mechanisms underlying cross-talk phenomena in hormone-regulated plant defense responses in *Arabidopsis thaliana*", 1/9/2010-31/8/2013.

5. Niedersächsisch-israelisches Forschungsprojekt: "Function of the calmodulin-binding protein IQD1, which is a positive regulator of glucosinolate biosynthesis, in general plant defense responses", 1/1/2010-30/12/2012.

F. Other activities

Coordinator/Spokesperson of the DFG-funded Forschergruppe (FOR546); Member of the Fachkollegium of the DFG.

G. Memberships and awards

Awards: Alfried Krupp von Bohlen and Halbach Prize for Young University Professors (1996).

NAME	POSITION / TITLE
GÖRKE, Boris	Group leader, Privatdozent Dr.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Freiburg, Freiburg, Germany	Diploma	1995	Biology
University of Freiburg, Freiburg, Germany	Dr. rer. nat.	2000	Genetics
University of Freiburg, Freiburg, Germany	Postdoctoral fellow	2000-2001	Genetics
Laboratoire De Chimie Bactérienne (LCB), Centre National De La Recherche Scientifique (CNRS), Marseille, France	Postdoctoral fellow	2002-2004	Microbiology
University of Göttingen, Germany	Habilitation	2009	Microbiology and Genetics

B. Positions / Academic Appointments

2004- Group leader, University of Göttingen, Göttingen, Germany

C. Major research interests

Our research interests are dedicated to the investigation of novel regulatory mechanisms that control carbohydrate utilization in the two model bacteria *Bacillus subtilis* and *Escherichia coli*. Since all macromolecules of the cell consist of carbon, uptake and fluxes of carbon compounds through metabolic pathways must be tightly controlled and coordinated with virtually all other processes in the cell. Therefore, extensive regulation occurs at all levels including post-transcriptional control and regulation on the protein level. Our past and ongoing research projects focus on two regulatory principles: (I) the roles of protein phosphorylation and protein-protein interaction in controlling protein activities, and (II) genetic circuits involving post-transcriptional control of gene expression by small regulatory RNAs. We perform our studies in the bacteria *Escherichia coli* and *Bacillus subtilis*, which are the two model organisms, representative for the Gram-negative and Gram-positive world of bacteria, respectively.

D. Selected peer-reviewed publications

Göpel Y, **Görke B** (2012) Rewiring two-component signal transduction with small RNAs. *Curr Opin Microbiol* 15, 132-139.

Landmann J, Busse R, Latz J-H, Singh K, Stülke J, **Görke B** (2011) Crh, the paralog of the phosphocarrier protein HPr, controls the methylglyoxal bypass of glycolysis in *Bacillus subtilis*. *Mol Microbiol* 82, 770-787.

Göpel Y, Lüttmann D, Heroven A, Reichenbach B, Dersch P, **Görke B** (2011) Common and divergent features in transcriptional control of the homologous small RNAs GlmY and GlmZ in Enterobacteriaceae. *Nucleic Acids Res* 39, 1294-1309.

Reichenbach B, Göpel Y, **Görke B**. (2009) Dual control by perfectly overlapping Sigma54- and Sigma70-promoters adjusts small RNA GlmY expression to different environmental signals. *Mol Microbiol* 74, 1054-1070.

Lüttmann D, Heermann R, Zimmer B, Hillmann A, Rampp I, Jung K, **Görke B** (2009) Stimulation of the potassium sensor KdpD kinase activity by interaction with the phosphotransferase protein IIA^{Ntr} in *Escherichia coli*. *Mol Microbiol* 72, 978-994.

E. Research Support (selection)

1. SPP 1258 (DFG): "GlmY and GlmZ: A regulatory cascade composed of two small RNAs", 5/1/2010-4/30/2013. PI on one project.

2. Research grant (DFG): "The nitrogen-related phosphotransferase system in *Escherichia coli*", 10/1/2010-9/30/2013. PI on one project.

3. SPP 1258 (DFG): "The role of small RNAs in the control of amino sugar metabolism in *Escherichia coli*", 5/1/2008-4/30/2010. PI on one project.

F. Other activities

not applicable

G. Memberships and awards

Memberships: American Society For Microbiology (ASM), Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM)

Awards: Research Award 2000 of the Gödecke GmbH, a company of Pfizer.

NAME	POSITION / TITLE
GÖRLICH, Dirk	Professor and Director

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Martin-Luther-Universität Halle, Germany	Diploma	1989	Biochemistry
Humboldt-Universität Berlin, Germany	Dr. rer. nat.	1993	Biochemistry
Wellcome/ CRC Institute, Cambridge, UK	Postdoctoral Fellow	1993-1994	Cell Biology

B. Positions / Academic Appointments

1996 - 2007	Research Group Leader at the ZMBH, University of Heidelberg
2001 - 2007	Professor of Molecular Biology, University of Heidelberg
2007-	Director, Department of Cellular Logistics, Max Planck Institute for Biophysical Chemistry, Göttingen

C. Major research interests

The main research focus of our group is nucleocytoplasmic transport. In particular we would like to understand why nuclear pore complexes can pose firm diffusion barriers that prevent an intermixing of nuclear and cytoplasmic contents, but, at the same time, allow a rapid passage of cargo bound to nuclear transport receptors. We are also interested in cargo recognition by importins and exportins, nuclear pore assembly, cell type-specific functions of nucleoporins, gametogenesis, translation, nuclear actin, protein engineering and the development of new chromatographic procedures for protein purification.

D. Selected peer-reviewed publications

Güttler T, Madl T, Neumann P, Deichsel D, Corsini L, Monecke T, Ficner R, Sattler M, **Görlich D** (2010) NES consensus redefined by structures of PKI-type and Rev-type nuclear export signals bound to CRM1, *Nat Struct Mol Biol* 17, 1367-1376.

Mohr D, Frey S, Fischer T, Güttler T, **Görlich D** (2009) Characterisation of the passive permeability barrier of nuclear pore complexes. *EMBO J* 28, 2541-2553.

Monecke T, Güttler T, Neumann P, Dickmanns A, **Görlich D***, Ficner R (2009) Crystal Structure of the Nuclear Export Receptor CRM1 in Complex with Snurportin1 and RanGTP. *Science* 324, 1087-1091.

Frey S, **Görlich D** (2007) A saturated FG-repeat hydrogel can reproduce the permeability properties of nuclear pore complexes. *Cell* 130, 512-523.

Frey S, Richter RP, **Görlich D** (2006) FG-rich repeats of nuclear pore proteins form a three-dimensional meshwork with hydrogel-like properties. *Science* 314, 815-817.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 2010-2014. Co-PI with Ralf Ficner.

2. EU training grant "Treat polyQ", 01/03/2010-02/28/2013. PI (Consortium partner).

F. Memberships and awards

Memberships: German Academy of Science Leopoldina, EMBO.

Awards: Karl Lohmann Prize (1993, German Society for Biochemistry and Molecular Biology), Falcon Prize (1994, German Society for Cell Biology), Heinz Maier-Leibnitz Prize (1997), EMBO Gold Medal (1997), Alfried Krupp-Förderpreis (2001).

NAME	POSITION / TITLE
GRIESINGER, Christian	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Frankfurt, Germany	Pre-Diploma	1982	Physics
University of Frankfurt, Germany	Diploma	1984	Chemistry
University of Frankfurt, Germany	Dr. phil. nat.	1986	Chemistry
ETH Zürich, Zürich, Switzerland	Postdoctoral Fellow & Assistant	1986-1989	Physical Chemistry

B. Positions / Academic Appointments

1990-2000	Full professor (C4) for organic chemistry, University Frankfurt, Germany
1999-	Director of the Department NMR based Structural Biology and Scientific Member at the Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2001	Honorary Professor, Physical Chemistry, University Göttingen, Germany

C. Major research interests

Synthesis and elucidation of structure and dynamics of biologically active molecules (peptides, DNA, RNA, oligosaccharides) using NMR spectroscopy in solution and in the solid state; Methods- and software development for multidimensional NMR spectroscopy; Elucidation of mechanisms of Enzymes; Structural biology of neurodegenerative diseases; Transmembrane signalling; Stereochemistry of natural products.

D. Selected peer-reviewed publications

Ban D, Funk M, Gulich R, Egger D, Sabo TM, Walter KFA, Fenwick RB, Giller K, Pichierri F, de Groot BL, Lange OF, Grubmüller H, Salvatella X, Wolf M, Loidl A, Kree R, Becker S, Lakomek NA, Lee D, Lunkenheimer P, **Griesinger C** (2011) Kinetics of Conformational Sampling in Ubiquitin. *Angew Chem Int Ed* 50, 11437-40.

Rodriguez-Castaneda F, Maestre-Martinez M, Coudeville N, Dimova K, Junge H, Lipstein N, Lee D, Becker S, Brose N, Jahn O, Carlomagno T, **Griesinger C** (2010) Modular Architecture of Munc13/calmodulin complexes: dual recognition by Ca²⁺ and possible function in short-term synaptic plasticity. *EMBO J* 29, 680-91.

Karpinar DP, Balija MBG, Kügler S, Opazo F, Rezaei-Ghaleh N, Wender N, Kim HY, Taschenberger G, Kumar A, Riedel D, Fichtner L, Voigt A, Braus GH, Giller K, Becker S, Herzig A, Baldus M, Jäckle H, Eimer S, Schulz JB, **Griesinger C**, Zweckstetter M (2009) Prefibrillar α -Synuclein variants with impaired β -structure increase neurotoxicity in Parkinson's disease models. *EMBO J* 28, 3256-68.

D. Selected peer-reviewed publications (continued)

Bayrhuber M, Meins T, Habeck M, Becker S, Giller K, Villinger S, Vonrhein C, **Griesinger C**, Zeth K, Zweckstetter M (2008) Structure of the human voltage dependent anion channel. Proc Natl Acad Sci USA 105, 15370-75.

Lange OF, Lakomek NA, Fares C, Schröder GF, Walter KFA, Becker S, Meiler J, Grubmüller H, **Griesinger C**, de Groot BL (2008) Recognition Dynamics up to microseconds revealed from an RDC derived ubiquitin ensemble in solution. Science 320, 1471-75.

E. Research Support (selection)

1. SFB 803 (DFG): "Strukturuntersuchungen von Membranproteinen mit Flüssig- und Festkörper-NMR Spektroskopie", 1/1/2009-12/31/2012, together with Adam Lange.

2. SFB 860 (DFG): "Strukturelle Grundlage von SLP-Adapterproteinen, um die Dynamik lymphozytärer Signalgebung zu kontrollieren", 07/01/2010-31/6/2014. Together with J. Wienands.

3. FOR 934 "Bestimmung der absoluten und relative Konfiguration von Naturstoffen mit verbesserten NMR-Methoden und neuen orientierenden Medien", 07/01/2011-06/30/2016. Consortium partner.

4. BMBF "Neue Verfahren der Bio-NMR zur Optimierung und Beschleunigung strukturbasierter Wirkstoffentwicklung (INPHARMA) 01/01/2010-12/31/2012. PI (Consortium leader).

5. ERC Advanced Grant (EU): "Hiddentime NMR" 07/01/2009-06/31/2014

6. Consortium BioNMR (EU): PI in four JRAs 09/01/2010-08/30/2014. PI (Consortium partner).

F. Other activities

As of April 2012: Scientific Advisory Board of the Forschungsinstitut for Molecular Pharmacology (chair); Board of ICMRBS; Member of the DFG Panel: "Grundlagen der Biologie und Medizin"; Associate Editor of J Magn Reson and FEBS Letters.

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, EMBO, Göttingen Academy of Sciences, Honorary member of the National Magnetic Resonance Society (India)

Awards: Sommerfeld Prize (1997), Gottfried Wilhelm Leibniz Prize of the DFG (1998), Otto Bayer Prize (2003), Elhuyar-Goldschmidt Prize of the Royal Society of Spain and the GDCH (2011), Theodor Bücher award Lecture at FEBS and IUBMB (2012).

NAME	POSITION / TITLE
GROSS, Uwe	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Hamburg, Germany	Staatsexamen	1986	Medicine
University of Hamburg, Germany	Dr. med.	1987	Medical Microbiology
University of California at Los Angeles (UCLA), CA, USA	Postdoctoral Fellow	1987-1989	Rheumatology
Julius-Maximilians University Würzburg, Germany	Habilitation	1995	Microbiology and Hygiene

B. Positions / Academic Appointments

1989-1998	Lecturer, Group Leader, and Assistant Professor (C1 Assistant), Institute for Hygiene and Microbiology, Julius-Maximilians University Würzburg, Germany
1998-1999	Associate Professor of Parasitology, Julius-Maximilians University Würzburg, Germany
1999-	Full Professor of Bacteriology and Director, Department of Medical Microbiology, University of Göttingen Medical Center, Göttingen, Germany

C. Major research interests

My group is investigating the protozoan parasite *Toxoplasma gondii* which usually causes asymptomatic infections in immunocompetent adults leading to lifelong persistence especially in the brain and in muscle tissue. Life-threatening reactivation of such infection might occur in immunocompromised individuals (i. e. patients suffering from AIDS). This parasite serves as a model organism for studying evasion mechanisms of intracellular pathogens. We are interested in the cross-talk between the parasite and its host cell on a molecular level. We could demonstrate that the parasite (i) modulates the host cell capacity for MHC-restricted antigen presentation and (ii) inhibits apoptosis of the infected cell. Both mechanisms allow intracellular persistence. Vice versa, the host's immune response determines the fate of the parasite by direct interference with differentiation processes of *Toxoplasma gondii*. The precise molecular events for these strategies of intense interplay between both partners are currently under our investigation. Recently, we also started to investigate host-pathogen interactions of *Campylobacter jejuni*. This pathogen is the most prominent bacterial species that causes diarrhoea followed eventually by the development of neurological complications. Currently, we are focusing on the identification of putative virulence-associated factors. In addition, we are appointed the "German National Reference Center for Systemic Mycoses". In this respect, we are investigating fungal factors and mechanisms that are involved in pathogenesis of mycoses; i.e. cell wall structure and differentiation processes. Finally, we perform epidemiological projects on infectious diseases especially in sub-Saharan Africa within the "Göttingen International Health Network" that has been established in 2011.

D. Selected peer-reviewed publications

Hotop A, Hlobil H, **Groß U** (2012) Efficacy of rapid treatment initiation following primary *Toxoplasma gondii* infection during pregnancy. Clin Infect Dis 2012, Mar 29 [Epub ahead of print].

Bereswill S, Fischer A, Plickert R, Haag LM, Otto B, Kühl AA, Dasti JI, Zautner AE, Muñoz M, Loddenkemper C, **Groß U**, Göbel UB, Heimesaat MM (2011) Novel Murine Infection Models Provide Deep Insights into the "Ménage à Trois" of *Campylobacter jejuni*, Microbiota and Host Innate Immunity. PLoS One 6(6), e20953.

Lin SS, **Groß U**, Bohne W (2011) Two internal type II NADH dehydrogenases of *Toxoplasma gondii* are both required for optimal tachyzoite growth. Mol Microbiol 82, 209-221.

Groß U, Amuzu SK, de Ciman R, Kassimova I, Groß L, Rabsch W, Rosenberg U, Schulze M, Stich A, Zimmermann O (2011) Bacteremia and antibiotic drug resistance over time, Ghana. Emerg Infect Dis 17, 1879-1882.

Vutova P, Wirth M, Hippe D, **Groß U**, Schulze-Osthoff K, Schmitz I, Lüder CGK (2007) *Toxoplasma gondii* inhibits Fas/CD95-triggered cell death by inducing aberrant processing and degradation of caspase 8. Cell Microbiol 9, 1556-1570.

E. Research Support (selection)

1. DFG GR 906/15-1: "Identification and characterization of virulence-associated factors of *Campylobacter jejuni* by using a high throughput negative selection method", 2010-2012 (subsequent proposal is in review process).

2. BMBF 01KI1002B: "Determination of risk factors for transmission of *Toxoplasma gondii* to humans and of prognostic markers for the clinical outcome of infection", 2007-2013.

3. Consortium CANDICOL (ERANET): Understanding colonisation and the transition to pathogenic dissemination by *Candida* species: towards early diagnostic and therapeutic approaches", 2011-2014, PI on one project.

4. BMG: "National Reference Center for Systemic Mycoses", 2001-2013.

5. DAAD: "Indonesian-German Health Education Partnership (IGHEP)", 2007-2014.

F. Other activities

Coordinator/Spokesperson of the Göttingen International Health Network, Head of the German National Consulting Laboratory for Toxoplasmosis, Member and Vice-Chair of the Central Committee for Biological Safety (ZKBS).

G. Memberships and awards

Advancement Award of the German Society of Hygiene and Microbiology (1992), Major Award of the Eugen-Grimminger-Foundation (1996).

NAME	POSITION / TITLE
GROSSHANS, Jörg	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Princeton University, Princeton, NJ, USA		1997-2001	Molecular Biology
Max Planck Institute for Developmental Biology, Tübingen	Dr. rer. nat.	1994-1996	Genetics
University of Tübingen	Dipl. Biochem.	1997-1993	Biochemistry
University of North Carolina, Chapel Hill, USA	-	1990-1991	Biochemistry

B. Positions / Academic Appointments

2002-2008	Independent group leader (Emmy-Noether), ZMBH, Heidelberg
2009-	Professor, Universitätsmedizin, Göttingen

C. Major research interests

Biological structure formation/morphogenesis and ageing: Our group is interested in the molecular and cell-biological mechanisms how biological structures are formed. We analyze structure formation in the early *Drosophila* embryo employing genetical, biochemical and embryological experiments as well as live-imaging. Specifically we investigate how nuclear shape is determined and how the farnesylated protein Kugelkern is involved, how the cells are regularly arranged, how apical-basal polarity is established and how the number of synchronous cell divisions is robustly controlled. Based on our studies nuclear shape we have studied the function of the nuclear lamina and lamina proteins, such as lamin and Kugelkern, in ageing and stem cell proliferation and differentiation in the adult fly.

D. Selected peer-reviewed publications

Kanesaki T, Edwards C, Schwarz U, Großhans J (2011) Dynamic ordering of nuclei in syncytial embryos: a quantitative analysis of the role of cytoskeletal networks. *Integ Biol* 3, 1112-1119.

Polychronidou M, Hellwig A, Großhans J (2010) The farnesylated nuclear proteins Kugelkern and LaminDmO affect nuclear morphology by directly interacting with the nuclear membrane. *Mol Biol Cell* 21, 3409-3420.

Brandt A, Papagiannouli F, Wagner N, Wilsch-Bräuninger M, Braun M, Furlong EE, Loserth S, Wenzl C, Pilot F, Vogt N, Lecuit T, Krohne G, Großhans J (2006) Developmental control of nuclear size and shape by Kugelkern and kurzKern. *Curr Biol* 16, 543--552.

Großhans J, Wieschaus E (2000) A genetic link between morphogenesis and cell division during formation of the ventral furrow in *Drosophila*. *Cell* 101, 523-531.

Großhans J, Bergmann A, Haffter P, Nüsslein-Volhard C (1994). Activation of the kinase Pelle by Tube in the dorsoventral signal transduction pathway of *Drosophila* embryo. *Nature* 372, 563-566.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative structural biology", 2010-2014. PI.
2. SFB 937 (DFG): "Collective behavior of soft and biological matter", 2011-2014. Co-PI (with A. Zippelius and C. Schmidt).
3. SPP 1464 (DFG): "Principles and evolution of actin nucleator complexes", 2010-2013. PI.
4. FOR 1756 (DFG): "Functional dynamics of cell contacts in cellular assemblies and migratory cells", 2011-. Spokesperson and co-PI (with F. Wolf).

F. Other activities

Coordinator/spokesperson of the DFG FOR 1756 (2011-)

NAME	POSITION / TITLE
GRUBMÜLLER, Helmut	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Technical University Munich (TUM), Germany	Diploma	1990	Physics
Technical University Munich (TUM), Germany	Dr. rer. nat.	1994	Physics
University of Göttingen, Germany	Habilitation	2002	Physics

B. Positions / Academic Appointments

1990-1991	Research visits, University of Illinois at Urbana-Champaign, USA
1994-1998	Postdoctoral assistant, Theoretical Biophysics Group, University of Munich (LMU)
1994-1996	Research visits, Laboratoire de Biophysique Moleculaire et Cellulaire, CENG, Grenoble, France
1998-2003	Group leader, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2003	Associate Professor of Biomolecular Sciences, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
2003-	Director, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2005-	Honorary Professor of Physics, University of Göttingen

C. Major research interests

The aim of our theoretical biophysics group is to contribute to the understanding of the physics and function of biomolecules - particularly proteins - at the atomic level. Here, two lines of questions span the field at the interface between physics, molecular biochemistry and computer science:

(1) What structural and dynamical properties are common to proteins? How can these highly organized, but irregular pieces of condensed matter be described in terms of many-body systems?

(2) How does a given protein work? What is the mechanism of such biochemical "nano-machine"? New concepts to neglect irrelevant degrees of freedom as well as efficient and problem-oriented, parallel algorithms for molecular dynamics simulations, being indispensable tools in that area, are our methodological focus.

D. Selected peer-reviewed publications

Czub J, **Grubmüller H** (2011) Torsional elasticity and energetics of F1-ATPase. Proc Natl Acad Sci USA 108(18), 7408-7413.

Bockmann RA, de Groot BL, Kakorin S, Neumann E, **Grubmüller H** (2008) Kinetics, statistics, and energetics of lipid membrane electroporation studied by molecular dynamics simulations, Biophys J 95, 1837-1850.

Lange OF, Lakomek NA, Fares C, Schröder GF, Walter KFA, Becker S, Meiler J, **Grubmüller H**, Griesinger C, de Groot BL (2008) Recognition dynamics up to microseconds revealed from an RDC-derived ubiquitin ensemble in solution. Science 320,1471-1475.

Sieber JJ, Willig KI, Kutzner C, Gerding-Reimers C, Harke B, Donnert G, Rammner B, Eggeling C, Hell SW, **Grubmüller H**, Lang T (2007) Anatomy and dynamics of a supramolecular membrane protein cluster. Science 317, 1072-1076.

de Groot BL, **Grubmüller H** (2001) Water permeation across biological membranes: Mechanism and dynamics of aquaporin-1 and GlpF. Science 294, 2353-2357.

E. Research Support (selection)

1. SFB 755 (DFG): "Nanoscale Photonic Imaging: Simulation of primary electronic dynamics in macromolecules after femtosecond x-ray pulses", 01.07.2011-30.6.2015 (with G. Groenhof).

2. SFB 755 (DFG): "Nanoscale Photonic Imaging: Nanoscale dynamics of proteins and their interaction", 01.07.2011-30.6.2015 (with J. Enderlein).

3. SFB 803 (DFG): "Functionality controlled by organization on and between membranes", 1/1/2009-31/12/2012.

4. DFG "Nanocell", 12/2009-1/2013 (with D. Müller, T. Meier).

5. BMBF: "Joint Project Therapeutic Systems Immunology", 1/5/2009-30/4/2012 (with H.-J. Thiesen).

6. GIF: "Molecular structural basis of alpha-synuclein cytotoxicity in the etiology of Parkinson's disease", 1/1/2010-31/12/2012 (with E. Haas).

7. DFG-Forschergruppe, "Ribosome Dynamics in Regulation of Speed and Accuracy of Translation", Teilprojekt P2: "3D Structure determination and molecular dynamics simulations of cognate and non-cognate ribosome-SelB-Sec-tRNA^{Sec} complex", 06/2012-05/2015 (with H. Stark).

F. Other activities

Spokesman of the IMPRS for Physics of Biological and Complex Systems (since 2007); Fritz Haber Minerva Research Center for Molecular Dynamics Advisory Board (since 2005); CCPB Advisory Board (since 2007).

G. Memberships

Elected member of the Reviewing Board of the German Research Foundation (2003-2012), the Executive Committee of the European Biophysical Societies' Association (since 2005), the IUPAP Commission on Biological Physics (since 2008), and Max Planck Society Perspective Commission (since 2007), and the International Advisory Board for Scientific Biology (since 2006).

NAME	POSITION / TITLE
GRUENE, Tim	Research Assistant, Ph.D.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Technische Hochschule, Karlsruhe, Germany	Diplom	1993-1999	Physics
EMBL, Grenoble, France	PhD	1999-2003	Molecular Biology

B. Positions / Academic Appointments

2003-2007	Research Assistant, Georg-August-Universität, Göttingen, Germany
2007-2007	Beamline Scientist Assistant, Australian Synchrotron, Melbourne, Australia
2007-present	Research Assistant, Georg-August-Universität, Göttingen, Germany
2011-present	Associate members of the IMPRS for Molecular Biology

C. Major research interests

Methods development in X-ray and neutron crystallography:

- automated building of nucleic acids in electron density maps
- low resolution refinement and model building
- integration of neutron diffraction data

A methods developer has the task to understand the theory and implement it in (computer) programs so that experimental scientists get as good as possible data from their experiments. As such method development builds the essential bridge between experimental equipment and the benefit and conclusions science can draw from it.

D. Selected peer-reviewed publications

Gruene T, Sheldrick, G M (2011) Geometric properties of nucleic acids with potential for autobuilding. Acta Crystallogr A67, 1-8.

Beck T, **Gruene T**, Sheldrick, G M (2010) The magic triangle goes MAD: experimental phasing with a bromine derivative. Acta Crystallogr D66, 374-380.

E. Research Support (selection)

1. DFG project: "Programmierung einer graphischen Schnittstelle zur Erleichterung der Erstellung von Nukleinsäuremodellen aus Röntgenkristalldaten." Support for one part-time pupil assistant (2012)

F. Other activities

G. Memberships and awards

Awards: EMBO Longterm fellowship Jan 2004-Dec 2006

NAME	POSITION / TITLE
HAHN, Heidi	Director/Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
General Medical Council Bayern, Germany	Approbation	1993	Medicine
University of Würzburg, Germany	Dr. med.	1993	Toxicology
Technical University of Munich, Germany	Habilitation	2001	Experimental Pathology

B. Positions / Academic Appointments

1992-1993	Research associate at the Institute of Virology / Würzburg, Germany
1994	Research associate at the Institute for Medical Radiobiology and Cell Biology / Würzburg, Germany
1994-1996	Postdoc at the National Cancer Institute, Frederick MD, USA
1996-1998	Postdoc at the National Institute of Mental Health, Bethesda MD, USA
1999-2001	Leader of a Biofuture research Group sponsored by the BMBF at the Technical University of Munich / Helmholtz Centre Munich - German Research Centre for Environmental Health, Germany
Since Oct 2001	Professorship Department Human Genetics/Molecular Developmental Genetics, University of Göttingen Medical Center, Germany

C. Major research interests

Our group is interested in the role of the Hedgehog/Patched (Hh/Ptch) signaling cascade in the development of solid tumors. The focus is on rhabdomyosarcoma and basal cell carcinoma. The first aim is the discovery of molecular and cellular events that trigger the initiation of Hh/Ptch associated tumors. The second aim is to elucidate the function of Hh/Ptch signaling during tumor progression. The current focus is on the interaction between Hh/Ptch and Wnt signaling during formation and progression of basal cell carcinomas, and on the interaction between Hh/Ptch and Ras signaling in the progression of rhabdomyosarcoma. The third goal is the identification of drugs that target Hh/Ptch associated solid tumors. Currently, we are analyzing the anti-tumoral effects of doxorubicin in combination with other drugs and of Vitamin D3 derivatives. Finally, we also try to identify new molecular targets useful for therapies of Hh/Ptch associated tumors.

D. Selected peer-reviewed publications

Nitzki F, Zibat A, Frommhold A, Schneider A, Schulz-Schaeffer W, Braun T, **Hahn H** (2011) Uncommitted precursor cells might contribute to increased incidence of embryonal rhabdomyosarcoma in heterozygous *Patched1* mutant mice. *Oncogene* 30(43), 4428-36.

Nitzki F, Zibat A, König S, Wijgerde M, Rosenberger A, Brembeck F, Carstens PO, Frommhold A, Uhmman A, Klingler S, Reifenberger J, Pukrop T, Aberger F, Schulz-Schaeffer W, **Hahn H** (2010) Tumor stroma-derived Wnt5a induces differentiation of basal cell carcinoma of *Ptch* mutant mice via CaMKII. *Cancer Research* 70(7), 2739-48.

Ecke I, Petry F, Rosenberger A, Tauber S, Mönkemeyer S, Hess I, Dullin C, Kimmina S, Pirngruber J, Johnsen SA, Uhmman A, Nitzki F, Wojnowski L, Schulz-Schaeffer W, Witt O, **Hahn H** (2009) Antitumor effects of a combined 5-aza-2'-deoxycytidine and valproic acid treatment on rhabdomyosarcoma and medulloblastoma in *Ptch* mutant mice. *Cancer Research* 69, 887-95.

Uhmman A, Dittmann K, Nitzki F, Dressel R, Koleva M, Frommhold A, Zibat A, Binder C, Adham I, Nitsche M, Heller T, Armstrong V, Schulz-Schaeffer W, Wienands J, **Hahn H** (2007) The Hedgehog receptor Patched controls lymphoid lineage commitment. *Blood* 110(6), 1814-23.

Hahn H, Wicking C, Zaphiropoulos P, Gailani M, Shanley S, Chidambaram A, Vorechovsky I, Holmberg E, Unden A, Gillies S, Negus K, Smyth I, Pressman C, Leffell D, Gerrard B, Goldstein A, Wainright B, Toftgard R, Chenevix-Trench G, Dean M, Bale A (1996) Mutations of the human homologue of *Drosophila* patched in the nevoid basal cell carcinoma syndrome. *Cell* 85(6), 841-51.

E. Research Support (selection)

Wilhelm-Sander Stiftung : "Untersuchung der Rolle des Shh/Ptch/Gli1 Signalwegs bei der Entstehung von Rhabdomyosarkomen" (2003.112.3). 2010- 2011 (2 years). PI.

GRK 1034 DFG: "Abhängigkeit der Therapieantwort von der genetischen Wirts- und Tumorvariabilität im Mausmodell". 2005-2014 (9 years). PI.

Deutsche Krebshilfe: "Epigenetische Therapie von Ptch-assoziierten Rhabdomyosarkomen (1347890). 2008-2009 (2 years)". Co-PI (with O. Witt).

FOR 942 DFG: "Interaktion zwischen Hh/Ptch und Wnt5a Signalweg bei der Progression von Basalzellkarzinomen (HA 2197/5-2)". 2011-2013 (3years). PI.

DFG: "Funktion des Hedgehog-Rezeptors Patched in T Zellen (HA 2197/6-1)". 2009-2010 (2 years). Co-PI (with A. Uhmman and H. Reichardt).

KoSAR Deutsche Krebshilfe: "Identification and evaluation of molecular targets in childhood sarcoma (109837)". 2012-2015 (3 years). Co-PI (with S. Fulda, T. Klingebiel, E. Koscielniak).

DFG: "Rolle von embryonalen Muskelvorläuferzellen bei der Entstehung von Rhabdomyosarkomen (HA2197/7-1)". 2012-2015 (3 years). PI.

F. Other activities

Lecturing in preclinical and clinical Medicine; reviewer for several journals (including PNAS and Cancer Research); reviewer for the DFG, Wilhelm-Sander-Stiftung, Wellcome Trust a.o.

G. Memberships and awards

Biofuture 2000, Siegfried-Stettendorf Preis 2009

NAME	POSITION / TITLE
HELL, Stefan W.	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1987	Physics
University of Heidelberg, Germany	Dr. rer. nat.	1990	Physics
EMBL (European Molecular Biology Laboratory)	Postdoctoral Researcher	1991 - 1993	Physics
University of Turku, Finland	Senior Researcher	1993 - 1996	Physics
University of Heidelberg, Germany	Habilitation	1996	Physics

B. Positions / Academic Appointments

1997 - 2002	Group Leader, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2002 -	Director, Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2002 -	Head, Optical Nanoscopy Division, German Cancer Research Center, Heidelberg, Germany
	Apl. Prof., Faculty of Physics, University of Heidelberg, Germany
	Hon. Prof., Faculty of Physics, University of Göttingen, Germany

C. Major research interests

The resolution of light microscopy has been limited by diffraction to about half the wavelength of light, which is why conventional light microscopes fail to distinguish object details that are closer than ~200 nanometers. We have broken this century-old barrier and are developing fluorescence microscopes with a spatial resolution down to a few nanometers in biological cells and light tissue. Prominent nanoscopy methods include STED and RESOLFT microscopy, as well as concepts based on stochastic single-molecule switching, such as GSDIM microscopy. In combination with 4Pi microscopy, another concept developed by this group, the resolution can be increased in all spatial dimensions down to the nanometer scale. All these superresolution concepts have in common that labels are reversibly prepared by light in at least two different states, typically an on-state and an off-state. Consequently, the group also pioneers the development and application of new labeling methods to improve the performance of the labels' state switching behavior. The new concepts have proven to be extremely valuable in biological research and have helped e.g. to uncover aspects of the mechanism of synaptic vesicle exocytosis, the anatomy and dynamics of membrane protein clusters or the molecular organization of the presynaptic active zone. Fluorescence nanoscopy has the unique potential to provide, for the first time, direct visual access to the molecular mechanisms of life with minimal invasion.

D. Selected peer-reviewed publications

Berning S, Willig KI, Steffens H, Dibaj P, **Hell SW** (2012) Nanoscopy in a Living Mouse Brain. *Science* 335, 551.

Liu KSY, Siebert M, Mertel S, Knoche E, Wegener S, Wichmann C, Matkovic T, Muhammad K, Depner H, Mettke C, Bückers J, **Hell SW**, Müller M, Davis GW, Schmitz D, Sigrist SJ (2011) RIM-Binding Protein, a Central Part of the Active Zone, Is Essential for Neurotransmitter Release. *Science* 334, 1565-1569.

Eggeling C, Ringemann C, Medda R, Schwarzmann G, Sandhoff K, Polyakova S, Belov VN, Hein B, von Middendorff C, Schönle A, **Hell SW** (2009) Direct observation of the nanoscale dynamics of membrane lipids in a living cell. *Nature* 457, 1159-1163.

Sieber, JJ, Willig KI, Kutzner C, Gerding-Reimers C, Harke B, Donnert G, Rammner B, Eggeling C, **Hell SW**, Grubmüller H, Lang T (2007) Anatomy and dynamics of a supramolecular membrane protein cluster. *Science* 317, 1072-1076.

Willig KI, Rizzoli SO, Westphal V, Jahn R, **Hell SW** (2006) STED-microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis. *Nature* 440, 935-939.

E. Research Support (selection)

1. NanoFluor (BMBF): "Erarbeitung der Grundlagen für die GSDIM-Weitfeld-Nanoskopie – Teilvorhaben: Grundlagen zur Bereitstellung neuer organischer Fluorophore und fluoreszierender Proteine für die Weitfeld-Nanoskopie (NanoFluor)", 01/03/2011 – 30/03/2014. Co-PI.

2. SFB 755 (DFG): "Nanoscale Photonic Imaging – isoSTED microscopy for live cell imaging", 01/07/2011 – 30/06/2015. Co-PI.

3. VolkswagenStiftung: "Atomic Nano Asembler", 07/2010 – 08/2013. Co-PI.

4. Consortium FLUODIAMON (EU): "Ultra-high resolution and ultra-sensitive fluorescence methods for objective sub-cellular diagnosis of early disease and disease progression in breast and prostate cancer", 01/06/2008 – 01/06/2012. PI (consortium partner).

5. CMPB (DFG): "Research Center Molecular Physiology of the Brain", 01/01/2011 – 30/09/2014. Co-PI.

F. Other activities

Head, Optical Nanoscopy Division, German Cancer Research Center, Heidelberg, Germany; Spokesperson, DFG Center Molecular Physiology of the Brain Göttingen; Board of directors, Laser Laboratorium Göttingen e.V., Board of trustees, X-LAB, Göttingen, Secretary of the International Society on Optics Within Life Sciences (OWLS).

G. Memberships and awards

Memberships: Max Planck Society, Scientific Member of Chem-Phys-Tech & Biomedical Section; Associate Member, European Neuroscience Institute Göttingen (ENI-G); Göttingen Academy of Science; Heidelberg Academy of Science, Corresponding Member.

Awards: ICO Prize, International Commission for Optics (2000), Helmholtz-Prize for metrology (2001), Innovation Award of Leibinger-Foundation (2002), Carl-Zeiss Research Award of Ernst-Abbe-Fonds (2002), Karl-Heinz Beckurts-Prize (2002), Gottlieb Daimler- and Karl Benz Prize, Berlin Brandenburg Academy of Sciences (2004), Innovation Award of the German President (2006), Cozzarelli Prize awarded by the Proc Natl Acad Sci USA (2007), Julius Springer Prize for Applied Physics (2007), Gottfried Wilhelm Leibniz Prize of the German Research Council (2008), Lower Saxony State Award (2008), Otto Hahn Prize in Physics (2009), Doctor honoris causa med, University of Turku, Finland (2009), Ernst-Hellmut-Vits-Prize (2010), Hansen Family Award (2011), Körber European Science Prize (2011), Gothenburg Lise Meitner Prize (2011), Meyenburg Prize for Cancer Research (2011).

NAME	POSITION / TITLE
HÖBARTNER, Claudia	Max Planck Research Group Leader

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Vienna University of Technology, Austria	Dipl. Ing. (DI)	1995-2001	Chemistry
ETH Zürich, Switzerland	(Erasmus progr., Diploma Thesis)	10/1999- 07/2000	Organic Chemistry
University of Innsbruck, Austria	Dr. rer. nat.	2001-2004	Organic Chemistry
University of Illinois, Urbana-Champaign, USA	Postdoctoral Fellow	2005-2007	Bioorganic Chemistry

B. Positions / Academic Appointments

2007-2008	Independent junior researcher, Hertha-Firnberg Fellow (Austrian Science Fund, FWF), Leopold-Franzens-University of Innsbruck, Austria
2008-	Max Planck Research Group Leader, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

C. Major research interests

The work in our group is focused on the chemistry and biochemistry of natural and artificial nucleic acids, with special emphasis on chemically modified RNA and catalytic DNA (deoxyribozymes). The accessibility of labeled RNA is essential to investigate RNA folding pathways, RNA-ligand and RNA-protein interactions of noncoding RNAs by spectroscopic methods. Current aims of our projects are:

- (i) To develop DNA catalysts into efficient tools for site-specific modification of large RNAs. Deoxyribozymes are envisioned to mimic the strategy of natural guide RNAs by using Watson-Crick binding arms to guide the selection of the reaction site (the target nucleotide). The single-stranded core forms an active site that enables productive cofactor binding and catalyzes covalent bond formation.
- (ii) To develop a mechanistic framework for DNA-catalyzed RNA modification to facilitate catalyst engineering by rational design. Using established methods and new analysis approaches developed in our group, we seek molecular level insights into the function and mechanism of DNA enzymes.
- (iii) To develop new chemical modifications for RNA; to prepare spin-labeled RNA for EPR spectroscopy by combined chemical and enzymatic synthesis, and to study folding and function of noncoding RNAs (e.g., riboswitches, siRNAs, and snRNAs). New spin labels with improved physical and chemical properties are developed that provide local conformational rigidity without imposing structural constraints on the RNA, and possess improved stability in biological environment.

D. Selected peer-reviewed publications

Gore KR, Nawale GN, Harikrishna S, Chittoor VG, Pandey SK, **Höbartner C**, Patankar S, Pradeepkumar PI (2012) Synthesis, Gene Silencing, and Molecular Modeling Studies of 4'-C-Aminomethyl-2'-O-methyl Modified Small Interfering RNAs. *J Org Chem* 77, 3233-3245.

Wachowius F, **Höbartner C** (2011) Probing essential nucleobase functional groups in aptamers and deoxyribozymes by nucleotide analog interference mapping of DNA. *J Am Chem Soc* 133, 14888-14891.

Wachowius F, JavadiZarnaghi F, **Höbartner C** (2010) Combinatorial mutation interference analysis reveals functional nucleotides required for DNA catalysis. *Angew Chem Int Ed* 49, 8504-8508.

Sicoli G, Wachowius F, Bennati M, **Höbartner C** (2010) Probing secondary structures of spin-labeled RNA by pulsed EPR spectroscopy *Angew Chem Int Ed* 49, 6443-6447.

Heller DA, Jin H, Martinez BM, Patel D, Miller BM, Yeung TK, Jena PV, **Höbartner C**, Ha T, Silverman SK, Strano MS (2009) Multimodal optical sensing and analyte specificity using single-walled carbon nanotubes. *Nature Nanotechnology* 4, 114-120.

E. Research Support (selection)

1. Max Planck Research Group (MPG): "Nucleic acid chemistry", since 2008.
2. IRTG 1422 (DFG): "Metal sites in biomolecules: structures, regulation and mechanisms", 2011-2015. Co-PI on two projects (with M. Bennati and G. Clever).

F. Other activities

G. Memberships and awards

Awards:

Research Award of the Peter and Traudl Engelhorn Foundation (2011)

European Young Chemist Award, Silver Medal (2010)

NAME	POSITION / TITLE
JÄCKLE, Herbert	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Freiburg, Germany	Diploma	1975	Chemistry, Biology
University of Freiburg, Germany	Ph.D	1977	Zoology
University of Texas, Austin, Texas, USA	Postdoct. Fellow	1978 - 1980	Zoology
University of Tübingen, Germany	Venia Legendi	1985	Biology

B. Positions / Academic Appointments

1989-1982	Faculty member at the EMBL, Heidelberg (Germany)
1982-1988	Head of the group (Assoc. Prof.), Max Planck Institute for Developmental Biology, Tübingen, Germany
1988 - 1991	Professor and Chairman, Dept. of Genetics and Microbiology, University of Munich, Germany
1991 -	Director at the Max Planck Institute for Biological Chemistry, Vice President of the Max Planck Society (since 2002)

C. Major research interests

Our research interest is focused on molecular processes and the mechanisms involved in the phenomenon of biological pattern formation during *Drosophila* embryogenesis. Aim of my studies is a better understanding of the biochemical pathways and the molecular characterization of the regulatory networks leading to the establishment of the segmental organization of the embryo, organ formation and cell behavior underlying morphogenesis.

A second line of research concerns the genetic basis for energy homeostasis in cells. We use the *Drosophila* fat metabolism to study the control of energy intake (food) and energy usage by factors that are associated with lipid droplets (fat storage) or control such factors in response to external cues. We also established a test system to test the "histone code hypothesis". This aspect of epigenetics is focused on developmental and metabolomic aspects that are regulated by epigenetic marks.

D. Selected peer-reviewed publications

Löhr U, Chung HR, Beller M, **Jäckle H** (2009) Antagonistic action of Bicoid and the repressor Capicua determines the spatial limits of *Drosophila* head gene expression domains. Proc Natl Acad Sci USA 106, 21695-21700.

Beller M, Thiel K, Thul PJ, **Jäckle H** (2010) Lipid droplets: A dynamic organelle moves into focus. FEBS Lett 584, 2176-2182.

Günesdogan U, **Jäckle H**, Herzig A (2010) A genetic system to assess *in vivo* the functions of histones and histone modifications in higher eukaryotes. EBO Rep 11, 772-776.

Beller M, Bulankina AV, Hsiao HH, Urlaub H, **Jäckle H**, Kühnlein R (2010) PERILIPIN-Dependent Control of Lipid Droplet Structure and Fat Storage in *Drosophila*. Cell Metab 12, 521-532..

E. Research Support (selection)

F. Other activities

Member of Senat and Hauptausschuss of the Deutsche Forschungsgemeinschaft (1993 - 2000), Member of several Scientific Advisory Boards, Member of stipend commissions of DAAD, NATO and Boehringer Ingelheim Fonds (1995 - 2008), President of the German Society for Developmental Biology (1994 - 1996), Chairman of the Life Sciences Panel, EU program Human Capital and Mobility (1995 - 1999), Chairman of HFSP Fellowship Panel (1995), Council Member of EMBO (1998 - 2003), Chairman EMBO (2001 - 2003), Member of the Reviewing Board of the Minerva Foundation (Chairman 1999 - 2006), Member of the Board of Governors, The Weizmann Institute, Rehovot, Israel.

G. Memberships and awards

Memberships: German Society for Cell Biology, German Society for Developmental Biology

Awards: Prize of the German Society for Cell Biology (1986), Gottfried Wilhelm Leibniz Prize (1986), Feldberg Prize (1990), Otto Bayer Prize (1992), Science Prize and Karl Ritter von Frisch Medal of the German Zoological Society (1992), Mendel Medal of the Deutsche Akademie der Naturforscher Leopoldina (1999), Louis Jeantet Prize for Medicine (1999), Science Prize of the Stifterverband (1999), "Innovation Prize" of the German Federal President (1999), "Co-operation Prize" of the Land Lower Saxony (2003), Cross of Merit, First Class, of the Order of Merit of the Federal Republic of Germany (2010).

NAME	POSITION / TITLE
JAHN, Reinhard	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma Staatsexamen	1976	Biology Biology, Chemistry
University of Göttingen, Germany	Dr. rer. nat.	1981	Zoology
Yale University, New Haven / The Rockefeller University, New York, USA	Postdoctoral Fellow	1982-1985	Neuroscience
Ludwig Maximilian University, Munich, Germany	Habilitation	1990	Biochemistry

B. Positions / Academic Appointments

1985-1986	Assistant Professor, The Rockefeller University, New York, NY, USA
1986-1991	Junior group leader, Max-Planck Institute for Psychiatry, Martinsried, Germany
1991-1997	Associate (since 1995 Full) Professor of Pharmacology and Cell Biology, Yale University School of Medicine, Associate Investigator, Howard Hughes Medical Institute, New Haven, CT, USA
1997-	Director, Department of Neurobiology, MPI for Biophysical Chemistry, Göttingen, Adjunct Professor of Biology (since 2001)

C. Major research interests

Our group is interested in the mechanisms of membrane fusion, with the main emphasis on regulated exocytosis in neurons. Intracellular membrane fusion events are mediated by sets of conserved membrane proteins, termed SNAREs, that are controlled by additional proteins including SM-proteins and scaffold proteins. For fusion to occur, complementary sets of SNAREs need to be present on both of the fusing membranes. The neuronal SNAREs are among the best characterized. We study their properties in detail using biochemical and biophysical approaches. Furthermore, we investigate the mechanisms of membrane fusion at the level of isolated proteins as well as in semi-intact and intact cells.

A second line of research includes the characterization of presynaptic protein complexes and protein-protein interaction networks involving quantitative biochemical and proteomic approaches. Our main emphasis is on the quantitative description of synaptic vesicles and synaptic vesicle-plasma membrane complexes. Other projects of the group include the study of neurotransmitter uptake by synaptic vesicles and the function of Rab-GTPases in neuronal exocytosis.

D. Selected peer-reviewed publications

Chua JJ, Butkevich E, Worsack JM, Kittelmann M, Gronborg M, Behrmann E, Stelzl U, Pavlos NJ, Lalowski M, Eimer S, Wanker EE, Klopfenstein DR, **Jahn R** (2012) Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. Proc Natl Acad Sci USA, in press.

van den Bogaart G, Meyenberg K, Risselada JH, Amin H, Willig KI, Hubrich BE, Dier M, Hell SW, Grubmüller H, Diederichsen U, **Jahn R** (2011) Membrane protein sequestering by ionic protein-lipid interactions. Nature 479, 552-555.

van den Bogaart G, Holt MG, Bunt G, Riedel D, Wouters FS, Jahn R (2010) One SNARE complex is sufficient for membrane fusion. Nature Struct Mol Biol 17, 358-365.

Stein A, Weber G, Wahl MC, Jahn R (2009) Helical extension of the neuronal SNARE complex into the membrane. Nature 460, 525-52.

Takamori S, Holt M, Stenius K, Lemke EA, Grønberg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, Rammner B, Gräter F, Hub JS, De Groot BL, Mieskes G, Moriyama Y, Klingauf J, Grubmüller H, Heuser J, Wieland F, **Jahn R** (2006) Molecular anatomy of a trafficking organelle. Cell 127, 831-846.

E. Research Support (selection)

1. SFB 803 (DFG): "Functionality controlled by organization on and between membranes", 1/1/2009-12/31/2012. Co-PI on two projects (with J. Walla and U. Diederichsen).

2. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Co-PI (with H. Urlaub) on one project.

3. Program Project Grant (NIH) "Structural dynamics of presynaptic membrane fusion", 07/01/2011-06/30/2016. PI on one project.

4. Consortium EUROSPIN (EU) "Synaptic protein networks in neurological and psychiatric diseases", 01/01/2010-12/31/2013. PI (Consortium partner).

5. Consortium SynSys (EU): "Synaptic systems: dissecting brain function in health and disease", 07/01/2010-06/30/2014. PI (Consortium partner).

F. Other activities

Coordinator/spokesperson of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB), funded by the German Excellence Initiative (since 2007), Scientific Advisory Board of the European Molecular Biology Laboratory EMBL (vice-chair), EMBO Publications Advisory Committee (chair), ERC Starting grant Review Panel LS1 (chair 2011 and 2013), Member of the Senate and the Hauptausschuss of the DFG.

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, EMBO

Awards: Max-Planck Research Prize (1990), Gottfried Wilhelm Leibniz Prize of the DFG (2000), Ernst Jung Prize for Medicine (2006), Sir Bernhard Katz Award of the American Biophysical Society (2008), Lower Saxony State Science Prize (2010).

NAME	POSITION / TITLE
JAKOBS, Stefan	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Kaiserslautern, Germany	Diploma	1995	Biology
Max Planck Institute for Plant Breeding Research, University of Cologne, Germany	Dr. rer. nat.	1999	Biology
University of Göttingen, Germany	Habilitation	2007	Botany, Cell Biology

B. Positions / Academic Appointments

5/1997-11/1997	Visiting Scientist, Dept. of Cell and Developmental Biology, John-Innes-Centre, Norwich, UK
1999	Postdoctoral Fellow, Department of Plant Genetics, Max Planck Institute for Plant Breeding Research, Cologne, Germany
1999-2005	Postdoctoral Fellow, Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2005-	Head of the research group "Mitochondrial Structure and Dynamics", Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2008-	Faculty member of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biosciences, Göttingen, Germany
2010-	Professor (W2) of High Resolution Microscopy in Neurodegenerative Diseases, University of Göttingen Medical Center, Dept. of Neurology, Göttingen, Germany

C. Major research interests

Mitochondria have a central role in the energy metabolism of all eukaryotic cells and are important for many cellular and developmental processes. Mitochondrial dysfunctions are associated with numerous severe diseases, including several devastating neurodegenerative diseases. We are concentrating on two research areas that are fundamental for the maintenance of mitochondrial structure and function. First, we investigate the molecular mechanisms that maintain the structural organization of the inner membrane. Second, we investigate the degree, the functional relevance and the molecular causes of the heterogeneity of mitochondrial structure and function in healthy and challenged single cells. Because mitochondria are very small organelles, we are using next to molecular and biochemical tools in particular advanced super-resolution light microscopy.

Another scientific focus is on the investigation and improvement of reversibly switchable fluorescent proteins. These proteins are photo-switchable between a non-fluorescent and a fluorescent state by light. With their unique properties, they open up numerous novel applications in microscopy and cell biology.

D. Selected peer-reviewed publications

Grotjohann T, Testa I, Leutenegger M, Bock H, Urban NT, Lavoie-Cardinal F, Willig KI, Eggeling C, **Jakobs S***, Hell SW* (2011) Diffraction-unlimited all-optical imaging and writing with a photochromic GFP. *Nature* 478, 204-208, *shared corresponding authors.

Brakemann T, Stiel AC, Weber G, Andresen M, Testa I, Grotjohann T, Leutenegger M, Plessmann U, Urlaub H, Eggeling C, Wahl MC, Hell SW, **Jakobs S** (2011) A reversibly photoswitchable GFP-like protein with fluorescence excitation decoupled from switching. *Nature Biotech* 29(10), 942-947

Kukat C, Wurm CA, Spähr H, Falkenberg M, Larsson N, **Jakobs S** (2011) Super-resolution microscopy reveals that mammalian mitochondrial nucleoids have a uniform size and frequently contain a single copy of mtDNA. *Proc Natl Acad Sci USA* 108(33), 13534-9.

Wurm CA, Neumann D, Lauterbach MA, Harke B, Egner A, Hell SW, **Jakobs S** (2011) Nanoscale distribution of mitochondrial import receptor Tom20 is adjusted to cellular conditions and exhibits an inner-cellular gradient. *Proc Natl Acad Sci USA* 108(33), 13546-51.

Andresen M, Stiel AC, Fölling J, Wenzel D, Schönle A, Egner A, Eggeling C, Hell SW, **Jakobs S** (2008) Photoswitchable fluorescent proteins enable monochromatic multilabel imaging and dual color fluorescence nanoscopy. *Nature Biotech* 26, 1035-1040.

E. Research Support (selection)

1. Consortium Imagint (EU) "Nanoscale imaging of Her2", 2011-2015. PI (Consortium partner).
2. Consortium SysComp (BMBF) "Investigation of the sub-mitochondrial localizations of mitochondrial dehydrogenases", 2009-2012. PI (Consortium partner).
3. *Normalverfahren* (DFG) "Analysis of the compartmentalization of the inner membrane and the inter membrane space of yeast mitochondria", 2009-2012. PI.
4. SFB 755 (DFG) "Structure-dynamics-function in photo-switchable proteins", 2011-2015. Co-PI (with S. Techert) on one project.

F. Memberships and awards

Awards: Max-Planck Fellowship (2000-2001), Fellowship of the Studienstiftung des deutschen Volkes (1995-1999), Kekulé-fellowship of the Stiftung Stipendien-Fonds des Verbandes der Chemischen Industrie e. V. (1995-1997), EMBO-short term fellowship (1997)

NAME	POSITION / TITLE
JANSHOFF, Andreas	Professor and head of department

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Münster, Germany	Diploma	1994	Chemistry
University of Münster, Germany	Dr. rer. nat.	1997	Chemistry
University of Münster, Germany	Habilitation	2001	Biochemistry

B. Positions / Academic Appointments

1997-1998	Postdoctoral fellow, Scripps Research Institute, La Jolla, CA, USA
1999-2001	Research associate, Institute of Biochemistry, University of Münster, Germany
2001-2006	Associate Professor of Physical Chemistry, University of Mainz, Germany
2006-	Professor of Biophysical Chemistry, University of Mainz, Germany
2008-	Professor of Surface Science, University of Göttingen, Germany

C. Major research interests

- Membrane Biophysics
- Cell mechanics
- Sensor design
- Single-molecule force spectroscopy

D. Selected peer-reviewed publications

Schäfer E, Westendorf C, Bodenschatz E, Beta C, Geil B, **Janshoff A** (2011) Shape oscillations of *Dictyostelium discoideum* cells on ultramicroelectrodes monitored by impedance analysis. *Small* 7, 723-726.

Tarantola M, Marel A-K, Sunnick E, Adam H, Wegener J, **Janshoff A** (2010) Dynamics of human cancer cell lines monitored by electrical and acoustic fluctuation analysis. *Int Biol* 2, 139-150.

Lorenz B, Keller R, Sunnick E, Geil B, **Janshoff A** (2010) Colloidal probe microscopy of membrane-membrane interactions: from ligand-receptor interactions to fusion events. *Biophys Chem* 150, 54-63.

Janke M, Rudzevich Y, Molokanova O, Metzroth T, Mey I, Diezemann G, Marszalek PE, Gauss J, Böhmer V, **Janshoff A** (2009) Mechanically locked nanocapsules under force allow reversible hydrogen bond breakage. *Nat Nanotechnol* 4, 225-229.

Schuy S, Schäfer E, Yoder NC, Vogel R, Hobe S, Kumar K, **Janshoff A** (2009) Coiled coil lipopeptides mimicking the prehairpin intermediate of gp41. *Angew Chemie Int Ed* 48, 751-754.

E. Research Support (selection)

1. SFB 937 (DFG): "Collective behavior of soft and biological matter", 1/1/2011-12/31/2014. PI on the project A08 and Co-PI on the Project A14 (with K. Samwer).

2. Program (DFG): "Biological Responses to Nanoscale Particles (Bio-Nano-Responses) (SPP 1313)", PI on one Project 05/01/2011-04/30/2014.

3. Program (DFG): "Functional dynamics of cell contacts in cellular assemblies and migratory cells (FOR 1756)", 07/07/2011-07/06/2014. PI on one project.

F. Other activities

GAUSS (managing board), SFB 937 (board of directors).

G. Memberships and awards

Memberships: Gesellschaft Deutscher Chemiker (GDCh), DGfB (Deutsche Gesellschaft für Biophysik)

Awards: PhD award of the Fonds der Chemischen Industrie (1997), PhD Award of the Mathematisch-Naturwissenschaftliche Fakultät of the Westfälische Wilhelms-University Münster (1997).

NAME	POSITION / TITLE
JOHNSEN, Steven A.	Assistant Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Idaho, Moscow, ID, USA	B.Sc.	1996-1999	Molecular Biology & Biochemistry
Mayo Graduate School, Rochester, MN, USA	Ph.D.	1999-2003	Molecular Biology
ZMNH, Hamburg, Germany	Postdoctoral Fellow	2003-2006	Molecular Biology
EMBL, Heidelberg, Germany	Postdoctoral Fellow	2006-2007	Molecular Biology

B. Positions / Academic Appointments

2007-2012	Assistant Professor (W1), University of Göttingen, Göttingen, Germany
2009-2012	GZMB Junior Group Leader, University of Göttingen, Göttingen, Germany
2012-	Associate Professor (W2), University of Hamburg, Hamburg, Germany

C. Major research interests

The 3 x 10⁹ bp of DNA in the human genome is organized in several higher order chromatin structures which allow for the correct packaging and "reading" of the genetic material. Importantly, the proper regulation of gene transcription, DNA replication and probably most DNA-associated nuclear functions is regulated by the post-translational modification of histone proteins. Our group is focused on the role and regulation of chromatin modifications in controlling transcription and transcription-coupled nuclear processes during tumorigenesis. The primary interest of our work is the monoubiquitination of histone H2B (H2Bub1) which appears to serve a tumor suppressor role in breast cancer and is tightly associated to active gene transcription. Although this modification has been studied extensively in yeast, relatively little is known about its function and regulation in higher eukaryotic organisms.

In our future work we will address: (1) the role of H2B modifying enzymes in tumorigenesis in transgenic mouse models, (2) the regulation of tumorigenic properties and metastasis by epigenetic modifiers, (3) how epigenetic modifications control cellular differentiation and dedifferentiation, (4) the function of dynamics changes in chromatin structure in various nuclear processes, including transcription and DNA repair, (5) the importance and regulation of 3-dimensional nuclear organization in the control of nuclear hormone receptor-regulated gene transcription.

D. Selected peer-reviewed publications

Johnsen SA (2012) The enigmatic role of H2Bub1 in cancer. FEBS Letters, in press.

Prenzel T, Begus-Nahrman Y, Kramer F, Hennion M, Hsu C, Gorsler T, Hintermair C, Eick D, Kremmer E, Simons M, Beissbarth T, **Johnsen SA** (2011) Estrogen-dependent gene transcription in human breast cancer cells relies upon proteasome-dependent monoubiquitination of histone H2B. Cancer Research 71, 5739-5753.

Pirngruber J, Shchebet A, Schreiber L, Shema E, Minsky N, Chapman RD, Eick D, Aylon Y, Oren M, **Johnsen SA** (2009) CDK9 directs histone H2B monoubiquitination to control replication-dependent histone mRNA 3' end processing. EMBO Reports 10, 894-900.

Johnsen SA, GÜngör C, Prenzel T, Riethdorf S, Riethdorf L, Taniguchi-Ishigaki N, Rau T, Furlow JD, Sauter G, Pantel K, Scheffner M, Gannon F, Bach I (2009) Regulation of estrogen-dependent transcription by the LIM cofactors CLIM and RLIM in breast cancer. Cancer Research 69, 128-136.

Shema E, Tirosh I, Aylon Y, Huang J, Ye C, Moskovitis N, Raver-Shapira N, Minsky N, Pirngruber J, Tarcic G, Hublarova P, Moyal L, Gana-Weisz M, Shiloh Y, Yarden Y, **Johnsen SA**, Vojtesek B, Berger SL, Oren M (2008) The histone H2B-specific ubiquitin ligase RNF20/hBRE1 acts as a putative tumor suppressor through selective regulation of gene expression. Genes and Development 22, 2664-2676.

E. Research Support (selection)

1. GRK 1034 (DFG) "The impact of inherited polymorphisms in oncology: From basic science to clinical application."
2. Krebshilfe 109088 "Investigation of the Ubiquitin-Proteasome-System and the Histone H2B Ubiquitin Ligase Complex RNF20/40 as Therapeutic Targets for Estrogen Receptor-Positive Breast Cancer". PI.
3. JO 815/1-1 (DFG), "The Role of p53-Dependent Histone mRNA Processing in the Development of Cancer". PI.
4. Lower-Saxony Israel Cooperation (VWZN2562), Volkswagen Stiftung & Lower Saxony MWK, "The Role of Histone H2B Monoubiquitination in the Regulation of Transcription and Breast Cancer Phenotype". Co-PI.

F. Other activities

Vice chair of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB) doctoral program entitled "Molecular Biology of Cells" (since 2009); member of the doctoral interview and selection committee for the doctoral program entitled "Molecular Biology of Cells" (since 2011).

G. Memberships and awards

Memberships: Phi Sigma Biological Honor Society (since 1997)

Awards: ASBMR Young Investigator Award, 24th Annual Meeting of the American Society of Bone and Mineral Research (2002); ASBMB Graduate Travel Award, Experimental Biology 2002 / Annual Meeting of the American Society of Biochemistry and Molecular Biology (2002).

NAME	POSITION / TITLE
KESSEL, Michael	Research group leader, Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Kiel, Germany	Diploma,	1976	Microbiology, Biochemistry
University of Kiel, Germany	Dr. rer. nat.	1981	Biochemistry
National Cancer Institute, NIH, Bethesda, USA University of Heidelberg, Germany	Postdoctoral fellow	1981-1983 1983-1986	Molecular Biology
University of Göttingen, Germany	Habilitation	1992	Molecular Biology

B. Positions / Academic Appointments

1979-1981	Scientific assistant, Biochemical Institute, University of Kiel, Germany
1986-1991	Staff scientist, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
1992-	Research group leader, Max Planck Institute for Biophysical Chemistry
2001-	Adjunct Professor at the University of Göttingen

C. Major research interests

The group is interested in the coordination between cell cycle and developmental control processes in mice. We apply biochemical, genetic and embryological techniques. We previously identified the Geminin protein as a mediator between cell cycle progression and the control of axial specification. Geminin regulates homeodomain proteins of the Hox family both on a transcriptional and a chromatin level. Studying a conditional mouse knock-out model we found that Geminin is essential for the first cell divisions in murine embryos, but not later in development. Geminin is also necessary for the establishment, growth and maintenance of murine embryonic stem cells. We further analyze the Mad2l2, a regulator of the APC/C complex, and a subunit of translesion DNA polymerase zeta. We study the role of Mad2l2 in cell cycle regulation with particular focus on the development of primordial germ cells. We generated a model where a programming of the germ cell fate is inhibited. On the other hand, we attempt to transdifferentiate somatic cells into a germ cells, following the approach used for induced pluripotency.

D. Selected peer-reviewed publications

Asli NS, **Kessel M** (2010) Spatiotemporally restricted regulation of generic motor neuron programs by miR-196-mediated repression of Hoxb8. *Dev Biol* 344, 857-868.

Pitulescu ME, Teichmann M, Luo L, **Kessel M** (2009) TIPT2 and geminin interact with basal transcription factors to synergize in transcriptional regulation. *BMC Biochem* 10, 16.

Wittler L, Saborowski M, **Kessel M** (2008) Expression of the chick Sizzled gene in progenitors of the cardiac outflow tract. *Gene Expr Patterns* 8(6), 471-6.

Luo L, Uerlings Y, Happel N, Asli NS, Knoetgen H, **Kessel M** (2007) Regulation of geminin functions by cell cycle dependent nuclear-cytoplasmic shuttling. *Mol Cell Biol* 27, 4737-4744.

Luo L, Yang X, Takihara Y, Knoetgen H, **Kessel M** (2004) The cell-cycle regulator geminin inhibits Hox function through direct and polycomb-mediated interactions. *Nature* 427, 749-53.

E. Research Support (selection)

Research is supported by the Max Planck Society.

NAME	POSITION / TITLE
KLOPFENSTEIN, Dieter	Group Leader / PhD

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Biozentrum, University of Basel, Switzerland	Diploma	1994-1995	Cell Biology
Biozentrum, University of Basel, Switzerland	Dr. rer. nat.	1995-1999	Biochemistry
University of California, San Francisco, USA	(Postdoc)	1999-2003	Biochemistry

B. Positions / Academic Appointments

2003-2009	Junior Group Leader, Center for Molecular Physiology of the Brain, Biochemistry II, University of Göttingen, Germany
2009-present	Group Leader, Biophysics, University of Göttingen, Germany

C. Major research interests

We are interested in the molecular mechanisms of motor-based cargo transport. The long-range transport of vesicles and organelles along the axonal cytoskeleton is essential for neuronal development and proper function of synaptic transmission. Thus, we analyze the molecular motor proteins of the kinesin and dynein family in neurons of the nematode *C. elegans in vivo*. We use structure/function approaches to define cargo binding and regulatory domains on motor proteins. Proper axonal transport is investigated using physiological read-outs as locomotion (neuro-muscular junctions), sensitivity to neurotoxins (chemosensation), fertility (behavior), and touch-response (mechanosensation). Analysis of rescue and loss-of-function phenotypes in RNAi-gene knock-down screens allows the identification of proteins involved in cargo interaction and motor regulation.

D. Selected peer-reviewed publications

LChua JJ, Butkevich E, Warseck JM, Kittelmann M, Gronborg M, Behrmann E, Stelzl U, Pavlos NJ, Lalowski M, Eimer S, Wanker EE, **Klopfenstein DR**, Jahn R (2012) Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. Proc Natl Acad Sci USA, in press.

Gerson-Gurwitz A, Thiede C, Movshovich N, Fridman V, Podolskaya M, Danieli T, Lakämper S, **Klopfenstein DR**, Schmidt CF, Gheber L (2011) Directionality of individual kinesin-5 Cin8 motors is modulated by loop 8, ionic strength and microtubule geometry. EMBO J 30(24), 4942-54.

Kumar J, Chowdhary B., Metpally R, Ramanathan S, Zheng Q, Nonet ML, **Klopfenstein DR**, Koushika SP (2010) The *C. elegans* kinesin motor UNC-104 is degraded upon loss of specific binding to cargo. PLoS Genetics 6(11), e1001200.

Krahn MP, **Klopfenstein DR**, Fischer N, Wodarz A (2010) Membrane targeting of Bazooka/PAR-3 is mediated by direct binding to phosphoinositide lipids. Curr Biol 20(7), 636-42.

Wagner OI, Esposito A, Wouters F, Shen K, Wenzel D, **Klopfenstein DR**. (2009) Active zone protein SYD-2/liprin-alpha regulates kinesin UNC-104/KIF1A motility and motor clustering along axons. Proc Natl Acad Sci USA 106(46), 19605-10.

E. Research Support

1. Human Frontier Science Program Young Investigator Grant RGY72: "Investigation of regulation of synaptic transport", 2006-2010. PI.
2. DFG KL1952-1: "Role of phosphatidylinositolphosphates in membrane traffic", 2006-2009. PI.

F. Other activities

Lecturing Professorship Biochemistry II, University of Göttingen, 2011-2012.

G. Memberships and awards

Memberships: American Society for Cell Biology (ASCB), Swiss Society for Biochemistry.

Awards: ASCB Travel award 1998, Gian Thöndury prize of the Swiss Society for Anatomy, Histology and Embryology 1999, EMBO Long Term Fellowship 1999-2001, Swiss National Science Foundation fellowship 2001-2003

NAME	POSITION / TITLE
KRAMER, Wilfried	Akademischer Oberrat, PD Dr.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Cologne, Germany	Diplom	1982	Biology
University of Cologne, Germany	Dr. rer. nat.	1986	Genetics
UC Berkeley, USA	Postdoctoral Fellow	1986-1989	Yeast Genetics
University of Göttingen, Germany	Habilitation	2000	Molecular Biology and Genetics

B. Positions / Academic Appointments

1989-1993	Hochschulassistent, University of Göttingen, Germany
1993-2005	Akademischer Rat, University of Göttingen, Germany
since 2005	Akademischer Oberrat, University of Göttingen, Germany

C. Major research interests

A long standing interest concerns factors affecting the stability of the genetic information. In one project enzymes counteracting the mutagenic potential of cytosine deamination to uracil in thermophilic archaea were identified and allowed the description of a novel DNA repair pathway initiated by nucleolytic incision at uracil. For the DNA damage response in the yeast *S. cerevisiae* research focusses mainly on the MPH1 gene, which we identified as a novel factor for recombinational bypass of replication blocking lesions. We are interested in its genetic interactions, the phase of the cell cycle this pathway is relevant in as well as in the potential role of phosphorylation in fine-tuning the cellular response to DNA damage. Parallel analysis of a splice variant of the human homolog FancM should provide further insight into the mechanisms of tumorigenesis in humans.

Together with Prof. H. Krebber we are looking for new factors involved in export of mRNA from the nucleus in the yeast *S. cerevisiae*. The project takes advantage of the availability of genomic mutant and overexpression arrays. With this we search for mutants with negative genetic interaction with known mRNA export mutants and for multicopy suppressors of such mutants.

D. Selected peer-reviewed publications

Ede C, Rudolph CJ, Lehmann S, Schürer KA, **Kramer W** (2011) Budding yeast Mph1 promotes sister chromatid interactions by a mechanism involving strand invasion. *DNA Repair* 10, 45-55.

Schomacher L, Schürer KA, Ciirdaeva E, McDermott P, Chong J, **Kramer W**, Fritz HJ (2010) Archaeal DNA uracil repair via direct strand incision: A minimal system reconstituted from purified components. *DNA Repair* 9, 438-447.

Panico ER, Ede C, Schildmann M, Schürer KA, **Kramer W** (2010) Genetic evidence for a role of *Saccharomyces cerevisiae* Mph1 in recombinational repair under replicative stress. *Yeast* 27, 11-27.

Prakash R, Satory D, Dray E, Papusha A, Scheller J, **Kramer W**, Krejci L, Klein H, Haber JE, Sung P, Ira G (2009) Yeast Mph1 helicase dissociates Rad51-made D-loops: implications for crossover control in mitotic recombination. *Genes Dev* 23, 67-79.

Schürer KA, Rudolph C, Ulrich HD, **Kramer W** (2004) Yeast MPH1 gene functions in an error-free DNA damage bypass pathway that requires genes from homologous recombination, but not from postreplication repair. *Genetics* 166, 1673-1686.

E. Research Support (selection)

DFG Graduiertenkolleg 1034 " Die Bedeutung genetischer Polymorphismen in der Onkologie: Von den Grundlagen zur individualisierten Therapie"

F. Other activities

Member of the program committee of the Molecular Biology MSc/PhD program – International Max Planck Research School.

G. Memberships and awards

Membership in Deutsche Gesellschaft für DNA Reparaturforschung e.V.

NAME	POSITION / TITLE
KREBBER, Heike	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Osnabrück, Germany	Diploma	1993	Biology
Deutsches Krebsforschungszentrum (DKFZ), Heidelberg, Germany	Dr. rer. nat.	1996	Molecular Biology
Dana-Farber Cancer Institute, Harvard Medical School, Boston (USA)	Postdoctoral Fellow	1999	RNA-Biology, Genetics
Institut für Molekularbiologie und Tumorforschung (IMT), University of Marburg, Germany	Habilitation	2005	Molecular Biology

B. Positions / Academic

1999-2010	Junior group leader, Institut für Molekularbiologie und Tumorforschung (IMT), University of Marburg, Germany
2010-	Professor for Molecular Genetics, Georg-August Universität Göttingen, Germany

C. Major research interests

The compartmentation of eukaryotic cells requires a machinery that is able to transport a great number of molecules into and out of the nucleus in a rapid, accurate and regulated manner. The natural cargos for this machinery are proteins and RNA-protein complexes (RNPs). For the mRNPs it has to be assured that intron containing pre messenger RNAs are retained in the nucleus until processing is completed. Only fully processed and spliced mRNAs are transported into the cytoplasm and translated at the ribosomes. The otherwise resulting gene products can be toxic to cells and harmful to organisms. Several examples exist where not fully processed pre-mRNAs reach the cytoplasm, resulting in diseases like cancer or neurodegenerative diseases. Our projects aim to identify and characterize the requirements for mRNA processing, transport and translation. We want to learn which proteins are associated with the transported RNP, how transport is regulated and how the cell distinguishes between export incompetent and export competent mRNPs. Moreover, we study the principles of mRNA quality control. *Saccharomyces cerevisiae* has been proven to be a useful model organism for eukaryotic cells and we use a combination of genetics, biochemistry and cell biology to uncover these processes.

D. Selected peer-reviewed publications

Hackmann A, Gross T, Baierlein C, **Krebber H** (2011) The mRNA export factor Npl3 mediates the nuclear export of large ribosomal subunits. *EMBO Rep* 12(10), 1024-1031.

Khoshnevis S, Gross T, Rotte C, Baierlein C, Ficner R, **Krebber H** (2010) The iron-sulfur protein Rli1 functions in translation termination. *EMBO Rep* 11, 214-219.

Gross T, Siepmann A, Sturm D, Windgassen M, Scarelli J, Cole CN, Seedorf M, **Krebber H** (2007) The DEAD-box RNA-helicase Dbp5 functions in translation termination. *Science* 315(5812), 646-649.

Windgassen M, Sturm D, Cajigas IJ, González CI, Seedorf M, Bastians H, **Krebber H** (2004) Yeast shuttling SR-proteins Npl3p, Gbp2p and Hrb1p are part of the translated mRNAs and Npl3p can function as a translational repressor. *Mol Cell Biol* 24(23), 10479-10491.

E. Research Support (selection)

1. SFB 860 (DFG) "Integrative Structural Biology of Dynamic Macromolecular Assemblies", 2011-2014.
2. DFG: "Characterization of messenger ribonucleoprotein complexes (mRNPs) during cellular stresses".

F. Other activities

G. Memberships and awards

Awards:

2006 Heisenberg Fellow

2006 Fonds der chemischen Industrie

2009 Heinz Maier-Leibnitz Preis (DFG)

NAME	POSITION / TITLE
LIPKA, Volker	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Aachen, Germany	Diploma	1994	Biology
University of Aachen, Germany	Dr. rer. nat.	1999	Biology
Sainsbury Laboratory, John Innes Centre, Norwich, UK	Postdoctoral Fellow	1999-2000	Plant-Microbe Interactions
Max-Planck Institute for Plant Breeding Research, Cologne	Postdoctoral Fellow	2000-2004	Plant-Microbe Interactions

B. Positions / Academic Appointments

2004-2007	Junior Professor, University of Tübingen, Department of Plant Biochemistry, Germany
2007-2009	Junior group leader, Sainsbury Laboratory, John Innes Centre, Norwich, UK
2009-	Full Professor of Plant Cell Biology, University of Göttingen, Germany

C. Major research interests

Our laboratory is interested in the molecular analysis of plant innate immunity. Our research is focused on 1) the molecular dissection of mechanisms that control activation of basal defense in the plant model *Arabidopsis thaliana* 2) the analysis of defense mechanisms that contribute to resistance against fungal pathogens 3) the identification of fungal effector molecules that interfere with the plant defense machinery and allow host plant colonization

In nature, plants are constantly exposed to above- and below-ground attack by a vast array of potential pathogens. However, most plants are immune to the majority of would-be pathogens and susceptible to only a relatively small number of adapted microbes. Using a novel plant-fungus interaction model system we recently identified several molecular components that are required for the activation and execution of basal plant defense. As a consequence, receptor-mediated recognition, pathogen-induced intracellular transport processes, dynamic organelle translocation and cytoskeletal rearrangements represent major research topics in our department. Suppression of these defense mechanisms is a key requirement for adapted pathogens and we recently began studies to identify secreted fungal effector molecules that are likely to be involved. We combine genetic, cell, molecular and biochemical experimental strategies to gain novel insights into these complex mechanisms.

D. Selected peer-reviewed publications

Willmann R, Lajunen HM, Erbs G, Newman MA, Kolb D, Tsuda K, Katagiri F, Fliegmann J, Bono JJ, Cullimore JV, Jehle AK, Götz F, Kulik A, Molinaro A, **Lipka V**, Gust AA, Nürnberger T (2011) *Arabidopsis* lysin-motif proteins LYM1 LYM3 CERK1 mediate bacterial peptidoglycan sensing and immunity to bacterial infection. Proc Nat Acad Sci USA 108(49), 19824-19829.

Petutschnig EK, Jones AM, Serazetdinova L, Lipka U, **Lipka V** (2010) The Lysin Motif Receptor-like Kinase (LysM-RLK) CERK1 is a major chitin-binding protein in *Arabidopsis thaliana* and subject to chitin-induced phosphorylation. J Biol Chem 285(37), 28902-28911.

Gimenez-Ibanez S, Hann DR, Ntoukakis V, Petutschnig E, **Lipka V***, Rathjen JP* (2009) AvrPtoB targets the LysM receptor kinase CERK1 to promote bacterial virulence on plants. Curr Biol 19, 423-429, *co-corresponding authors.

Kwon C, Neu C, Pajonk S, Yun HS, Lipka U, Humphry ME, Bau S, Straus M, Rampelt H, El Kasmi F, Jürgens G, Parker J, Panstruga R*, **Lipka V***, Schulze-Lefert P* (2008) Co-option of a default secretory pathway for plant immune responses. Nature 451, 835-840, *co-corresponding authors.

Lipka V, Dittgen J, Bednarek P, Bhat RA, Stein M, Landtag J, Brandt W, Scheel D, Llorente F, Molina A, Wiermer M, Parker J, Somerville SC, Schulze-Lefert P (2005) Pre- and post-invasion defenses both contribute to non-host resistance in *Arabidopsis*. Science 310, 1180-1183.

E. Research Support (selection)

1. LI1317/4-1 (DFG): "Functional analysis of Arabidopsis LysM-RLKs and related kinases in chitin perception and defense signaling", 2012-2015. Co-PI (with E. Petutschnig).

2. SPP1212 LI1317/3-2 (DFG): "Functional characterization of a novel semi-dominant mutant allele of the Chitin Elicitor Receptor-like Kinase CERK1", 2011-2013. PI.

3. SPP1212 LI1317/3-1 /DFG) "Funktionale Charakterisierung der Chitin Elicitor Receptor-like Kinase CERK1 innerhalb der pflanzlichen Immunität", 2009-2011. PI.

4. LI1317/2-1 (DFG) "Analyse der PEN2-vermittelten Pathogeninvasionskontrolle in der Nichtwirtsresistenz von Arabidopsis", 2006-2009. PI.

F. Other activities

Coordinator/spokesperson of the International MSc Program "Microbiology & Biochemistry" at the University of Göttingen (since 2010), Scientific Advisory Board of the BASF Plant Science Company GmbH (since 2010).

G. Memberships and awards

Memberships: Deutsche Botanische Gesellschaft, International Society for Molecular Plant-Microbe Interactions

NAME	POSITION / TITLE
LÜHRMANN, Reinhard	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Münster, Germany	Diploma	1973	Chemistry
University of Münster, Germany	Dr. rer. nat.	1975	Chemistry
Max Planck Institute for Molecular Genetics, Berlin, Germany	Postdoctoral Fellow	1976-1980	Molecular Biology
Free University Berlin, Germany	Habilitation	1981	Biochemistry and Molecular Biology

B. Positions / Academic Appointments

1981-1988	Leader of Independent Research Group at the Otto Warburg Laboratory, MPI for Molecular Genetics, Berlin, Germany
1988-1999	Professor of Biochemistry and Molecular Biology, Institute for Molecular Tumor Biology, Philipps University, Marburg, Germany
2000-	Director, Department of Cellular Biochemistry, MPI for Biophysical Chemistry, Göttingen, Germany, Honorary Professor at the Philipps University of Marburg and Göttingen, Germany

C. Major research interests

Introns are removed from nuclear pre-mRNAs by the spliceosome, a large ribonucleoprotein complex that is formed by interaction of the pre-mRNA with small nuclear ribonucleoproteins (snRNPs U1, U2, U4/U6 and U5) and more than 100 non-snRNP proteins. One major goal of our research is (i) to understand how the spliceosome specifically recognizes and pairs the correct 5' and 3' splice sites of the pre-mRNA for splicing and (ii) to investigate the molecular mechanism of spliceosome activation and the catalytic steps of splicing by reconstituting the spliceosome from purified components. Another long-term goal is to obtain 3D structural information about the spliceosome at distinct stages of assembly/function at the highest possible resolution, using yeast and human spliceosomes. To achieve these goals, our group is using a multi-parameter approach, combining biochemical and biophysical strategies with structural biology techniques.

D. Selected peer-reviewed publications

Rasche N, Dybkov O, Schmitzova J, Akyildiz B, Fabrizio P, **Lührmann R** (2012) Cwc2 and its human homolog RBM22 promote an active conformation of the spliceosome catalytic center. *EMBO J* 31, 1591-1604.

Golas MM, Sander B, Bessonov S, Grote M, Wolf E, Kastner B, Stark H, **Lührmann R** (2010) 3D Cryo-EM structure of an active step 1 spliceosome and localization of its catalytic core. *Mol Cell* 40, 927-938.

Schneider M, Will CL, Anokhina A, Tazi J, Urlaub H, **Lührmann R** (2010) Exon definition complexes contain the tri-snRNP and can be directly converted into B-like pre-catalytic splicing complexes. *Mol Cell* 38, 223-235.

Warkocki Z, Odenwalder P, Schmitzova J, Platzmann F, Stark H, Urlaub H, Ficner R, Fabrizio P, **Lührmann R** (2009) Reconstitution of both steps of *S. cerevisiae* splicing with purified spliceosomal components. *Nature Struct Mol Biol* 16, 1237-1243.

Bessonov S, Anokhina M, Will CL, Urlaub H, **Lührmann R** (2008) Isolation of an active step 1 spliceosome and composition of its RNP core. *Nature* 452, 846-850.

E. Research Support (selection)

1. SFB 860 (DFG): "Structural dynamics of the yeast spliceosome during its activation and catalysis of splicing". PI in one project.

2. FOR 806 (DFG): "Interfering with protein-protein interactions in the spliceosome". Co-PI (with M. Wahl) on one project.

3. DIP Grant (DFG): "Alternatives mRNA-Spleien: Evolution von Spleifaktoren und ihrer Bindungsspezifitat". Consortium Partner.

4. GIF Grant: "Exploring causes and consequences of splicing impairments in Alzheimer's disease". Co-PI (with M. Sorek).

F. Other activities

German delegate to the EMBL and EMBC Council (since 2001); Chair of the Scientific Advisory Board of the Gene Center Munich (since 2004) and of the Bavarian Research Network for Molecular Biosystems (since 2011); Member of the Scientific Advisory Committee of the Behring Rontgen Foundation, Marburg (since 2007) and of the Feldberg Stiftung (since 2004); ERC Advanced Grant Review Panel LS1 (since 2012); Member of the Scientific Advisory Board of the German Society of Biochemistry and Molecular Biology (since 2010).

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, Academia Europaea, EMBO.

Awards: Max Planck Research Prize (1990), Gottfried Wilhelm Leibniz Prize of the DFG (1996), Feldberg Prize (2002), Ernst Jung Prize for Medicine (2003), NACON VII Nucleic Acids Award (2010).

NAME	POSITION / TITLE
MANSOURI, Ahmed	Research Group Leader and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Technical University of Braunschweig	Diploma	1975	Chemistry
Technical University of Braunschweig	PhD	1978	Technical Chemistry
University of Göttingen, Institute of Human Genetics	Postdoctoral Fellow	1982-1986	Human Genetics
MPI in Tübingen and Freiburg	Postdoctoral Fellow	1986-1989	Developmental Biology
University of Göttingen Medical Center	Habilitation	1999	Developmental Genetics
University of Göttingen Medical Center, Department of Clinical Neurophysiology	Professorship	2005	Stem Cells

B. Positions / Academic Appointments

1989-2002	Staff scientist, Department Molecular Cell Biology, MPI for Biophysical Chemistry, Göttingen, Germany
Since 2002	Research Group leader, Department Molecular Cell Biology, MPI for Biophysical Chemistry, Molecular Cell Differentiation Group, Göttingen, Germany
Since 2005	Professor, University of Göttingen Medical Center, Department of Clinical Neurophysiology, Göttingen, Germany

C. Major research interests

Studying the molecular mechanisms controlling cell fate destiny and diversity is of fundamental interest for understanding pathological processes and diseases. We are using mouse genetics to study the role of transcription factors during cell differentiation in the endocrine pancreas and in the ventral midbrain. In the pancreas, we are interested in molecules that control the endocrine cell subtype specification. In addition, we are studying animal models to uncover molecular pathways promoting beta-cell regeneration in the adult pancreas. In the midbrain the specification of dopaminergic neurons is under the control of several transcription and secreted factors. Specifically, we want to identify factors that interact with Lmx1 a/b in order to promote the generation of functionally distinct dopaminergic neuron populations. Moreover, we have established induced pluripotent cells (iPS) from 4 Parkinson patients. These cells were used to generate neuronal precursor cells, as well as dopaminergic neurons that will serve to identify possible molecular alterations related to Parkinson' disease

D. Selected peer-reviewed publications

Kordowich S, Collombat P, **Mansouri A**, Serup P (2011) Arx and Nkx2.2 compound deficiency redirects pancreatic alpha- and beta-cell differentiation to a somatostatin/ghrelin co-expressing cell lineage. *BMC Dev Biol* 11, 52-67.

Griesel G, Krug C, Yurlova L, Diaconu M, **Mansouri A** (2011) Generation of knockout mice expressing a GFP-reporter under the control of the *Lmx1a* locus. *Gene Expr Patterns* 11(5-6), 345-358.

Collombat P, Xu X, Ravassard P, Sosa-Pineda B, Dussaud S, Billestrup N, Ole Madsen OD, Serup P, Heimberg H, **Mansouri A** (2009) The ectopic expression of Pax4 in the mouse pancreas converts progenitor cells into a - and subsequently b -cells. *Cell* 138, 449-462.

Dressel R, Schindehütte J, Kuhlmann T, Elsner L, Novota P, Baier PC, Schillert A, Bickeböller H, Herrmann T, Trenkwalder C, Paulus W, **Mansouri A** (2008) The tumorigenicity of mouse embryonic stem cells and in vitro differentiated neuronal cells is controlled by the recipients' immune response. *PLoS ONE* 3(7), e2622.

Collombat P, Hecksher-Sørensen J, Krull J, Berger J, Riedel D, Herrera PL, Serup P, **Mansouri A** (2007) Embryonic endocrine pancreas and mature beta cells acquire alpha and PP cell phenotypes upon Arx misexpression. *J Clin Invest* 117(4), 961-70.

E. Research Support (selection)

1. NIH: Beta-cell Biology Consortium (BCBC) NIH, Aug 2005 - Jul 2010. Co-Investigator.

2. BMBF-Project: "Evaluation of induced Pluripotent cells (iPS) from Parkinson patients", Feb 2009 - Apr 2012 (A. Mansouri) Coordinator.

Partners: Universitätsmedizin Göttingen (Prof. W. Paulus; Prof. R. Dressel), Paracelsus-Elena Klinik Kassel (Prof. C. Trenkwalder).

3. BMBF-ANR Project: "In vitro and in vivo generation of insulin-producing beta-cells from pancreatic cells", Jul 2010 - Jun 2013 (A. Mansouri). Coordinator.

Partners: INSERM Nice (France) Faculté des Sciences, Parc Valrose (P. Collombat); INSERM, Faculté Necker, Paris (R. Scharfmann); CNRS, INSERM Hopital Pitié Salpêtrière, Paris (P. Ravassard).

4. DFG Center Molecular Physiology of the Brain (CMPB): "Role of the transcription factor *Lmx1a* in neural crest development", since 2002. Co-Investigator.

5. JDRF- Project: "Generation of functional beta-cells from alternative pancreatic cell subtypes", Dec 2010 - Nov 2013 (A. Mansouri). Co-Investigator.

Partners: INSERM Nice (France) Faculté des Sciences, Parc Valrose (P. Collombat), Broad Institute, Cambridge, Boston, USA (B. Wagner Kelly; S. Alykhan; S. Schreiber), Hagedorn Research Institute Copenhagen, Denmark (J. Heckescher-Sorensen), CEMM Vienna (Austria) (S. Kubicek).

F. Other activities

G. Memberships and awards

Dr. Helmut Storz Donation Professorship (2005)

NAME	POSITION / TITLE
MARQUARDT, Till	Group leader / Principal Investigator

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Max Planck Institute for Biophysical Chemistry and University of Göttingen, Germany	Diploma	1993-1998	Developmental Biology, Genetics
Max Planck Institute for Biophysical Chemistry and University of Göttingen, Germany	Dr.rer.nat.	1998-2001	Developmental Biology, Genetics
The Salk Institute for Biological Studies, La Jolla, CA, USA	Postdoctoral Fellow	2002-2006	Developmental Neuroscience

B. Positions / Academic Appointments

2002-2005	Postdoctoral Fellow, The Salk Institute for Biological Studies, La Jolla, CA, USA
2006	Staff scientist, The Salk Institute for Biological Studies, La Jolla, CA, USA
2007-now	Group leader, European Neuroscience Institute, Göttingen, Germany

C. Major research interests

The neuromuscular system represents the final common path in the generation of behaviors by linking the central nervous system with the movement apparatus. The assembly of this circuitry depends on genetically hardwired programs that lay down the fundamental pattern of neuromuscular connectivity during embryonic and postnatal development. While work in the past 15 years provided a mechanistic framework for understanding how motor neuron-muscle connections are established, insights into how these connectivity patterns become integrated into functional sensory-motor circuits remain sparse. These early processes are inherently linked to the functional refinement of neural properties and connections, including the high degree of adaptive plasticity of the neuromuscular circuitry throughout adult life. Research in my lab centers around three main focus areas tackling the following questions:

- (1) How is wiring specificity achieved in the sensory-motor circuitry?
- (2) What are the molecular pathways driving the functional specification and plasticity of motor units?
- (3) What are the determinants underlying motor unit type-specific vulnerability?

D. Selected peer-reviewed publications

Marquardt T, Shirasaki R, Ghosh S, Carter N, Andrews SE, Hunter T, Pfaff SL (2005) Co-expressed EphA receptors and ephrin-A ligands mediate opposing actions on growth cone navigation from distinct membrane sub-domains. *Cell* 121, 127-139.

Gallarda B, Bonanomi D, Müller D, Brown A, Alaynick WA, Lemke G, Pfaff SL, **Marquardt T** (2008) Segregation of axial sensory and motor pathways through heterotypic trans-axonal signaling. *Science* 320, 233-236.

Wang L, Klein R, Zheng B, **Marquardt T** (2011) Anatomical coupling of sensory and motor nerve trajectory through axon tracking. *Neuron* 71, 263-277.

Bonanomi D, Chivatakarn O, Bai G, Lettieri K, Abdesselem H, **Marquardt T**, Pierchala BA, Pfaff SL (2012) Ret is a multifunctional co-receptor that integrates diffusible- and contact-axon guidance signals. *Cell* 148, 568-582.

Wang L, **Marquardt T** (2012) Live monitoring of heterotypic axonal interactions *in vitro*. *Nature Protocols* 7, 351-363.

E. Research Support (selection)

1. Emmy Noether Programm (DFG), Signaling mechanisms in Neuromuscular circuit assembly, 2007-2012, PI
2. Isreal-Niedersachsen Grant (VW-Stiftung), Boundary Cell-Dependent Assembly of Hindbrain Axonal Pathways, 2011-2014, Co-PI with Prof. D. Sera-Sonnenfeld, Jehovot, Israel
3. CMPB-B1 (DFG), Mechanisms driving Neuromuscular synapse specificity, PI

F. Other activities

Teaching (lectures, courses, seminars and lab rotations): International Max-Planck research school (IMPRS) MSc/PhD Program in Molecular Biology (since 2011); IMPRS MSc/MD/PhD Programme in Neurosciences, Göttingen (since 2007); University of Göttingen, BS/MSc program in Developmental, Neural and Behavioral Biology

G. Memberships and awards

Damon Runyon Fellowship Award (2002), Pioneer Fund Endowment Award (2006)

NAME	POSITION / TITLE
MORGENSTERN, Burkhard	Professor and head of department

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Munich, Germany	Diplom	1993	Mathematics
University of Bielefeld, Germany	Dr. Math.	1996	Mathematics

B. Positions / Academic Appointments

1996-1998	Postdoc, GSF Research Center, Neuherberg, Germany
1998-2000	Rhone-Poulenc Rorer / Aventis Pharma, Dagenham, UK
2000-2001	Postdoc at MIPS, Max Planck Institute for Biochemistry, Martinsried and GSF Research Center, Neuherberg, Germany
2001-2002	Group leader and faculty members, International Graduate School in Bioinformatics, and Genome Research, University of Bielefeld, Germany
2002-	Professor and head of Department of Bioinformatics, University of Göttingen, Germany

C. Major research interests

A central focus of our research work is on algorithm development for nucleic acid and protein sequence analysis; the multiple-alignment program DIALIGN is developed and maintained in our department. Current projects include novel graph-theoretical approaches to integrate local homologies into a multiple alignment and alignment of structure-annotated RNA sequences.

Other areas of research in our department include: metabolomics and mass spectroscopy data analysis, phylogeny reconstruction, RNA structure analysis, metagenomics, motif discovery and remote homology detection using machine-learning methods, genome annotation for prokaryotes, recombinations in viral genomes and HIV classification using coalescent theory.

D. Selected peer-reviewed publications

Corel E, Pitschi F, **Morgenstern B** (2010) A min-cut algorithm for the consistency problem in multiple sequence alignment. *Bioinformatics* 26, 1015-102.

Philippe H, Derelle R, Lopez P, Pick K, Borchiellini C, Boury-Esnault C, Vacelet J, Renard E, Houliston E, Quéinnec E, Da Silva C, Wincker P, Le Guyader H, Leys S, Jackson DJ, Schreiber F, Erpenbeck D, **Morgenstern B**, Wörheide G, Manuele M (2009) Phylogenomics restores traditional views on deep animal relationships. *Curr Biol* 19, 706-712.

Subramanian AR, Kaufmann M, **Morgenstern B** (2008) DIALIGN-TX: greedy and progressive approaches for segment-based multiple sequence alignment. *Algorithms Mol Biol* 3, 6.

The *Tribolium* Genome Sequencing Consortium (2008) The genome of the beetle developmental model and pest *Tribolium castaneum*. *Nature* 452, 949-955.

Stanke M, Tzvetkova A, **Morgenstern B** (2006) AUGUSTUS+ at EGASP: using EST, protein and genomic alignments for improved gene prediction in the human genome. *Genome Biol* 7, S11.

E. Research Support (selection)

1. DFG Project MO 1048/6: "Anchored sequence alignment and motif discovery".
2. DFG FOR 1234: "iBeetle: Functional Genomics of Insect Embryogenesis and Metamorphosis" (spokesperson: G. Bucher).
3. BMBF project BIOFUNG: "Integrative study of the biotrophic growth of the fungus *Verticillium longisporum* on its host oilseed rape (by G. Braus, I. Feussner, B. Morgenstern; spokesperson: G. Braus).
4. DFG Project MO 1048/7: "A combined phylogenetic and palaeontological approach to resolve deep phylogenetic incongruences among Phylum Porifera" (within DFG Priority Program SPP 1174).
5. DFG Project MO 1048/1: "Objective functions and optimization techniques for the segment-based sequence alignment" (within DFG Priority Program SPP 1063).

F. Other activities

- BMC Bioinformatics, member of editorial board since 2005, Section Editor since 2010.
- Algorithms for Molecular Biology, co-founder and co-Editor-in-Chief since 2006.
- BMC Research Notes, Associate Editor since 2008.

NAME	POSITION / TITLE
MOSER, Tobias	Research Director/ Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Leipzig, Germany	n.a.	1988-1990	Medicine
University of Jena/Erfurt, Germany	Staatsexamen	1990-1994	Medicine
University of Jena, Germany	MD	1995	Physiology
MPI for Biophysical Chemistry, Göttingen	Post-doctoral Fellow	1994-1997	Biophysics
University of Göttingen Medical Center	Board Certificate	1998-2002	Otolaryngology
University of Göttingen Medical Center	Habilitation	2003	Otolaryngology

B. Positions / Academic Appointments

1997-2001	Junior group leader, MPI for biophysical Chemistry, Göttingen
2001-2005	Research group leader, Dept. of Otolaryngology, University of Göttingen Medical Center
2005	Associate Professor of Experimental and Clinical Audiology, Research group leader, Dept. of Otolaryngology, University of Göttingen Medical Center
2007-	(full) Professor of Auditory Neuroscience and Research Director, Dept. of Otolaryngology, University of Göttingen Medical Center

C. Major research interests

Our work focuses on the molecular physiology and pathology of sound encoding at the hair cell ribbon synapse. We have physiologically and morphologically characterized synapses of wild-type and mutant mice with defects in hair cell synaptic coding from the molecular to the systems level. This way we have contributed to understanding hair cell ribbon synapse structure and function and co-initiated the concept of auditory synaptopathies. Molecular dissection and detailed physiological characterization of ribbon synapse function employ a spectrum of molecular, biophysical and physiological techniques such as mouse mutagenesis, *in vivo* and *in vitro* viral gene transfer into hair cells and spiral ganglion neurons of mice, single cell RT-PCR, immunohistochemistry, confocal microscopy of hair cells, synaptic ultrastructure, hair cell synaptic physiology, mouse auditory systems physiology, optogenetic stimulation of cochlea, computational modeling, clinical audiology and human genetics.

D. Selected peer-reviewed publications

Nouvian R, Neef J, Bulankina AV, Reisinger E, Pangršič T, Frank T, Sikorra S, Brose N, Binz T, **Moser T** (2011) Exocytosis at the hair cell ribbon synapse apparently operates without neuronal SNARE proteins. *Nat Neurosci*, 14(4):411-3.

Frank T, Rutherford MA, Strenzke N, Pangrsic T, Khimich D, Fejtova A, Gundelfinger ED, Liberman MC, Harke B, Bryan KE, Lee A, Egner A, Riedel D, **Moser T** (2010). Bassoon and the synaptic ribbon organize Ca^{2+} channels and vesicles to add release sites and promote refilling. *Neuron* 68 724–738.

Pangrsic T, Lasarow L, Reuter K, Takago H, Schwander M, Riedel D, Frank T, Tarantino LM, Bailey JS, Strenzke N, Müller U, Brose N, Reisinger E*, **Moser T*** (2010) Hearing requires otoferlin-dependent efficient replenishment of synaptic vesicles in hair cells. *Nat Neurosci* 13(7):869-76.

Meyer AC, Frank T, Khimich D, Hoch G, Riedel D, Chapochnikov, NM, Yarin YM, Harke B, Hell S, Egner A, **Moser T** (2009) Tuning of Synapse Number, Structure and Function in the Cochlea, *Nat Neurosci* 12:444-534.

Khimich D, Nouvian R, Pujol R, Tom Dieck S, Egner A, Gundelfinger ED, **Moser T** (2005) Hair Cell Synaptic Ribbons are Essential for Synchronous Auditory Signaling. *Nature* 434, 889-94.

E. Research Support (selection)

1. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Coordinator, PI and Co-PI (with S. Rizzoli) on two projects.

2. Center for Nanoscopy and Molecular Physiology of the Brain (DFG), 2010-2015, Co-PI with Erwin Neher and Stefan Hell.

3. Bernstein Center for Computational Neuroscience (BMBF), 2010-2015. Co-PI (with Fred Wolf and Alexander Meyer) on one project.

4. Bernstein Focus for Neurotechnology (BMBF), 2008-2013. Co-PI (with Ernst Bamberg and Alexander Egner) on two projects.

F. Other activities

Coordinator/spokesperson of the Sensory and Motor Neuroscience of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB) funded by the German Excellence Initiative (since 2007), Board-member: Bernstein Center for Computational Neuroscience, Bernstein Focus for Neurotechnology, Board-member & Vice-President of the German Society for Audiology.

G. Memberships and awards

Memberships: various scientific societies

Awards: Fellow of the "Studienstiftung des deutschen Volkes" (1993), Thesis Award 1996 of the University of Jena, Marius-Tausk Award of the German Society for Endocrinology (1997), Meyer-zum-Gottesberge Award of the German Society for Audiology (2004), Habilitation Award of the University of Göttingen (2005).

NAME	POSITION / TITLE
NAVE, Klaus-Armin	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1983	Biology, Chemistry, Physics
University of California, San Diego, CA, USA.	Ph.D.	1987	Neuroscience
The Salk Institute, La Jolla, CA, USA	Postdoctoral Fellow	1988-1990	Neuroscience
University of Heidelberg, Germany	Habilitation	1996	Molecular Biology

B. Positions / Academic Appointments

1991-1997	Independent Group Leader, ZMBH, University of Heidelberg, Germany
1998-1999	Professor of Biology (C4), ZMBH, University of Heidelberg, Germany (Since 2000 Adjunct Professor, University of Heidelberg)
2000-	Director, Department of Neurogenetics, MPI for Experimental Medicine, Göttingen

C. Major research interests

We are studying the interaction of neurons and glial cells in the mammalian nervous system, and are concentrating on the ensheathment of long axons by myelinating oligodendrocytes and Schwann cells. This research includes the cell biology of myelination in development and in regeneration, but also the role of mature glial cells in maintaining normal axon function and survival throughout adult life. The first line of research aims at understanding the role of specific myelin structural proteins and lipids, as well as the axonal signaling proteins and their glial receptors that trigger myelination,. Here, we have discovered the pivotal role of neuregulins in myelination in the peripheral nervous system. We also found that all myelinating glial cells support axon function independent of myelination itself. To this end, a new research focus of the Department has become the putative metabolic interactions between axons and their associated glial cells. Perturbations of these interactions are likely a major cause of persistent disability in neurological and psychiatric diseases in which myelinating glial cells are primarily affected. We have created novel animal models for several human myelin diseases by using transgenic techniques and conditional mutagenesis, and we have used these mice and rats to explore the underlying disease mechanisms. For some disorders we have even explored novel treatment strategies.

D. Selected peer-reviewed publications

Fünfschilling U, Supplie LM, Mahad D, Boretius S, Saab AS, Edgar J, Brinkmann BG, Kassmann CM, Tzvetanova ID, Möbius W, Diaz F, Meijer D, Suter U, Hamprecht B, Sereda MW, Moraes CT, Frahm J, Goebbels S, **Nave KA** (2012) Glycolytic oligodendrocytes maintain myelin and long-term axonal integrity. *Nature*, in press.

Nave KA (2010) Myelination and the trophic support of long axons. *Nat Rev Neurosci* 11, 275-283.

Nave KA (2010) Myelination and support of axonal integrity by glia. *Nature* 468, 244-252.

Brinkmann BG, Agarwal A, Sereda MW, Garratt AN, Wende TH, Stassart RM, Nawaz S, Humml C, Velanac V, Radyuschkin K, Goebbels S, Fischer TM, Franklin RJ, Lai C, Ehrenreich H, Birchmeier C, Schwab MH, **Nave KA** (2008) Neuregulin-1/ErbB signaling serves distinct functions in myelination of the peripheral and central nervous system. *Neuron* 59, 581-595.

Kassmann CM, Lappe-Siefke C, Baes M, Brügger B, Mildner A, Werner HB, Natt O, Michaelis T, Prinz M, Frahm J, **Nave KA** (2007) Axonal loss and neuroinflammation caused by peroxisome-deficient oligodendrocytes. *Nat Genet* 39, 969-976.

Michailov GV, Sereda MW, Brinkmann BG, Fischer TM, Haug B, Birchmeier C, Role L, Lai C, Schwab MH, **Nave KA** (2004) Axonal neuregulin-1 regulates myelin sheath thickness. *Science* 304, 700-703.

Sereda MW, Meyer zur Hörste G, Suter U, Uzma N, **Nave KA** (2003) Therapeutic administration of progesterone antagonist in a model of Charcot-Marie-tooth disease (CMT-1A). *Nat Med* 9, 1533-1537.

E. Research Support (selection)

1. SFP/TR44 (DFG): "Secondary neuroinflammation in the CNS white matter", 01/01/2012-12/31/2015.
2. Integrated Project LEUKOTREAT (EU-FP7), Consortium partner, 2009-2012.
3. Integrated Project NGIDD (EU-FP7), Consortium partner, 2009-2012.
4. BMBF LEUKONET, Consortium Partner, 2010-2012.
5. ERC Advanced Grant "AxoGLIA", 2011-2015.

F. Other activities

Scientific Advisory Board, Felix Wankel - - ; Scientific Advisory Board, Center for Molecular Medicine (ZMMK), University of Cologne Scientific Advisory Board, Center for Molecular Neurobiology (ZMNH), University of Hamburg; Member, Göttingen Research Council.

G. Memberships and awards

Memberships: (2004) EMBO Membership

Awards: (2001) Sobek Prize for Multiple Sclerosis Research; (2004) Felix-Jerusalem-Prize; (2010) ERC Advanced Investigator Grant

NAME	POSITION / TITLE
NEHER, Erwin	Emeritus Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Technical University Munich, Germany	Diploma	1965	Physics
University of Wisconsin	M.Sc.	1967	Physics
Technical University of Munich, Germany	Dr. rer. nat.	1970	Physics
Max Planck Institute for Psychiatry	Postdoctoral Fellow	1970-1972	Neuroscience
Yale University, Department of Physiology, New Haven	Postdoctoral Fellow	1975-1976	Neuroscience
California Institute of Technology, Pasadena	Fairchild Scholar	1989	Bioinformatics

B. Positions / Academic Appointments

1972 - 1975	Research associate at the Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
1976-1982	Research associate at the Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
1983-2011	Director of the Department of Membrane Biophysics at the Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2011-	Emeritus Director, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

C. Major research interests

- Fluctuation and relaxation analyses in artificial and biological membranes.
- Development of high resolution electrophysiological measurements.
- Cellular processes involving changes in surface area as measured in membrane capacitance.
- Mechanisms of secretion control in mammalian cells.
- Mechanisms of short term synaptic plasticity.
- Cellular Ca⁺⁺ buffering and Ca⁺⁺ diffusion.
- Quantitative analysis of fluorescence images.

D. Selected peer-reviewed publications

Haucke V, **Neher E**, Sigrist SJ (2011) Protein scaffolds in the coupling of synaptic exocytosis and endocytosis. *Nature Rev Neurosci* 12, 127-138.

Mohrmann R, de Wit H, Verhage M, **Neher E**, Soerensen JB(2010) Fast vesicle fusion in living cells requires at least three SNARE complexes. *Science* 330, 502-505.

Young SM Jr., **Neher E** (2009) Synaptotagmin has an essential function in synaptic vesicle positioning for synchronous release in addition to its role as a calcium sensor. *Neuron* 63, 482-496.

Neher R A, Mitkovski M, Kirchhoff F, **Neher E**, Theis FJ, Zeug A (2009) Blind source separation techniques for the decomposition of multiply labeled fluorescence images. *Biophys J* 96, 3791-3800.

Neher E, Sakaba T (2008) Multiple roles of calcium ions in the regulation of neurotransmitter release. *Neuron* 59, 861-872. Invited Review.

E. Research Support (selection)

Consortium EUROSPIN (EU) "Synaptic protein networks in neurological and psychiatric diseases", 01/01/2010-12/31/2013. PI (Consortium partner).

F. Other activities

Memberships: Board of the European Neuroscience Institute, Göttingen; European Research Advisory Board (EURAB), installed by the European Research Commissioner Philippe Busquin (2000-06); Advisory Group for "Thematic Priority I", 6th Framework Program (EU) (2004-06); ERC Neuroscience Panel (since 2008);

, Venetian Institute of Molecular Medicine, Padova, European Brain Research Institute, Rome, Fondazione Internazionale Premio E. Balzan, Milano, Peter and Patricia Gruber Foundation, St. Thomas, FRIAS School of Life Sciences, University of Freiburg, Center for Integrated Protein Science (CIPSM), Munich.

G. Memberships and awards

Corresponding Member of the Bavarian Academy of Sciences (since 1988), Member of the Academia Europaea (since 1989), Foreign Associate Member of the National Academy of Sciences, USA (since 1989), Member of the Akademie der Wissenschaften zu Göttingen (since 1991), Member "Academia Scientiarum et Artium Europaea" (since 1992), Foreign Honorary Member 'American Academy of Arts and Sciences (since 1992), Foreign Member "Academy of Science of the Ukraine" (since 1994), Foreign Associate Member of The Royal Society, London (since 1994), Honorary Member of The Physiological Society, London (since 1997), Honorary Member of the Polish Academy of Medicine (1998), Member of the "Deutsche Akademie der Naturforscher, Leopoldina" (1998), Corresp. Member of the Nordrhein-Westfalian Academy of Sciences (since 1999), Honorary member of the "Real Academia Nacional de Medicina" Madrid (since 2001), Honorary member of the "Real Academia Nacional de Farmakología" Madrid (since 2009), Honorary Professorship, University of Nanjing, China (April 2010)

Numerous scientific prizes, including:

Leibniz Award, Deutsche Forschungsgemeinschaft (1986), Nobel Prize in Physiology or Medicine, together with Bert Sakmann (1991).

Fifteen honorary degrees, among them from the Technical University Munich, the University of Wisconsin, the Hebrew University, and University College of London.

NAME	POSITION / TITLE
NEUMANN, Heinz	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Tübingen	Diploma	2000	Chemistry
University of Tübingen	Dr. rer. nat.	2005	Biochemistry
Université de Lausanne, Switzerland	Postdoctoral Fellow	2005-2006	Biochemistry
MRC Laboratory of Molecular Biology, Cambridge, UK	Postdoctoral Fellow	2006-2009	Synthetic Biology

B. Positions / Academic Appointments

2009- Junior Professor, University of Göttingen, Germany

C. Major research interests

Synthetic Biology is a new, actively growing field of the life sciences that combines elements from biology and engineering with the aim to design and create life forms with new, unprecedented properties and functions. Synthetic biologists have increased the coding potential of several organisms to allow genetic incorporation of additional "unnatural" amino acids into proteins. These unnatural amino acids have unique chemical or biophysical properties or carry naturally occurring (post-translational) modifications and are therefore fascinating new tools to investigate cellular processes.

Using these tools we develop new strategies to introduce spectroscopic probes into proteins to study the dynamic properties of chromatin. Our major goal is to develop new methods to investigate the assembly of nucleosomes. We are also using genetically encoded photo-crosslinkers to investigate chromatin related protein-protein or protein-DNA interactions in vivo. With this approach we aim to investigate the mechanisms chromatin-related processes (e.g. compaction during mitosis and remodeling during DNA repair) in life cells. We are also interested in the effect of the post-translational acetylation of lysine residues on protein structure and function.

D. Selected peer-reviewed publications

Neumann H, Wang K, Davis L, Garcia-Alai M, Chin JW (2010) Encoding Multiple Unnatural Amino Acids via Evolution of a Quadruplet Decoding Ribosome. *Nature* 464, 441-444.

Neumann H, Slusarczyk AL, Chin JW (2010) *De novo* generation of mutually orthogonal aminoacyl-tRNA synthetase/tRNA pairs. *J Am Chem Soc* 132, 2142-44.

Neumann H, Hancock S, Buning R, Routh A, Chapman L, Somers J, Owen-Hughes T, van Noort J, Rhodes D, Chin JW (2009) A method for genetically installing site-specific acetylation in recombinant histones defines the effects of H3 K56 acetylation. *Mol Cell* 36,153-63.

Neumann H, Peak-Chew SY, Chin JW (2008) Genetically encoding N(epsilon)-acetyllysine in recombinant proteins. *Nat Chem Biol* 4, 232-234.

Wang K, **Neumann H**, Peak-Chew SY, Chin JW (2007) Evolved orthogonal ribosomes enhance the efficiency of synthetic genetic code expansion. *Nat Biotechnol* 25, 770-777.

E. Research Support (selection)

1. Emmy-Noether Program (DFG) "Using genetic code expansion to investigate the functional dynamics of proteins", 9/10/2009.

2. SFB 860 (DFG) "Integrative Structural Biology of Dynamic Macromolecular Assemblies", 07/01/2010-06/30/2013. Associate member.

F. Other activities

None.

G. Memberships and awards

Memberships: None.

Awards: Anton-Keller Prize (TU Darmstadt, 1997).

NAME	POSITION / TITLE
PIELER, Tomas	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Max Planck Institute for Molecular Genetics, Berlin	Diploma	1981	Biochemistry
Free University of Berlin	Dr. rer. nat.	1984	Biochemistry
Free University of Berlin and Rockefeller University, New York	Postdoctoral Fellow	1984-1988	
Free University of Berlin	Habilitation	1992	Biochemistry

B. Positions / Academic Appointments

1988-1992	Junior group leader, Otto-Warburg-Laboratorium, Max Planck Institute for Molecular Genetics, Berlin
Since 1992	Professor and Director of the Department of Developmental Biochemistry, University of Goettingen

C. Major research interests

Cellular asymmetries as well as complex signaling circuits are the major driving force for the development of cellular diversity during early stages of vertebrate embryogenesis. Our primary research interest is in the characterization of the corresponding gene networks in *Xenopus*.

We have identified a group of mRNAs which localize to the vegetal cortex of the oocyte; our aims are to elucidate the molecular mechanisms underlying vegetal RNA transport and to define the function of the corresponding proteins in early embryogenesis. One such function is in germ cell specification and directional migration. Another project deals with the process of primary neurogenesis and neuronal subtype specification in *Xenopus* embryos; we have been able to identify different transcription factors that are part of the gene network that drives these processes. Finally, we also analyze the formation of pancreatic precursor cells in the early *Xenopus* endoderm with the aim to define experimental protocols that allow pancreas formation in vitro from pluripotent, early embryonic ectodermal cells.

D. Selected peer-reviewed publications

Afelik S, Chen Y, **Pieler T** (2006) Combined ectopic expression of Pdx1 and Ptf1a/ p48 results in the stable conversion of posterior endoderm into endo- and exocrine pancreatic tissue. *Genes Dev* 20, 1441-1446.

Souopgui J, Rust B, Vanhomwegen J, Heasman J, Henningfeld KA, Bellefroid E, **Pieler T** (2008) The RNA-binding protein XSeb4R: a positive regulator of VegT mRNA stability and translation that is required for germ layer formation in *Xenopus*. *Genes Dev* 22(17), 2347-52.

Arthur PK, Claussen M, Koch S, Tarbashevich K, Jahn O, **Pieler T** (2009) Participation of *Xenopus* Elr-type proteins in vegetal mRNA localization during oogenesis. *J Biol Chem* 284(30), 19982-92.

Koebnick K, Löber J, Arthur P, Tarbashevich K, **Pieler T** (2010) Elr-type proteins protect *Xenopus* Dead end mRNA from miR-18-mediated clearance in the soma. *Proc Nat Acad Sci* 107, 16148-16153.

Tarbashevich K, Dzementsei A, **Pieler T** (2011) A novel function for KIF13B in germ cell migration. *Dev Biol* 349, 169-178.

E. Research Support (selection)

DFG Research Unit "Functional dynamics of cell contacts in cellular assemblies and migratory cells", Project title: "Cellular and molecular dynamics of cell-cell contact formation in the context of directional germ cell migration during *Xenopus* embryogenesis", 2011-2014.

DFG Einzelförderung "Primordial germ cell development", 2006-2012.

DFG Research Center Molecular Physiology of the Brain (CMPB): "Molecular mechanisms of neurogenesis with pluripotent embryonic precursor cells from *Xenopus*", 2002-2014.

F. Other activities

Fachgutachter DFG, 2000-2004.

Executive Director of the Göttingen Center for Molecular Biosciences (GZMB), 2003-2009.

Dean for Science, University of Göttingen Medical Center, since 2009.

G. Memberships and awards

1984 Ernst-Reuter-Price

1987 Heisenberg Stipend

1998 EMBO Membership

NAME	POSITION / TITLE
PÖGGELER, Stefanie	Professor (W2)

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Ruhr University, Bochum, Germany	Diploma	1989	Biology
Ruhr University, Bochum, Germany	Dr. rer. nat.	1993	Molecular Biology
Institut de Génétique et Microbiologie, Université Paris-Sud, Orsay, France	Visiting Scientist	1997	Genetics
Ruhr University, Bochum, Germany	Habilitation	2000	Botany

B. Positions / Academic Appointments

1993-1995	Research Associate, Institute of General Botany, Ruhr University, Bochum, Germany
1995-2001	Group leader (C1), Ruhr University, Bochum, Germany
2001-2003	Associate Professor (stand-in C3) of Botany, Institute of Botany, Westfälische Wilhelms University, Münster, Germany
2003-2006	University Lecturer (C2) and Group leader, Ruhr University, Bochum, Germany
2006-	Associate Professor (W2) of Genetics, Head of the Dept. of Genetics of Eukaryotic Microorganisms, Institute of Microbiology & Genetics Georg-August University, Göttingen, Germany

C. Major research interests

The major focus of the laboratory is on molecular biology of filamentous fungi. We use filamentous ascomycetes as models to analyse the regulation and evolution of developmental processes and protein splicing mechanisms.

1. We study fruiting body development and sexual development in filamentous ascomycetes and analyse the function and evolution of mating-type genes, pheromone and pheromone receptor systems as well as conserved developmental genes involved in hyphal fusion and fruiting body development.
2. We are interested in environmental signals regulating fruiting-body development. These studies include CO₂ sensing mechanisms and nutritional cues affecting autophagy.
3. Further, we are interested in exploring protein splicing, evolution and applications of fungal inteins.

D. Selected peer-reviewed publications

Bloemendal S, Bernhards Y, Bartho K, Dettmann A, Voigt O, Seiler S, Wolters DA, **Pöggeler S**, Kück U (2012) A homolog of the human STRIPAK complex controls sexual development in fungi. *Mol Microbiol*, in press.

Klix V, Nowrousian M, Ringelberg C, Lorros JJ, Dunlap JC, **Pöggeler S** (2010) Functional characterization of MAT1-1-specific mating type genes in the homothallic ascomycete *Sordaria macrospora* provides new insights into essential and non-essential sexual regulators. *Eukaryotic Cell* 9, 894-905.

Elleuche S, **Pöggeler S** (2009) β -Carbonic anhydrases play a role in fruiting body development and ascospore germination in the filamentous fungus *Sordaria macrospora*. *PLoS One*, 4:e5177.

Storlazzi A, Tesse S, Ruprich-Robert G, Gargano S, **Pöggeler S**, Kleckner N, Zickler D (2008) Coupling meiotic chromosome axis integrity to recombination. *Genes Dev* 15, 796-809.

Elleuche S, **Pöggeler S** (2007) *Trans*-splicing of an artificially split fungal mini-intein. *Biochem Biophys Res Com* 355, 830-834

E. Research Support (selection)

1. DFG PO 523/4-1(PAK489), Package proposal "Impact of the striatin-like protein PRO11 and its interaction partners on fruiting body development and hyphal fusion in *Sordaria macrospora*" (1/1/2010 – 12/31/2012), PI.

2. DFG PO 523/5-1Bicarbonate and fruiting body development in filamentous ascomycetes (04/15/2010 – 04/14/2013), PI.

F. Other activities

Editorial board member of *FEMS Microbiology Letters* (2012-); editor of the book "Evolution of fungi and fungal-like organism" in the series "The Mycota", Springer Verlag, Heidelberg (2010-2011); mentor in the mentoring program of the University of Göttingen Medical Center (2010-).

G. Memberships and awards

Memberships: Deutsche Botanische Gesellschaft e. V. (1990-), Gesellschaft für Biochemie und Molekularbiologie e. V. (2001-), American Society for Microbiology (2005-), Genetics Society of America (2005-), Vereinigung für Allgemeine und Angewandte Mikrobiologie (VAAM) (2007-)

NAME	POSITION / TITLE
REHLING, Peter	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Ruhr-University Bochum, Germany	Diploma	1987-1993	Biology
Ruhr-University Bochum, Germany	Dr. rer. nat.	1993-1996	Biology
Ruhr-University Bochum, Germany	Postdoctoral Fellow	1996-1998	Physiological Chemistry
HHMI University of California San Diego, USA	Postdoctoral Fellow	1998-2000	Cell Biology
University of Freiburg, Germany	Habilitation	2003	Biochemistry and Molecular Biology

B. Positions / Academic Appointments

2000-2004	Junior group leader, Institute of Biochemistry and Molecular Biology, Freiburg, Germany
2004-2007	Assistant Professor, Institute of Biochemistry and Molecular Biology, Freiburg, Germany
2007-	Director, Department for Biochemistry II, Göttingen, Germany
2010-	Associated research group, MPI for Biophysical Chemistry, Göttingen,

C. Major research interests

Mitochondria are vital for eukaryotic cells. Our research aims to analyze the biogenesis of mitochondria and how malfunction leads to human disorders. One focus is to understand the molecular mechanisms by which proteins are transported across the mitochondrial membranes and to understand how multi-protein complexes in the inner membrane (TIM complexes; translocation machineries of the inner membrane) mediate this task. Moreover, we analyze how newly imported proteins assemble into multi-protein complexes in the inner membrane. In case of the respiratory chain complexes the assembly process is especially demanding since central subunits of the complexes are made within mitochondria. Dedicated chaperone-like factors are required to assist and regulate assembly and translation in mitochondria. The analysis of the principles of the biogenesis process and the activities of the assembly factors and how they regulate translation in mitochondria in a feedback cycle is of central importance for our understanding of the molecular basis of human mitochondrial disorders.

D. Selected peer-reviewed publications

Vukotic M, Oeljeklaus S, Wiese S, Vögtle FN, Meisinger C, Meyer HE, Zieseniss A, Katschinski DM, Jans DC, Jakobs S, Warscheid B, **Rehling P***, Deckers M (2012) Rcf1 mediates cytochrome oxidase assembly and respirasome formation, revealing heterogeneity of the enzyme complex. *Cell Metab* 7, 336-347. (*corresponding author).

Schulz C, Lytovchenko O, Melin J, Chacinska A, Guiard B, Neumann P, Ficner R, Jahn O, Schmidt B, **Rehling P** (2011) Tim50's presequence receptor domain is essential for signal driven transport across the TIM23 complex. *J Cell Biol* 195, 643-656.

Mick DU, Vukotic M, Piechura H, Meyer HE, Warscheid B, Deckers M, **Rehling P** (2010) Coa3 and Cox14 are essential for negative feedback regulation of COX1 translation in mitochondria. *J Cell Biol* 191, 141-154.

Van der Laan M, Meinecke M, Dudek J, Hutu DP, Lind M, Perschil I, Guiard B, Wagner R, Pfanner N, **Rehling P** (2007) Motor-free mitochondrial presequence translocase drives membrane integration of preproteins. *Nature Cell Biol* 9, 1152-1159.

Meinecke M, Wagner R, Kovermann P, Guiard B, Mick DU, Hutu DP, Voos W, Truscott KN, Chacinska A, Pfanner N, **Rehling P** (2006) Tim50 maintains the permeability barrier of the mitochondrial inner membrane. *Science* 312, 1523-1526.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 7/1/2010-6/30/2014. PI of projects B1.

2. FOR 967 (DFG): "Functions and mechanisms of ribosomal tunnel exit ligands", 01/04/2011-01/03/2014. PI of project 6.

3. RE 1384/5-1 (DFG): "Molekulare Analyse der Funktion von SURF1/Shy 1 in den frühen Schritten der Cytochrom c Oxidase Assemblierung", 08/08/2008-04/30/2013. PI on the project.

4. RE1384/7-1 (DFG): "Mechanisms and components of mitochondrial turn-over and quality control by mito-phagy". 06/14/2011-06/13/2014. PI on the project.

F. Other activities

Spokesperson study section Molecular Cell Biology of the German Society for Cell Biology; Vice Spokesperson SFB860; Editorial Board "Biological Chemistry"; Board of Scientific Directors of the University of Göttingen Medical Center.

G. Memberships and awards

Memberships: German Society for Biochemistry and Molecular Biology (GBM), American Society for Cell Biology, European Neuroscience Institute Göttingen (associated member), Max Planck Institute for Biophysical Chemistry (associated research group).

Awards: Young Investigator Award of the German Society for Biochemistry and Molecular Biology & Scheringstiftung, Habilitation Award of the University of Freiburg.

NAME	POSITION / TITLE
RIZZOLI, Silvio	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Bucharest, Romania	BSc	1996-2000	Biochemistry
University of Colorado, Denver, CO, USA	PhD	2000-2004	Physiology
Max Planck Institute Biophysical Chemistry, Göttingen, Germany	Postdoctoral Fellow	2004-2007	Neuroscience

B. Positions / Academic Appointments

2007-2012	Group Leader, European Neuroscience Institute, Göttingen, Germany
2012-	Professor, University of Göttingen Medical Center, Göttingen, Germany

C. Major research interests

Conventional fluorescence microscopy is limited by the diffraction of light: fluorescent objects that are close together cannot be discerned. Stimulated emission depletion (STED) is a recent advancement in optical physics that breaks the diffraction barrier, allowing microscopes to obtain much clearer images. The diffraction barrier has been particularly problematic for imaging synaptic vesicles, which are among the smallest known organelles (30-50 nm in diameter). They are located in small areas in the synapses (about 1 micron in diameter). My group takes advantage of the increased imaging resolution provided by STED to investigate synaptic vesicle function, with an emphasis on synaptic vesicle recycling. Since STED microscopy also allows imaging of protein domains, my group aims at studying the patterning of protein domains in the synapse, in order to understand its molecular architecture. Among our recent results, we investigated the behavior of synaptic vesicles in living, un-anaesthetized animals. We termed this approach cellular ethology – the study of cellular and subcellular behavior under natural conditions. Contrary to the well established dogma in the synaptic physiology field, namely that synapses contain large numbers of vesicles since in order to use them for neurotransmitter release, we found that under natural conditions (as opposed to artificial stimuli) only few synaptic vesicles are used. The rest, more than 90 %, function as a molecular buffer, involved in maintaining accessory proteins in the synapse.

D. Selected peer-reviewed publications

Denker A, Bethani I, Kröhnert K, Körber C, Horstmann H, Wilhelm BG, Barysch SV, Kuner T, Neher E, **Rizzoli SO** (2011) A small pool of vesicles maintains synaptic activity in vivo. *Proc Natl Acad Sci USA* 108, 17177-17182.

Denker A, Kröhnert K, Bückers J, Neher E, **Rizzoli SO** (2011) The reserve pool of synaptic vesicles acts as a buffer for proteins involved in synaptic vesicle recycling. *Proc Natl Acad Sci USA* 108, 17183-17188.

Wilhelm BG, Groemer TW, **Rizzoli SO** (2010) The same synaptic vesicles drive active and spontaneous release. *Nat Neurosci* 13, 1454-1456.

Hoopmann P, Punge A, Barysch SV, Westphal V, Bückers J, Opazo F, Bethani I, Lauterbach MA, Hell SW, **Rizzoli SO** (2010) Endosomal sorting of readily releasable synaptic vesicles. *Proc Natl Acad Sci USA* 107, 19055-19060.

Kamin D, Lauterbach MA, Westphal V, Keller J, Schönle A, Hell SW, **Rizzoli SO** (2010) High- and low-mobility stages in the synaptic vesicle cycle. *Biophys J* 99, 675-684.

E. Research Support (selection)

1. FP7 Starting Grant (European Research Council) "The Synapse Nanomap", 1/9/2008-31/8/2013.
2. DFG Single Grant (DFG): "Super-resolution investigation of synaptic function", 1/9/2008-31/8/2011, prolonged until 31/08/2012.
3. DFG Single Grant (DFG): "Nanodomains in the secretory pathway investigated by super-resolution microscopy" 1/9/2010-31/08/2013.
4. DFG Single Grant (DFG): "Stoichiomeric biology and life cycle of the SNAREs" 1/9/2010-31/08/2013. Co-PI with Thorsten Lang, LIMES, University of Bonn, Germany.
5. SFB 889 (DFG): "Synaptic vesicle recycling in the hair cell ribbon synapse" 1/1/2011-12/31/2014. Co-PI with Tobias Moser, University of Göttingen, Germany.

F. Other activities

Member of the IMPRS "Neurosciences" program committee; member of the board of the Theodor-Förster Institute (Göttingen).

G. Memberships and awards

Awards: EMBO Young Investigator Programme Award (2011), European Research Council (ERC) Starting Grant, FP7 scheme (2007), Human Frontier Science Program (HFSP) Long-Term Fellowship (2005), European Molecular Biology Organization (EMBO) Long-Term Fellowship (2005).

NAME	POSITION / TITLE
RODNINA, Marina V.	Director/Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Kiev, Ukraine	MSc	1982	Biology
Institute of Molecular Biology and Genetics, Kiev, Ukraine	PhD	1982 -1989	Molecular Biology
University of Witten/Herdecke, Witten, Germany	Postdoctoral Fellow	1990 -1992	Biochemistry
University of Witten/Herdecke, Witten, Germany	Habilitation	1998	Biochemistry

B. Positions / Academic Appointments

1992-1998	Research Fellow, Institute of Molecular Biology, University of Witten/Herdecke, Witten, Germany
1998-2000	Associate Professor of Physical Biochemistry, Institute of Molecular Biology, University of Witten/Herdecke, Witten, Germany
2000-2008	Full Professor, Head of the Institute of Physical Biochemistry, University of Witten/Herdecke, Witten, Germany
2008-	Director of the Department of Physical Biochemistry, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

C. Major research interests

The focus of our work is to understand the function and dynamics of the ribosome, a molecular machine that synthesizes proteins in all cells. We investigate the kinetic mechanisms that control mRNA selection which largely define how the composition of the cellular transcriptome is converted to the proteome and controls the response and adaptation to environmental stimuli. Understanding the balance between the speed and accuracy of protein synthesis is an important focus, as these fundamental parameters determine for the fitness of living cells, the quality control of translation, and the evolution of ribosomes. We also investigate the mechanisms of recoding caused by reprogramming signals in mRNAs which overwrite the normal decoding rules of translation. Finally, the mechanism of tRNA translocation through the ribosome is of major importance, as it provides insights into basic principles of movements within the molecular machines. Using a combination of rapid kinetic techniques, fluorescence, single molecule techniques, biochemistry, genetics, and mass spectrometry we are capable to monitor the timing of events and derive the energy landscapes of multi -pathway, non-linear translation processes. As the translational apparatus is a major target for antibiotics, better understanding of the mechanisms of antibiotic action and resistance mechanisms will be increasingly important for developing new antimicrobials and combating the major infectious diseases.

D. Selected peer-reviewed publications

Milon P, Maracci C, Filonava L, Gualerzi CO, **Rodnina MV** (2012) Real-time assembly landscape of bacterial 30S translation initiation complex. *Nat Struct Mol Biol*, in press.

Kuhlenkoetter S, Wintermeyer W, **Rodnina MV** (2011) Different substrate transition states in the active site of the ribosome. *Nature* 476, 351-354.

Fischer N, Konevega AL, Wintermeyer W, **Rodnina MV**, Stark H (2010) Ribosome dynamics and tRNA movement by time-resolved electron cryomicroscopy. *Nature* 466, 329-333.

Wohlgemuth I, Pohl C, **Rodnina MV** (2010) Optimization of speed and accuracy of decoding in translation. *EMBO J* 29, 3707-3709.

Milon P, Konevega AL, Gualerzi CO, **Rodnina MV** (2008) Kinetic checkpoints at a late step in translation initiation. *Mol Cell* 30, 712-720.

E. Research Support (selection).

1. DFG: "Mechanism of selenoprotein synthesis in bacteria", Nov 2006-Aug 2011. PI.
2. DFG: "Catalytic Mechanism of Peptide Bond Formation on the Ribosome", Dec 2007. PI.
3. DFG: "Quality Control of Translation on the Ribosome", June 2008. PI.
4. HFSP - The Human Frontier Science Program, Sept 2010-approx. Aug 2013. PI.
5. SFB 860, DFG: "Integrative Structural Biology of Dynamic Macromolecular Complexes", July 2010-June 2014. PI.
6. CMPB, DFG Research Center Molecular Physiology of the Brain, Jan 2007-Sept 2014. PI.

F. Other activities

Spokesperson of the GGNB doctoral program "Biomolecules: Structure - Function - Dynamics" and member of the GGNB Managing Board; elected member of the DFG Study Section "Biochemistry, Biophysics, Structural Biology, Bioinformatics, and Theoretical Biology"; member of the ERC Starting grant review panel LS1; member of the DAAD committee for PhD fellowships selection; member of the editorial boards of *EMBO J*, *EMBP Rep*, *RNA*.

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, EMBO.

Awards: Honors Diploma Kiev University (1982), Alexander von Humboldt Fellowship (1990-1992), Elected Director of the RNA Society (2007-2009).

NAME	POSITION / TITLE
ROSSNER, Moritz	Research Group Leader / Priv. Doz., Dr. rer. nat.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Berufsakademie, Mannheim	Wirtschaft-Ass BA	1985-1987	Economics
University of Heidelberg, Germany	Diploma	1988-1994	Molecular Biology
ZMBH, Heidelberg, Germany	PhD	1995-1997	Neurobiology
University of Göttingen, Germany	Habilitation	2010	Neurobiology

B. Positions / Academic Appointments

1998-1999	PostDoc, ZMBH, Heidelberg, Germany
1999-2000	PostDoc, BASF-Lynx AG, Heidelberg, Germany
2000-2002	Project Group Leader, Axaron Bioscience AG, Heidelberg, Germany
2003-	Research Group Leader, MPI for Experimental Medicine, Göttingen, Germany

C. Major research interests

Our research interest is directed towards the generation and analysis of transgenic mouse mutants in order to understand individual gene functions in the adult brain. Towards this goal, we employ mouse genetics, molecular/biochemical and behavioral techniques. Our current interest focuses on basic-helix-loop-helix (bHLH) transcription factors. Several loss- and gain-of-function mouse mutants of the bHLH family that we and others have analyzed display behavioral alterations frequently also observed in psychiatric diseases. Among these are alterations of the sleep-wake or circadian behavior, altered cognitive performances and disturbed environmental adaptations to time shifts (jet-lag) or social stress. At the molecular level, we find several signaling pathways to be deregulated that likely provide a mechanistic link between disturbed environmental adaptations and deregulated gene expression seen in bHLH mouse mutants. To study cellular signaling upstream of gene expression, we have developed a series of genetically encoded biosensors that can be analyzed with standard fluorescent or luminescent reporter proteins but also with libraries of molecular barcodes to perform systems-level analyses. Currently, we aim at combining mouse models and genetic sensors to better understand the molecular adaptations of gene-environment interactions relevant for psychiatric and neurological diseases.

D. Selected peer-reviewed publications

Djannatjan MS, Galinski S, Fischer TM, **Rossner M** (2011) Studying G protein-coupled receptor activation using split-TEV assays. *Anal Biochemistry* 412(2), 141-52.

Brzózka MM, Radyushkin R, Wichert SP, Ehrenreich H, **Rossner M** (2010) Cognitive and sensorimotor gating impairments in transgenic mice overexpressing the schizophrenia susceptibility gene Tcf4 in the forebrain. *Biological Psychiatry* 68(1), 33-40.

Botvinnik A, Wichert SP, Fischer TM, **Rossner M** (2010) Integrated analysis of receptor activation and downstream signaling with EXTassays. *Nature Methods* 7(1), 74-80.

Rossner M, Oster H, Wichert SP, Reinecke L, Wehr MC, Reinecke J, Eichele G, Taneja R, Nave KA. Disturbed clockwork resetting in Sharp-1 and Sharp-2 single and double mutant mice. *PLoS ONE* 3(7).

Rossner M, Hirrlinger J, Wichert SP, Boehm C, Newrzella D, Hiemisch H, Eisenhardt G, Stuenkel C, von Ahnen O, Nave KA (2006) Global Transcriptome Analysis of Genetically Identified Neurons in the Adult Cortex. *J Neuroscience* 26(39), 9956-9966.

E. Research Support (selection)

1. DFG/KFO 241: "Gene-environment interactions and molecular signatures in mouse models of psychosis", Jan 2012 - Dec 2014, FKZ RO4076/1-1. PI.

2. BMBF, VIP Program: "Validation of barcoded biosensors", Nov 2010 - Oct 2013. FKZ 16V0008. PI.

3. BMBF, BioProfil Program: "Development of genetically encoded biosensors". Consortium, Oct 2007 - Sep 2010. FKZ 0315180A. PI, Coordinator.

F. Other activities

Student speaker DFG Research Training Group "Molecular Neurobiology" (1995-1997), animal safety delegate (2000-2002), safety officer gene technology (seit 2006), gewählter Mitarbeitervertreter, section members of the Max Planck Society (since 2008), member of the Faculty of Biology, University of Göttingen (since 2010)

G. Memberships and awards

Memberships: Gesellschaft für Biochemie und Molekularbiologie e.V. (GBM), Neurowissenschaftliche Gesellschaft (NWG)

Awards: Best diploma-thesis of the year (GFM) (1995), DFG doctoral stipend (1995-1997), doctoral thesis "summa cum laude" (1998), 2x Science4life award for innovative research (2007), EXIST-Forschungstransfer / StartUp-Competition (2010)

NAME	POSITION / TITLE
SCHLÜTER, Oliver Marcus	Independent group leader

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Hannover, Germany	Diploma	1994	Biochemistry
University of Göttingen, Germany	Staatsexamen	2000	Medicine
University of Hannover, Germany	Dr. rer. nat.	2000	Biochemistry
Universtiy of Göttingen, Germany	Dr. med.	2001	Medicine
MPI for Biophysical Chemistry, Göttingen, Germany	Postdoctoral fellow	2001-2002	Neuroscience
Stanford University, Palo Alto, USA	Postdoctoral fellow	2002-2006	Neuroscience

B. Positions / Academic Appointments

2006- Independent group leader, European Neuroscience Institute, Göttingen, Germany

C. Major research interests

Our group is interested in the molecular mechanisms of long-term synaptic plasticity. Specifically, we investigate the role of signaling scaffolds in the post-synaptic density of rodents. We use a combination of genetic manipulations, biochemistry and electrophysiology to dissect how the signaling scaffolds coordinate signaling processes. Our working hypothesis is that the signaling scaffolds tether receptors and signaling proteins with the respective target molecules to ensure signaling specificity.

A second line of research addresses cellular and molecular mechanisms in drug addiction in rodent models. We hypothesize that drugs of abuse hijack synaptic plasticity mechanisms to induce "pathological memories", reminiscent of the addicted brain. Using an extension to in vivo genetic manipulations and behavioral paradigms, we aim to link chains of molecular events to cellular and ultimately behavioral alterations.

D. Selected peer-reviewed publications

Brown TE, Lee BR, Mu P, Ferguson D, Dietz D, Ohnishi YN, Lin Y, Suska A, Ishikawa M, Huang YH, Shen H, Kalivas PW, Sorg BA, Zukin RS, Nestler EJ, Dong Y, **Schlüter OM** (2011) A silent synapse-based mechanism for cocaine-induced locomotor sensitization. *J Neurosci* 31, 8163-74.

Xu* W, **Schlüter* OM**, Steiner P, Czervionke BL, Sabatini B, Malenka RC (2008) Molecular dissociation of the role of PSD-95 in regulating synaptic strength and LTD. *Neuron* 57, 248-62.

Schlüter* OM, Xu* W, Malenka RC (2006) Alternative N-terminal domains of PSD-95 and SAP97 govern activity-dependent regulation of synaptic AMPA receptor function. *Neuron* 51, 99-111.

Schlüter OM, Basu J, Südhof TC, Rosenmund C (2006) Rab3 superprimes synaptic vesicles for release: implications for short-term synaptic plasticity. *J Neurosci* 26, 1239-46.

Chandra S, Gallardo G, Fernandez-Chacon R, **Schlüter OM**, Südhof TC (2005) Alpha-synuclein cooperates with CSP α in preventing neurodegeneration. *Cell* 123, 383-96

E. Research Support (selection)

1. Emmy-Noether award (DFG): "Analysis of signaling scaffolds in hippocampal NMDA receptor-dependent long-term synaptic depression", 12/1/2006-11/30/2011. PI.

2. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 1/1/2011-12/31/2012. PI on one project.

3. Research center (DFG): "Molecular physiology of the brain", 1/1/2009-10/31/2012. PI on one project.

4. ITN Training grant (EU): "Synapses: from Molecules to Brain Diseases", 11/1/2010-31/10/2013. PI on one project.

5. Erasmus Training grant (EU): "European Neuroscience Campus", 11/1/2011-31/10/2014. PI on one project.

F. Other activities

none.

G. Memberships and awards

Emmy Noether award (2006)

NAME	POSITION / TITLE
SCHUH, Reinhard	Research Group Leader / Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Frankfurt, Germany	Diploma	1982	Microbiology
University of Tübingen, Germany	Dr. rer. nat.	1985	Genetics
Max Planck Institute for Developmental Biology, Tübingen, Germany	Postdoctoral Fellow	1986-1988	Developmental Biology
Ludwig Maximilian University, Munich, Germany	Akademischer Rat	1988-1991	Genetics
TU Carolo-Wilhelmina zu Braunschweig, Germany	Habilitation	2001	Cell Biology

B. Positions / Academic Appointments

1992-2005	Group Leader, Max-Planck Institute for Biophysical Chemistry, Göttingen, Germany
2005-	Research Group Leader -Molecular Organogenesis-, Max-Planck Institute for Biophysical Chemistry, Göttingen, Germany
2008	Adjunct Professor of Biology, University of Göttingen, Germany

C. Major research interests

Branched tubular networks are a fundamental structural design of many organs including lung, vascular system and kidney. Critical for organ function, i.e. the transport of fluids or gases, is the proper size and diameter of the tubular branches as well as an elaborate network formation. How is tube size and diameter controlled? How can the system respond to different physiological needs? How do epidermal sheets control the paracellular passage of solutes?

The development of the *Drosophila* tracheal (respiratory) system provides an ideal model to address such questions. We focus on the analysis of Septate Junction protein complexes and their role for epithelial morphogenesis and physiology. Furthermore we elucidate the molecular mechanisms that lead to the liquid clearance of tracheal tubes, a prerequisite for normal gas transport.

D. Selected peer-reviewed publications

Weiss A, Charbonnier E, Ellertsdottir E, Tsigos A, Wolf C, **Schuh R**, Pyrowolakis G, M. Affolter M (2010) A conserved activation element in BMP signaling during *Drosophila* development. *Nature Struct Mol Biol* 17, 69-76.

Harder B, Schomburg A, Pflanz R, Küstner KM, Gerlach N, **Schuh R** (2008) TEV protease-mediated cleavage in *Drosophila* as a tool to analyze protein functions in living organisms. *BioTechniques* 44, 765-772.

Behr M, Wingen C, Wolf C, **Schuh R**, Hoch M (2007) Wurst is essential for airway clearance and respiratory-tube size control. *Nature Cell Biol* 9, 847-853.

Krause C, Wolf C, Hemphälä J, Samakovlis C, **Schuh R** (2006) Distinct functions of the leucine-rich repeat transmembrane proteins Capricious and Tartan in the *Drosophila* tracheal morphogenesis. *Dev Biol* 296, 253-264.

Behr M, Riedel D, **Schuh R** (2003) The claudin-like Megatrachea is essential in septate junctions for the epithelial barrier function in *Drosophila*. *Dev Cell* 5, 611-620.

E. Research Support

Max-Planck-Society

NAME	POSITION / TITLE
SCHWAPPACH, Blanche	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Konstanz, Germany	Diploma	1992	Biology
University of Hamburg, Germany	Dr. rer. nat.	1996	Biology
University of California, San Francisco, USA	Postdoctoral Fellow	1997-2000	Cell Biology
University of Heidelberg, Germany	Habilitation	2004	Molecular Biology Cell Biology

B. Positions / Academic Appointments

2000-2007	Independent research group leader at the <i>Zentrum für Molekulare Biologie der Universität Heidelberg (ZMBH)</i> , University of Heidelberg, Germany
2007-2010	Wellcome Trust Senior Research Fellow and Senior Lecturer, Faculty of Life Sciences, University of Manchester, UK
2010-	Professor of Biochemistry, director of Department Biochemistry I, Universitätsmedizin Göttingen, University of Göttingen, Germany

C. Major research interests

The group works on different aspects of membrane protein biogenesis and its integration into the physiology of organs such as the brain or the heart. In one strand of our research we study the early life of tail-anchored proteins that are post-translationally targeted to the endoplasmic reticulum for membrane integration.

Other projects address the role of sorting motifs during the passage of ion channels and neurotransmitter receptors through the secretory pathway. A major focus of this second strand of our research is on peptide sorting motifs that are recognized by the COPI vesicle coat and/or 14-3-3 proteins. One channel under investigation, the ATP-sensitive potassium (K_{ATP}) channel, couples cellular metabolism to insulin secretion in pancreatic beta cells. In the brain and the heart K_{ATP} channels play less defined roles that we currently address employing biochemical methods.

We study biogenesis and trafficking under (patho)physiological conditions in genetically tractable model organisms such as yeast or mouse. Besides membrane protein biochemistry we use GFP-based physiological sensors for small molecules and ions in cellular compartments. This allows us to tackle how ion channels and transporters contribute to different physicochemical milieus inside cells.

D. Selected peer-reviewed publications

Braun NA, Morgan B, Dick TP, and **Schwappach B** (2010) The yeast CLC protein counteracts vesicular acidification during iron starvation. *J Cell Sci* 123, 2342-2350.

Leznicki P, Clancy A, **Schwappach B** and High S (2010) Bat3 promotes the membrane integration of tail-anchored proteins. *J Cell Sci* 123, 2170-2178.

Jonikas MC, Collins SR, Denic V, Oh E, Quan EM, Schmid V, Weibezahn J, **Schwappach B**, Walter P, Weissman JS, Schuldiner M (2009) Comprehensive characterization of genes required for protein folding in the endoplasmic reticulum. *Science* 323, 1693-1697.

Schuldiner M, Metz J, Schmid V, Denic V, Rakwalska M, Schmitt HD, **Schwappach B*** and Weissman JS* (2008, *co-corresponding) The GET Complex Mediates Insertion of Tail-Anchored Proteins into the ER. *Cell* 134, 635-645.

Michelsen K, Schmid V, Metz J, Heusser K, Liebel U, Schwede T, Spang A, and **Schwappach B** (2007) Novel cargo-binding site in the beta and delta subunits of coatamer. *J Cell Biol* 179, 209-217.

E. Research Support (selection)

1. Senior Research Fellowship in Basic Biomedical Science (Wellcome Trust; 081671/Z06/Z): "Sorting of ion transport proteins – assembly-dependent cell surface transport of multimeric membrane proteins and ion homeostasis in the early secretory pathway", 01/08/2007-31/07/2012. PI (sole recipient of award).

2. FOR 1086/2 (DFG; SCHW 823/2-1): TP 9 „Mechanismen der Regulation des intrazellulären Transports von TASK-1 und TASK-3“ der Forschergruppe „K2P-Kanäle vom Molekül zur Physiologie“, 01/08/2011-31/07/2014. PI (project TP9).

F. Other activities

Wellcome Trust Expert Review Group "Cellular and Molecular Neuroscience", Scientific Advisory Board of C.H.S.-Stiftung zur Förderung Biomedizinischer Forschung, Vertrauensdozentin der Studienstiftung des deutschen Volkes

G. Memberships and awards

Karl-Freudenberg Award of the Heidelberg Academy of Sciences (2004), EMBO Young Investigator (2003)

NAME	POSITION / TITLE
SHCHERBATA, Halyna	Max Planck Research Group Leader and PD

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Lviv National University Lemberg, Ukraine	MS	1987-1992	Biology and Chemistry
Lviv National University, Lemberg, Ukraine Institute of Gene Biology, Moscow, Russia Institute for Plant Genetics, Kiev, Ukraine	PhD	1992-1996	Genetics
Basel University, Switzerland	Postdoctoral Fellow	1996, 1998	Developmental Biology, Neurobiology
University of Washington, Seattle, WA, USA	Postdoctoral Fellow	2001, 2003-2007	Biochemistry, Stem Cell Biology

B. Positions / Academic Appointments

1996-2003	Scientific Researcher (since 2000 Assistant Professor), Department of Genetics and Biotechnology, Lviv National University, Lemberg, Ukraine
2003-2007	Postdoctoral fellow (since 2007 Research Professor), Department of Biochemistry, Institute for Stem Cell and Regenerative Medicine, University of Washington, Seattle, WA, USA
2008-	Max Planck Research Group Leader, Gene Expression and Signaling Group, MPI for Biophysical Chemistry, Göttingen, Germany

C. Major research interests

Our group is currently working on studying the role of the microRNA pathway in stem cells. Previously we have demonstrated the necessity of the miRNA pathway for proper control of stem cell division and maintenance. Now our findings show that the hormonal signaling and miRNAs direct germline stem cell differentiation. This effect of hormones is non-cell autonomous, since the pathway is activated in soma to control germline behavior. In addition, the hormonal signaling is reassured via the miRNA pathway. Not only is the miRNA expression itself controlled by steroid hormones, miRNAs act in the feedback loops to regulate the strength of the hormonal signaling. This provides the means to fine-tune the signals managing stem cell division, maintenance and differentiation in response to ever-changing extracellular conditions. The other project we are interested is understanding the origin of muscular dystrophy. Previously we have developed a Drosophila model for studying muscular dystrophies and used the genetic tractability of Drosophila to search for novel components of the Dystroglycan glycoprotein complex, as well as components that may be involved in its signaling and regulation, including miRNAs. Findings about the role for miRNA in development of muscular dystrophies could provide new insights into mechanisms that contribute to dystrophic muscle degeneration and facilitate development of alternative pathways for treatment of these fatal neuromuscular disorders using miRNAs as therapeutic agents.

D. Selected peer-reviewed publications

König A, Yatsenko AS, Weiss M, **Shcherbata HR** (2011) Ecdysteroids affect *Drosophila* ovarian stem cell niche formation and early germline differentiation. *EMBO J* 30, 1549-1562.

Kucherenko MM, Marrone AK, Rishko VM, Magliarelli H, **Shcherbata HR** (2011) Stress and muscular dystrophy: a genetic screen for dystroglycan and dystrophin interactors in *Drosophila* identifies cellular stress response components. *Dev Biol* 352, 228-242.

Marrone AK, Kucherenko MM, Rishko VM, **Shcherbata HR** (2011) New Dystrophin/Dystroglycan interactors control neuron behavior in *Drosophila* eye. *BMC Neurosci* 12, 93.

Marrone AK, Kucherenko MM, Wiek R, Göpfert MC, **Shcherbata HR** (2011) Hyperthermic seizures and aberrant cellular homeostasis in *Drosophila* dystrophic muscles. *Nature Sci Rep* 1, 47.

Shcherbata HR*, Hatfield SD*, Fischer KA, Nakahara K, Carthew RW, Ruohola-Baker H (2005) Stem cell division is regulated by the microRNA pathway. *Nature* 435, 974-978, *-equal contribution.

E. Research Support (selection)

1. American Heart Association Grant for Postdoctoral Fellows: "*Drosophila* as a model system of muscular dystrophy: a molecular-genetic analysis of Dystroglycan-Dystrophin complex", 7/01/05-6/30/08. PI.

2. MPC/UCSD: "Systems Biology Investigations of Skeletal Muscle Development and Pathologies". Co-PI (with Shankar Subramaniam, UCSD).

F. Other activities

Organizer of the "The Extracellular Matrix" workshop at the 48th and 49th *Drosophila* Research Conferences (2007, 2008, USA), Co-organizer of XXIV International Congress of Entomology (2012, Korea); Host Editor for the Research Topic "Genetic and Epigenetic Control of Stem Cell Fate" in "Frontiers in Genetics"; Reviewer for Developmental Biology, PLoS Biology, The International Journal of Neuroscience; Referee to the 2012 call of Inserm Atip-Avenir Programme; Member of the Admission Committee of the IMPRS for Molecular Biology (2011,2012).

G. Memberships and awards

Memberships: Genetic Society of America

Awards: John Soros Award for Young Scientists (2000), WUBMR (West-Ukrainian Biomedical Research) Award for Postdocs (2002)

NAME	POSITION / TITLE
SIMONS, Mikael	W3-Heisenberg Professorship

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Medical School Heidelberg, Germany	MD	1991-1997	Medicine
Residency in Neurology, Tübingen, Germany	"Facharzt"	1997-2004	Clinical Neurology
University of Tübingen, Germany	Habilitation	2005	Neurology
University of Göttingen, Germany	W3 Professorship	2009	Neurology

B. Positions / Academic Appointments

2004-2008	Junior Group leader, Biochemistry, Göttingen
2007-present	Consulting Neurologist, Department of Neurology, Göttingen
2009-present	Research Group leader with an ERC Starting Grant, MPI for Experimental Medicine, Göttingen
2009-present	W3-Heisenberg-Professorship, Department of Neurology, Göttingen

C. Major research interests

The myelin sheath is formed by the spiral wrapping of glial plasma membrane extensions around the axons, followed by the extrusion of cytoplasm and the compaction of the stacked membrane bilayers.

These tightly packed membrane stacks provide electrical insulation around the axons and maximize their conduction velocity. Axonal insulation by myelin not only facilitates rapid nerve conduction but also regulates axonal transport and protects against axonal degeneration. Damage to the myelin sheath, as it for example occurs in multiple sclerosis (MS) results therefore in severe neurological disability also as a result of neurodegeneration. Our main goal is to come up with new approaches of how to promote remyelination in demyelinating diseases such as MS. To realize this goal we need to understand how myelin is formed during normal development.

How oligodendrocytes wrap their plasma membrane around an axon to form myelin with its many layers of a tightly stacked membrane is one of the big unresolved questions in cellular neurobiology. A mystery is how newly synthesized membrane is delivered to the tip of the growing myelin sheath through the many layers of compact membrane and how the force is generated to move the membrane around the axon.

Our aim is to elucidate the cellular machinery that is required for the formation of this membrane. Myelin membrane trafficking and assembly is under extensive control by signal transduction cascades. We are therefore also interested to identify the influence of cell-cell communication on membrane trafficking. These studies aim to understand the complex interplay between neurons and glia in order to gain insights into mechanisms of myelin formation during the development of the central nervous system.

D. Selected peer-reviewed publications

Aggarwal S, Yurlova L, Snaidero N, Reetz C, Frey S, Zimmermann J, Pähler G, Janshoff A, Friedrichs J, Müller DJ, Goebel C, **Simons M** (2011) A Size Barrier Limits Protein Diffusion at the Cell Surface to Generate Lipid-Rich Myelin-Membrane Sheets. *Dev Cell* 21(3), 445-56.

Hsu C, Morohashi Y, Yoshimura S-I, Manrique-Hoyos N, Jung SY, Lauterbach M, Bakhti M, Grønborg G, Möbius W, Rhee JS, Barr FA, **Simons M** (2010) Regulation of exosome secretion by Rab35 and its GTPase-activating proteins TBC1D10A-C. *J Cell Biol* 189(2), 223-32.

Trajkovic K, Hsu C, Chiantia S, Rajendran L, Wenzel D, Wieland F, Schwille P, Brügger B, **Simons M** (2008) Ceramide triggers budding of exosome vesicles into multivesicular endosomes. *Science* 319(5867), 1244-7.

Fitzner D, Schneider A, Kippert A, Möbius W, Willig K-I, Hell SW, Bunt G, Gaus K, **Simons M** (2006) Myelin basic protein-dependent plasma membrane reorganization in the formation of myelin. *EMBO J* 25(21), 5037-48.

Trajkovic K, Dhaunchak AS, Goncalves J, Wenzel D, Bunt G, Nave K-A, **Simons M** (2006) Neuron to glia signalling triggers myelin membrane exocytosis from endosomal storage sites. *J Cell Biol* 172, 937-48.

E. Research Support (selection)

1. ERC Starting Grant, EU: "Myelin Biogenesis", 01/2009 - 12/2012.
2. W3 Heisenberg Program, 02/2009-02/2012.
3. DFG, FOR1756: "Oligodendrocyte and axon interaction", 01/2011-12/2013.
4. DFG, Transregio 43: "Myelin and Autoimmunity", 01/2012- 12/2015.
5. Tschira Stiftung: "Microbes in the biology of multiple sclerosis", 03/2012 - 2/2015. PI (Consortium partner).
6. BMBF E-Rare: "Cell biology and biochemistry of Charcot Marie Tooth disease", 03/2012- 2/2015. PI (Consortium partner).

F. Other activities

Consulting Neurologist, Head of the Multiple Sclerosis Outpatient Clinic.

G. Memberships and awards

Awards: Bundesweiter Dissertationspreis anlässlich des 6. deutschen Ärztekongresses, 1995; Ruprechts-Karls-Preis der Universität Heidelberg, 1998; Heinz-Maier-Leibniz Preis, 2001; Akademiepreis der Heidelberger Akademie der Wissenschaften, 2002; Attempto-Preis für Neurobiologie der Universität Tübingen, 2003; EMBO, Young Investigator Award, 2008.

NAME	POSITION / TITLE
STARK, Holger	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Free University Berlin, Berlin, Germany	Diploma	1993	Biochemistry
Free University Berlin, Berlin, Germany	Dr. rer. nat.	1996	Structural Biology
Imperial College, London, UK	Postdoctoral Fellow	1997-1998	Structural Biology

B. Positions / Academic Appointments

1998-1999	Group Leader, Institute for Molecular Biology and Tumor Science, Marburg, Germany
2000-2007	Group Leader, Max-Planck-Institute for biophysical Chemistry, Göttingen, Germany
2007	Professor for 3D Molecular Cryo Electron Microscopy, University Göttingen, Germany.

C. Major research interests

Our group is interested in the three-dimensional structure determination of large macromolecular complexes by single particle cryo-EM. For many large macromolecular complexes this is currently the method of choice to determine their structure because of the difficulties in crystallization. The main complexes we are interested in are related to mRNA processing (ribosome, spliceosome, snRNPs). Another major topic is related to cell cycle regulation by determining the structure of the anaphase promoting complex in different functional states.

Methodologically we focus on new biochemical strategies for complex isolation and stabilization, improvement in electron microscopic imaging and development of novel software strategies for computational image analysis. The combination of these methods allows us to determine even the structure of dynamic macromolecules and the detailed analysis of structural variability in solution.

D. Selected peer-reviewed publications

Fischer N, Konevega AL, Wintermeyer W, Rodnina MV, **Stark H** (2010) Ribosome dynamics and tRNA movement as visualized by time-resolved electron cryomicroscopy. *Nature* 466, 329-333.

Herzog F, Primorac I, Dube P, Lenart P, Sander B, Mechtler K, **Stark H**, Peters JM (2009) Structure of the anaphase promoting complex/cyclosome interacting with a mitotic checkpoint complex. *Science* 323, 1477-1481.

Kastner B, Fischer N, Golas MM, Sander B, Dube P, Boehringer D, Hartmuth K, Deckert J, Hauer F, Wolf E, Uchtenhagen H, Urlaub H, Herzog F, Peters JM, Poerschke D, Lührmann R, **Stark H** (2008) GraFix: sample preparation for single-particle electron cryomicroscopy. *Nat Methods* 5, 53-55.

Sander B, Golas MM, Makarov EM, Brahm H, Kastner B, Lührmann R, **Stark H** (2006) Organization of core spliceosomal components U5 snRNA loop I and U4/U6 Di-snRNP within U4/U6.U5 Tri-snRNP as revealed by electron cryomicroscopy. *Mol Cell* 24, 267.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 14/7/2010. PI on three projects.
2. BioFuture (BMBF): "High-throughput structure determination by single particle cryo-EM", 1.1.2005 - 31.12.2009, PI.
3. Consortium 3DRepertoire (EU): "A multidisciplinary approach to determine the structures of protein complexes in a model organism" 1.2.2005 - 31.1.2010. PI (consortium partner).

F. Other activities

Member of the DFG panel Structural Biology (since 2012).

G. Memberships and awards

Memberships: EMBO Member (since 2010).

Awards: Otto-Hahn-Medal of the Max-Planck-Society (1997), "Förderpreis" of the German Society of Electron Microscopy (1999), BioFuture Award (BMBF, 2005).

NAME	POSITION / TITLE
STEINEM, Claudia	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Münster, Germany	Diploma	1994	Biology, Chemistry
University of Münster, Germany	Dr. rer. nat.	1997	Chemistry
University of Münster, Germany	Habilitation	2001	Biochemistry

B. Positions / Academic Appointments

1997-1998	Postdoctoral fellow, Scripps Research Institute, La Jolla, CA, USA
1999-2001	Research associate, Institute of Biochemistry, University of Münster, Germany
2001-2006	Associate Professor of Biosensors and Bioanalytics, Institute of Analytical Chemistry, Chemo- and Biosensors, University of Regensburg, Germany
2006-	Professor of Biomolecular Chemistry, University of Göttingen, Germany

C. Major research interests

The main research focus of our group lies on artificial membrane systems, which are used to answer biochemical questions under well-defined conditions in a quantitative manner. We are in particular interested in peptides, channel proteins and pumps, as well as proteins that connect the plasma membrane with the cytoskeleton. For the analysis, we apply a variety of biophysical methods with special emphasis on electrochemical and surface sensitive techniques.

D. Selected peer-reviewed publications

Lazzara TD, Carnarius C, Kokun M, Janshoff A, **Steinem C** (2011) Separating attoliter-sized compartments using fluid pore-spanning lipid bilayers. *ACS Nano* 5, 6935–6944.

Bosk S, Braunger J, Gerke V, **Steinem C** (2011) Activation of F-actin binding capacity of ezrin: synergism of PIP2 interaction and phosphorylation. *Biophys J* 100, 1708-1717.

Höfer I, **Steinem C** (2011) A membrane fusion assay based on pore-spanning membranes. *Soft Matter* 7, 1644-1647.

Bernecker A, Wieneke R, Riedel R, Seibt M, Geyer A, **Steinem C** (2010) Tailored synthetic polyamines for controlled biomimetic silica formation. *J Am Chem Soc* 132, 1023-1031.

Gaßmann O, Kreir M, Ambrosi C, Pranskevich J, Oshima A, Röling C, Sosinsky G, Fertig N, **Steinem C** (2009) The mutant of connexin26 reveals conductance states in pore-suspending membranes. *J Struct Biol* 168, 168-176.

E. Research Support (selection)

1. Research Grant (DFG): "Quantitative analysis of the ezrin-actin interaction at membranes", 04/2011-03/2014.

2. SFB 803 (DFG): "Functionality controlled by organization on and between membranes", 01/2009-12/2012. PI on two projects (one with U. Diederichsen).

F. Other activities

Vice-Chair of the German Biophysics Society. Coordinator of the DFG Collaborative Research Center SFB 803.

G. Memberships and awards

Memberships: Editorial board member of *Biophysical Journal* (2010-2013); co-spokesperson of the IMPRS-bpcs program committee (since 2010); chair (Dekanin) of the Faculty of Chemistry, University of Göttingen (2009-2011); member of the Göttingen Center for Molecular Biosciences (since 2007); member of the editorial board of the journal "Blick in die Wissenschaft", University of Regensburg (2004-2006).

Awards: Lise-Meitner habilitation fellowship (1999-2000), PhD award of the Fonds der Chemischen Industrie (1997), PhD Award of the Mathematisch-Naturwissenschaftliche Fakultät of the Westfälische Wilhelms-University Münster (1997), SOF Award of the Scripps Research Institute, La Jolla, CA, USA (1998), Bennigsen-Foerder Award of the Land Nordrhein-Westfalen (1999).

NAME	POSITION / TITLE
STÜLKE, Jörg	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Greifswald, Germany	Diploma	1990	Biology
University of Greifswald, Germany	Dr. rer. nat.	1994	Microbiology
Pasteur Institute, Paris, France	Postdoc	1994-1996	Microbiology
University of Erlangen, Germany	Habilitation	2000	Microbiology

B. Positions / Academic Appointments

1996-2003	Junior Group leader, University of Erlangen, Germany
2003-	Full Professor, Department of General Microbiology, Institute for Microbiology and Genetics, Georg-August-University of Göttingen

C. Major research interests

Our group studies the regulation of metabolism in the pathogenic bacterium *Mycoplasma pneumoniae* and the model organism *Bacillus subtilis*. We are following global ("post-genomic") and gene-specific approaches. In *M. pneumoniae*, we study the regulation of gene expression in this pathogenic bacterium and its relation to pathogenicity. This is highly interesting because this bacterium is an important cause of pneumonia. Moreover, *M. pneumoniae* is one of the organisms with the smallest genetic equipment that is capable of independent life. Specifically, we are analyzing protein phosphorylation and mechanisms of transcription regulation in *M. pneumoniae*. We have shown, that protein phosphorylation of is of key importance for pathogenicity of *M. pneumoniae*. Metabolism in *B. subtilis* is studied by transcriptomics, metabolome and fluxome analyses. Our specific interests are focused on two key pathways: glycolysis and glutamate biosynthesis, the decisive link between carbon and nitrogen metabolism. The regulation of glycolysis is studied at the level of a controlled protein-RNA interaction. Regulation through RNA has become widely recognized in the past few years. Our studies revealed that glycolytic enzymes themselves are part of a protein complex that is required for mRNA processing and degradation. Finally, we are interested in systems biology approaches to the analysis of *B. subtilis* and develop web interfaces for the functional annotation.

D. Selected peer-reviewed publications

Görke B, **Stülke J** (2008) Carbon catabolite repression in bacteria: many ways to make most out of nutrients. *Nat Rev Microbiol* 6, 613-624.

Commichau FM, Rothe FM, Herzberg C, Wagner E, Hellwig D, Lehnik-Habrink M, Hammer E, Völker U, **Stülke J** (2009) Novel activities of glycolytic enzymes in *Bacillus subtilis*: Interactions with essential proteins involved in mRNA processing. *Mol Cell Proteomics* 8, 1350-1360.

Schmidl SR, Gronau K, Pietack N, Hecker M, Becher D, **Stülke J** (2010) The phosphoproteome of the minimal bacterium *Mycoplasma pneumoniae*: Analysis of the complete known Ser/Thr kinome suggests the existence of novel kinases. *Mol Cell Proteomics* 9, 1228-1242.

Hübner S, Declerck N, Diethmaier C, Le Coq D, Aymerich S, **Stülke J** (2011) Prevention of cross-talk in conserved regulatory systems: Identification of specificity determinants in RNA-binding antitermination proteins of the BglG family. *Nucleic Acids Res* 39, 4360-4372.

Schmidl SR, Otto A, Lluch-Senar M, Pinol J, Busse J, Becher D, **Stülke J** (2011) A trigger enzyme in *Mycoplasma pneumoniae*: Impact of the glycerophosphodiesterase GlpQ on virulence and gene expression. *PLOS Pathogens* 7, e1002263.

E. Research Support (selection)

1. DFG (Einzelantrag): "Protein-mRNA Interactions in Carbon Metabolism in *Bacillus subtilis*", 2006 - 2009. PI.

2. DFG (Einzelantrag): "Regulation of carbon metabolism in *Mycoplasma pneumoniae*", 2006 – 2009. PI.

3. Consortium SPP 1258 (DFG): "Riboswitches and small RNAs in Bacilli under different thermal conditions", 2007 – 2010. PI of one project.

4. SFB 860 (DFG): "The RNA degradosome of *B. subtilis*", 2010 – 2014. PI of one project.

5. DFG (Einzelantrag): "Mechanisms of gene regulation by CcpA", 2010 – 2013. PI.

6. Consortium BACELL SYSMO (ERA-NET, BMBF): "Systems biology with *B. subtilis*", 2007 - 2010.

7. Consortium BACELL SYSMO2 (ERA-NET, BMBF) "Protein complexes in *B. subtilis*", 2010 - 2013.

F. Other activities

Spokesperson of the International MSc/PhD program (IMPRS) "Molecular Biology" (since 2011), Spokesperson of the GGNB PhD program "Microbiology and Biochemistry" (since 2011), Steering group member of the European *Bacillus* community BACELL (since 2005).

G. Memberships and awards

Awards: Thesis award of the Ernst-Moritz-Arndt Universität Greifswald (1994).

NAME	POSITION / TITLE
THUMM, Michael	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Stuttgart, Germany	Diploma	1984	Chemistry
University of Stuttgart, Germany	Dr. rer. nat.	1987	Biochemistry
University of Stuttgart, Germany	Habilitation	1997	Biochemistry

B. Positions / Academic Appointments

1998-2003	Privatdozent, University of Stuttgart, Germany
2003-	Professor, University of Göttingen, Germany

C. Major research interests

Our group is interested in the molecular mechanism and physiological relevance of macro- and microautophagy in *Saccharomyces cerevisiae*. Research topics include the origin of autophagosomal membranes and the mechanism of autophagosome biogenesis. We are further interested in selective variants of autophagy such as piecemeal microautophagy of the nucleus and mitophagy.

Another open question is how autophagic bodies are broken down within the vacuole, the lytic compartment of yeast.

D. Selected peer-reviewed publications

Nair U, **Thumm M***, Klionsky DJ*, Krick R (2011) GFP-Atg8 protease protection as a tool to monitor autophagosome biogenesis. *Autophagy* 7(12), 1546-1550, Toolbox, *corresponding authors.

Krick R, Bremer S, Welter E, Schlotterhose P, Muehe Y, Eskelinen E-L, **Thumm M** (2010) Cdc48/p97 and Shp1/p47 regulate autophagosome biogenesis in concert with ubiquitin-like Atg8. *J Cell Biol* 190(6), 965-973.

Welter E, **Thumm M***, Krick R (2010) Quantification of nonselective bulk autophagy in *S. cerevisiae* using Pgk1-GFP. *Autophagy* (6), 794-7, Toolbox, *corresponding author.

Krick R, Muehe Y, Prick T, Bremer S, Schlotterhose P, Eskelinen E-L, Millen J, Goldfarb DS, **Thumm M** (2008) Piecemeal microautophagy of the nucleus requires the core macroautophagy genes. *Mol Biol Cell* (19), 4492-4505.

Krick R, Henke S, Tolstrup J, **Thumm M** (2008) Dissecting the localization and function of Atg18, Atg21 and Ygr223c. *Autophagy* 4(7), 896-905.

E. Research Support (selection)

1. SFB 860 (DFG): "Structure and Function of WD-40 repeat containing Atg-Proteins" 1/7/2010-30/6/2014. Co-PI (with K. Kühnel).

2. Th752/6-1 (DFG): "Mechanisms and components of mitochondrial turnover and quality control by mitophagy", 7/2011-7/2014.

F. Other activities

Member of the Habilitationskommission and the Forschungskommission.

G. Memberships and awards

Memberships: Editor "AUTOPHAGY".

Awards: Promotionsstipendium of the Robert Bosch Foundation.

NAME	POSITION / TITLE
TITTMANN, Kai	Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Martin-Luther University Halle, Germany	Diploma	1991-1996	Biochemistry
Martin-Luther University Halle, Germany	Dr. rer. nat.	1996-2000	Biochemistry
Rutgers University Newark, NJ, USA	Invited research fellow	2003	Enzymology
University of Nebraska Lincoln, NE, USA	Invited research fellow	2005	Enzymology

B. Positions / Academic Appointments

2003-2008	Assistant Professor for Molecular Enzymology, Martin-Luther University Halle, Germany
2006	Associate Guest Professor in Biochemistry at Ben-Gurion University of the Negev, Beer-Sheva, Israel
2008-	W2 Professor, Faculty of Biology, University of Göttingen

C. Major research interests

The central research topic of our department is the analysis of molecular reaction mechanisms of enzymes as nature's chemical catalysts. In this context, we study enzymes with vitamin-derived cofactors, with metal ions, and Schiff base-forming enzymes. A particular focus is laid on the structural and kinetic characterization of enzymatic reaction intermediates by high-resolution X-ray crystallography, steady-state and transient kinetic methods, NMR spectroscopy and theoretical studies. Knowledge about the reaction mechanism is exploited to redesign enzymes for biocatalytic applications and for drug design. Our research addresses various thiamin diphosphate- (the vitamin B1 coenzyme) and flavin (the vitamin B2 coenzyme)-dependent enzymes. In this context, we are investigating the catalytic mechanism of bacterial and plant acetohydroxyacid synthases, which catalyze the first committed step of branched-chain amino acid biosynthesis. In another project, underlying principles of intramolecular electron transfer reactions and reversible membrane binding of pyruvate oxidases are being studied. We further characterize enzymes with key roles in cellular sugar metabolism including aldolases/transaldolases and transketolases. We are interested in the source of the different bond fission specificity in each enzyme family and study the reaction trajectory of both enzyme superfamilies by means of detailed transient kinetics, X-ray crystallography and DFT studies. One related aspect of our work is the mechanistic analysis of ring-opening reactions of cyclic sugar substrates at the active site of enzymes.

D. Selected peer-reviewed publications

Lehwess-Litzmann, A, Neumann, P, Parthier, C, Lüdtke, S, Golbik, R, Ficner R, **Tittmann, K** (2011) Twisted Schiff-base Intermediates and Substrate Locale Revise Transaldolase Mechanism. *Nature Chem Biol* 7, 678-684.

Meyer, D, Walter, L, Kolter, G, Pohl, M, Müller, M, **Tittmann, K** (2011) Conversion of pyruvate decarboxylase into an enantioselective carboligase with biosynthetic potential. *J Am Chem Soc* 133, 3609-3616.

Neumann, P, Weidner, A, Pech, A, Stubbs, MT, **Tittmann, K** (2008) Structural basis for membrane binding and catalytic activation of the peripheral membrane enzyme pyruvate oxidase from *E. coli*. *Proc Natl Acad Sci USA* 105, 17390-17395.

Kaplun, A, Binshtein, E, Vyazmensky, M, Steinmetz, A, Barak, Z, Chipman, D, **Tittmann, K**, Shaanan, B (2008) Glyoxylate carboligase lacks the canonical active site glutamate of thiamin-dependent enzymes. *Nature Chem Biol* 4, 113-118.

Wille, G, Meyer, D, Steinmetz, A, Hinze, E, Golbik, R, **Tittmann, K** (2006) The catalytic cycle of a thiamin diphosphate enzyme examined by cryocrystallography. *Nature Chem Biol* 2, 324-328.

E. Research Support (selection)

1. SFB 803 (DFG): "Functionality controlled by organization on and between membranes", 1/1/2009-12/31/2012. PI.

2. SFB 860 (DFG): "Integrative structural biology of dynamic macromolecular complexes", 1/7/2010-30/06/2014. PI.

3. FOR 1296 (DFG): "Diversity of Asymmetric Thiamine Catalysis ", 1/6/2010-31/05/2013. PI.

4. IRTG 1422 (DFG): "Metal Sites in Biomolecules: Structures, Regulation and Mechanisms", 1/4/2011-31/08/2015, PI.

F. Other activities

ERASMUS task force at Martin-Luther University Halle (-2008). Organization of international scientific conferences (2008 International Conference on Mechanisms and Physiology of Thiamine, 2012 Trends in Enzymology: Going beyond Frontiers).

G. Memberships and awards

Forschungsförderpreis, Martin-Luther University Halle-Wittenberg (1998), Luther medal of Martin-Luther University Halle-Wittenberg (2001), Dorothea Erxleben Award (best PhD thesis) of Martin-Luther University Halle-Wittenberg (2001), Research award for excellent basic research, Ministry of Education at Saxony-Anhalt (2005).

NAME	POSITION / TITLE
URLAUB, Henning	Professor, Group leader

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Free University Berlin, Germany	Diploma	1992	Biochemistry
Max Delbrück Center for Molecular Medicine, Berlin, Germany	Dr. rer. nat.	1993-1996	Protein Chemistry
University of Marburg, Germany	Postdoctoral fellow	1997 - 2000	RNA Biochemistry
Max Planck Institute for Biophysical Chemistry Göttingen, Germany	Postdoctoral fellow	2000-2004	Mass Spectrometry

B. Positions / Academic Appointments

2004-2010	Group leader, Bioanalytical Mass Spectrometry, MPI for Biophysical Chemistry
2010	Professor, University Göttingen, Group leader Bioanalytical Mass Spectrometry and Bioanalytics, Department of Clinical Chemistry, UMG, Göttingen

C. Major research interests

We are interested in developing analytical strategies that use state-of-the-art mass spectrometry in order to elucidate quantitative changes of proteins and their post-translational modifications. The proteins of interest are derived from various biological materials including tissues, cells, organelles and compartments. Our projects include, among others: (i) the identification of proteins that are associated with nucleosomes, in dependence upon various post-translational modifications of histones; (ii) the elucidation of novel Importin alpha/beta-dependent cargos in nuclear-cytoplasmic transport; (iii) unraveling the quantitative changes of the phosphoproteome of spliceosomal complexes in human and yeast cells; and (iv) an analysis of the b cell receptor dependent phosphoproteome and its malignant deregulation. More recently, in connection with my additional position at Goettingen University, we have become involved in clinical research projects at the University of Göttingen Medical Center; this work is focused on the preparation of samples from tissues and body fluids, and on proteome analyses of stem cells and the quantitative analysis of redox-mediated protein changes in heart failure. In addition to these "relative" quantification approaches, a major analytical focus is the determination of protein stoichiometry ("absolute" quantification) within native protein complexes; we are performing this by applying mass spectrometry to isolated spliceosomal complexes, synaptosomes and synaptic vesicles, prokaryotic ribosomes and nuclear pore complexes. An additional line of our mass-spectrometric research includes the determination of the spatial arrangement of components within protein-ligand complexes by the use of protein-protein and protein-nucleic acid crosslinking in combination with chemical probing (e.g. oxidative footprinting and mild glutaraldehyde treatment).

D. Selected peer-reviewed publications

Schmitzová J, Rasche N, Dybkov O, Kramer K, Fabrizio P, **Urlaub H**, Lührmann R, Pena V (2012) Crystal structure of Cwc2 reveals a novel architecture of a multipartite RNA-binding protein. *EMBO J* doi: 10.1038/emboj.2012.58 [Epub ahead of print].

Nikolov M, Stuetzer A, Mosch K, Krasauskas A, Soeroes S, Stark H, **Urlaub H***, Fischle W (2011) Chromatin affinity purification and quantitative mass spectrometry defining the interactome of histone modification patterns. *Mol Cell Proteomics*, in press, *co-corresponding author.

Oellerich T, Bremes V, Neumann K, Bohnenberger H, Dittmann K, Hsiao H-H, Engelke M, Schnyder T, Batista F, **Urlaub H***, Wienands J (2011) The B cell antigen receptor signal through a preformed transducer module of SLP65 and CIN85. *EMBO J*, in press, *co-corresponding author.

Kramer K, Hummel P, Hsiao HH, Luo X, Wahl M, **Urlaub H** (2011) Mass-spectrometric analysis of proteins cross-linked to 4-thio-uracil- and 5-bromo-uracil-substituted RNA. *Int J Mass Spec* 304, 184-194.

Schmidt C, Lenz C, Grote M, Lührmann R, **Urlaub H**. (2010) Determination of protein stoichiometry within protein complexes using absolute quantification and multiple reaction monitoring. *Anal Chem* 82, 2784-2796.

E. Research Support (selection)

1. SFB 860, INST 186/859-1: "Integrative structural biology of dynamic macromolecular assemblies", 01/07/2010-30/06/2014, PI on one project.
2. SFB 889, INST 186/907-1: "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Co-PI (with R. Jahn) on one project.
3. FOR 1680 UR 225/1-1: "Unravelling the procaryotic immune system", 01/01/2012-12/31/2014, PI on one project.

F. Other activities

2011, organizer (together with Juri Rappsilber) of EMBO practical course "Protein-protein and protein nucleic acid crosslinking and mass spectrometry"; 2009, 2011 co-organizer of "Proteomic Forum", Berlin; 2007 – 2012 organizer (together with Katrin Marcus and Bernhard Küster (from 2011)) of the 1st to 5th EU Summer School "Proteomic Basics"; 2004 - 2006 organizer (together with Katrin Marcus) of the 1st, 2nd and 3rd BMBF Summer School "Proteomic Basics".

G. Memberships and awards

Since 2011, Member of the Editorial Board of *Molecular Cellular Proteomics*; since 2007 member of the editorial board of *Journal of Proteomic*; 2007 - 2011 member of the executive board of the German Society of Proteome Research; 2006 – 2009 member of the scientific advisory board for Proteomics of Qiagen Company; since 2006 independent referee for the Landesstiftung Baden-Württemberg; Member of American Society for Mass Spectrometry (ASMS), German Society for Mass Spectrometry (DGMS), German Society for Proteome Research (DGPF), Society for Biochemistry and Molecular Biology (GBM), Goettingen Proteomic Forum (GPF).

NAME	POSITION / TITLE
WALTER, Lutz	Department head and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma	1992	Biology
University of Göttingen, Germany	Dr. rer. nat.	1994	Immunogenetics
University of Göttingen, Germany	Postdoctoral fellow	1994-1999	Genomics, Immunogenetics
University of Göttingen, Germany	Habilitation	2005	Immunology, Immunogenetics

B. Positions / Academic Appointments

1994-1999	Postdoctoral position, University of Göttingen, Germany
1999-2004	Group leader, University of Göttingen, Germany
2004-	Head of Department of Primate Genetics, German Primate Center, Leibniz Institute for Primate Research, Göttingen, Germany

C. Major research interests

Research in my group involves the biology of Natural Killer (NK) cells, their receptors and cognate ligands. In particular, we are interested in the genetic diversity of NK receptors and ligands and the role of this variability in infections with immunodeficiency virus in a non-human primate model of AIDS.

Further, we are studying changes of non-coding RNAs upon viral infections and we are exploring targeted delivery of RNA interference-inducing molecules for therapeutic use in viral infections and models of cancer.

D. Selected peer-reviewed publications

Rosner C, Kruse PK, Hermes M, Otto N, Walter L (2011) Rhesus macaque inhibitory and activating KIR3D interact with Mamu-A-encoded ligands. *J Immunol* 186, 2156-2163.

Brameier M, Herwig A, Renhardt R, Walter L, Gruber J (2011) Human box C/D snoRNAs with miRNA like functions: expanding the range of regulatory RNAs. *Nucleic Acids Res* 39, 657-686.

Abi-Rached L, Kuhl H, Roos C, ten Hallers B, Zhu B, Carbone L, de Jong PJ, Mootnick AR, Knaust F, Reinhardt R, Parham P, Walter L (2010) A Small, Variable and Irregular Killer cell Immunoglobulin-like Receptor (KIR) Locus Accompanies the Absence of MHC-C and MHC-G in Gibbons. *J Immunol* 184, 1379-1391.

Averdam A, Petersen B, Rosner C, Neff J, Roos C, Eberle M, Aujard F, Münch C, Schempp W, Carrington M, Shiina T, Inoko H, Knaust F, Coggill P, Sehra H, Beck S, Abi-Rached L, Reinhardt R, Walter L (2009) A novel system of polymorphic and diverse NK cell receptors in primates. *PLoS Genet* 5(10), e1000688.

Averdam A, Kuhl H, Sontag M, Becker T, Hughes AL, Reinhardt R, Walter L (2007) Genomics and diversity of the common marmoset monkey natural killer complex (NKC). *J Immunol* 178, 7151-7161.

E. Research Support (selection)

1. National Genome Research Network (BMBF): "RNomics of viral infections", 01/09/2008-31/08/2013. PI (Consortium partner).
2. Industrial cooperation: "Analysis of antibody dependent cellular cytotoxicity by Natural killer cells", 15/11/2009-14/11/2010.

NAME	POSITION / TITLE
WIENANDS, Jürgen	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Köln, Germany	Diploma	1989	Biology
Albert-Ludwigs-University of Freiburg, Germany	Dr. rer. nat.	1992	Immunology, Biochemistry
Preclinical Research Institute Sandoz, Basel, Switzerland	Postdoctoral Fellow	1992-1994	Immunology, Signal Transduction, Pharmaceutical Target Identification
Max Planck Institute for Immunobiology, University of Freiburg, Germany	Postdoctoral Fellow	1994-1996	Immunology, Biochemistry
University of Freiburg, Germany	Habilitation	2001	Immunology and Biochemistry

B. Positions / Academic Appointments

1996-2001	Group leader, Institute of Biology III, University of Freiburg, Germany
2001-2004	Full Professor for Biochemistry and Immunology, Institute of Biochemistry and Molecular Immunology, University of Bielefeld, Germany
2004-	Director, Full Professor for Immunology, Department of Cellular and Molecular Immunology, University of Göttingen, Germany

C. Major research interests

The development and function of B lymphocytes depends on signals emanating from their clonotypic antigen receptor (BCR). We are studying the molecular details of BCR signal transduction in health and disease using genetic, biochemical and microscopic imaging techniques. Following the identification of the central BCR effector protein SLP65 (for: SH2 domain-containing leukocyte adaptor of 65 kDa) we are now investigating the dynamic assembly of multimeric signaling platforms in BCR-stimulated B cells, and how these signalosomes shuttle between the cytosol and the plasma membrane during the generation of second messengers such as Ca²⁺. Several of the identified signaling proteins appeared to play a major role in human immunodeficiencies. Another focus is given to the elucidation of signaling differences that distinguish BCR activation in newly generated B cells from that in antigen-experienced (or memory) B cells. Upon antigen recall, memory B cells respond with increased efficiency, which provides the fundamental basis for vaccinations. However, memory B cell responses are only poorly understood. Collectively, we are aiming at a better understanding of primary and secondary antibody responses and how the underlying signal networks are disturbed in human diseases.

D. Selected peer-reviewed publications

Oellerich T, Bremes V, Neumann K, Bohnenberger H, Dittmann K, Hsiao H-H, Engelke M, Schnyder T, Batista FD, Urlaub H, **Wienands J** (2011) The B-cell antigen receptor signals through a preformed transducer module of SLP65 and CIN85. *EMBO J* 30, 3620-3634.

Engels N, König LM, Heemann C, Lutz J, Tsubata T, Griep S, Schrader V, **Wienands J** (2009) Recruitment of the cytoplasmic adaptor Grb2 to surface IgG and IgE provides antigen receptor-intrinsic costimulation to class-switched B cells. *Nat Immunol* 10, 1018-1025.

Stork B, Neumann K, Goldbeck I, Alers S, Kähne T, Naumann M, Engelke M, **Wienands J** (2007) Subcellular localization of Grb2 by the adaptor protein Dok-3 restricts the intensity of Ca²⁺ signaling in B cells. *EMBO J* 26, 1140-1149.

Stork B, Engelke M, Frey J, Horesjsi V, Hamm-Baarke A, Schraven B, Kurosaki T, **Wienands J** (2004) Grb2 and the non-T cell activation linker NTAL constitute a Ca²⁺-regulating signal circuit in B lymphocytes. *Immunity* 21, 681-691.

Engels N, Merchant M, Pappu R, Chan AC, Longnecker R, **Wienands J** (2001) Epstein-Barr virus latent membrane protein 2A (LMP2A) employs the SLP-65 signaling module. *J Exp Med* 194, 255-264.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 07/01/2010-06/30/2014. Co-PI with C. Griesinger.

2. Niedersächsisch-israelisches Gemeinschaftsvorhaben (Nieders. Vorab – Niedersächsisches Ministerium für Wissenschaft und Kultur): "Molecular Mechanisms of Lymphocyte Activation: Positive and negative regulation of Tec-family kinases by SLP- and Dok-family adaptor proteins", 12/01/2008-06/30/2012. Co-PI with H. Urlaub and D. Yablonski.

F. Other activities

Elected Full Member of the Advisory Board of the German Government, Central Commission on Biosafety (ZKBS); Member of the Advisory Board of the German Society of Immunology (DGfI); Coordinator of the PhD School *Current Concepts in Immunology* of the Academia for Immunology (DGfI); Chairman of the Study Group Biology of B Lymphocytes (DGfI); Elected Member of the Professional Council 201 of the DFG.

G. Memberships and awards

Memberships: The Henry Kunkel Society, Signal Transduction Society, German Society of Immunology, Göttingen Academy of Sciences

NAME	POSITION / TITLE
WIMMER, Ernst A.	Full Professor and Department Head

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Ludwigs-Maximilian-University (LMU), Munich, Germany	Diplom Biology	1991	Biology, Genetics
LMU, Munich, MPI Biophysical Chemistry, Göttingen, Germany, and Baylor College of Medicine, Houston, USA	Dr. rer. nat.	1995	Developmental Biology
Howard Hughes Medical Institute, The Rockefeller University, New York, USA	Postdoctoral Fellow/Associate	1995 - 1998	Developmental Biology

B. Positions / Academic Appointments

1999-2003	Assistant Professor, Department of Genetics, University Bayreuth, Germany
2003-	Full Professor for Developmental Biology and Department Head, Johann-Friedrich-Blumenbach-Institute for Zoology and Anthropology, Georg-August-University Göttingen, Germany

C. Major research interests

The research in the Department of Developmental Biology covers a variety of developmental processes (e.g. head development, brain development, limb development, segmentation, development of stink glands, and olfaction), their molecular basis, and their evolutionary conservation or diversification. In addition, novel approaches to insect pest management are developed using developmental genes and molecular biology tools. The animal model systems used at the department include a series of arthropods: insects (flies, beetles, bugs), crustaceans, and spiders.

The tritocerebral head segment of arthropods represents a segment that can have quite diverse morphologies. Depending on the arthropod clade, this segment carries diverse appendages: second-antenna in crustaceans, pedipalps in chelicerates, or has lost its appendages as intercalary segment of insects and myriapods. We ask functional questions on the evolutionary changes that led to the diversification and convergent evolution of the tritocerebral segment within the diverse arthropod clades. Beetles and ants are the most prolific producers of repellent and/or toxic compounds. Defensive substances are usually multifunctional. As repellents, toxicants, insecticides, or antimicrobics, they are directed against a large array of potential target organisms or may function for boiling bombardment or as surfactants. We want to understand the biosynthesis and controlled secretion of semiochemicals as well as the mechanisms of self-protection against toxic substances at a molecular level. The focus of the project in beetle olfaction will lay on the biological functions of odorant binding proteins (OBP) and sensory neuron membrane proteins (SNMPs) which are still largely unknown. Especially the interaction of OBPs or SNMPs with odorant receptors will be of key interest.

D. Selected peer-reviewed publications

The Tribolium Genome Consortium (2008) The genome of the model beetle and pest *Tribolium castaneum*. Nature 452, 949-955.

Schetelig MF, Caceres C, Zacharopoulou A, Franz G, **Wimmer EA** (2009) Conditional embryonic lethality to improve the sterile insect technique in *Ceratitis capitata* (Wiedemann; Diptera: Tephritidae). BMC Biology 7, 4.

Schetelig MF, Scolari F, Handler AM, Kittelmann S, Gasperi G, **Wimmer EA** (2009) Site-specific recombination for the modification of transgenic strains of the Mediterranean fruit fly *Ceratitis capitata*. Proc Natl Acad Sci USA 106, 18171–18176.

Schaeper ND, Pechmann M, Damen WG, Prpic NM, **Wimmer EA** (2010) Evolutionary plasticity of *collier* function in head development of diverse arthropods. Dev Biol 344, 363-76.

Ntini E, **Wimmer EA** (2011) Second order regulator Collier directly controls intercalary-specific segment polarity gene expression. Dev Biol 360, 403-414.

E. Research Support (selection)

1. SPP 1392 (DFG) "Integrative Analysis of Olfaction", 01.07.2009 – 20.06.2012. Co-PI (with S. Schütz and J. Schachtner): "Biological function of odorant binding proteins, their relation to odorant receptors and the post-metamorphic plasticity of the central olfactory pathway".

2. FOR 1234 (DFG): "iBeetle: Functional genomics of insect development and metamorphosis", 01.09.2010 - 31.08.2013. PI. "Revealing a genetic circuitry governing the development of the tritocerebral head segment".

3. Co-ordinated Research Project (CRP) of the International Atomic Energy Agency (IAEA) "Development and Evaluation of Improved Strains of Insect Pests for SIT", 01.05.2009 - 30.04.2014. PI "Site-specific recombination to improve transgenic pest strains for their use in SIT programs".

F. Other activities

Spokesperson of the GGNB doctoral program "Genes and Development"; spokesperson of the MSc program "Developmental, Neural, and Behavioral Biology"; GM insect working group of the European Food Safety Authority (EFSA); member in CRPs of the International Atomic Energy Agency (IAEA); executive director, Johann-Friedrich-Blumenbach-Institute of Zoology and Anthropology (2006- 2010); member of Marie-Curie Research Training Network ZONET (EU FP6).

G. Memberships and awards

Awards: Fulbright Foundation Travel Grant 1989/90; Boehringer Ingelheim Fonds Fellowship 1992-1994; EMBO Long Term Fellowship 1995; HFSP Long Term Fellowship 1996-1997; Science Prize 2000, awarded by the Universitätsverein Bayreuth; Robert Bosch Foundation 'Junior Professorship', 2000; EMBO Young Investigator Award 2001.

NAME	POSITION / TITLE
WODARZ, Andreas	Director and Professor

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Köln, Germany	Diploma	1990	Biology
University of Köln, Germany	Dr. rer. nat.	1993	Developmental Biology
Stanford University, USA	Postdoctoral Fellow	1994-1997	Cell- and Developmental Biology
University of Düsseldorf, Germany	Habilitation	2001	Cell- and Developmental Biology

B. Positions / Academic Appointments

1997-2001	Junior group leader, University of Düsseldorf, Germany
2001-2004	Assistant Professor, University of Düsseldorf, Germany
2004-2010	Associate (since 2009 Full) Professor of Stem Cell Biology, DFG Research Center Molecular Physiology of the Brain, University of Göttingen, Germany
2010-	Director, Department of Anatomy and Cell Biology, University of Göttingen Medical Center

C. Major research interests

The research activities in our lab focus on different aspects of the asymmetric division of neural stem cells and the molecular control of cell polarity. Asymmetric cell division is a fundamental mechanism for the generation of cell diversity in complex organisms. At the same time, asymmetric cell division is essential for the balance between stem cells and differentiating cells in an organism. Disturbances of this balance can cause severe diseases, including cancer and neurodevelopmental disorders. Asymmetric cell division is intricately linked to the control of apical-basal cell polarity, which is investigated in a second research focus. The establishment and maintenance of apical-basal cell polarity is connected to the regulation of planar cell polarity (PCP) and cell adhesion, especially in epithelial tissues. In this context, we investigate the function of the evolutionarily conserved Wnt signal transduction pathway in the regulation of cell adhesion and PCP.

The model organism of our research is mainly the fruit fly *Drosophila melanogaster*, as it is easily accessible to genetic manipulation and is very well suited for cell biological analyses using high-resolution light microscopy.

D. Selected peer-reviewed publications

Gailite I, Egger-Adam D, **Wodarz A** (2012) The phosphoinositide-associated protein Rush hour regulates endosomal trafficking in *Drosophila*. *Mol Biol Cell* 23, 433-447.

Morawe T, Honemann-Capito M, von Stein W, **Wodarz A** (2011) Loss of the extraproteasomal ubiquitin receptor Rings lost impairs ring canal growth in *Drosophila* oogenesis. *J Cell Biol* 193, 71-80.

Krahn MP, Bückers J, Kastrop L, **Wodarz A** (2010) Formation of a Bazooka-Stardust complex is essential for plasma membrane polarity in epithelia. *J Cell Biol* 190, 751-760.

Krahn MP, Klopfenstein D, Fischer N, **Wodarz A** (2010) Membrane targeting of Bazooka/PAR-3 is mediated by direct binding to phosphoinositide lipids. *Curr Biol* 20, 636-642.

Krahn MP, Egger-Adam D, **Wodarz A** (2009) PP2A antagonizes phosphorylation of Bazooka by PAR-1 to control apical-basal polarity in dividing embryonic neuroblasts. *Dev Cell* 16, 901-908.

E. Research Support (selection)

1. Research Center 103 (DFG): "Molecular Physiology of the Brain", 10/15/2004-09/30/2014. PI on one project.
2. SFB 523 (DFG): "Protein- and membrane transport between cellular compartments", 01/01/2006-12/31/2008. PI on one project.
3. FOR 942 (DFG) "Wnt-associated signaling pathways in development and tumor progression", 01/01/2008-03/31/2014. PI on one project.
4. FOR 1756 (DFG) "Functional dynamics of cell contacts in cellular assemblies and migratory cells", 08/01/2011-07/31/2014. PI on one project.

F. Other activities

Steering Board Member and coordinator of the research field B1 „From neurogenesis to synaptogenesis“ of the DFG Research Center for Molecular Physiology of the Brain (CMPB) at the Georg-August-University Göttingen, Executive Board Member Göttingen Center for Molecular Biosciences (GZMB), Member of the commission for structural development and finances of the University of Göttingen Medical Center.

G. Memberships and awards

Memberships: Gesellschaft für Entwicklungsbiologie, Gesellschaft für Genetik, Deutsche Gesellschaft für Zellbiologie.

Awards: Boehringer Ingelheim Fonds predoctoral fellowship (1990), DFG postdoctoral research fellowship (1994).

Anlage 42 - Teaching faculty of the MSc/PhD Program "Neurosciences" - Overview

Faculty member	faculty member since	Institution
Prof. Dr. med. Matthias Bähr	2001	Uni-Med
Prof. Dr. rer. nat. Thomas Bayer	2008	Uni-Med
Prof. Dr. rer. nat. Nils Brose	2001	MPI-em
Prof. Dr. med. Wolfgang Brück	2006	Uni-Med
Camin Dean, Ph.D.	2010	ENI-G
Prof. Dr. med. vet. Hannelore Ehrenreich	2008	MPI-em
Dr. rer. nat. Stefan Eimer	2006	ENI-G
Prof. Dr. med. Wolfgang Engel	2000	Uni-Med
Prof. Dr. rer. nat. André Fiala	2008	Uni-Bio
Prof. Dr. rer. nat. André Fischer	2007	ENI-G
Prof. Dr. med. Alexander Flügel	2010	Uni-Med
Prof. Dr. rer. nat. Gabriele Flügge	2000	DPZ
Prof. Dr. rer. nat. Jens Frahm	2000	MPI-bpc
Prof. Dr. rer. nat. Tim Friede	2010	Uni-Med
Prof. Dr. rer. nat. Eberhard Fuchs	2000	DPZ
Prof. Dr. rer. nat. Theo Geisel	2004	MPI-ds/Uni-Phy
Prof. Dr. rer. nat. Martin Göpfert	2008	Uni-Bio
Prof. Dr. med. Uwe-Karsten Hanisch	2008	Uni-Med
Prof. Dr. rer. nat. Ralf Heinrich	2002	Uni-Bio
Prof. Dr. rer. nat. Stefan Hell	2010	MPI-bpc
Prof. Dr. rer. nat. Michael Hörner	2000	Uni-Bio
PD Dr. med. Swen Hülsmann	2000	Uni-Med
Prof. Dr. rer. nat. Reinhard Jahn	2000	MPI-bpc
Prof. Dr. rer. nat. Hubertus Jarry	2002	Uni-Med

Prof. Dr. rer. nat. Siegrid Löwel	2011	Uni-Bio
Dr. rer. nat. Till Marquardt	2007	ENI-G
Prof. Dr. med. Tobias Moser	2001	Uni-Med
Prof. Klaus-Armin Nave, Ph.D.	2000	MPI-em
Prof. Dr. rer. nat. Erwin Neher	2000	MPI-bpc
PD Dr. Luis Pardo	2009	MPI-em
Prof. Dr. med. Walter Paulus	2000	Uni-Med
Prof. Dr. med. Diethelm W. Richter	2000	Uni-Med
PD Dr. med. Michael Rickmann	2000	Uni-Med
Prof. Dr. rer. nat. Silvio Rizzoli	2008	ENI-G
PD Dr. rer. nat. Moritz Rossner	2010	MPI-em
Prof. Dr. rer. nat. Dr. med. Detlev Schild	2000	Uni-Med
Dr. rer. nat. Dr. med. Oliver Schlüter	2007	ENI-G
Prof. Dr. rer. nat. Mikael Simons	2008	MPI-em/Uni-Med
Prof. Dr. med. Jochen Staiger	2010	Uni-Med
Dr. rer. nat. Judith Stegmüller	2008	MPI-em
Prof. Dr. rer. biol. hum. Nicole v. Steinbüchel	2007	Uni-Med
PD Dr. med. Anastassia Stoykova	2002	MPI-bpc
Prof. Dr. rer. nat. Walter Stühmer	2000	MPI-em
Prof. Dr. rer. nat. Andreas Stumpner	2002	Uni-Bio
Prof. Dr. rer. nat. Stefan Treue	2001	DPZ/Uni-Bio
Prof. Dr. rer. nat. Andreas Wodarz	2006	Uni-Med
Prof. Dr. phil. nat. Fred Wolf	2004	MPI-ds/Uni-Phy
Prof. Dr. rer. nat. Fred Wouters	2001	ENI-G

NAME BÄHR, Mathias	POSITION / TITLE Head, Department of Neurology, University Medical Centre Göttingen, Germany
-----------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Department of Neurology, Eberhard Karls University in Tübingen, Germany	M.D.	1986	Medicine
Residency in the Departments of Neurology, Universities of Düsseldorf and Tübingen, Germany	Board Certification in Neurology	1993	Neurology
Department of Neurology, Eberhard Karls University in Tübingen, Germany	Habilitation/ Professorial qualification	1993	Neurology

B. Positions / Academic Appointments

1986-1987	Department of Neurology, University Düsseldorf (Prof. H.J. Freund) - Research Assistant
1987-1989	Max-Planck-Institute for Developmental Neurobiology (Prof. F. Bonhoeffer) - DFG-Fellow
10/1988-4/1989	Washington-University St. Louis, Department of Anatomy and Neurobiology (Prof. R.P. Bunge) - (Max-Planck-Fellowship)
1993	Board Certification in Neurology Qualification as a Lecturer for Neurology (Habilitation)
1994-1996	Department of Neurology, University of Tübingen Registrar (Oberarzt)
1996-2001	Department of Neurology, University of Tübingen Associate Professor (Schilling-Foundation-Professorship)
1998-2001	Vice-chairman (Leitender Oberarzt und Stellvertreter des ärztlichen Direktors) Department of Neurology
Since 4/2001-present	Head, Department of Neurology, University Medical Centre Göttingen, Germany

C. Major research interests

The main interest of the research in my lab has been the analysis of axonal and neuronal degeneration in stroke, aggregation disorders and inflammation. In the latter field we have established new model systems to mimick human optic neuritis in various rat and mouse strains, analyse the cellular and molecular pathophysiology and develop new neuroprotective therapy strategies. We have evaluated current established immunomodulatory and immunosuppressive therapies and combined them with new treatment concepts. We could show that a combination of immunosuppressive and protective therapies may lead to improved functional outcome after optic neuritis, i.e. recovery of visual functions measured by ERG and VEP.

D. Selected peer-reviewed publications

Frank T, Klinker F, Falkenburger BH, Laage R, Lühder F, Göricke B, Schneider A, Neurath H, Desel H, Liebetanz D, **Bähr M**, Weishaupt JH (2012) Pegylated granulocyte colony-stimulating factor conveys long-term neuroprotection and improves functional outcome in a model of Parkinson's disease. *Brain*. 2012 Mar 16. [Epub ahead of print] PubMed PMID: 22427327

Koch JC, Knöferle J, Tönges L, Michel U, **Bähr M**, Lingor P (2011) Imaging of rat optic nerve axons in vivo. *Nat Protoc*. 2011 Nov 3;6(12):1887-96. doi: 10.1038/nprot.2011.403. PubMed PMID: 22051801

Krumova P, Meulmeester E, Garrido M, Tirard M, Hsiao HH, Bossis G, Urlaub H, Zweckstetter M, Kügler S, Melchior F, **Bähr M**, Weishaupt JH (2011) Sumoylation inhibits alpha-synuclein aggregation and toxicity. *J Cell Biol*. 2011 Jul 11;194(1):49-60. PubMed PMID: 21746851; PubMed Central PMCID: PMC3135405

Knöferle J, Koch JC, Ostendorf T, Michel U, Planchamp V, Vutova P, Tönges L, Stadelmann C, Brück W, **Bähr M**, Lingor P (2010) Mechanisms of acute axonal degeneration in the optic nerve in vivo. *Proc Natl Acad Sci U S A*. 2010 Mar 30;107(13):6064-9. Epub 2010 Mar 15. PubMed PMID: 20231460; PubMed Central PMCID: PMC2851885

Deeg S, Gralle M, Sroka K, **Bähr M**, Wouters FS, Kermer P (2010) BAG1 restores formation of functional DJ-1 L166P dimers and DJ-1 chaperone activity. *J Cell Biol*. 2010 Feb 22;188(4):505-13. Epub 2010 Feb 15. PubMed PMID: 20156966; PubMed Central PMCID: PMC2828921

E. Research Support (selection)

DFG-Research Center and Cluster of Excellence (CNMPB)

EU – Neugene, Neurest, NeuroNe

Schilling-Foundation

BMBF – DZNE

F. Other activities

2006-2008: President of the German Neuroscience Society

2002-2006: Chair, Institute for Multiple Sclerosis Research Göttingen

Reviewer (Journals) Editorial Board: *J. Neuroscience*; *Neurodegenerative Disorders*; *Neurobiology of Disease*

Reviewer (Grants): German Research Foundation, European Science Foundation, Israel Science Foundation, Science Foundation of Ireland

G. Memberships and awards

Member of the DFG panel Neurosciences

Member of the National Stem cell approval committee

Member of the GIF Board

Member of the Leopoldina and Göttingen Academy of Neurosciences

Member of the Royal Society of Physicians

Member of the ENI steering committee

Elected Member of the Senate of the Georg August University (2005)

Heinrich-Pette-Award, German Society for Neurology (1998)

Herrmann und Lilly Schilling Foundation Professorship (1996)

NAME BAYER, Thomas	POSITION / TITLE Head Molecular Psychiatry / Prof.
-----------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Stuttgart, Stuttgart, Germany	Diploma	1984-1989	Biology
University of Cologne, Cologne, Germany	Ph.D.	1989-1993	Development
University of Bonn, Bonn, Germany	Postdoc	1993-1997	Neuropathology
University of Bonn, Bonn, Germany	Habilitation	2000	Neurobiology

B. Positions / Academic Appointments

1993-1997	Postdoc, University of Bonn, Bonn, Germany
1997-2003	Lab leader, University of Bonn, Bonn, Germany
2003-20007	Lab leader, Saarland University Medical Center, Homburg, Germany
2007-	Professor, Georg-August University of Göttingen, Göttingen, Germany

C. Major research interests

Pathogenesis of Alzheimer's disease, neuronal cell death mechanisms, preclinical proof-of-concept studies; characterization and development of mouse models for Alzheimer's disease (neuropathology, anatomy, biochemistry, behavioural tests), preclinical therapy studies in mouse models, blood and CSF biomarker analysis, development and validation of therapeutic concepts.

D. Selected peer-reviewed publications

Wittnam JL, Portelius E, Zetterberg H, Gustavsson MK, Schilling S, Koch B, Demuth H-U, Blennow K, Wirths O, **Bayer TA** (2012) Pyroglutamate Amyloid beta Aggravates Behavioral Deficits in Transgenic Amyloid Mouse Model for Alzheimer Disease. *J. Biol. Chem.*, 287, 8154–8162

Jawhar S, Wirths O, Schilling S, Graubner S, Demuth HU, **Bayer TA** (2011) Overexpression of glutaminyl cyclase, the enzyme responsible for pyroglutamate abeta formation, induces behavioral deficits and glutaminyl cyclase knock-out rescues the behavioral phenotype in 5XFAD mice. *Journal of Biological Chemistry* 286, 4454–4460

Wirths O, Erck E, Martens H, Harmeier A, Geumann C, Jawhar S, Kumar S, Multhaup G, Walter J, Ingelsson M, Degerman-Gunnarsson M, Kalimo H, Huitinga I, Lannfelt L, **Bayer TA** (2010) Identification of low molecular weight pyroglutamate Abeta oligomers in Alzheimer disease: a novel tool for therapy and diagnosis pyroglutamate Abeta oligomers in Alzheimer disease: a novel tool for therapy and diagnosis. *J. Biol. Chem.*, 53, 41517-24

Venkataramani V, Rossner C, Iffland L, Schweyer S, Tamboli I, Walter J, Wirths O, **Bayer TA** (2010) The histone deacetylase inhibitor valproic acid inhibits cancer cell proliferation via down-regulation of the Alzheimer amyloid precursor protein. *J. Biol. Chem.*, 285, 10678-10689

Bayer TA, Schäfer S, Simons A, Kemmling, Kamer T, Tepest R, Eckert A, Schüssel K, Eikenberg O, Sturchler-Pierrat, Abramowski D, Staufenbiel, Multhaup G (2003) Dietary Cu stabilizes brain SOD-1 activity and reduces amyloid A β production in APP23 transgenic mice. *PNAS*, 100, 14187-14192

E. Research Support (selection)

1. International Ph.D. Graduate School, funded by the Marie Curie Action Program of the European Commission (FP6) «Neurodegeneration in Alzheimer's disease – mechanism, consequence and therapy»; coordinator (2006-2011).
2. Federal ministry of science; competence program neurodegenerative disease (together with Claus Pietrzik, University Mainz), «The role of A β -aggregation on blood brain barrier function» (2011-2013); Co-investigator.
3. Federal ministry for economy; R&D program together with Synaptic Systems GmbH (Göttingen); development of a novel ELISA test for Alzheimer's disease (2009-2011); co-investigator.

F. Other activities

Personal tutor of the Studienstiftung at the Georg-August-University Göttingen; scientific advisory boards: Alzheimer Research Initiative, Düsseldorf; Alzheimer Foundation Göttingen, University Medicine Göttingen; Uppsala Berzelii Technology Centre for Neurodiagnostics, University of Uppsala.

G. Memberships and awards

Memberships: Editorial Board Member von „the Journal of Biological Chemistry“; Neurowissenschaftliche Gesellschaft (NWG); European College of Neuropharmacology (ECNP).

Awards: 2000 NARSAD Young Investigator Award (National Alliance for Research on Schizophrenia and Affective Disorders); Research prize of the „ University Clinics at Homburg“ 2004; Award of the International Copper Association (2005 und 2007); Award of the European Copper Institute (2006); 2010, Award for “Life scientific achievement in Alzheimer disease and copper research”; 2011, innovation award of the “Landkreis Göttingen” “Science and Education“: Passive immunization as therapy for Alzheimer dementia.

NAME BROSE, Nils	POSITION / TITLE Director and Professor
---------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Tübingen, Germany	Pre-Diploma	1983	Biochemistry
University of Oxford, UK	M.Sc.	1987	Physiology
University of Munich (LMU), Germany	Dr. rer. nat.	1990	Biology
Salk Institute, La Jolla, CA, USA	Postdoc	1991-1993	Neuroscience
UTSW Medical Center, Dallas, TX, USA	Postdoc	1993-1995	Neuroscience

B. Positions / Academic Appointments

1995-2001	Research Group Leader, Departments of Molecular Neurobiology and Neurogenetics, Max Planck Institute of Experimental Medicine, Göttingen, Germany
since 2001	Director, Department of Molecular Neurobiology, Max Planck Institute of Experimental Medicine, Göttingen, Germany
since 2002	Adjunct Professor of Biochemistry, Medical School, University of Göttingen, Germany
since 2005	Adjunct Professor of Biochemistry, Faculty of Biology, University of Göttingen, Germany

C. Major research interests

We combine biochemical, cell biological, mouse genetic, and physiological approaches to explore the molecular basis of nerve cell development and function. In this regard, (i) we study the role of protein ubiquitylation and SUMOylation as key regulatory principles in nerve cell differentiation and function, (ii) we study the role of synaptic cell adhesion proteins in the maturation, function, and plasticity of synapses between nerve cells, and (iii) we examine the molecular mechanisms by which presynaptic transmitter release is regulated. In several instances, we explore the role that aberrations of these processes play in neuropsychiatric disorders such as autism or schizophrenia.

D. Selected Peer-Reviewed Publications

Herzog E, Nadrigny F, Silm K, Biesemann C, Helling I, Bersot T, Steffens H, Schwartzmann R, Nägerl UV, El Mestikawy S, Rhee J-S, Kirchhoff F, **Brose N** (2011) In vivo imaging of inter-synaptic vesicle exchange using VGLUT1^{Venus} knock-in mice. *J Neurosci* 31, 15544-15559

Kawabe H, Neeb A, Dimova K, Young SM Jr, Takeda M, Katsurabayashi S, Mitkovski M, Malakhova OA, Zhang D-E, Umikawa M, Kariya K, Goebbels S, Nave K-A, Rosenmund C, Jahn O, Rhee J-S, **Brose N** (2010) Regulation of Rap2A by the ubiquitin ligase Nedd4-1 controls neurite development in cortical neurons. *Neuron* 65, 358-372

Jamain S, Radyushkin K, Hammerschmidt K, Granon S, Boretius S, Varoqueaux F, Ramanantsoa N, Gallego J, Ronnenberg A, Winter D, Frahm J, Fischer J, Bourgeron T, Ehrenreich H, **Brose N** (2008) Reduced social interaction and ultrasonic communication in a mouse model of monogenic heritable autism. *Proc Natl Acad Sci USA* 105, 1710-1715

Jockusch W, Speidel D, Sigler A, Sørensen J, Varoquaux F, Rhee J-S, **Brose N** (2007) CAPS-1 and CAPS-2 are essential synaptic vesicle priming proteins. *Cell* 131, 796-808

Varoquaux F, Aramuni G, Rawson RL, Mohrmann R, Missler M, Gottmann K, Zhang W, Südhof TC, **Brose N** (2006) Neuroligins determine synapse maturation and function. *Neuron* 51, 741-754

E. Research Support (Current)

1. Consortium EUROSPIN (EU): 'Synaptic protein networks in neurological and psychiatric diseases', 01/01/2010-12/31/2013. PI (Consortium Coordinator).
2. Consortium SynSys (EU): 'Synaptic systems: dissecting brain function in health and disease', 07/01/2010-06/30/2014. PI (Consortium Partner).
3. SFB 889 (DFG): 'Cellular mechanisms of sensory processing', 01/01/2011-12/31/2014. Co-PI on one project (with J.-S. Rhee).
4. SPP 1365 (DFG): 'Ubiquitin family network', 05/01/2011-04/30-2014. Co-PI on one project (with H. Kawabe).
5. IMI Consortium EU-AIMS (EU): 'Autism research in Europe', 04/01/2012-03/31/2017. PI (Consortium Partner).

F. Other Activities (Current)

Minerva Foundation Fellowship Committee (Chair) (since 2005), Alexander von Humboldt Foundation Central Selection Committee (since 2010), Scientific Advisory Board of the Institute of Biology at Ecole Normale Supérieure Paris (since 2011), EMBO Membership Committee (since 2012), Scientific Advisory Board of the Leibniz Institute of Molecular Pharmacology Berlin (since 2012).

G. Memberships and Awards

Memberships: EMBO

Awards: E.P. Abraham Cephalosporin Fund Fees Scholarship, The Queen's College, Oxford, UK (1986), Florey European Scholarship, The Queen's College, Oxford, UK (1986), Helmholtz Fellowship 'Neurobiology', German Federal Ministry for Research and Technology, Bonn, Germany (1995-1997), Gerhard Hess Prize of the DFG, Bonn, Germany (1997-2002), Heisenberg Fellowship of the DFG, Bonn, Germany (1998-2001).

NAME BRÜCK, Wolfgang	POSITION / TITLE Professor of Neuropathology
-------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University Medical Center Göttingen	Habilitation	1996	Neuropathology
University Medical Center Göttingen	PhD (Dr. med.)	1990	Neuropathology
University Medical Center Göttingen	Specialist in Neuropathology	1988-1994	Neuropathology
Medical school, Johannes Gutenberg University, Mainz, Germany	Medical license	1980-1986	Medicine

B. Positions / Academic Appointments

1996-2002	Associate Professorships for Neuropathology in the Departments of Neuropathology, Humboldt University, Charité, Berlin, and University Medical Center Göttingen, Germany
Since 2002	Director of the Department of Neuropathology, University of Göttingen, Germany
Since 2005	Acting Dean of Research in the Faculty of Medicine, University of Göttingen

C. Major research interests

Immunopathology of multiple sclerosis

Brain-specific mechanisms of immune response in multiple sclerosis

Axonal damage in inflammatory demyelination and mechanisms of remyelination

Mechanisms and consequences of microglial activation

D. Selected peer-reviewed publications

Kuhlmann T, Remington L, Maruschak B, Owens T, Brück W (2007) Nogo-A is a reliable oligodendroglial marker in human and mouse adult CNS as well as in demyelinated lesions. *J. Neuropathol. Exp. Neurol.*, 66: 238-246

Albert M, Antel J, Brück W, Stadelmann C (2007) Extensive cortical remyelination in patients with chronic multiple sclerosis. *Brain Pathol.*, 17: 129-138

Metz I, Lucchinetti CF, Openshaw H, Garcia-Merino A, Lassmann H, Freedman MS, Azzarelli B, Kolar OJ, Atkins HL, Brück W (2007) Autologous hematopoietic stem cell transplantation fails to stop demyelination and neurodegeneration in multiple sclerosis. *Brain* 130: 1254-1262

Jack C, Antel J, Brück W, Kuhlmann T (2007) Contrasting potential of nitric oxide and peroxynitrite to mediate oligodendrocyte injury in multiple sclerosis. *Glia*, 55: 926-934

Schwartz M, Butovsky O, Brück W, Hanisch UK (2006) Microglial phenotype: Is the commitment reversible? *Trends Neurosci.*, 29: 68-74

NAME DEAN, Camin	POSITION / TITLE Group Leader
---------------------	----------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Arizona, Tucson, USA	B.S./ B.S.	1989-1994	Molecular & Cell Biology, Mathematics
University of California, Berkeley, USA	Ph.D.	1999-2003	Molecular & Cell Biology, Neuroscience
University of Wisconsin, Madison, USA	Postdoctoral Fellow	2004-2010	Neuroscience

B. Positions / Academic Appointments

2010-present	Group Leader, European Neuroscience Institute, Göttingen, Germany
--------------	---

C. Major research interests

Our lab is interested in the mechanisms by which individual synapses, neurons and circuits dynamically adjust their transmission properties in response to changes in neuronal network activity.

To accomplish this, neurons signal to each other not only unidirectionally via classical pre to post-synaptic transmission, but also bidirectionally via pre or post-synaptic release of neuropeptides and neurotrophins. This bidirectional channel of communication is essential for the modulation of synapse and circuit strength, via regulation of distinct membrane fusion events on both sides of the synapse, including synaptic vesicle exocytosis, post-synaptic receptor recycling, and adhesion molecule recycling.

We investigate the mechanisms by which these trans-synaptic signaling events are regulated, at the level of single synapses, single neurons and neuronal networks, using a combination of live imaging approaches, electrophysiology, and biochemistry in neuronal cell culture and brain slices.

Our overall goal is to understand how neurons communicate changes in activity to affect circuit function, and ultimately behavior, during learning and memory acquisition, or to counteract aberrant brain states such as seizure activity.

D. Selected peer-reviewed publications

Dean C, Dunning FM, Liu H, Bomba-Warczak E, Martens H, Bharat V, Ahmed S, Chapman ER (2012) Axonal and dendritic synaptotagmin isoforms revealed by a pHluorin-syt functional screen. Mol. Biol. Cell. 2012, in press

Dean C, Liu H, Staudt T, Stahlberg MA, Vingill S, Bückers J, Kamin D, Engelhardt J, Jackson MB, Hell SW, Chapman ER (2012) Distinct subsets of syt-IV/ BDNF vesicles are sorted to axons versus dendrites and recruited to synapses by activity. J. Neurosci. 2012 Apr 18;32(16):5398-5413

Zhang G, Bai H, Zhang H, **Dean C**, Wu Q, Li J, Guariglia S, Meng Q, Cai D (2011) Neuropeptide exocytosis involving synaptotagmin-4 and oxytocin in hypothalamic programming of body weight and energy balance. Neuron. 2011 Feb 10;69(3):523-35

Lee H, **Dean C**, Isacoff E (2010) Alternative splicing of neuroligin regulates the rate of presynaptic differentiation. J Neurosci. 2010 Aug 25;30(34):11435-46

Liu H, **Dean C**, Arthur CP, Dong M, Chapman ER (2009) Autapses and networks of hippocampal neurons exhibit distinct synaptic transmission phenotypes in the absence of synaptotagmin I. *J. Neurosci.* 2009 Jun 10;29(23):7395-403

Dean C, Liu H, Dunning FM, Chang PY, Jackson, MB, Chapman, ER (2009) Synaptotagmin-IV modulates synaptic function and LTP by regulating BDNF release. *Nature Neurosci.* 2009 Jun 12(6):767-76

Zhang Z, Bhalla A, **Dean C**, Chapman ER, Jackson MB (2009) Synaptotagmin IV: a multifunctional regulator of peptidergic nerve terminals. *Nat. Neurosci.* 2009 Feb;12(2):163-71

Dong M, Yeh F, Tepp WH, **Dean C**, Johnson EA, Janz R, Chapman ER (2006) SV2 is the protein receptor for botulinum neurotoxin A. *Science.* 2006 Apr 28;312(5773):592-6

Dean C, Scholl FG, Choih J, DeMaria S, Berger J, Isacoff E, Scheiffele P (2003) Neurexin mediates the assembly of presynaptic terminals. *Nature Neurosci.* 2003 Jul;6(7):708-16

E. Research Support (selection)

1. Sofja Kovalevskaja Award (Alexander von Humboldt Foundation): "Modulation of synaptic plasticity and circuit function by regulation of neurotrophin exocytosis", 8/1/2009-7/31/2013 (declined continuation of award as of 3/31/2011).

2. ERC Starting Grant (ERC): "Modulation of synaptic plasticity and circuit function by regulation of neurotrophin exocytosis", 4/1/2011-3/31/2016.

3. DFG Grant: "Localization and function of synaptotagmin isoforms and regulation of dense core vesicle fusion in hippocampal neurons.", 2/1/2012-1/31/2015.

4. SFB 889 (DFG): "The role of synaptotagmins in olfactory processing", 2/1/2012-12/31/2014.

5. ENC-Network (EU): "Regulation of receptor recycling by synaptotagmins in neuronal dendrites", 8/1/2012-7/31/2015. Co-PI (partner with David Perrais, University of Bordeaux).

NAME EHRENREICH, Hannelore	POSITION / TITLE Adjunct Professor of Biology and Psychology
-------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Göttingen	Habilitation	1994	Neurology, Psychiatry, Neuroendocrinology
NIH, Bethesda, MD, USA	Postdoctoral Fellow	1989- 1991	NIAID (Dr. A.S. Fauci)
University of Munich	Doctor of Medicine	1989	
University of Munich	Graduation from Medicine	1987	
University of Munich	Clinical Fellow	1984- 1986	Department of Internal Medicine
Max Planck Institute of Psychiatry, Munich	Research Fellow	1982- 1984	
University of Munich	Doctor of Veterinary Medicine	1981	
University of Munich	Clinical Fellow	1980- 1981	Veterinary Gynaecology & Obstetrics
Universities of Hannover and Munich	Graduation from Veterinary Medicine	1980	

B. Positions / Academic Appointments

2008	Adjunct Professor of Biology, University of Göttingen
2004	Board of Certificate for Psychotherapy
1998	Adjunct Professor of Psychiatry and Neurology, University of Göttingen
1996-2003	Consultant (Oberarzt) for Neurology & Psychiatry, University of Göttingen
1995-	Head, Division of Clinical Neuroscience, MPI-em
1995	Board Certificate for Neurology & Psychiatry, Göttingen
1992-1995	Residency, Departments of Neurology & Psychiatry, University of Göttingen
1987-1988	Residency, Department of Neurology, University of Munich

C. Major research interests

Translational Neuroscience

Molecular-cellular basis of neuropsychiatric diseases with focus on mechanisms of disease and on endogenous neuroprotection/neuroregeneration (erythropoietin/EPO variants)

Clinical research on neuroprotection/neuroregeneration in acute (ischemia/hypoxia, neurotrauma) and chronic brain diseases (schizophrenia, autism, MS, alcoholism)

Phenotype-based genetic association studies (PGAS) as a tool to understand the genotype contribution to (disease) phenotypes

D. Selected peer-reviewed publications

Hagemeyer N, Goebbels S, Papiol S, Kästner A, Hofer S, Begemann M, Gerwig UC, Boretius S, Wieser GL, Ronnenberg A, Gurvich A, Heckers SH, Frahm J, Nave KA, **Ehrenreich H** (2012) A myelin gene causative of a catatonia-depression syndrome upon aging. *EMBO Molecular Medicine*, *in press*

Ribbe K, Ackermann V, Schwitulla J, Begemann M, Papiol S, Grube S, Sperling S, Friedrichs H, Jahn O, Sillaber I, Gefeller O, Krampe H, **Ehrenreich H** (2011) Prediction of the risk of comorbid alcoholism in schizophrenia by interaction of common genetic variants in the corticotropin releasing factor system. *Arch Gen Psych*, 68: 1247-56

Wüstenberg T, Begemann M, Bartels C, Gefeller O, Stawicki S, Hinze-Selch D, Mohr A, Falkai P, Aldenhoff JB, Knauth M, Nave KA, **Ehrenreich H** (2011) Recombinant human erythropoietin delays loss of gray matter in chronic schizophrenia. *Molecular Psychiatry*, 16: 26-36

Begemann M, Klaus S, Papiol S, Malzahn D, Krampe H, Ribbe K, Friedrichs H, Radyushkin KA, El-Kordi A, Benseler F, Hannke K, Sperling S, Schwerdtfeger D, Thanhhäuser I, Gerchen MF, Ghorbani M, Gutwinski S, Hilmes C, Leppert R, Ronnenberg A, Sowislo J, Stawicki S, Stödtke M, Szuszies C, Reim K, Riggert J, Falkai P, Bickeböller H, Nave KA, Brose N, **Ehrenreich H** (2010) Complexin2 gene polymorphisms modify cognitive performance in schizophrenia. *Arch Gen Psych*, 67: 879-88

Ehrenreich H, Hinze-Selch D, Stawicki S, Knolle-Veentjer S, Aust C, Wilms S, Heinz G, Erdag S, Jahn H, Degner D, Ritzen M, Mohr A, Knauth M, Wagner M, Schneider U, Bohn M, Huber M, Czernik A, Pollmächer M, Maier W, Sirén A-L, Klosterkötter J, Falkai P, Rütther E, Aldenhoff JB, Krampe H (2007) Improvement of cognitive functions in chronic schizophrenic patients by recombinant human erythropoietin. *Molecular Psychiatry*, 12, 206-20

E. Research Support (selection)

2011-2015: Schizophrenia. Funding source: EU-FP7 ERANET Neuron

2007-2017: Forschungszentrum CMPB: Schizophrenia. Funding source: DFG

2009-2012: MPG Grant (GRAS), Schizophrenia

2009-2011: Bipolar Disease. Funding source: BWiM-ZIM

F. Other activities

G. Memberships and awards

2010- Member of the Scientific Advisory Board, German Primate Center

2003- Member of the Advisory Board, Medical University Hannover

2002- Member of several US Advisory Boards Neuroprotection/Neuroregeneration

2000-2002: Vice President Georg August University Göttingen

NAME EIMER, Stefan	POSITION / TITLE Independent group leader/ Dr. rer. nat.
-----------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Bayreuth, Germany	Diploma	1998	Biochemistry
Ludwig Maximilians University, Munich, Germany	Dr. rer. nat.	2003	Biochemistry
Ecole Normale Supérieure, Paris, France	Postdoctoral Fellow	2003-2005	Field 3

B. Positions / Academic Appointments

2005-2012	Junior group leader, European Neuroscience Institute, Goettingen, Germany
2012-	W2 Professor for cellular structural biology, University of Freiburg, Germany

C. Major research interests

My group is interested in understanding how neurons maintain their physiological states by dynamic regulation of intracellular trafficking. We are using this knowledge to analyze how this neuronal physiology and membrane trafficking is changed or affected by neurotoxic processes that lead to neurodegeneration or by aging. Furthermore, we are studying how Parkinson's disease associated genes like α -synuclein cause neurotoxicity and what morphological and functional changes are associated with it. Using *Caenorhabditis elegans* as our main model system we are also analyzing the cellular function of Parkinson's disease associated genes by studying their homologs in the worm.

Furthermore, we try to understand how changes in the physiological states of neurons affect the network and ultimately the behavior of the whole animal. For example, we are studying how neuronal activity is modulated by neuropeptide secretion and dense core vesicle signaling. To find new molecules and dissect molecular mechanisms involved in neuronal fitness and degeneration, we are using a combination of genetic and molecular cell biology approaches as well as electrophysiology and modern imaging techniques. In particular, we have established a "high pressure freeze" (HPF) electron microscopy (EM) facility, which allowed us to study cellular morphology and protein localization at ultra high resolution by immuno-EM and EM tomography.

D. Selected peer-reviewed publications

Luo L, Hannemann M, Koenig S, Hegermann J, Ailion M, Cho M-K, Sasidharan N, Zweckstetter M, Rensing SA and **Eimer S** (2011) The *C. elegans* GARP complex contains the conserved Vps51 subunit and is required for lysosomal morphology. *MBoC*; 22(14):2564-78

Witte K, Schuh AL, Sarkeshik A, Hegermann J, Mayers JR, Schwarze K, Yates III JR, **Eimer S**, and Audhya A (2011) Mechanisms by which TFG functions in protein secretion and oncogenesis. *Nat. Cell Biol.*, 13(5):550-8

Kamp F, Exner N, Lutz AK, Wender N, Hegermann J, Brunner B, Nuscher B, Bartels T, Giese A, Beyer K, **Eimer S**, Winklhofer KF and Haass C (2010) Inhibition of Mitochondrial fusion by α -Synuclein is rescued by PINK1, Parkin, and DJ-1. *EMBO J.*, 29(20):3571-89

Karpinar P, Babu Gajula Balia M, Kügler S, Opazo P, Rezaei-Ghaleh N, Wender N, Kim HY, Taschenbergert G, Falkenburger BH, Heise H, Kumar A, Riedel D, Fichtner L, Voigt A, Braus GH, Giller K, Becker S, Herzig A, Baldus M, Jäckle H, **Eimer S***, Schulz JB*, Griesinger C* and Zweckstetter M* (2009)

Pre-fibrillar α -Synuclein Variants with Impaired β -Structure Increase Neurotoxicity in Parkinson's Disease Models (*corresponding authors) *EMBO J.*, 28(20):3256-68

Sumakovic M, Hegemann J, Luo L, Husson S, Olendrowitz C, Schwarze K, Schoofs L, Richmond J, and **Eimer S** (2009) The small GTPase RAB-2 and its effector RIC-19 are involved in dense core vesicle maturation in *C. elegans*. *JCB*, 186(6):897-914

E. Research Support (selection)

International research and training network grant SyMBaD (EU): Synapses: from Molecules to Brain and Diseases, 12/2010-11/2014. PI (consortium partner)

F. Other activities

Co-coordinator of the Network of European Neuroscience Institutes (ENINET) since 2005, Coordination of the Göttingen Electron Microscopy network (GÖNEM) since 2006.

G. Memberships and awards

Memberships: GMB

Awards: Elisabeth Gateff Award of the German Genetics Society (2003)

NAME ENGEL, Wolfgang	POSITION / TITLE Professor of Human Genetics
-------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Freiburg	Habilitation	1974	Human Genetics
Hospital Schorndorf	Physician	1966-1968	
University of Freiburg	Dr. med.	1967	Medicine

B. Positions / Academic Appointments

1977	Professor of Human Genetics and Director of the Institute, University of Göttingen
1968-1977	Postdoc, Institute of Human Genetics and Anthropology, University of Freiburg

C. Major research interests

Our research is focused on the molecular analysis of normal human variability and genetic disturbances of development and differentiation.

Isolated genes are being analysed in detail with respect to their functional properties by animal models (transgenic and knock-out-mice). For suitable genetic diseases therapeutic strategies (substitution; gene therapy) are being developed and initial evaluation of such strategies is done in the mouse. We are working on the genotype-phenotype correlations in neurological and cardiovascular diseases (e. g. Spastic paraplegia, Rett syndrome, Morbus Osler, mental retardation by subtelomeric microdeletions, molybdenum cofactor deficiency; cardiomyopathies, Noonan syndrome) and several genetically determined malformation syndromes. We are also engaged in the molecular and cellular basis of initiation events of cancer, specifically in prostate cancer, medulloblastoma and rhabdomyosarcoma. One main interest in our institute is the analysis of structure, expression and function of genes involved in differentiation of male gametes. The knowledge of the function of those genes can help us to clarify the genetic causes of male infertility.

We have isolated spermatogonial stem cells (SSCs) from adult mouse testis and demonstrated that these cells are as pluripotent as embryonic stem cells (ESCs). Our main interest is now to isolate and proliferate SSCs from adult human testis. These cells would be of great interest for regenerative medicine.

D. Selected peer-reviewed publications

Xu X, Pantakani K, Lührig S, Tan X, Khromov T, Nolte J, Dressel R, Zechner U, **Engel W** (2011) Stage-specific germ-cell marker genes are expressed in all mouse pluripotent cell types and emerge early during induced pluripotency. PLoS ONE 6 (7): e22413. doi: 10.1371/journal.pone.0022413

Glaser T, Opitz T, Kischlat T, Konang R, Sasse P, Fleischmann BK, **Engel W**, Nayernia K, Brüstle O (2008) Adult germ line stem cells as a source of functional neurons and glia. Stem Cells 26:2434-2443

Zovoilis A, Nolte J, Drusenheimer N, Zechner U, Hada H, Guan K, Hasenfuß G, Nayernia K, **Engel W** (2008) Multipotent adult germline stem cells and embryonic stem cells have similar microRNA profiles. Molecular Human Reproduction 14:521-529

Guan K, Wagner S, Unsöld B, Maier LS, Kaiser D, Hemmerlein B, Nayernia K, **Engel W**, Hasenfuss G (2007) Generation of functional cardiomyocytes from adult mouse spermatogonial stem cells. Circulation Research 100:1615-1625

Nayernia K, Nolte J, Michelmann HW, Lee JH, Rathsack K, Drusenheimer N, Dev A, Wulf G, Ehrmann IE, Elliott DJ, Okpanyi V, Zechner, Haaf T, Meinhardt A, **Engel W** (2006) In vitro-differentiated embryonic stem cells give rise to male gametes that can generate offspring mice. Developmental Cell 11:125-132

NAME FIALA, André	POSITION / TITLE Professor
----------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Free University of Berlin, Germany	Diploma	1996	Biology
Free University of Berlin, Germany	Dr. rer. nat.	1999	Neurobiology
Memorial Sloan-Kettering Institute, New York, USA	Postdoctoral Fellow	2000	Neurobiology
Julius-Maximilians-University of Würzburg, Germany	Habilitation	2008	Genetics and Neurobiology

B. Positions / Academic Appointments

2000	Postdoctoral Fellow, Memorial Sloan-Kettering Institute, New York, USA
2001	Postdoctoral Fellow of the Deutsche Forschungsgemeinschaft, Julius-Maximilians-University of Würzburg, Germany
2002-2008	Scientific Assistant, Julius-Maximilians-University of Würzburg, Germany
2008-	Professor for Molecular Neurobiology of Behavior, Georg-August-University of Göttingen, Göttingen, Germany

C. Major research interests

We study neuronal mechanisms underlying olfaction, learning and memory, and goal-directed behavior using the model organism *Drosophila melanogaster*. The fruit fly *Drosophila* offers the advantage to express transgenes in almost any population of its about 100.000 neurons. Transgenes used by us are, for example, fluorescent sensor proteins for monitoring spatio-temporal activities of neurons, or light-sensitive proteins by which neuronal activity can be stimulated through illumination. Using these optogenetic techniques in combination with behavioral analyses we aim at unraveling the functioning of dedicated neuronal circuits, and how these circuits contribute to organizing behavior. In addition, molecular mechanisms underlying learning and memory processes are investigated.

D. Selected peer-reviewed publications

Störtkuhl KF, **Fiala A** (2011) The Smell of Blue Light: A New Approach toward Understanding an Olfactory Neuronal Network. *Front Neurosci* 5, 72

Kamikouchi A, Wiek R, Effertz T, Göpfert MC, **Fiala A** (2010) Transcuticular optical imaging of stimulus-evoked neural activities in the *Drosophila* peripheral nervous system. *Nat Protoc* 5, 1229-1235

Kamikouchi A, Inagaki HK, Effertz T, Hendrich O, **Fiala A**, Göpfert MC, Ito K (2009) The neural basis of *Drosophila* gravity-sensing and hearing. *Nature* 458, 165-171

Schroll C, Riemensperger T, Bucher D, Ehmer J, Völler T, Erbguth K, Gerber B, Hendel T, Nagel G, Buchner E, **Fiala A** (2006) Light-induced activation of distinct modulatory neurons triggers appetitive or aversive learning in *Drosophila* larvae. *Curr Biol* 16, 1741-1747

Riemensperger T, Völler T, Stock P, Buchner E, **Fiala A** (2005) Punishment prediction by dopaminergic neurons in *Drosophila*. *Curr Biol* 15, 1953-1960

E. Research Support (selection)

1. DFG (FI 821/3-1), 01/08/2009 – 30/06/2013. Project title: "Neuronale Grundlagen operanten Verhaltens und operanten Lernens bei *Drosophila melanogaster*".
2. SPP 1392 (DFG) "Integrative analysis of olfaction", 01/06/2009 – 20/10/2012. Project title: "Physiology and perception in *Drosophila* olfaction".
3. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Projects TP B04 and C02 (Co-PI with M. Göpfert).
4. Bernstein Center for Computational Neuroscience (BMBF), 01/05/2010 – 30/04/2015, TP B01, Project title: "Spatio-temporal coding and imprinting in the *Drosophila* olfactory system". Co-PI with Prof. M. Timme.
5. Bernstein Center for Computational Neuroscience (BMBF), 01/05/2010 – 30/04/2015, TP B05, Project title: "Predictive properties of modulatory neurons in reinforcement learning of the fruit fly". Co-PI with Prof. F. Wörgötter.

F. Other activities

Faculty member of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB), associated member of the European Neuroscience Institute Göttingen (ENI), member of the Bernstein Center for Computational Neuroscience (BCCN), extended teaching activities at the Georg-August-University of Göttingen.

G. Memberships

Society for Neuroscience
Deutsche Zoologische Gesellschaft
Deutsche Neurowissenschaftliche Gesellschaft

NAME FISCHER, Andre	POSITION / TITLE Professor
------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Göttingen, Germany	Diploma	2000	Neurosciences
University of Göttingen, Göttingen, Germany	Dr. rer.nat	2002	Neurosciences
Harvard Medical School, Boston, USA	Postdoctoral fellow	2003-2006	Neurosciences
Massachusetts Institute of Technology (MIT), Cambridge, USA	Postdoctoral fellow	2006	Neurosciences

B. Positions / Academic Appointments

2007-2011	Independent Group Leader, European Neuroscience Institute, Göttingen, Germany
2011-present	Professor, University Medical Center, University Göttingen, Göttingen, Germany
2011- present	Speaker/Director, German Center for Neurodegenerative Diseases (DZNE) Göttingen 1, Göttingen, Germany

C. Major research interests

The long-term goal of our research is to understand the cellular and molecular mechanisms underlying brain diseases and to develop neuroprotective and neuroregenerative therapeutic approaches. To understand the pathogenesis of Alzheimer's disease and to identify effective therapeutic strategies is a major focus.

There is now accumulating evidence that on an individual level health or disease critically depends on the interaction between genes and environment. Epigenetic mechanisms such as histone-modification, DNA-methylation and the action of non-coding RNAs are key-regulators of gene-environment interactions. Importantly, such epigenetic mechanisms have recently been implicated with the pathogenesis of neurodegenerative and psychiatric diseases.

As such, our current hypothesis is that deregulation of genome-environment interactions, especially via epigenetic gene-expression, is a key feature of neurodegenerative diseases such as Alzheimer's disease. In a second line of research we also investigate epigenetic processes in psychosis and anxiety diseases. Our research combines interdisciplinary approaches including genome wide sequencing, molecular and behavioral biology as well as system biology using computational methods to understand the dynamics of molecular networks.

D. Selected peer-reviewed publications

Zovoilis A, Agbemenyah HY, Agis-Balboa RC, Stilling RM, Edbauer D, Rao P, Farinelli L, Delalle I, Schmitt A, Falkai P, Bahari-Javan S, Burkhardt S, Sananbenesi F, **Fischer A** (2011) microRNA-34c is a novel target to treat dementias. *EMBO J.* 2011 Sep 23;30(20):4299-308. doi: 10.1038/emboj.2011.327

Agis-Balboa RC, Arcos-Diaz D, Wittnam J, Govindarajan N, Blom K, Burkhardt S, Haladyniak U, Agbemenyah HY, Zovoilis A, Salinas-Riester G, Opitz L, Sananbenesi F, **Fischer A** (2011) A hippocampal insulin-growth factor 2 pathway regulates the extinction of fear memories. *EMBO J.* 2011 Aug 26;30(19):4071-83. doi: 10.1038/emboj.2011.293

Kuczera T, Stilling RM, Hsia HE, Bahari-Javan S, Irrniger S, Nasmyth K, Sananbenesi F, **Fischer A** (2010) The Anaphase Promoting Complex is required for memory function in mice. *Learning&Memory*, 18, 1:49-57, 2010

Peleg S, Sananbenesi F, Zovoilis A, Burkhardt S, Bahari-Javan S, Agis-Balboa RC, Cota P, Wittnam JL, Gogol-Doering A, Opitz L, Salinas-Riester G, Dettenhoffer M, Farinelli L, Chen W, **Fischer A** (2010) Altered histone H4 lysine 12 acetylation is associated with age-dependent memory impairment in mice. *Science*, 328; 753, 2010

Fischer A, Sananbenesi F, Wang X, Dobbin M, Tsai LH (2007) Recovery of learning and memory is associated with chromatin remodeling. *Nature* 447, 178-82. (AF is corresponding author)

E. Research Support (selection)

1. Euryi Award (EU): Epigenetic mechanisms in learning processes, age related cognitive decline and neurodegenerative diseases. 1/1/2008-31/12/2012 (PI).
2. Schram-Foundation: The cellular mechanisms by which chromatin plasticity affects neuronal gene-expression in the aging brain. 10/2009-09/2012 (PI)
3. EPITHERAPY (ERA-NET Neuron, FP7): An epigenetic approach towards the recovery of neuronal network plasticity and cognitive function in neurodegenerative disease and ageing. 2/2009-01/2012 (Coordinator and PI)
4. Hans und Ilse Breuer Stiftung: The role of Histone deacetylases in Alzheimer's disease. 1/1/2009-31/12/2012 (PI)
5. DFG Clinical Research Group 241: The impact of epigenetic gene-expression on the longitudinal aspect of psychosis. (PI)

F. Other activities

Speaker of the German Center for Neurodegenerative Diseases (DZNE) Göttingen

G. Memberships and awards

Memberships: EMBO, ENI-NET, Molecular and Cellular Cognition Society, Fritz-Kleekamp Foundation, Hans und Ilse Breuer Foundation

Awards: EMBO Young Investigator Award (2010), Amsterdam Young Scientist Award of the European Neuroscience Society (2010), Dr. Wilmar Schwabe Preis der Deutschen Hirnliga e.V. (2009), Alzheimer Research Award of the Hans and Ilse Breuer Foundation (2009), Junior Faculty Award of the Alzheimer's disease/Parkinson's Disease Organization (2009), Heinz Maier Leibnitz Award of the German Research Foundation (2008), European Young Investigator (EURYI) award of the European Science Foundation (2007), Feodor Lynen Fellowship of the Alexander von Humboldt Foundation (2004)

NAME FLÜGEL, Alexander	POSITION / TITLE Director and Professor
---------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Ludwig-Maximilians University (LMU), Munich, Germany	Medical degree	1986-1992	Medicine
LMU, Munich, Germany	Doctoral Degree (Dr. med.)	1990-1993	Physical biochemistry and cell biology
LMU, Munich, Germany	Approbation	1991	Medicine
LMU, Munich, Germany	Habilitation	2004	Neuroimmunology

B. Positions / Academic Appointments

1994	Scientist, Max-Planck Group for Rheumatology and Clinical Immunology of the Medical Clinic for Immunology of the Friedrich-Alexander University, Erlangen, Germany
1994-2000	Postdoctoral fellow, Institute for Neuroimmunology, Max-Planck Institute for Neurobiology, Martinsried, Munich, Germany
2000-2002	Resident, Dept. of Neurology, LMU Munich, Germany
2002-2007	Group leader, Max-Planck Institute for Neurobiology, Martinsried, Munich, Germany
2008-2008	Professor (W2) for Experimental Immunology, Institute for Immunology, LMU, Munich, Germany
12/2008 -	Full Professor (W3) and Head of Department of Neuroimmunology / Director of Institute for Multiple Sclerosis Research, University Medical Center Goettingen, Georg-August University Goettingen, Germany

C. Major research interests

- Neuroimmunology
- T cell biology
- Intravital imaging

The focus of my interest lies on the mechanisms and factors that allow T cells to enter the central nervous system, to communicate in this milieu and to influence the brain tissue.

My colleagues and I pursue the following aims, i) development of new models and tools to study CNS autoimmunity; ii) revealing the basics of pathogenesis in (auto-)immune diseases of the nervous system; iii) deducing and developing new therapeutical approaches; and iv) analyzing the mechanisms of action for (adverse) effects of new therapeutical procedures.

D. Selected peer-reviewed publications

Cordiglieri C, Odoardi F, Zhang B, Nebel M, Kawakami N, Klinkert WE, Lodygin D, Lühder F, Breunig E, Schild D, Ulaganathan VK, Dornmair K, Dammermann W, Potter BV, Guse AH, **Flügel A** (2010) Nicotinic acid adenine dinucleotide phosphate-mediated calcium signalling in effector T cells regulates autoimmunity of the central nervous system. *Brain* 133, 1930-1943

Bartholomäus I, Kawakami N, Odoardi F, Schläger C, Miljkovic D, Ellwart JW, Klinkert WE, Flügel-Koch C, Issekutz TB, Wekerle H, **Flügel A** (2009) Effector T cell interactions with meningeal vascular structures in nascent autoimmune CNS lesions. *Nature* 462, 94-98

Odoardi F, Kawakami N, Klinkert WE, Wekerle H, **Flügel A** (2007) Blood-borne soluble protein antigen intensifies T cell activation in autoimmune CNS lesions and exacerbates clinical disease. *PNAS* 104, 18625-18630

Kawakami N, Nägerl UV, Odoardi F, Bonhoeffer T, Wekerle H, **A. Flügel A.** (2005) Live imaging of effector cell trafficking and autoantigen recognition within the unfolding autoimmune encephalomyelitis lesion. *J Exp Med* 201, 1805-1814

Flügel A, Berkowicz T, Ritter T, Labeur M, Jenne DE, Li Z, Ellwart JW, Willem M, Lassmann H, Wekerle H. (2001) Migratory activity and functional changes of green fluorescent effector cells before and during experimental autoimmune encephalomyelitis. *Immunity* 14, 547-560

E. Research Support (selection)

1. SFB TRR43 (DFG): "The brain as a target of inflammatory processes", 2nd funding period 1/1/2012-12/31/2015. Co-PI (with F. Odoardi) on project B10 "Encephalitogenic T cells during preclinical EAE: migratory behavior and functional analysis of fluorescent GFP-transduced T cells" and co-PI (with F. Lühder) on project B11 "Intravital analyses of T cell priming and effector phases during active and spontaneous EAE".

2. DFG Research Unit 1336 (FOR1336): "From monocytes to brain macrophages – conditions influencing the fate of myeloid cells in the brain". 1/1/2010-12/31/2012 (new funding period likely). PI on one project.

3. German Competence Network for Multiple Sclerosis, Consortium Understand MS (BMBF): "Understanding multiple sclerosis heterogeneity: Linking human disease with animal models". 07/01/2009-06/30/2012 (new funding period likely). Co-PI on one project (with W. Brück, M. Prinz, H. Wekerle, M. Kerschensteiner).

4. Hertie Foundation grant: "Intravital 2-photon imaging of encephalitogenic T cells in different phases of clinical EAE: role of chemokines in T-cellular locomotion behavior and functional properties", 09/01/2011-08/31/2013. Co-PI (with F. Odoardi).

5. Project grant (DFG): "NAADP in T cell biology", 09/09/2011-09/08/2014. Co-PI (with A. Guse).

6 Project grant (TEVA): "Intravital analysis of laquinimod therapy on the interactive behavior of autoaggressive effector T cells within living milieu", 01/01/2011-12/31/2012. Co-PI (with F. Odoardi and F. Lühder).

F. Memberships and awards

Memberships: DGI – Deutsche Gesellschaft für Immunologie (Germany Immunological Society)

NAME FLÜGGE, Gabriele	POSITION / TITLE Staff scientist, Prof. Dr.
--------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Tübingen, Germany	Diploma	1974	Biology
University of Munich, Germany	Dr. rer. nat.	1975-1979	Molecular Biology
University of Munich, Germany	Postdoctoral Fellow	1979-1980	Molecular Biology
Max-Planck Institute for Biophysical Chemistry, Göttingen, Germany	Postdoctoral Fellow	1980-1982	Cell Biology
German Primate Center, Göttingen, Germany	Postdoctoral Fellow	1983	Reproductive Biology
University of Göttingen, Medical School	Habilitation	2002	Experimental Neuroscience

B. Positions / Academic Appointments

1983-1985	Junior group leader, Department of Reproductive Biology, German Primate Center, Göttingen, Germany
1985-2003	Staff Scientist, Div. Reproductive Biology and later: Neurobiology, German Primate Center, Göttingen, Germany
1989	Guest scientist at the National Institute of Health, Bethesda, USA
1992-	Reader at the University of Göttingen (Topics: Neurobiology, Neuropsychopharmacology)
2003-	Staff Scientist, Div. Clinical Neurobiology, German Primate Center, Göttingen, Germany
2006-	Extraordinary Professor at the University of Göttingen, Medical School, Göttingen, Germany

C. Major research interests

Research of my group focuses on central nervous processes that underlie depression. Although depressive diseases are among the most prevalent human central nervous disorders, the molecular basis of their etiology is still not understood. Since in humans, depression can be induced by stressful experiences we are using animal models in which chronic stress leads to depressive-like symptoms. To elucidate the mechanisms that are induced by effective antidepressive therapy, we treat stressed animals with antidepressant drugs. Specific behavioral tests are conducted to find out whether animals develop depressive-like symptoms. In the brains we quantify gene expression with the aim to find genes whose expression is specifically regulated by the stress and antidepressive drugs, respectively. New drugs that may potentially serve as antidepressants are tested in this model. - Our group found that chronic stress leads to numerous changes in the brain, with regard to neurons as well as glia cells. These include alterations in the morphology of cells, in diverse molecular factors and in the electrophysiological properties of the cells. A new finding is, that chronic stress affects the GABAergic system which might have implications for cognitive performance.

D. Selected peer-reviewed publications

Hu W, Zhang M, Czéh B, **Flügge G**, Zhang W (2010) Stress Impairs GABAergic Network Function in the Hippocampus by Activating Nongenomic Glucocorticoid Receptors and Affecting the Integrity of the Parvalbumin-Expressing Neuronal Network. *Neuropsychopharmacology* 35: 1693-1707

Cooper B, Fuchs E, **Flügge G** (2009) Expression of the axonal membrane glycoprotein M6a is regulated by chronic stress. *PLoS ONE* 4(1):e3659

Czéh B, Perez-Cruz C, Fuchs E, **Flügge G** (2008) Chronic stress-induced cellular changes in the medial prefrontal cortex and their potential clinical implications: does hemisphere location matter? *Behav Brain Res* 190: 1-13

Abumaria N, Rygula R, Hiemke C, Fuchs E, Havemann-Reinecke U, Ruther E, **Flügge G** (2007) Effect of chronic citalopram on serotonin-related and stress-regulated genes in the dorsal raphe nucleus of the rat. *Eur Neuropsychopharmacol* 17: 417-429

Gould E, Tanapat P, McEwen BS, **Flügge G**, Fuchs E (1998) Proliferation of granule cell precursors in the dentate gyrus of adult monkeys is diminished by stress. *Proc. Natl. Acad. Sci. U. S. A.* 95, 3168-3171

E. Research Support (selection)

DFG Research Center Molecular Physiology of the Brain (CMPB), 2002-2012; Area B2: Neurodevelopmental Disorders. From Synaptopathies to System Dysfunction.

F. Other activities

Faculty member MSc/PhD Neurosciences Program, University of Göttingen

G. Memberships and awards

Memberships: International Affiliated Scientist, Wisconsin Regional Primate Research Center, Madison, WI, USA; Member Center for Systems Neuroscience, Göttingen; member Society for Neuroscience, USA

Awards: Research Award of the German Primate Center (1988); Excellence in Teaching Neuroscience Award, MSc/PhD Neurosciences Program, University of Göttingen (2008)

NAME FRAHM, Jens	POSITION / TITLE Director and Professor
---------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Dipl. Phys.	1974	Physics
University of Göttingen, Germany	Dr. rer. nat.	1977	Physical Chemistry
Max-Planck-Institute for Biophysical Chemistry	Postdoct. Fellow	1977-1982	Physical Chemistry
University of Göttingen, Germany	Habilitation	1994	Physical Chemistry

B. Positions / Academic Appointments

1982-1992	Leader, Junior Research Group, MPI for Biophysical Chemistry, Göttingen, Germany
1993 -	Director, Biomedizinische NMR Forschungs GmbH (non-profit)
1994 -	C3/W2 Position, MPI for Biophysical Chemistry, Göttingen, Germany
1997 -	Adjunct Professor, Physical Chemistry, University of Göttingen, Germany
2011 -	External Scientific Member, MPI for Dynamic and Self-Organization, Göttingen, Germany

C. Major research interests

Methodological development and biomedical application of spatially resolved nuclear magnetic resonance (NMR) techniques: Magnetic resonance imaging (MRI), localized magnetic resonance spectroscopy (MRS). Noninvasive studies of animals and humans. System-oriented neurobiology, human neuroscience, cardiovascular imaging, animal models. MRS of cerebral metabolism, MRI of human brain function, contrast-enhanced MRI of animal brain, diffusion MRI of structural connectivity, non-Cartesian imaging, nonlinear inverse image reconstruction, model-based reconstruction, real-time MRI.

D. Selected peer-reviewed publications

Joseph AA, Merboldt KD, Voit D, Zhang S, Uecker M, Lotz J, **Frahm J** (2012) Real-time phase-contrast MRI of cardiovascular blood flow using undersampled radial FLASH and nonlinear inverse reconstruction. *NMR Biomed*, doi: 10.1002/nbm.1812

Fünfschilling U, Supplie LM, Mahad D, Boretius S, Saab A, Edgar J, Brinkmann BG, Kassmann CM, Tzvetanova ID, Möbius W, Diaz F, Meijer D, Suter U, Hamprecht B, Sereda MW, Moraes CT, **Frahm J**, Goebbels S, Nave KA (2012) Glycolytic oligodendrocytes maintain myelin and long-term axonal integrity. *Nature*, doi:10.1038/nature11007

Merboldt KD, Uecker M, Voit D, **Frahm J** (2011) Spatially encoded phase-contrast MRI – 3D MRI movies of 1D and 2D structures at millisecond resolution. *Magn Reson Med* 66, 950-956

Schweisfurth MA, Schweizer R, **Frahm J** (2011) Functional MRI indicates consistent intra-digit topographic maps for the little but not the index finger within the human primary somatosensory cortex. *NeuroImage* 56, 2138-2143

Uecker M, Zhang S, Voit D, Karaus A, Merboldt KD, **Frahm J** (2010) Real-time MRI at a resolution of 20 ms. *NMR Biomed* 23, 986-994

E. Research Support (selection)

1. Center for Molecular Physiology of the Brain "MRI of Animal Models – Neurodegeneration" (DFG)
2. Bernstein Center for Computational Neuroscience "Advanced Diffusion MRI and Fiber Tractography of the Human Brain" (BMBF)
3. Bernstein Focus Neurotechnology "Functional MRI of Neurofeedback" (BMBF)
4. German Center for Cardiovascular Research "Real-time MRI" (BMBF)
5. Joint Grant "Analysis Strategies for Cardiovascular Real-time MRI" (Max-Planck & Fraunhofer Societies)

F. Other activities

Managing Director, Foundation of the University of Göttingen

G. Memberships and awards

Memberships: Ordinary Member, Academy of Sciences at Göttingen

Awards: European Magnetic Resonance Award (1990), Gold Medal Award of the Society of Magnetic Resonance in Medicine (1991), Karl Heinz Beckurts Award (1993), Fellow of the Society of Magnetic Resonance in Medicine (1995), Niedersachsen State Award for Science (1996), Sobek Research Award (2005)

NAME FRIEDE, Tim	POSITION / TITLE Professor of Biostatistics and Chair, Dept. of Medical Statistics, University Medical Center Göttingen
---------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Karlsruhe, Germany	Dipl.-Math.	1998	Mathematics
University of Heidelberg, Germany	Dr. sc. hum.	2001	Medical Biometry
Lancaster University, UK	NHS Postdoctoral Training Fellow in Medical Statistics	2001-2003	Medical Statistics

B. Positions / Academic Appointments

2004-2004	Lecturer in Biostatistics, Dept. Mathematics and Statistics, Lancaster University, UK
2004-2006	Expert Statistical Methodologist, Novartis Pharma AG, Basel, Switzerland
2006-2009	Associate Professor of Medical Statistics, Warwick Medical School, The University of Warwick, Coventry, UK
2010-	Professor and Chair, Dept. of Medical Statistics, University Medical Center Göttingen, Germany

C. Major research interests

The Department of Medical Statistics is one of four Departments in the Centre Informatics, Statistics and Epidemiology at the University Medical Center Göttingen. The activities of the Department of Medical Statistics include clinical cooperations that we see through from grant applications to publications, a biostatistical advisory service for doctoral students and early career scientists, research in statistical methodology and teaching. The current organizational structure of the Department includes three working groups. These are "Statistical Bioinformatics", "Nonparametric Statistics", and "Clinical Trials".

Tim Friede's primary research interests are in clinical trial designs, in particular sample size re-estimation and adaptive group sequential designs.

D. Selected peer-reviewed publications

Friede T, Parsons N, Stallard N, Todd S, Valdés-Márquez E, Chataway J, Nicholas R (2011) Designing a seamless phase II/III clinical trial using early outcomes for treatment selection: An application in multiple sclerosis. *Statistics in Medicine* 30: 1528-1540

Nicholas R, Straube S, Schmidli H, Schneider S, **Friede T** (2011) Trends in annualized relapse rates in relapsing remitting multiple sclerosis and consequences for clinical trial design. *Multiple Sclerosis Journal* 2011; 17: 1211-1217

Friede T, Schmidli H (2010) Blinded sample size reestimation with count data: Methods and applications in multiple sclerosis. *Statistics in Medicine* 29: 1145-1156

Rog DJ, Nurmikko TJ, **Friede T**, Young CA (2005) Randomised controlled trial of cannabis based medicine in central neuropathic pain due to multiple sclerosis. *Neurology* 65:812-819

Steiner T, **Friede T**, Aschoff A, Schellinger PD, Schwab S, Hacke W (2001) Effect and feasibility of controlled rewarming after moderate hypothermia in stroke patients with malignant infarction of the middle cerebral artery. *Stroke* 32: 2833-2835

E. Research Support (selection)

1. Blinded sample size reestimation in clinical trials with recurrent event data and time-dependent event rates; Tim Friede (PI) in collaboration with Prof Rob Henderson (Newcastle) and Dr Heinz Schmidli (Novartis, Basel); Funded by: Deutsche Forschungsgemeinschaft (DFG); Project duration: 2012 - 2015.
2. Analysis and assessment of dose-finding studies with model-based dose calibration; Norbert Benda (BfArM), Jörg Zinserling (BfArM), Tim Friede (PIs); Funded by: Bundesinstitut für Arzneimittel und Medizinprodukte (BfArM); Project duration: 2012 - 2013.
3. Using Surrogate Endpoints for Decision-Making in Adaptive Seamless Designs; with Prof Nigel Stallard (PI, Warwick), Dr Nick Parsons (Warwick), Dr Sue Todd (Reading); Funded by: UK Medical Research Council; Project duration: 2011 - 2014.
4. Kompetenznetz Degenerative Demenzen (KNDD); with Prof Inga Zerr and Prof Mathias Bähr (PIs, Dept. Neurology); Funded by: Bundesministerium für Bildung und Forschung (BMBF); Project duration: 2011-2014.
5. European Register for Multiple Sclerosis (EUREMS); with the European MS Platform (EMSP) as main partner; Funded by the European Commission; Project duration: 2011-2014.

F. Other activities

Co-Editor, Biometrical Journal, 2009-2011; Member, Council, International Biometrics Society (IBS), since 2008; Member, Subcommittee Statistics in Regulatory Affairs, International Society for Clinical Biostatistics (ISCB) (since 2007); Chair, Scientific Programme Committee, ISCB34, Munich.

G. Memberships and awards

Memberships: International Biometric Society, GMDS, International Society for Clinical Biostatistics, Royal Statistical Society, Statisticians in the Pharmaceutical Industry

Awards: Student Award of the German Society of Medical Informatics, Biometry and Epidemiology (1999); Young scientist award of the German Region of the International Biometric Society (2001).

NAME FUCHS, Eberhard	POSITION / TITLE Professor
-------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of München, Germany	Staatsexamen	1967-1972	Biology Chemistry
University of München, Germany	Dr. rer. nat.	1977	Zoology
University of Karlsruhe, Germany	Habilitation	1989	Animal Physiology

B. Positions / Academic Appointments

1972-1975	Research Fellow, Institute of Zoology, University of München, Germany
1975-1982	Postdoctoral Fellow, Institute for Animal Physiology, University of Bayreuth, Germany
1982-1985	Staff Scientist, Div. Reproductive Biology, German Primate Center, Göttingen, Germany
1985-1990	Acting Head, Division of Reproductive Biology, German Primate Center, Göttingen, Germany
1989-1996	Reader (Animal Physiology), University of Karlsruhe, Germany
1990 – 2003	Head Research Group, Division of Neurobiology, German Primate Center, Göttingen, Germany
1996-2003	Extraordinary Professor (Animal Physiology), University of Karlsruhe, Germany
2003-	Professor for Neurobiology, Department of Neurology, Medical School, University of Göttingen, Germany
2003-	Head Clinical Neurobiology Laboratory, German Primate Center, Göttingen, Germany
2004-	Founder and CEO of Encepharm

C. Major research interests

Functional *in vivo* imaging (MRI, SPECT), neuroanatomical, neuropharmacological, behavioral and molecular approaches to investigate functioning of the brain in non-human primate models of neurodegenerative disorders. This work integrates inputs from other research fields with the ultimate aim of developing and testing new therapeutic strategies for neurodegenerative disorders such as Parkinsons disease.

D. Selected peer-reviewed publications

Yee N, Ribic A, de Roo C C, **Fuchs E** (2011) Differential effects of maternal immune activation and juvenile stress on anxiety-like behaviour and physiology in adult rats: no evidence for the "double-hit hypothesis". *Behav. Brain Res.*, 224:180-188

Koolhaas JM, Bartolomucci A, Buwalda B, de Boer S, Flügge G, Korte SM, Meerlo P, Murison R, Olivier B, Palanza P, Richter-Levin G, Sgoifo A, Steimer T, Stiedl O, van Dijk G, Wöhr M, **Fuchs E** (2011) Stress revisited: a critical evaluation of the stress concept. *Neurosci. Biobehav. Rev.*, 35: 1291-12301

Pryce CR, Aubert Y, Maier C, Pearce PC, **Fuchs E** (2011) The developmental impact of prenatal stress, prenatal dexamethasone and postnatal social stress on physiology, behaviour and neuroanatomy of primate offspring: studies in rhesus macaque and common marmoset. *Psychopharmacology*, 214:33–53

Mc Ewen BS, Chattarji S, Diamond D, Jay T, Reagan L, Svenningsson P, **Fuchs E** (2010) The neurobiological properties of Stablon: From monoamine hypothesis to glutamatergic modulation. *Mol Psychiatry*, 15: 237-249

Perez-Cruz C, Simon M, Czéh B, Flügge G, **Fuchs E** (2009) Hemispheric differences in basilar dendrites and spines of pyramidal neurons in the rat prelimbic cortex: activity- and stress-induced changes. *Europ J Neurosci*, 29: 738-747

E. Research Support (selection)

1. Consortium DEPSTER (EU) *The pregnenolone-derivative MAP4343 as a new therapy for the treatment of depressive disorders: a preclinical project.* 2010-2013; PI (Consortium partner)
2. Consortium PARKCDNF (EU) *Development of an experimental therapeutic strategy using the newly identified growth factor CDNF for treatment of Parkinson's disease.* 2009-2012; PI (Consortium partner)
3. DFG Research Center Molecular Physiology of the Brain (CMPB) *Primate Platform.* 2009-2012); PI

F. Other activities

Board Member DFG Research Center Molecular Physiology of the Brain (CMPB), Göttingen; Board Member Section Neuroendocrinology, German Society of Endocrinology; Member of the Scientific Advisory Board Servier Germany; Member ISPNE Education Committee; Member of the European Neuroscience Institute, Göttingen; Member Center for Systems Neuroscience, Göttingen

G. Memberships and awards

Memberships: International Affiliated Scientist, Wisconsin Regional Primate Research Center, Madison, WI, USA

Awards: Science Award donated by the Stifterverband der Deutschen Wissenschaft (Germany's donors' association for sciences and humanities)

NAME GEISEL, Theo	POSITION / TITLE Director and Professor
----------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Universities of Frankfurt and Regensburg		1967 - 1975	Physics
University of Regensburg	Ph.D.	1975	Physics
University of Regensburg	Habilitation	1982	Physics

B. Positions / Academic Appointments

1976-1977	Postdoctoral Associate, Max Planck Institute for Solid State Research, Stuttgart
1978-1979	Postdoctoral Associate, Xerox Palo Alto Research Center, USA
1980-1982	Assistant Professor, Institute for Theoretical Physics, University of Regensburg
1983 - 1987	Heisenberg Fellow (DFG), University of Regensburg
1988 - 1989	Associate Professor of Theoretical Physics, University of Würzburg
1989 - 1996	Associate Professor of Theoretical Physics, University of Frankfurt
1996-	Director, Max Planck Institute for Dynamics and Self-Organization, Göttingen and Professor of Theoretical Physics, University of Göttingen

C. Major research interests

Theoretical neuroscience, dynamics and function of neuronal networks, anomalous diffusion in physics and biology, modeling and forecast of epidemic spreading, chaos and quantum chaos, transport in semiconductor nanostructures.

D. Selected peer-reviewed publications

Tchumatchenko T, Malyshev A, **Geisel T**, Volgushev M, and Wolf F (2010) Correlations and synchrony in threshold neuron models, Phys. Rev. Lett. 104(5), 058102

Kirst C, **Geisel T**, and Timme M (2009) Sequential desynchronization in networks of spiking neurons with partial reset, Phys. Rev. Lett. 102, 068101

Levina A, Herrmann JM, and **Geisel T** (2009) Phase transitions towards criticality in a neural system with adaptive interactions, Phys. Rev. Lett. 102(11), 118110

Levina A, Herrmann JM, and **Geisel T** (2007) Dynamical synapses causing self-organized criticality in neural networks, Nature Physics 3, 857-860

Brockmann D, Hufnagel L, and **Geisel T** (2006) The scaling laws of human travel, Nature 439, 462-465

E. Research Support (selection)

1. Bernstein Center for Computational Neuroscience (BCCN) II (BMBF): 5/1/2010-4/30/2015.
2. Bernstein Center for Computational Neuroscience (BCCN) (BMBF): 2/1/2005-12/31/2010.
3. Forschergruppe FOR1756, Scattering systems with complex dynamics (DFG): Project "Scattering in random media and decay properties of Bose-Einstein Condensates in leaking traps", 2011-2014.

F. Other activities

Chairman, Bernstein Center for Computational Neuroscience; Editor for Physical Review X (Divisional Associate Editor); Editorial Board: CHAOS, American Institute of Physics; Member of the GGNB Managing Board, Program Director and faculty member of the GGNB doctoral program "Theoretical and Computational Neuroscience".

G. Memberships and awards

Memberships: Fellow of the American Physical Society (APS) (2008)

Awards: Gottfried Wilhelm Leibniz Prize of the DFG (1994), Fellow of the American Physical Society (APS) (2008), Gentner-Kastler-Prize (Société Française de Physique and Deutsche Physikalische Gesellschaft) (2009).

NAME GÖPFERT, Martin	POSITION / TITLE Professor
-------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Erlangen-Nürnberg, Germany	Diploma	1994	Biology
University of Göttingen, Germany	Dr. rer. nat.	1998	Zoology
University of Zurich, Switzerland / University of Bristol, UK	Postdoctoral Fellow	1998-2003	Neuroscience
University of Zurich, Switzerland	Habilitation	2002	Biochemistry

B. Positions / Academic Appointments

2003-2008	Junior group leader, University of Cologne, Germany
2008	Associate Professor of Biophysics and Molecular Biology of Sensory Systems, University of Cologne, Germany
2008-	Professor of Cellular Neurobiology, University of Göttingen

C. Major research interests

Our research focuses on the mechanisms of mechano-electrical stimulus transduction.

Our group studies fundamental processes in hearing. By combining mechanical measurements with genetics, molecular biology, immunohistochemistry, electrophysiology, calcium imaging, and biophysical modeling, we are trying to decipher how molecular processes shape the performance of an ear. Our preferred model system is the hearing organ of the fruit fly *Drosophila melanogaster*, whose auditory sensory cells share conserved molecular modules with hair cells in our ears.

Our work has uncovered striking parallels between fly and vertebrate hearing, including the functional equivalence of the auditory transduction and adaptation machineries, the motility of auditory sensory cells, transducer-based force generation, and the expression of homologous genes. Our work also provided insights into the diverse roles of –and interactions between– transient receptor potential (TRP) ion channels in hearing, and a model of TRP-function in the fly's auditory system has been devised. Using a novel electrostatic actuation method, we were able to identify hair cell-like signatures of transducer gating and adaptation in the fly's auditory mechanics and could show that a simple transduction model as proposed to describe hair cell mechanics comprehensively explains the macroscopic behavior of an ear. Based on these findings, we are currently devising a computational model that allows for the high-throughput characterization of genetic hearing defects.

D. Selected peer-reviewed publications

Effertz T, Wiek R, **Göpfert MC** (2011) NompC TRP channel is essential for *Drosophila* sound receptor function. *Curr Biol* 12, 592-597

Bechstedt S, Albert JT, Kreil DP, Müller-Reichert T, **Göpfert MC**, Howard J (2010) A doublecortin containing microtubule-associated protein is implicated in mechanotransduction in *Drosophila* sensory cilia. *Nat Commun* 1, 11

Kamikouchi A, Inagaki HK, Effertz T, Hendrich O, Fiala A, **Göpfert MC***, Ito K* (2009) The neural basis of *Drosophila* gravity-sensing and hearing. *Nature* 458, 165-171 (* joint corresponding authors)

Nadrowski B, Albert JT, **Göpfert MC** (2008) Transducer-based force generation explains active process in Drosophila hearing. *Curr Biol* 18, 1365-1372

Albert JT, Nadrowski B, **Göpfert MC** (2007) Mechanical signatures of transducer gating in the Drosophila ear. *Curr Biol* 17, 1000-1006

E. Research Support (selection)

1. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. One project and Co-PI (with A. Fiala) on a second project.
2. Research grant (DFG) "Genetic and functional dissection of Drosophila hearing", 01/01/2010-12/31/2013.
3. Göttingen Bernstein Centre (BMBF). Co-PI (with C. Schmidt) on a project.

F. Other activities

Deputy speaker of the SFB 889

G. Memberships and awards

Awards: Leopoldina Research Fellowship (1999), Royal Society University Research Fellowship (2002), Volkswagen Junior Research Group (2003), Walther-Arndt Habilitation Price (2005), Biology Award of the Göttingen Academy of Sciences (2005).

NAME HANISCH, Uwe-Karsten	POSITION / TITLE Professor for Experimental Neurobiology
------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Leipzig, Germany	Diploma	1981-1986	Biochemistry
University of Leipzig, Germany	Dr.rer.nat.	1986-1990	Biochemistry, Neuroscience
Douglas Hospital Research Centre, McGill University, Montreal, Canada	Postdoctoral fellow	1991-1993	Neuroscience
Max Delbrück Center for Molecular Medicine, Berlin, Germany	Helmholtz Fellowship Awardee	1993-1995	Neuroscience, Neuroimmunology
Max Delbrück Center for Molecular Medicine, Berlin, Germany	Research Associate	1995-2002	Neuroscience, Neuroimmunology

B. Positions / Academic Appointments

1990-1991	Staff scientist, Paul Flechsig Institute for Brain Research, Leipzig, Germany
2002-2004	Professor, Biochemistry, University of Applied Sciences Lausitz, Germany
2004-2008	Professor, Experimental Neurobiology (tenure track), University of Göttingen, Germany
2008-	Professor, Experimental Neurobiology, University of Göttingen, Germany

C. Major research interests

Research interests concern the role of microglia in health and disease, especially signals and mechanisms that initiate and govern their activation, the conditions and cellular interactions that influence their activities and the consequences that result from their multiple functions. Microglia are innate immune cells. Multiple influences control their activity states and shape reactions to threatening challenges as they come with trauma, cell impairment or exposure to microbial agents, certain cytokines, immune complexes and tumours. Actual reactive phenotypes and consequences for the CNS are determined by the nature of triggering factors and the situational context. Our work addresses molecular and cellular principles that instruct and regulate microglial responses. Toll-like receptors (TLRs) serve in a response to most diverse danger signals of either microbial and endogenous origins, collectively being designated as pathogen- and damage/danger-associated molecular patterns (PAMPs and DAMPs). Analyses of the functional organization of especially the TLR4 demonstrates how such a receptor complex can serve as a decision maker to mount microglial reactions, based on molecular, cellular and in vivo approaches. As another focus of interest, we address the heterogeneity of microglia by their constitutive and inducible features and capacities.

D. Selected peer-reviewed publications

Regen T, van Rossum D, Scheffel J, Kastriti ME, Revelo NH, Prinz M, Brück W, **Hanisch UK** (2011) CD14 and TRIF govern distinct responsiveness and responses in mouse microglial TLR4 challenges by structural variants of LPS. *Brain Behav Immun* 25: 957-970

Fitzner D, Schnaars M, van Rossum D, Krishnamoorthy G, Dibaj P, Bakhti, M, Regen T, **Hanisch UK**, Simons M (2011) Selective transfer of exosomes from oligodendro-cytes to microglia by macropinocytosis. *J Cell Sci* 124: 447-458

Pukrop T, Dehghani F, Chuang HN, Lohaus R, Bayanga K, Heermann S, Regen T, van Rossum D, Klemm F, Schulz M, Siam L, Hoffmann A, Trümper L, Stadelmann C, Bechmann I, **Hanisch UK**, Binder C (2010) Microglia promote colonization of brain tissue by breast cancer cells in a Wnt-dependent way. *Glia* 58: 1477-1489

Heneka MT, Nadrigny F, Regen T, Dumitrescu-Ozimek L, Terwel D, Jardanhazi-Kurutz D, Walter J, Kirchhoff F, **Hanisch UK**, Kummer MP (2010) Locus ceruleus controls Alzheimer disease pathology by modulating microglial functions through norepinephrine. *PNAS* 107: 6058-6063

Hanisch UK, Kettenmann H (2007) Microglia: active sensor and versatile effector cells in the normal and pathologic brain. *Nat Neurosci* 10: 1387-1393

E. Research Support (selection)

1. Project within FOR942 (DFG, Forschergruppe 942) , joint grant with Claudia Binder and Tobias Pukrop (2008-2010 / 2011-)
2. Project A5 within SFB/TR43 (DFG, Sonderforschungsbereich/ Transregio 43 (2008-2011 / 2012-)
3. Project A1 within FOR1336 (DFG, Forschergruppe 1336) (2010-2012)
4. Project with the U4 Initiative (Universities of Uppsala, Ghent, Groningen and Göttingen), joint grant with Hendrikus Boddeke (2012-)
5. Work package within MetastaSys as part of the e:Bio Initiative (BMBF), joint grant with Tobias Pukrop (2013-)

F. Other activities

Guest Editor (2002) and Editorial Board and *Glia* (since 2005); Reviewer for *Eur J Neurosci*, *Exp Neurol*, *Glia*, *Int Arch Allerg Immunol*, *J Gerontol*, *J Leukocyte Biol*, *J Neurochem*, *J Neurosci*, *J Neuroinflamm*, *Neuroscience*, *Trends in Neurosciences*, *Trends in Immunology*, *Clinical Science*, *Biology Cell*, *Neuron Glia Biology*; Reviewer for the Swiss National Fond for the Promotion of Science, NOW (The Netherlands), Dutch Cancer Society, Dutch Multiple Sclerosis Research Foundation, Parkinson's Disease Society (UK), MRC (UK), NHS (UK), Wellcome Trust (UK), U.S.-Israel Binational Science Foundation, German Research Foundation; Member of the Committee for Animal Experimental Work at the University of Göttingen; Deputy Chief Administrative Officer of the SFB/TR43

G. Memberships and awards

Memberships: German Society for biochemistry and molecular biology (GBM), German Society for Neurosciences (NWG)

Awards: Fellowship of the Medical Research Council, Canada (MRCC); Fellowship of the Human Frontier Science Program Organization (HFSP); Hermann von Helmholtz Fellowship of the BMFT/BMBF Ministry of Research and Technology of Germany

NAME HEINRICH, Ralf	POSITION / TITLE Professor
------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Marburg University, Germany	Diploma	1986-1992	Biology
Göttingen University, Germany	Dr. rer. Nat.	1992-1995	Zoology
Harvard Medical School, Boston, USA	PostDoc	1997-1999	Neurobiology
Göttingen University, Germany	Habilitation	2004	Zoology

B. Positions / Academic Appointments

1999-2002	Associate Professor, Göttingen University, Germany
2002-2008	Junioprofessor, Göttingen University, Germany
2008-	Associate Professor, Göttingen University, Germany

C. Major research interests

We study mechanisms that bias an organism to perform most useful actions to secure survival and reproduction by influencing the initiation, intensity, direction and persistence of behaviors. Our lab is especially interested in central nervous and humoral mechanisms underlying the selection and adaptation of actions that are most appropriate for the particular situation an animal encounters. We study the involved neurochemical mechanisms with a combination of neuroethological, pharmacological, electrophysiological, histochemical and immunocytochemical methods and apply these to intact animals, reduced preparations and cultured cells of various invertebrate species. Our research interests include questions on the evolution of pharmacological signals, central nervous and humoral systems and sensory organs by comparison of various invertebrate and vertebrate species. Since invertebrates offer unique advantages over more complex nervous systems of vertebrates and especially mammals (e.g. a smaller number of neurons in the central nervous system, individually identifiable neurons and rather limited repertoires of behaviors), we select the most suitable and experimentally accessible preparation from various phylogenetic groups including insects (locusts, grasshoppers, fruitflies), crustaceans (marbled crayfish) and annelids (medicinal leech).

D. Selected peer-reviewed publications

Ganter GK, Desilets JB, Davis-Heim JA, Panaitiu AE, Fisher EA, Sweezy M, Sungail J, **Heinrich R** (2012) *Drosophila* female precopulatory behavior is modulated by ecdysteroids. *J Insect Physiol* 58, 413-419, 2012

Ostrowski D, Ehrenreich H, **Heinrich R** (2011) Erythropoietin promotes survival and regeneration of insect neurons in vivo and in vitro. *Neuroscience* 188: 95-108, 2011

Kunst M, Pfortner R, Aschenbrenner K, **Heinrich R** (2011) Neurochemical architecture of the central complex related to its function in the control of grasshopper acoustic communication. *PLoS One* 6(9): e25613, 2011

Farca Luna AJ, Hurtado-Zavala JI, Reischig T, **Heinrich R** (2009) Circadian regulation of agonistic behaviour in groups of parthenogenetic marbled crayfish, *Procambarus spec.* *J Biological Rhythms* 24: 64-72, 2009

Heinrich R, Wenzel B, and Elsner N (2001) A role for muscarinic excitation: Control of specific singing behavior by activation of the adenylate cyclase pathway in the brain of grasshoppers. Proc Nat Acad Sci USA 98: 9919-9923, 2001

E. Research Support (selection)

-

F. Other activities

Head of examination board of the Ms/PhD program Neurosciences; board member of the Center for Systems Neurobiology Göttingen

G. Memberships and awards

Memberships: Neurowissenschaftliche Gesellschaft; International Society for Neuroethology

NAME HELL, Stefan W.	POSITION / TITLE Director and Professor
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1987	Physics
University of Heidelberg, Germany	Dr. rer. Nat.	1990	Physics
EMBL (European Molecular Biology Laboratory)	Postdoctoral Researcher	1991 - 1993	Physics
University of Turku, Finland	Senior Researcher	1993 - 1996	Physics
University of Heidelberg, Germany	Habilitation	1996	Physics

B. Positions / Academic Appointments

1997 - 2002	Group Leader, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2002 -	Director, Department of NanoBiophotonics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
2002 -	Head, Optical Nanoscopy Division, German Cancer Research Center, Heidelberg, Germany
	Apl. Prof., Faculty of Physics, University of Heidelberg, Germany
	Hon. Prof., Faculty of Physics, University of Göttingen, Germany

C. Major research interests

The resolution of light microscopy has been limited by diffraction to about half the wavelength of light, which is why conventional light microscopes fail to distinguish object details that are closer than ~200 nanometers. We have broken this century-old barrier and are developing fluorescence microscopes with a spatial resolution down to a few nanometers in biological cells and light tissue. Prominent nanoscopy methods include STED and RESOLFT microscopy, as well as concepts based on stochastic single-molecule switching, such as GSDIM microscopy. In combination with 4Pi microscopy, another concept developed by this group, the resolution can be increased in all spatial dimensions down to the nanometer scale. All these superresolution concepts have in common that labels are reversibly prepared by light in at least two different states, typically an on-state and an off-state. Consequently, the group also pioneers the development and application of new labeling methods to improve the performance of the labels' state switching behavior. The new concepts have proven to be extremely valuable in biological research and have helped e.g. to uncover aspects of the mechanism of synaptic vesicle exocytosis, the anatomy and dynamics of membrane protein clusters or the molecular organization of the presynaptic active zone. Fluorescence nanoscopy has the unique potential to provide, for the first time, direct visual access to the molecular mechanisms of life with minimal invasion.

D. Selected peer-reviewed publications

Berning S, Willig KI, Steffens H, Dibaj P, **Hell SW** (2012) Nanoscopy in a Living Mouse Brain. *Science* 335, 551

Liu KSY, Siebert M, Mertel S, Knoche E, Wegener S, Wichmann C, Matkovic T, Muhammad K, Depner H, Mettke C, Bückers J, **Hell SW**, Müller M, Davis GW, Schmitz D, Sigrist SJ (2011) RIM-Binding Protein, a Central Part of the Active Zone, Is Essential for Neurotransmitter Release. *Science* 334, 1565 – 1569

Eggeling C, Ringemann C, Medda R, Schwarzmann G, Sandhoff K, Polyakova S, Belov VN, Hein B, von Middendorff C, Schönle A, **Hell SW** (2009) Direct observation of the nanoscale dynamics of membrane lipids in a living cell. *Nature* 457, 1159-1163

Sieber JJ, Willig KI, Kutzner C, Gerding-Reimers C, Harke B, Donnert G, Rammner B, Eggeling C, **Hell SW**, Grubmüller H, Lang T (2007) Anatomy and dynamics of a supramolecular membrane protein cluster. *Science* 317, 1072-1076

Willig KI, Rizzoli SO, Westphal V, Jahn R, **Hell SW** (2006) STED-microscopy reveals that synaptotagmin remains clustered after synaptic vesicle exocytosis. *Nature* 440, 935-939

E. Research Support (selection)

1. NanoFluor (BMBF): "Erarbeitung der Grundlagen für die GSDIM-Weitfeld-Nanoskopie – Teilvorhaben: Grundlagen zur Bereitstellung neuer organischer Fluorophore und fluoreszierender Proteine für die Weitfeld-Nanoskopie (NanoFluor)", 01/03/2011 – 30/03/2014. Co-PI.

2. SFB 755 (DFG): "Nanoscale Photonic Imaging – isoSTED microscopy for live cell imaging", 01/07/2011 – 30/06/2015. Co-PI.

3. VolkswagenStiftung: "Atomic Nano Assembler", 07/2010 – 08/2013. Co-PI.

4. Consortium FLUODIAMON (EU): "Ultra-high resolution and ultra-sensitive fluorescence methods for objective sub-cellular diagnosis of early disease and disease progression in breast and prostate cancer", 01/06/2008 – 01/06/2012. PI (consortium partner).

5. CMPB (DFG): "Research Center Molecular Physiology of the Brain", 01/01/2011 – 30/09/2014. Co-PI.

F. Other activities

Head, Optical Nanoscopy Division, German Cancer Research Center, Heidelberg, Germany; Spokesperson, DFG Center Molecular Physiology of the Brain Göttingen; Board of directors, Laser Laboratorium Göttingen e.V, Board of trustees, X-LAB, Göttingen, Secretary of the International Society on Optics Within Life Sciences (OWLS).

G. Memberships and awards

Memberships: Max Planck Society, Scientific Member of Chem-Phys-Tech & Biomedical Section; Associate Member, European Neuroscience Institute (ENI-G; Göttingen Academy of Science; Heidelberg Academy of Science, Corresponding Member

Awards: ICO Prize, International Commission for Optics (2000), Helmholtz-Prize for metrology (2001), Innovation Award of Leibinger-Foundation (2002), Carl-Zeiss Research Award of Ernst-Abbe-Fonds (2002), Karl-Heinz Beckurts-Prize (2002), Gottlieb Daimler- and Karl Benz Prize, Berlin Brandenburg Academy of Sciences (2004), Innovation Award of the German President (2006), Cozzarelli Prize awarded by the Proc. Natl. Acad. Sc. USA (2007), Julius Springer Prize for Applied Physics (2007), Gottfried Wilhelm Leibniz Prize of the German Research Council (2008), Lower Saxony State Award (2008), Otto Hahn Prize in Physics (2009), Doctor honoris causa med, University of Turku, Finland (2009), Ernst-Hellmut-Vits-Prize (2010), Hansen Family Award (2011), Körber European Science Prize (2011), Gothenburg Lise Meitner Prize (2011), Meyenburg Prize for Cancer Research (2011).

NAME HÖRNER, Michael	POSITION / TITLE Professor of Cellular Neurobiology
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
	Habilitation	1997	Zoology
University of Göttingen	Dr. rer. nat.	1989	

B. Positions / Academic Appointments

2004-	apl. Professor, Institute for Zoology, Anthropology and Developmental Biology, Göttingen, and Scientific Coordinator International MSc/PhD/MD-PhD Program Neurosciences
2002-2004	Guest Professor, University of Science & Technology, Hong Kong
1997-2002	Associate Professor, Institute for Zoology and Anthropology, Göttingen
1994-1995	Feodor-Lynen/Humboldt Fellow, Harvard Medical School, Boston, USA
1993-1996	Research Fellow, Arizona Research Labs, Tucson, USA
1992/1997	Research Fellow Marine Biological Labs, Woods Hole, USA
1990-1997	Assistant Professor, Institute for Zoology and Anthropology, Göttingen
1989-1990	Postdoctoral Fellow, Medical University of Kiel, Dept. Physiology
1985/1986	Research Assistant, MPI for Ethology, Seewiesen

C. Major research interests

Molecular Mechanisms of Synaptic and Non-Synaptic Modulation.

Biogenic amines such as serotonin, dopamine, histamine or octopamine (OA), the pendant of norepinephrine in invertebrates, are widely distributed within the animal kingdom. These evolutionary conserved neuroactive substances are involved in the control of vital functions in both vertebrates and invertebrates. Biogenic amines often initiate long-lasting neuro-modulatory effects in their targets, which is due to diffusion following non-synaptic release activating G-protein coupled to intracellular pathways. My work is focussed on the investigation of cellular and molecular mechanisms underlying the modulation of neuronal signaling in identified networks in invertebrate model systems. Using electrophysiological, pharmacological and immunocytochemical techniques in combination with behavioral measurements, I am investigating mechanisms of aminergic modulation in identified neurons of defined networks in insects and crustacea. To address both mechanistic and functional questions, a parallel approach has been developed, which allows to investigate single identified neurons both in-vivo with intact synaptic connections and in-vitro in primary "identified" cell culture, where neurons are separated from connections to other neurons. The functional meaning of aminergic modulation on the cellular level in behaviorally-relevant circuits is assessed by quantitative behavioral measurements. The investigations show that OA enhances the responsiveness of a neuronal network in insects ("giant fiber pathway") which triggers a fast escape reaction. The reaction to sensory stimuli in the postsynaptic giant interneurons, which are monosynaptically coupled to sensory neurons via excitatory cholinergic synapses, is significantly enhanced by OA application. Characteristic changes of the action potentials in-vivo ("spike broadening") and patch-clamp recordings in-vitro suggest, that OA selectively affects slow K⁺-conductances in postsynaptic giant interneurons.

D. Selected peer-reviewed publications

Rose T, Gras H, **Hörner M** (2006) Activity-dependent suppression of spontaneous spike generation in the Retzius neurons of the leech, *Hirudo medicinalis* L... *Invertebrate Neuroscience* 6: 169-176 (DOI 10.1007/s10158-006-0030-2)

Hörner M, Heinrich R, Cromarty SI, Kravitz EA (2002) Synaptic connectivity of amine-containing neurosecretory cells of lobsters: inputs to 5HT- and OCT- containing neurons. in: *The Crustacean Nervous System*. (ed. K. Wiese) Springer Verlag, Berlin, Heidelberg, New York, pp156-172

Ferber M, **Hörner M**, Cepok S, Gnatzy W (2001) Digger wasp versus cricket: Mechanisms underlying the total paralysis caused by the predators venom. *J Neurobiol* 47: 207-2222

Heinrich R, Cromarty S I, **Hörner M**, Edwards D H, Kravitz E A (1999) Autoinhibition of serotonin cells: An intrinsic regulatory mechanism sensitive to the pattern of usage of the cells. *Proc Natl Acad Sci USA* 96: 2473-2478

Kloppenburg P, **Hörner M** (1998) Voltage-activated currents in identified giant interneurons isolated from adult crickets, *Gryllus bimaculatus*. *J Exp Biol* 201(17): 2529-2541

E. Other activities

Scientific Coordinator of of the Ms/PhD program Neurosciences; speaker of the PhD Program 'Molecular Physiology of the Brain'; faculty member of the Center for Systems Neurobiology Göttingen; member of the GGNB board

F. Memberships and awards

Neurowissenschaftliche Gesllschaft; International Society for Neuroethology; Deutsche Zoologische Gesellschaft

NAME HÜLSMANN, Swen	POSITION / TITLE Adjunct Professor/Prof. Dr. med.
------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Münster, Germany	Staatsexamen	1995	Medicine
University of Münster, Germany	Dr. med	1995	Physiology
University of Münster, Germany	AIP	1995-1996	Neurosurgery
University of Göttingen, Germany	Habilitation	2005	Physiology

B. Positions / Academic Appointments

1997-2001	Wissenschaftlicher Mitarbeiter, University of Göttingen, Germany
2001-2007	Wissenschaftlicher Assistent (C1), University of Göttingen, Germany
2001-	Group leader, University of Göttingen, Germany
2007-	Wissenschaftlicher Mitarbeiter, University of Göttingen, Germany

C. Major research interests

Our group investigates the role of glial cells for neuronal activity. We are especially interested in the role of astrocytes for neuronal network activity. As our primary model system we use the respiratory network, which is interesting for us not only because of its vital function, but also because it represents an ideal model for the analysis of synaptic interactions in general. We use electrophysiology and modern high resolution optical methods (incl. 2-photon microscopy) to analyse the function of astrocytes for synaptic transmission.

A second line of research includes the characterization of the functional role of inhibitory, especially glycinergic neurons in respiratory network.

D. Selected peer-reviewed publications

Schnell C, Fresemann J, **Hülsmann S** (2011) Determinants of Functional Coupling between Astrocytes and Respiratory Neurons in the Pre-Bötzing Complex. PLoS ONE 6:e26309

Latal, AT*, Kremer T*, Gomeza J, Eulenburg V, **Hülsmann S.** (2010) Development of synaptic inhibition in glycine transporter 2 deficient mice, Mol. Cell. Neurosci. 44, 342-52

Winter SM, Fresemann J, Schnell C, Oku Y, Hirrlinger J, **Hülsmann S** (2009) Glycinergic interneurons are functionally integrated into the inspiratory network of mouse medullary slices. Pflügers Arch 458, 459-469

Härtel K, Schnell C, **Hülsmann S** (2009) Astrocytic calcium signals induced by neuromodulators via functional metabotropic receptors in the ventral respiratory group of neonatal mice. Glia 5: 815-827

Grass D, Pawlowski PG, Hirrlinger J, Papadopoulos N, Richter DW, Kirchhoff F, **Hülsmann S** (2004) Diversity of functional astroglial properties in the respiratory network. J. Neurosci. 24: 1358-1365

E. Research Support (selection)

1. DFG Sachbeihilfe Hu797/7-1 (2010 – 2013) Die Bedeutung und Entwicklung von Neuronen mit Co-Transmission von GABA und Glyzin im respiratorischen Netzwerk, PI.
2. CMPB Research Field B2 im DFG-Forschungszentrums für Molekularphysiologie des Gehirns (2006 – 2014), PI.
3. DFG Sachbeihilfe Hu797/5-1 (2008 – 2011) Astrocyte-to-neuron communication: functional relevance for synaptic transmission in the respiratory network?, PI

F. Other activities

Member of the program committee of the international Master's/PhD/MD-PhD Neuroscience Program (since 2001).

G. Memberships and awards

Memberships: Deutsche Physiologische Gesellschaft, Neurowissenschaftliche Gesellschaft, Society for Neuroscience

Awards: Promotionspreis des Herzzentrums Münster (1996), Preis der Westfälischen Wilhelms-Universität Münster (1996), JSPS Invitation Fellowship for Research (2008), Sertürner Preis 2009

NAME JAHN, Reinhard	POSITION / TITLE Director and Professor
------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma Staatsexamen	1976	Biology Biology, Chemistry
University of Göttingen, Germany	Dr. rer. nat.	1981	Zoology
Yale University, New Haven / The Rockefeller University, New York, USA	Postdoctoral Fellow	1982-1985	Neuroscience
Ludwig Maximilian University, Munich, Germany	Habilitation	1990	Biochemistry

B. Positions / Academic Appointments

1985-1986	Assistant Professor, The Rockefeller University, New York, NY, USA
1986-1991	Junior group leader, Max-Planck Institute for Psychiatry, Martinsried, Germany
1991-1997	Associate (since 1995 Full) Professor of Pharmacology and Cell Biology, Yale University School of Medicine, Associate Investigator, Howard Hughes Medical Institute, New Haven, CT, USA
1997-	Director, Department of Neurobiology, MPI for Biophysical Chemistry, Göttingen, Adjunct Professor of Biology (since 2001)

C. Major research interests

Our group is interested in the mechanisms of membrane fusion, with the main emphasis on regulated exocytosis in neurons. Intracellular membrane fusion events are mediated by sets of conserved membrane proteins, termed SNAREs, that are controlled by additional proteins including SM-proteins and scaffold proteins. For fusion to occur, complementary sets of SNAREs need to be present on both of the fusing membranes. The neuronal SNAREs are among the best characterized. We study their properties in detail using biochemical and biophysical approaches. Furthermore, we investigate the mechanisms of membrane fusion at the level of isolated proteins as well as in semi-intact and intact cells.

A second line of research includes the characterization of presynaptic protein complexes and protein-protein interaction networks involving quantitative biochemical and proteomic approaches. Our main emphasis is on the quantitative description of synaptic vesicles and synaptic vesicle-plasma membrane complexes. Other projects of the group include the study of neurotransmitter uptake by synaptic vesicles and the function of Rab-GTPases in neuronal exocytosis.

D. Selected peer-reviewed publications

Chua JJ, Butkevich E, Worsack JM, Kittelmann M, Gronborg M, Behrmann E, Stelzl U, Pavlos NJ, Lalowski M, Eimer S, Wanker EE, Klopfenstein DR, **Jahn R** (2012) Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. Proc Natl Acad Sci USA, in press

van den Bogaart G, Meyenberg K, Risselada JH, Amin H, Willig KI, Hubrich BE, Dier M, Hell SW, Grubmüller H, Diederichsen U, **Jahn R** (2011) Membrane protein sequestering by ionic protein-lipid interactions. Nature 479, 552-555

van den Bogaart G, Holt MG, Bunt G, Riedel D, Wouters FS, **Jahn R** (2010) One SNARE complex is sufficient for membrane fusion. *Nature Struct Mol Biol* 17, 358-365

Stein A, Weber G, Wahl MC, **Jahn R** (2009) Helical extension of the neuronal SNARE complex into the membrane. *Nature* 460, 525-52

Takamori S, Holt M, Stenius K, Lemke EA, Grønberg M, Riedel D, Urlaub H, Schenck S, Brügger B, Ringler P, Müller SA, Rammner B, Gräter F, Hub JS, De Groot BL, Mieskes G, Moriyama Y, Klingauf J, Grubmüller H, Heuser J, Wieland F, **Jahn R** (2006) Molecular anatomy of a trafficking organelle. *Cell* 127, 831-846

E. Research Support (selection)

1. SFB 803 (DFG): "Functionality controlled by organization on and between membranes", 1/1/2009-12/31/2012. Co-PI on two projects (with J. Walla and U. Diederichsen).
2. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Co-PI (with H. Urlaub) on one project.
3. Program Project Grant (NIH) "Structural dynamics of presynaptic membrane fusion", 07/01/2011-06/30/2016. PI on one project.
4. Consortium EUROSPIN (EU) "Synaptic protein networks in neurological and psychiatric diseases", 01/01/2010-12/31/2013. PI (Consortium partner).
5. Consortium SynSys (EU): Synaptic systems: dissecting brain function in health and disease, 07/01/2010-06/30/2014. PI (Consortium partner).

F. Other activities

Coordinator/Speaker of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB), funded by the the German Excellence Initiative (since 2007), Scientific Advisory Board of the European Molecular Biology Laboratory EMBL (vice-chair), EMBO Publications Advisory Committee (chair), ERC Starting grant Review Panel LS1 (chair 2011 and 2013), Member of the Senate and the Hauptausschuss of the DFG.

G. Memberships and awards

Memberships: German Academy of Science Leopoldina, EMBO

Awards: Max-Planck Research Prize (1990), Gottfried Wilhelm Leibniz Prize of the DFG (2000), Ernst Jung Prize for Medicine (2006), Sir Bernhard Katz Award of the American Biophysical Society (2008), Lower Saxony State Science Prize (2010).

NAME JARRY, Hubertus	POSITION / TITLE Senior Scientist / Professor
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma	1980	Biology
University of Göttingen, Germany	Dr. rer. nat.	1985	Biochemistry
Michigan State University, East Lansing, USA 3	Postdoctoral Fellow	1985–1986	Neuroscience
University of Göttingen, Germany	Habilitation	1991	Endocrinology

B. Positions / Academic Appointments

1986-	Group leader Dept. Clinical and Experimental Endocrinology University of Göttingen
-------	--

C. Major research interests

The function of the Gonadotropin releasing hormone (GnRH) pulse generator is essential for reproduction of all mammals. GnRH pulses are a prerequisite for proper pituitary gonadotropin secretion. The neurochemical mechanisms leading to pulsatile GnRH release involve gamma amino butyric acid (GABA) as most important neurotransmitter. In addition, other catecholamines, amino acid neurotransmitters and neuropeptides play a modulatory role in the function of the GnRH pulse generator.

Many of the GABAergic neurons in the hypothalamus are estrogen-receptive. The mechanisms by which estrogen receptors regulate gene and protein expression of neurotransmitter-producing enzymes are at present a prime focus of interest. The initiation of GnRH pulse generator function is the ultimate trigger signal for puberty which is currently investigated. On the other hand, GnRH pulse generator function deteriorates in aged rats. Steroid hormone feedback signals are crucial for the neuroendocrine activity of the adult hypothalamus of which the molecular and neurochemical mechanisms are studied with cell biological and animal experimental tools. Many of hitherto unexplained infertilities are caused by malfunction of the GnRH pulse generator which is studied in a series of clinical experiments.

D. Selected peer-reviewed publications

Nguyen BT, Kararigas G, Wuttke W, **Jarry H** (2012) Long-term treatment of ovariectomized mice with estradiol or phytoestrogens as a new model to study the role of estrogenic substances in the heart. *Planta Med* 78, 6-11

Ucar A, Vafaizadeh V, **Jarry H**, Fiedler J, Klemmt PA, Thum T, Groner B, Chowdhury K (2010) miR-212 and miR-132 are required for epithelial stromal interactions necessary for mouse mammary gland development. *Nat Genet* 42, 1101-8

Wuttke W, **Jarry H**, Seidlova-Wuttke D (2010) Plant-derived alternative treatments for the aging male: facts and myths. *Aging Male* 13, 75-81

Böttner M, Leonhardt S, Wuttke W, Wedel T, **Jarry H** (2010) Expression of estrogen receptors in the hypothalamo-pituitary-ovarian axis in middle-aged rats after re-instatement of estrus cyclicity. *Biogerontology* 11, 75-85

Schlecht C, Klammer H, Frauendorf H, Wuttke W, **Jarry H** (2008) Pharmacokinetics and metabolism of benzophenone 2 in the rat. *Toxicology* 245, 11-

E. Research Support (selection)

1. DFG "Regulation of Estrogen synthesis in the hippocampus by GnRH", 01/01/2007-31/12/2010, PI
- 2 Bayerische Forschungstiftung " Prophylaxis of osteoporosis", 01/04/2009-31/03/2012, PI

F. Other activities

2004 -2009 Editor of "Endokrinologie-Informationen"

G. Memberships and awards

Memberships: American Endocrine Society, International Society of Neuroendocrinology

Awards: 1984 Award for modern medicinal plant research, 1990 Schöller-Junkmann-Prize of the German Endocrine Society, 1990 Rudolf-Fritz-Weiss-Prize

NAME LÖWEL, Siegrid	POSITION / TITLE Professor Dr. / Head of Systems Neuroscience Dept.
------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Johann-Wolfgang-Goethe Universität, Frankfurt/M., Germany	Diploma	1985	Biology
Johann-Wolfgang-Goethe Universität, Frankfurt/M., Germany	Dr. phil. nat.	1988	Neuroscience
Max-Planck-Institut für Hirnforschung, Frankfurt/M., Germany	Postdoctoral Fellow	1988-1990	Neuroscience
Johann-Wolfgang-Goethe Universität, Frankfurt/M., Germany	Habilitation	1995	Zoology

B. Positions / Academic Appointments

1990-1997	Research Assistant, Dept. Neurophysiology, Max-Planck-Institut für Hirnforschung, Frankfurt/M.
1997-2002 und 2004-2005	Head of the Research Group "Visual Development and Plasticity", Leibniz-Institut für Neurobiologie, Magdeburg, Germany
2002-2003	Associate Research Physiologist/Research Associate Professor, School of Medicine, Department of Physiology, University of California in San Francisco/U.S.A.
2003-2004	Dorothea-Erxleben-Guest Professorship, Otto-von-Guericke-Universität, Magdeburg, Germany
2004-2005	Scholarship in the Hertie-Excellency Program "Neurosciences"
2005-2010	Professor of Neurobiology, Friedrich-Schiller-Universität, Jena, Germany
Since 2010	Professor of Neuroscience, Bernstein Focus Neurotechnology and School of Biology, Georg-August-Universität, Göttingen, Germany

C. Major research interests

The Löwel lab is focussed on understanding the development and plasticity of neuronal circuits in the mammalian cortex. We use a combination of techniques, including optical imaging, physiology, neuroanatomy and modelling to explore how experience and learning influence the structure and function of nerve cell networks and how activity patterns and genetic factors influence these processes. We hope that answering these key questions not only helps to understand the rules underlying brain development, functioning and learning but additionally will open up new avenues to develop clinically relevant concepts to promote regeneration and rehabilitation for diseased and injured brains.

D. Selected peer-reviewed publications

Greifzu F, Schmidt S, Schmidt K-F, Kreikemeier K, Witte OW, **Löwel S** (2011) Global impairment and therapeutic restoration of visual plasticity mechanisms after a localized cortical stroke. Proc Natl Acad Sci USA 108, 15450-15455, Epub 2011 Aug 24. doi:10.1073/pnas.1016458108

Kaschube M, Schnabel M, **Löwel S**, Coppola DM, White LE, Wolf F (2010) Universality in the evolution of orientation columns in the visual cortex. Science 330, 1113-1116 (published online Nov. 4, 2010, DOI: 10.1126/science.1194869)

Goetze B, Schmidt K-F, Lehmann K, Altmann WD, Gundelfinger ED, **Löwel S** (2010) Vision and visual cortical maps in mice with a photoreceptor synaptopathy: reduced but robust visual capabilities in the absence of synaptic ribbons. Neuroimage 49, 1622-1631

Kaschube M, Schnabel M, Wolf F, **Löwel S** (2010) Interareal coordination of columnar architectures during visual cortical development. Proc Natl Acad Sci USA 106, 17205-17210

Kaschube M, Wolf F, Geisel T, **Löwel S** (2002) Genetic influence on quantitative features of neocortical architecture. J Neurosci 22, 7206-7217

Löwel S, Singer W (1992) Selection of intrinsic horizontal connections in the visual cortex by correlated neuronal activity. Science 255, 209-212

E. Research Support (selection).

1. BMBF Bernstein Fokus Lernen (BFNL Visual Learning) "Learning and cortical plasticity in the visual system: Understanding cortical learning mechanisms and their restoration after stroke". 2009 – 2014. Coordinator and PI of the consortium
2. BMBF Bernstein Focus Neurotechnology Göttingen – Systems Neuroscience, 2010-2013
3. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. PI on one project.
4. DFG Lo 442/8-1 "Ein Vergleich der Architektur des visuellen Wulst bei Vögeln mit der des visuellen Cortex bei Säugern." PI with Prof. Dr. Hans-Joachim Bischof, 2011 – 2013
5. DAAD Group of Eight (Go8) Australia – Germany Joint Research Co-operation, PI, 2012-2013.

F. Other activities

G. Memberships and awards

Awards:

Dorothea-Erxleben-Guest Professorship, Otto-von-Guericke-Universität, Magdeburg (2003)

Scholarship in the Hertie-Excellency Program "Neurosciences" (2004)

NAME	POSITION / TITLE
MARQUARDT, Till	Group leader / Principal Investigator

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Max-Planck Institute of biophysical Chemistry and University of Göttingen, Germany	Diploma	1993-1998	Developmental Biology, Genetics
Max-Planck Institute of biophysical Chemistry and University of Göttingen, Germany	Dr.rer.nat.	1998-2001	Developmental Biology, Genetics
The Salk Institute for biological Studies, La Jolla, USA	Postdoctoral Fellow	2002-2006	Developmental Neuroscience

B. Positions / Academic Appointments

2002-2005	Postdoctoral Fellow, The Salk Institute for biological Studies, La Jolla, USA
2006	Staff scientist, The Salk Institute for biological Studies, La Jolla, USA
2007-now	Group leader, European Neuroscience Institute, Göttingen, Germany

C. Major research interests

The neuromuscular system represents the final common path in the generation of behaviors by linking the central nervous system with the movement apparatus. The assembly of this circuitry depends on genetically hardwired programs that lay down the fundamental pattern of neuromuscular connectivity during embryonic and postnatal development. While work in the past 15 years provided a mechanistic framework for understanding how motor neuron-muscle connections are established, insights into how these connectivity patterns become integrated into functional sensory-motor circuits remain sparse. These early processes are inherently linked to the functional refinement of neural properties and connections, including the high degree of adaptive plasticity of the neuromuscular circuitry throughout adult life. Research in my lab centers around three main focus areas tackling the following questions:

- (1) How is wiring specificity achieved in the sensory-motor circuitry?
- (2) What are the molecular pathways driving the functional specification and plasticity of motor units?
- (3) What are the determinants underlying motor unit type-specific vulnerability?

D. Selected peer-reviewed publications

Wang L and **Marquardt T** (2012) Live monitoring of heterotypic axonal interactions in vitro. *Nature Protocols* 7: 351-363

Bononomi D, Chivatakarn O, Bai G, Lettieri K, Abdesselem H, **Marquardt T**, Pierchala BA, and Pfaff SL (2012) Ret is a multifunctional co-receptor that integrates diffusible- and contact-axon guidance signals. *Cell* 148: 568-582

Wang L, Klein R, Zheng B, and **Marquardt T** (2011) Anatomical coupling of sensory and motor nerve trajectory through axon tracking. *Neuron* 71: 263-277

Gallarda B, Bononomi D, Müller D, Brown A, Alaynick WA, Lemke G, Pfaff SL, and **Marquardt T** (2008) Segregation of axial sensory and motor pathways through heterotypic trans-axonal signaling. *Science* 320: 233-236

Marquardt T, Shirasaki R, Ghosh S, Carter N, Andrews SE, Hunter T, and Pfaff SL (2005) Co-expressed EphA receptors and ephrin-A ligands mediate opposing actions on growth cone navigation from distinct membrane sub-domains. *Cell* 121, 127-139

E. Research Support (selection)

1. Emmy Noether Programm (DFG), Signaling mechanisms in Neuromuscular circuit assembly, 2007-2012, PI
2. Isreal-Niedersachsen Grant (VW-Stiftung), Boundary Cell-Dependent Assembly of Hindbrain Axonal Pathways, 2011-2014, Co-PI with Prof. D. Sera-Sonnenfeld, Jehovot, Israel
3. CMPB-B1 (DFG), Mechanisms driving Neuromuscular synapse specificity, PI

F. Other activities

Teaching (lectures, courses, seminars and lab rotations): International Max-Planck research school (IMPRS) MSc/PhD Program in Molecular Biology (since 2011); IMPRS MSc/MD/PhD Programme in Neurosciences, Göttingen (since 2007); University of Göttingen, BS/MSc program in Developmental, Neural and Behavioral Biology

G. Memberships and awards

Damon Runyon Fellowship Award (2002), Pioneer Fund Endowment Award (2006)

NAME MOSER, Tobias	POSITION / TITLE Research Director/ Professor
-----------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Leipzig, Germany		1988-1990	Medicine
University of Jena/Erfurt, Germany	Staatsexamen	1990-1994	Medicine
University of Jena, Germany	MD	1995	Physiology
MPI for biophysical Chemistry, Göttingen	Post-doctoral Fellow	1994-1997	Biophysics
University of Göttingen Medical Center	Board Certificate	1998-2002	Otolaryngology
University of Göttingen Medical Center	Habilitation	2003	Otolaryngology

B. Positions / Academic Appointments

1997-2001	Junior group leader, MPI for biophysical Chemistry, Göttingen
2001-2005	Research group leader, Dept. of Otolaryngology, University of Göttingen Medical Center
2005	Associate Professor of Experimental and Clinical Audiology, Research group leader, Dept. of Otolaryngology, University of Göttingen Medical Center
2007-	(full) Professor of Auditory Neuroscience and Research Director, Dept. of Otolaryngology, University of Göttingen Medical Center

C. Major research interests

Our work focuses on the molecular physiology and pathology of sound encoding at the hair cell ribbon synapse. We have physiologically and morphologically characterized synapses of wild-type and mutant mice with defects in hair cell synaptic coding from the molecular to the systems level. This way we have contributed to understanding hair cell ribbon synapse structure and function and co-initiated the concept of auditory synaptopathies. Molecular dissection and detailed physiological characterization of ribbon synapse function employ a spectrum of molecular, biophysical and physiological techniques such as mouse mutagenesis, *in vivo* and *in vitro* viral gene transfer into hair cells and spiral ganglion neurons of mice, single cell RT-PCR, immunohistochemistry, confocal microscopy of hair cells, synaptic ultrastructure, hair cell synaptic physiology, mouse auditory systems physiology, optogenetic stimulation of cochlea, computational modeling, clinical audiology and human genetics.

D. Selected peer-reviewed publications

Nouvian R, Neef J, Bulankina AV, Reisinger E, Pangršič T, Frank T, Sikorra S, Brose N, Binz T, **Moser T** (2011) Exocytosis at the hair cell ribbon synapse apparently operates without neuronal SNARE proteins. *Nat Neurosci*, 14(4):411-3

Frank, T, Rutherford, MA, Strenzke, N, Pangrsic, T, Khimich, D, Fejtova, A, Gundfänger, ED, Liberman, MC, Harke, B, Bryan, KE, Lee, A, Egnér A, Riedel, D, **Moser T** (2010) Bassoon and the synaptic ribbon organize Ca²⁺ channels and vesicles to add release sites and promote refilling. *Neuron* 68 724–738

Pangrsic T, Lasarow L, Reuter K, Takago H, Schwander M, Riedel D, Frank T, Tarantino LM, Bailey JS, Strenzke N, Müller U, Brose N, Reisinger E*, **Moser T*** (2010) Hearing requires otoferlin dependent efficient replenishment of synaptic vesicles in hair cells. *Nat Neurosci* 13(7):869-76

Meyer AC, Frank T, Khimich D, Hoch G, Riedel D, Chapochnikov, NM, Yarin YM, Harke B, Hell S, Egnér A, **Moser T** (2009) Tuning of Synapse Number, Structure and Function in the Cochlea, *Nat Neurosci* 12:444-534

Khimich D, Nouvian R, Pujol R, tom Dieck S, Egnér A, Gundelfinger ED, **Moser T** (2005) Hair Cell Synaptic Ribbons are Essential for Synchronous Auditory Signaling. *Nature* 434, 889-94

E. Research Support (selection)

1. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Coordinator, PI and Co-PI (with S. Rizzoli) on two projects.
2. Center for Nanoscopy and Molecular Physiology of the Brain (DFG): 2010-2015, Co-PI with Erwin Neher and Stefan Hell
3. Bernstein Center for Computational Neuroscience (BMBF): 2010-2015. Co-PI (with Fred Wolf and Alexander Meyer) on one project
4. Bernstein Focus for Neurotechnology (BMBF): 2008-2013. Co-PI (with Ernst Bamberg and Alexander Egnér) on two projects

F. Other activities

Coordinator/Speaker of the Sensory and Motor Neuroscience of the Göttingen Graduate School for Neurosciences, Biophysics, and Molecular Biology (GGNB) funded by the German Excellence Initiative (since 2007), Board-member: Bernstein Center for Computational Neuroscience, Bernstein Focus for Neurotechnology, Board-member & Vice-President of the German Society for Audiology

G. Memberships and awards

Memberships: various scientific societies

Awards: Fellow of the "Studienstiftung des deutschen Volkes" (1993), Thesis Award 1996 of the University of Jena, Marius-Tausk Award of the German Society for Endocrinology (1997), Meyer-zum-Gottesberge Award of the German Society for Audiology (2004), Habilitation Award of the University of Göttingen (2005)

NAME NAVE, Klaus-Armin	POSITION / TITLE Director and Professor
---------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1983	Biology, Chemistry, Physics
University of California, San Diego, CA, U.S.A.	Ph.D.	1987	Neuroscience
The Salk Institute, La Jolla, CA, U.S.A.	Postdoctoral Fellow	1988-1990	Neuroscience
University of Heidelberg, Germany	Habilitation	1996	Molecular Biology

B. Positions / Academic Appointments

1991-1997	Independent Group Leader, ZMBH, University of Heidelberg, Germany
1998-1999	Professor of Biology (C4), ZMBH, University of Heidelberg, Germany (Since 2000 Adjunct Professor, University of Heidelberg)
2000-	Director, Department of Neurogenetics, MPI of Experimental Medicine, Göttingen

C. Major research interests

We are studying the interaction of neurons and glial cells in the mammalian nervous system, and are concentrating on the ensheathment of long axons by myelinating oligodendrocytes and Schwann cells. This research includes the cell biology of myelination in development and in regeneration, but also the role of mature glial cells in maintaining normal axon function and survival throughout adult life. The first line of research aims at understanding the role of specific myelin structural proteins and lipids, as well as the axonal signaling proteins and their glial receptors that trigger myelination,. Here, we have discovered the pivotal role of neuregulins in myelination in the peripheral nervous system. We also found that all myelinating glial cells support axon function independent of myelination itself. To this end, a new research focuss of the Department has become the putative metabolic interactions between axons and their associated glial cells. Perturbations of these interactions are likely a major cause of persistant disability in neurological and psychiatric diseases in which myelinating glial cells are primarily affected. We have created novel animal models for several human myelin diseases by using transgenic techniques and conditional mutagenesis, and we have used these mice and rats to explore the underlying disease mechanisms. For some disorders we have even explored novel treatment strategies.

D. Selected peer-reviewed publications

Fünfschilling U, Supplie LM, Mahad D, Boretius S, Saab AS, Edgar J, Brinkmann BG, Kassmann CM, Tzvetanova ID, Möbius W, Diaz F, Meijer D, Suter U, Hamprecht B, Sereda MW, Moraes CT, Frahm J, Goebbels S, **Nave KA** (2012) Glycolytic oligodendrocytes maintain myelin and long-term axonal integrity. *Nature* (in press)

Nave KA (2010) Myelination and the trophic support of long axons. *Nat Rev Neurosci.* 11, 275-283

Nave KA (2010) Myelination and support of axonal integrity by glia. *Nature* 468, 244-252

Brinkmann BG, Agarwal A, Sereda MW, Garratt AN, Wende TH, Stassart RM, Nawaz S, Humml C, Velanac V, Radyuschkin K, Goebbels S, Fischer TM, Franklin RJ, Lai C, Ehrenreich H, Birchmeier C, Schwab MH, and **Nave KA** (2008) Neuregulin-1/ErbB signaling serves distinct functions in myelination of the peripheral and central nervous system. *Neuron* 59, 581-595

Kassmann CM, Lappe-Siefke C, Baes M, Brügger B, Mildner A, Werner HB, Natt O, Michaelis T, Prinz M, Frahm J, **Nave KA** (2007) Axonal loss and neuroinflammation caused by peroxisome-deficient oligodendrocytes *Nat Genet.* 39, 969-976

Michailov GV, Sereda MW, Brinkmann BG, Fischer TM, Haug B, Birchmeier C, Role L, Lai C, Schwab MH, **Nave KA** (2004) Axonal neuregulin-1 regulates myelin sheath thickness. *Science* 304, 700-703

Sereda MW, Meyer zur Hörste G, Suter U, Uzma N, **Nave KA** (2003). Therapeutic administration of progesterone antagonist in a model of Charcot-Marie-tooth disease (CMT-1A). *Nat Med.* 9, 1533-1537

E. Research Support (selection)

1. SFP/TR44 (DFG): "Secondary neuroinflammation in the CNS white matter" 01/01/2012-12/31/2015
2. Integrated Project LEUKOTREAT (EU-FP7), Consortium partner (2009-2012)
3. Integrated Project NGIDD (EU-FP7), Consortium partner (2009-2012)
4. BMBF LEUKONET, Consortium Partner (2010-2012)
5. ERC Advanced Grant "AxoGLIA" (2011-2015)

F. Other activities

- - - ; Scientific Advisory Board, Center for Molecular Medicine (ZMMK), University of Cologne Scientific Advisory Board, Center for Molecular Neurobiology (ZMNH), University of Hamburg; Member, Goettingen Research Council.

G. Memberships and awards

Memberships: (2004) EMBO Membership

Awards: (2001) Sobek Prize for Multiple Sclerosis Research; (2004) Felix-Jerusalem-Prize; (2010) ERC Advanced Investigator Grant

NAME NEHER, Erwin	POSITION / TITLE Emeritus Director and Professor
----------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Technical University Munich, Germany	Diploma	1965	Physics
University of Wisconsin	M.Sc.	1967	Physics
Technical University of Munich, Germany	Dr. rer. nat.	1970	Physics
Max Planck Institute for Psychiatry	Postdoctoral Fellow	1970-1972	Neuroscience
Yale University, Department of Physiology, New Haven	Postdoctoral Fellow	1975-1976	Neuroscience
California Institute of Technology, Pasadena	Fairchild Scholar	1989	Bioinformatics

B. Positions / Academic Appointments

1972 - 1975	- - Chemie, Göttingen, Germany
1976-1982	- - Chemie, Göttingen, Germany
1983-2011	Director of the Membrane Biophysics Department at the Max-Planck- , Göttingen, Germany
2011-	Emeritus Director, MPI for Biophysical Chemistry, Göttingen,

C. Major research interests

- Fluctuation and relaxation analyses in artificial and biological membranes;
- Development of high resolution electrophysiological measurements;
- Cellular processes involving changes in surface area as measured in membrane capacitance;
- Mechanisms of secretion control in mammalian cells;
- Mechanisms of short term synaptic plasticity;
- Cellular Ca⁺⁺ buffering and Ca⁺⁺ diffusion.
- Quantitative analysis of fluorescence images.

D. Selected peer-reviewed publications

Haucke V, **Neher E**, Sigrist SJ (2011) Protein scaffolds in the coupling of synaptic exocytosis and endocytosis. *Nature Rev Neurosci* 12, 127-138

Mohrmann R, de Wit H, Verhage M, **Neher E**, Soerensen JB (2010) Fast vesicle fusion in living cells requires at least three SNARE complexes. *Science* 330, 502-505

Young SM Jr., **Neher E** (2009) Synaptotagmin has an essential function in synaptic vesicle positioning for synchronous release in addition to its role as a calcium sensor. *Neuron* 63:482-496

Neher R A, Mitkovski M, Kirchhoff F, **Neher E**, Theis FJ, Zeug A (2009) Blind source separation techniques for the decomposition of multiply labeled fluorescence images. *Biophys J* 96:3791-3800

Neher E, Sakaba T (2008) Multiple roles of calcium ions in the regulation of neurotransmitter release.

Neuron 59:861-872. Invited Review

E. Research Support (selection)

Consortium EUROSPIN (EU) "Synaptic protein networks in neurological and psychiatric diseases", 01/01/2010-12/31/2013. PI (Consortium partner).

F. Other activities

Member of the Board of the European Neuroscience Institute, Göttingen

2000-2006: Member of the European Research Advisory Board (EURAB), installed by the European Research Commissioner Philippe Busquin,

2004-2006: Member of the Advisory Group for 'Thematic Priority I' of the 6th Framework Program (EU)

2008-: Member of the ERC Neuroscience Panel

, Venetian Institute of Molecular Medicine Padova, European Brain Research Institute Rome, Fondazione Internazionale Premio E. Balzan Milano, Peter and Patricia Gruber Foundation St. Thomas, FRIAS School of Life Sciences University of Freiburg, Center for Integrated Protein Science (CIPSM) Munich

G. Memberships and awards

Corresponding Member of the Bavarian Academy of Sciences, since 1988; Member of the Academia Europaea, since 1989; Foreign Associate Member of the National Academy of Sciences, USA, since 1989; Member of the Akademie der Wissenschaften zu Göttingen since 1991; Member 'Academia Scientiarum et Artium Europaea', since 1992; Foreign Honorary Member 'American Academy of Arts and Sciences, since 1992; Foreign Member 'Academy of Science of the Ukraine', since 1994; Foreign Associate Member of The Royal Society, London, since 1994; Honorary Member of The Physiological Society, London, since 1997; Honorary Member of the Polish Academy of Medicine, 1998; Member of the 'Deutsche Akademie der Naturforscher, Leopoldina', 1998; Corresp. Member of the Nordrhein-Westfalian Academy of Sciences, since 1999; Honorary member of the 'Real Academia Nacional de Medicina' Madrid, since 2001; Honorary member of the 'Real Academia Nacional de Farmakología' Madrid, since 2009; Honorary Professorship, University of Nanjing, China, April 2010.

Numerous scientific prizes, including Leibniz Award, Deutsche Forschungsgemeinschaft (1986), Nobel Prize in Physiology or Medicine, together with Bert Sakmann (1991).

Fifteen honorary degrees, among them from the Technical University Munich, the University of Wisconsin, the Hebrew University, and University College of London.

NAME PARDO, Luis	POSITION / TITLE Max-Planck Research Group Leader, Adjunct Professor
---------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Universidad de Oviedo, Oviedo, Spain	MD	1980-1986	Medicine
Universidad de Oviedo, Oviedo, Spain	PhD	1986-1990-	Biochemistry
MPI Biophysical Chemistry, Göttingen, Germany	Postdoctoral Fellow	1991-1993	Ion Channels
Universidad de Oviedo, Oviedo, Spain	Postdoctoral Fellow	1993-1996	Ion Channels

B. Positions / Academic Appointments

1996-2000	Researcher, MPI Experimental Medicine, Göttingen, Germany
2004-2008	Researcher, MPI Experimental Medicine, Göttingen, Germany
2008-	Max-Planck Research Group Leader. MPI Experimental Medicine, Göttingen, Germany

C. Major research interests

We focus on the study of the role of ion channels in general, and potassium channels in particular, in the development and progression of human cancer. We discovered that the voltage-gated potassium channel $K_v10.1$ is aberrantly expressed in 70% human cancers, while its expression is restricted to the brain among healthy tissues. Tumors expressing the channel become dependent on it, in such a way that it is possible to reduce tumor progression or even induce regression in animal models by targeting the ion channel. Thus, we continue developing new tools to treat cancer based in these principles. At the same time, we study the mechanisms underlying both the aberrant expression of the channel and the consequences of its ectopic presence. We have extended the knowledge acquired with $K_v10.1$ to other channels, and study the ion channels expressed in distinct subpopulations in tumors such as the tumor initiating cells in glioblastoma. The goal of these studies is to design tools to selectively delete these populations. A crucial advantage of our approach is that the mechanisms targeted are different from any other used drug, and therefore can be used in combination with virtually any existing therapy.

In the process, we have generated a relatively large collection of genetic and biochemical tools to study $K_v10.1$. Taking advantage of this, we also study the physiological role of the channel in the healthy brain, and the molecular mechanisms linking voltage sensing and permeation.

D. Selected peer-reviewed publications

Hartung F, Stühmer W, **Pardo LA** (2011) Tumor cell-selective apoptosis induction through targeting of $KV10.1$ via bifunctional TRAIL antibody. *Mol Cancer* 10:109

Agarwal J, Griesinger F, Stuhmer W, **Pardo L** (2010) The potassium channel Ether a go-go is a novel prognostic factor with functional relevance in acute myeloid leukemia. *Molecular Cancer* 9:18

Hemmerlein B, Weseloh RM, de Queiroz FM, Knötgen H, Sánchez A, Rubio ME, Martin S, Schliephacke T, Jenke M, Joachim-Radzun H, Stühmer W, **Pardo LA** (2006) Overexpression of $Eag1$ potassium channels in clinical tumours. *Mol Cancer* 5:41

Downie BR, Sanchez A, Knotgen H, Contreras-Jurado C, Gymnopoulos M, Weber C, Stuhmer W, **Pardo LA** (2008) Eag1 expression interferes with hypoxia homeostasis and induces angiogenesis in tumors. J Biol Chem 283:36234-36240

Gomez-Varela D, Zwick-Wallasch E, Knotgen H, Sanchez A, Hettmann T, Ossipov D, Weseloh R, Contreras-Jurado C, Rothe M, Stuhmer W, **Pardo LA** (2007) Monoclonal antibody blockade of the human Eag1 potassium channel function exerts antitumor activity. Cancer Res 67:7343-7349

E. Research Support (selection)

1. Consortium namdiatream. Nanotechnological Toolkits for Multi-modal Disease Diagnostics and Treatment Monitoring FP7-NMP-2009-LARGE-3 – 246479. Co-investigator

2. Consortium IonTraC. Ion Transport Proteins in Control of Cancer Cell Behaviour. Marie Curie Initial Training Network on the role of Ion Transport Proteins in Pancreatic Cancer. FP7-PEOPLE-2011-ITN Grant Agreement No. 289648. Co-Investigator

F. Other activities

-

G. Memberships and awards

Memberships: ASMBM, EACR, SECF.

Awards: Premio Extraordinaio de Doctorado, University of Oviedo 1990

NAME PAULUS, Walter	POSITION / TITLE Director and Professor
------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Düsseldorf, Germany	Diploma Staatsexamen	1978	Medicine
University of Düsseldorf, Germany	Dr. med	1979	Psychophysics
Neurologische Klinik, Ludwig-Maximilians University Munich, Germany	Habilitation	1996	Neurology

B. Positions / Academic Appointments

1979 - 1982	Clinical Assistant, University of Düsseldorf, Germany
1980	Clinical Assistant, National Hospital for Nervous Diseases, UCL, London, UK
1983	Clinical Assistant, Alfried Krupp Krankenhaus, Essen, Germany
1984-1992	Oberarzt, Neurologische Klinik, Ludwig-Maximilians University Munich, Germany
1992	Director, Department of Clinical Neurophysiology, University Medical Center, Göttingen

C. Major research interests

The group aims at modifying human cortical neuroplasticity by means of non-invasive transcranial stimulation techniques. For this we have used repetitive transcranial magnetic stimulation (rTMS) and developed transcranial direct current stimulation (tDCS) and more recently transcranial random noise (tRNS) and transcranial alternating current stimulation (tACS). In order to generate LTP- or LTD like effects we have combined these techniques with neuropharmacology, with a focus on dopamine, nicotine and others. Plastic effects are frequently evaluated at the motor cortex by TMS or at other cortical areas by EEG or fMRI, in conjunction with connectivity analyses. TACS allows to interfere with cortical binding, thus we aim at improving cognition by transcranial stereotactic interference with oscillations connecting different areas. After optimizing stimulation techniques clinical therapeutic approaches in disorders like Parkinson's disease, migraine, epilepsy, multiple sclerosis, restless legs syndrome and others are targeted.

The Department of Clinical Neurophysiology pursues other research areas such as Neurorehabilitation in conjunction with the Bernstein Centre of Computational Neuroscience and with the Company Otto Bock. Another focus concerns Hereditary Neuropathies in collaboration with the MPI for Experimental Medicine, speech disorders with a focus on stuttering and others (overview researcher ID A-3544-2009).

D. Selected peer-reviewed publications

Antal A, Polania R, Schmidt-Samoa C, Dechent P, **Paulus W** (2011) Transcranial direct current stimulation over the primary motor cortex during fMRI. *Neuroimage*. 2011 Mar 15;55(2):590-6

Bachmann CG, Rolke R, Scheidt U, Stadelmann C, Sommer M, Pavlakovic G, Happe S, Treede RD, **Paulus W** (2010) Thermal hypoaesthesia differentiates secondary restless legs syndrome associated with small fibre neuropathy from primary restless legs syndrome. *Brain*, 133(Pt 3): 762-70

Moliadze V, Antal A, **Paulus W**. Boosting brain excitability by transcranial high frequency stimulation in the ripple range. *J Physiol*. 2010 588: 4891-904

Nitsche MA, Kuo MF, Karrasch R, Wächter B, Liebetanz D, **Paulus W** (2009) Serotonin affects transcranial direct current-induced neuroplasticity in humans. *BIOL PSYCHIAT*, 66(5): 503-8

Terney D, Chaieb L, Moliadze V, Antal A, **Paulus W** (2008) Increasing human brain excitability by transcranial high-frequency random noise stimulation. *J Neurosci*, 28(52): 14147-55

E. Research Support (selection)

1. Bernstein Center for Neurotechnology at Göttingen (German Ministry for Research) 2009 – 2014, consortium partner
2. Migraine Research Foundation, New York, Alternating Current Stimulation for the acute treatment of migraine. 2012 – 2013, Co-PI
3. Rose Foundation: External induction of neuroplasticity in patients with MS 2006 - 2012 (PI)
4. Niedersachsen-Israel Research Cooperation Program. The antidepressant effects of theta-burst rTMS in patients with major depression and patients with Parkinson's disease with depression 2006 – 2012 (Co-PI)
5. Bernstein Center Göttingen "Goal-directed external induction of neuroplastic effects by electric or magnetic brain stimulation based on a realistic head/brain model" (German Ministry for Research) 2005 – 2011 (Consortium Partner).

F. Other activities

Secretary of the European Chapter of Clinical Neurophysiology. Organizer of International Conferences on Transcranial Brain Stimulation (Göttingen 1998, 2003, 2008, Rome 2011).

G. Memberships and awards

Memberships: Several Scientific Societies and Editorial Boards of Brain Stimulation, Movement Disorders, *Frontiers in Human Neuroscience*, *Rest Neurol Neuroscience*.

Awards: Price for the best thesis of the University of Düsseldorf in 1978.

NAME RICHTER, Diethelm W.	POSITION / TITLE Director and Professor
------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Munich, Germany	Staatsexamen	1969	Medicine
University of Munich, Germany	Dr. med.	1970	Medicine
University of Munich, Germany	Habilitation	1974	Medicine
Galveston, University of Texas, USA	Elected Visiting Professor Med. Branch	1981	Neuroscience
Department of Physiology, London, UK	Elected Visiting Professor	1985-1989	Neuroscience

B. Positions / Academic Appointments

1972-1974	Wiss. Ass./Ass. Professor, Institute of Physiology, University of Munich
1975-1988	C2 Professor of Physiology, University of Heidelberg
1988-	Director, Department of Neuro- and Sensory Physiology, Georg-August-University Göttingen Medical School

C. Major research interests

Neurotransmitters, neuromodulators, and peptide hormones are known to activate metabotropic receptor proteins that control ion channels or second messenger cascades. These receptors regulate an intracellular network of interacting signal transduction pathways by means of G-proteins. Thus, receptors transmit extracellular signals to intracellular proteins and other chemical factors. These signals are normally not transduced in a stereotype manner, but they are integrated in a space- and time-dependent manner, resulting in highly dynamic and variable cellular responses. The specific nature of the cellular response depends on individual cell types that may differ in the expression pattern of receptor subtypes or of intracellular signaling factors. Our research group concentrates on the spatial organization of various subtypes of serotonin receptors and targets an understanding of the highly localized regulation of molecular interactions occurring simultaneously at many sites of a neuron. The goal is to achieve a refined understanding of the parallel signal processing within networks of chemical signal pathways and to clarify their effects on the properties of the neuron as a whole. Another task addressing complex brain functions is to transfer this knowledge about molecular signaling within cells to the integrated function of neuronal networks. The problem is that modulation of network systems cannot be predicted simply on the basis of cellular reactions, because subgroups of diversely wired neurons mostly express heterogeneous receptor profiles.

D. Selected peer-reviewed publications

Kobe F, Guseva D, Jensen TP, Wirth A, Renner U, Hess D, Müller M, Medrihan L, Zhang W, Zhang M, Braun K, Westerholz S, Herzog A, Radyushkin K, El-Kordi A, Ehrenreich H, **Richter DW**, Rusakov DA, Ponimaskin E (2012) 5-HT7R/G12 signaling regulates neuronal morphology and function in an age-dependent manner. *J Neurosci.* 32(9):2915-30

Renner U, Zeug A, Woehler A, Niebert M, Dityatev A, Dityateva G, Gorinski N, Guseva D, Abdel-Galil D, Fröhlich M, Döring F, Wischmeyer E, **Richter DW**, Neher E, Ponimaskin EG (2012) Heterodimerization of

serotonin receptors 5-HT1A and 5-HT7 differentially regulates receptor signalling and trafficking. *J Cell Sci.* [Epub ahead of print]

Shevtsova NA, Manzke T, Molkov YI, Bischoff A, Smith JC, Rybak IA, **Richter DW** (2011) Computational modelling of 5-HT receptor-mediated reorganization of the brainstem respiratory network. *Eur J Neurosci.* 34(8):1276-91

Salonikidis PS, Niebert M, Ullrich T, Bao G, Zeug A, **Richter DW** (2011) An ion-insensitive cAMP biosensor for long term quantitative ratiometric fluorescence resonance energy transfer (FRET) measurements under variable physiological conditions. *J Biol Chem.* 286(26):23419-31

Manzke T, Niebert M, Koch UR, Caley A, Vogelgesang S, Hülsmann S, Ponimaskin E, Müller U, Smart TG, Harvey RJ, **Richter DW.** (2010) *J Clin Invest.* 120(11):4118-28

Manzke T, Dutschmann M, Schlaf G, Mörschel M, Koch UR, Ponimaskin E, Bidon O, Lalley PM, **Richter DW** (2009) Serotonin targets inhibitory synapses to induce modulation of network functions. *Philos Trans R Soc Lond B Biol Sci.* 364(1529):2589-602

Kobe F, Renner U, Woehler A, Wlodarczyk J, Papusheva E, Bao G, Zeug A, **Richter DW**, Neher E, Ponimaskin E (2008) Stimulation- and palmitoylation-dependent changes in oligomeric conformation of serotonin 5-HT1A receptors. *Biochim Biophys Acta.* 1783(8):1503-16

E. Research Support (selection)

1. Center Molecular Physiology of the Brain (CMPB) (DFG): "From synaptopathies to system dysfunction", 07/01/2002-09/30/2014.
2. Cluster of Excellence EXC 171 „Microscopy at the Nanometer Range“ (DFG): 10/01/2006-10/31/2017.

F. Other activities

2006/2011: Rapporteur of the Scientific Advisory Board of MPG

2006-2010: Speaker of the Excellence Cluster EXC-171

2002-2010: Speaker of the DFG Research Centre CMPB

2005-2008: Speaker of ENI-G

2005-2006: Head of the BMBF Roadmap Committee on Neurology, Psychiatry, Sensory Organs

1995-2006: Speaker of the Collaborative DFG Research Centre SFB 406

1994-2000: Member of the DFG-Senate for Graduate Schools

G. Memberships and awards

Memberships: since 1983 Associate Member of the Physiological Society, UK

Awards: 2010 Sertürner Award for Pain Research

2009 Paton Lectureship, Physiological Society, UK

1995 Lambert Lectureship of Neuroscience, Univ. Seattle, USA

NAME RIZZOLI, Silvio	POSITION / TITLE Professor
-------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Bucharest, Romania	BSc	1996-2000	Biochemistry
University of Colorado, Denver, CO, USA	PhD	2000-2004	Physiology
Max Planck Institute Biophysical Chemistry, Göttingen, Germany	Postdoctoral Fellow	2004-2007	Neuroscience

B. Positions / Academic Appointments

2007-2012	Group Leader, European Neuroscience Institute, Göttingen, Germany
2012-	Professor, University of Göttingen School of Medicine, Göttingen, Germany

C. Major research interests

Conventional fluorescence microscopy is limited by the diffraction of light: fluorescent objects that are close together cannot be discerned. Stimulated emission depletion (STED) is a recent advancement in optical physics that breaks the diffraction barrier, allowing microscopes to obtain much clearer images. The diffraction barrier has been particularly problematic for imaging synaptic vesicles, which are among the smallest known organelles (30-50 nm in diameter). They are located in small areas in the synapses (about 1 micron in diameter). My group takes advantage of the increased imaging resolution provided by STED to investigate synaptic vesicle function, with an emphasis on synaptic vesicle recycling. Since STED microscopy also allows imaging of protein domains, my group aims at studying the patterning of protein domains in the synapse, in order to understand its molecular architecture. Among our recent results, we investigated the behavior of synaptic vesicles in living, un-anaesthetized animals. We termed this approach cellular ethology – the study of cellular and subcellular behavior under natural conditions. Contrary to the well established dogma in the synaptic physiology field, namely that synapses contain large numbers of vesicles since in order to use them for neurotransmitter release, we found that under natural conditions (as opposed to artificial stimuli) only few synaptic vesicles are used. The rest, more than 90%, function as a molecular buffer, involved in maintaining accessory proteins in the synapse.

D. Selected peer-reviewed publications

Denker A, Bethani I, Kröhnert K, Körber C, Horstmann H, Wilhelm BG, Barysch SV, Kuner T, Neher E, **Rizzoli SO** (2011) A small pool of vesicles maintains synaptic activity in vivo. Proc Natl Acad Sci U S A 108, 17177-17182

Denker A, Kröhnert K, Bückers J, Neher E, **Rizzoli SO** (2011) The reserve pool of synaptic vesicles acts as a buffer for proteins involved in synaptic vesicle recycling. Proc Natl Acad Sci U S A 108, 17183-17188

Wilhelm BG, Groemer TW, **Rizzoli SO** (2010) The same synaptic vesicles drive active and spontaneous release. Nat Neurosci 13:1454-1456

Hoopmann P, Punge A, Barysch SV, Westphal V, Bückers J, Opazo F, Bethani I, Lauterbach MA, Hell SW, **Rizzoli SO** (2010) Endosomal sorting of readily releasable synaptic vesicles. Proc Natl Acad Sci U S A 107, 19055-19060

Kamin D, Lauterbach MA, Westphal V, Keller J, Schönle A, Hell SW, **Rizzoli SO** (2010) High- and low-mobility stages in the synaptic vesicle cycle. Biophys J 99, 675-684

E. Research Support (selection)

1. FP7 Starting Grant (European Research Council) "The Synapse Nanomap", 1/9/2008-31/8/2013.
2. DFG Single Grant (DFG): "Super-resolution investigation of synaptic function", 1/9/2008-31/8/2011, prolonged until 31/08/2012.
3. DFG Single Grant (DFG): "Nanodomains in the secretory pathway investigated by super-resolution microscopy" 1/9/2010-31/08/2013.
4. DFG Single Grant (DFG): "Stoichiomeric biology and life cycle of the SNAREs" 1/9/2010-31/08/2013. Co-PI with Thorsten Lang, LIMES, University of Bonn, Germany.
5. SFB 889 (DFG): "Synaptic vesicle recycling in the hair cell ribbon synapse" 1/1/2011-12/31/2014. Co-PI with Tobias Moser, University of Göttingen, Germany.

F. Other activities

Member of the board of the Neuroscience Program of the IMPRS, member of the board of the Theodor-Förster Institute (Göttingen).

G. Memberships and awards

Awards: EMBO Young Investigator Programme Award (2011), European Research Council (ERC) Starting Grant, FP7 scheme (2007), Human Frontier Science Program (HFSP) Long-Term Fellowship (2005), European Molecular Biology Organization (EMBO) Long-Term Fellowship (2005).

NAME ROSSNER, Moritz	POSITION / TITLE Research Group Leader / Priv.Do. Dr. rer. nat.
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Berufsakademie, Mannheim	Wirtschaft-Ass BA	1985-1987	Economics
University of Heidelberg, Germany	Diploma	1988-1994	Molecular Biology
ZMBH, Heidelberg, Germany	PhD	1995-1997	Neurobiology
University of Göttingen, Germany	Habilitation	2010	Neurobiology

B. Positions / Academic Appointments

1998-1999	PostDoc, ZMBH, Heidelberg, Germany
1999-2000	PostDoc, BASF-Lynx AG, Heidelberg, Germany
2000-2002	Project Group Leader, Axaron Bioscience AG, Heidelberg, Germany
2003-	Research Group Leader, MPI of exp. Medicine, Göttingen, Germany

C. Major research interests

Our research interest is directed towards the generation and analysis of transgenic mouse mutants in order to understand individual gene functions in the adult brain. Towards this goal, we employ mouse genetics, molecular/biochemical and behavioral techniques. Our current interest focuses on basic-helix-loop-helix (bHLH) transcription factors. Several loss- and gain-of-function mouse mutants of the bHLH family that we and others have analyzed display behavioral alterations frequently also observed in psychiatric diseases. Among these are alterations of the sleep-wake or circadian behavior, altered cognitive performances and disturbed environmental adaptations to time shifts (jet-lag) or social stress. At the molecular level, we find several signaling pathways to be deregulated that likely provide a mechanistic link between disturbed environmental adaptations and deregulated gene expression seen in bHLH mouse mutants. To study cellular signaling upstream of gene expression, we have developed a series of genetically encoded biosensors that can be analyzed with standard fluorescent or luminescent reporter proteins but also with libraries of molecular barcodes to perform systems-level analyses. Currently, we aim at combining mouse models and genetic sensors to better understand the molecular adaptations of gene-environment interactions relevant for psychiatric and neurological diseases.

D. Selected peer-reviewed publications

Djannatjan MS, Galinski S, Fischer TM, **Rossner M** (2011) Studying G protein-coupled receptor activation using split-TEV assays. *Anal. Biochemistry*. May 15;412(2):141-52

Brzózka MM, Radyushkin R, Wichert SP, Ehrenreich H, **Rossner M** (2010) Cognitive and sensorimotor gating impairments in transgenic mice overexpressing the schizophrenia susceptibility gene Tcf4 in the forebrain. *Biological Psychiatry*. July; 68(1): 33-40

Botvinnik A, Wichert SP, Fischer TM, **Rossner M** (2010) Integrated analysis of receptor activation and downstream signaling with EXTassays. *Nature Methods*. Jan;7(1):74-80

Rossner M, Oster H, Wichert SP, Reinecke L, Wehr MC, Reinecke J, Eichele G, Taneja R, Nave KA. Disturbed clockwork resetting in Sharp-1 and Sharp-2 single and double mutant mice. *PLoS ONE*. 2008 Jul 23;3(7)

Rossner M, Hirrlinger J, Wichert SP, Boehm C, Newrzella D, Hiemisch H, Eisenhardt G, Stuenkel C, von Ahsen O, Nave KA (2006) Global Transcriptome Analysis of Genetically Identified Neurons in the Adult Cortex. *J Neuroscience*, Sep 27, 26(39):9956-9966

E. Research Support (selection)

1. DFG/KFO241 ‚Gene-environment interactions and molecular signatures in mouse models of psychosis‘, Jan 2012 – Dec 2014, FKZ RO4076/1-1, 450k€ (PI)
2. BMBF ‚VIP Program – Validation of barcoded biosensors‘ 1.500 T€, Nov 2010 – Oct 2013. FKZ 16V0008 (PI).
3. BMBF ‚BioProfil Porgram – Development of genetically encoded biosensors‘ 730 T€ (Consortium 1.300 T€), Oct 2007 – Sep 2010. FKZ 0315180A (PI, Coordinator).

F. Other activities

Student Speaker DFG Graduate Program ‚Molekulare Neurobiology‘(1995-1997), Tierschutzbeauftragter (2000-2002), Sicherheitsbeauftragter Gentechnik (seit 2006), gewählter Mitarbeitervertreter, Sektionsmitglied der MPG (seit 2008), Mitglied der Fakultät für Biologie, Universität Göttingen (since 2010)

G. Memberships and awards

Memberships: Gesellschaft für Biochemie und Molekularbiologie e.V. (GBM), Neurowissenschaftliche Gesellschaft (NWG)

Awards: Best diploma-thesis of the year (GFM)(1995), DFG Promotionsstipendium (1995-1997), Dissertation ‚summa cum laude‘ (1998), 2x Science4life award for innovative reasearch (2007), EXIST-Forschungstransfer / StartUp-Competition (2010)

NAME SCHILD, Detlev	POSITION / TITLE Director and Professor
------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma	1979	Physics
University of Göttingen, Germany	Staatsexamen	1982	Medicine
University of Göttingen, Germany	Dr. rer. nat.	1985	Physics
University of Göttingen, Germany	Dr. med.	1987	Medicine
University of Göttingen, Germany	Habilitation	1991	Physiology

B. Positions / Academic Appointments

1995	Adjunct Professor, Physiology
1997	Professor of Physiology, Head of Department
2009	Professor of Physics

C. Major research interests

Membrane biophysics (functions and actions of ionic channels in neurons and at synapses); Quantitative fluorescence microscopy; Computational Neuroscience; Synaptic transmission (at reciprocal synapses in the olfactory bulb and at intraglomerular synapses); Single molecule detection and single molecule dynamics using fluorescence correlation spectroscopy (FSC)

D. Selected peer-reviewed publications

Junek S, Kludt E, Wolf F, **Schild D** (2010) Olfactory coding with patterns of response latencies. *Neuron* 67, 872–84

Breunig E, Manzini I, Piscitelli F, Gutermann B, Di Marzo V, **Schild D**, Czesnik D (2010) The endocannabinoid 2-AG controls odor sensitivity in larvae of *Xenopus laevis*. *J. Neurosci.* 30, 8965-8973

Chen TW, Lin BJ, **Schild D** (2009) Odor coding by modules of coherent mitral/tufted cells in the vertebrate olfactory bulb. *Proc. Natl. Acad. Sci. USA* 106, 2401-6

Junek S, Chen TW, Alevra M, **Schild D** (2009) Activity Correlation Imaging Visualizing Function and Structure of Neuronal Populations. *BIOPHYS J* 96, 3801–9

Franze K, Grosche J, Skatchkov SN, Schinkinger S, **Schild D**, Uckermann O, Travis K, Reichenbach A, Guck J (2007) Spotlight on Glial Cells: Living Optical Fibers in the Vertebrate Retina. *Proc. Natl. Acad. Sci. USA* 104, 8287-92

E. Research Support (selection)

1. DFG Research Center Molecular Physiology of the Brain
2. Excellence Cluster 171 Microscopy at the Nanometer Scale
3. Bernstein Center of Computational Neuroscience
4. Bernstein Forum of Neurotechnology

F. Other activities

- Speaker of the Intern. M.Sc./PhD/MD-PhD Neuroscience Program, Göttingen
- Member of the Foundation Council of the University of Göttingen

G. Memberships and awards

Awards: ESF Fellow, University of Sussex, Dept. Experimental Psychology, Cozzarelli Prize of the National Academy of Sciences USA, 2008, Member of physiology, neuroscience and biophysics societies

NAME SCHLÜTER, Oliver Marcus	POSITION / TITLE Independent group leader
---------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Hannover, Germany	Diploma	1994	Biochemistry
University of Göttingen, Germany	Staatsexamen	2000	Medicine
University of Hannover, Germany	Dr. rer. nat.	2000	Biochemistry
Universtiy of Göttingen, Germany	Dr. med.	2001	Medicine
MPI for biophysical chemistry, Göttingen, Germany	Postdoctoral fellow	2001-2002	Neuroscience
Stanford University, Palo Alto, USA	Postdoctoral fellow	2002-2006	Neuroscience

B. Positions / Academic Appointments

2006-	Independent group leader, European Neuroscience Institute, Göttingen, Germany
-------	---

C. Major research interests

Our group is interested in the molecular mechanisms of long-term synaptic plasticity. Specifically, we investigate the role of signaling scaffolds in the post-synaptic density of rodents. We use a combination of genetic manipulations, biochemistry and electrophysiology to dissect how the signaling scaffolds coordinate signaling processes. Our working hypothesis is that the signaling scaffolds tether receptors and signaling proteins with the respective target molecules to ensure signaling specificity.

A second line of research addresses cellular and molecular mechanisms in drug addiction in rodent models. We hypothesize that drugs of abuse hijack synaptic plasticity mechanisms to induce "pathological memories", reminiscent of the addicted brain. Using an extension to in vivo genetic manipulations and behavioral paradigms, we aim to link chains of molecular events to cellular and ultimately behavioral alterations.

D. Selected peer-reviewed publications

Brown TE, Lee BR, Mu P, Ferguson D, Dietz D, Ohnishi YN, Lin Y, Suska A, Ishikawa M, Huang YH, Shen H, Kalivas PW, Sorg BA, Zukin RS, Nestler EJ, Dong Y, **Schlüter OM** (2011) A silent synapse-based mechanism for cocaine-induced locomotor sensitization. *J. Neurosci.*, 31, 8163-74

Xu* W, **Schlüter* OM**, Steiner P, Czervionke BL, Sabatini B, Malenka RC (2008) Molecular Dissociation of the Role of PSD-95 in Regulating Synaptic Strength and LTD. *Neuron*, 57, 248-62

Schlüter* OM, Xu* W, Malenka RC (2006) Alternative N-terminal domains of PSD-95 and SAP97 govern activity-dependent regulation of synaptic AMPA receptor function. *Neuron*, 51, 99-111

Schlüter OM, Basu J, Südhof TC, Rosenmund C (2006) Rab3 superprimes synaptic vesicles for release: implications for short-term synaptic plasticity. *J. Neurosci.*, 26, 1239-46

Chandra S, Gallardo G, Fernandez-Chacon R, **Schlüter OM**, Südhof TC (2005) Alpha-synuclein cooperates with CSP α in preventing neurodegeneration, *Cell*, 123, 383-96

E. Research Support (selection)

1. Emmy-Noether award (DFG): "Analysis of signaling scaffolds in hippocampal NMDA receptor-dependent long-term synaptic depression", 12/1/2006-11/30/2011. PI.
2. SFB 889 (DFG): "Cellular mechanisms of sensory processing", 1/1/2011-12/31/2012. PI on one project.
3. Research center (DFG): "Molecular physiology of the brain", 1/1/2009-10/31/2012. PI on one project.
4. ITN Training grant (EU): "Synapses: from Molecules to Brain Diseases", 11/1/2010-31/10/2013. PI on one project.
5. Erasmus Training grant (EU): "European Neuroscience Campus", 11/1/2011-31/10/2014. PI on one project.

F. Other activities

-

G. Memberships and awards

Emmy Noether Award (2006)

NAME SIMONS, Mikael	POSITION / TITLE W3-Heisenberg Professorship
------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Medical School Heidelberg, Germany	MD	1991-1997	Medicine
Residency in Neurology, Tübingen, Germany	"Facharzt"	1997-2004	Clinical Neurology
University of Tübingen, Germany	Habilitation	2005	Neurology
University of Göttingen, Germany	W3 Professorship	2009	Neurology

B. Positions / Academic Appointments

2004-2008	Junior Group leader, Biochemistry, Göttingen
2007-present	Consulting Neurologist, Department of Neurology, Göttingen
2009-present	Research Group leader with an ERC Starting Grant, MPI Exp Med, Göttingen
2009-present	W3-Heisenberg-Professorship, Department of Neurology, Göttingen

C. Major research interests

The myelin sheath is formed by the spiral wrapping of glial plasma membrane extensions around the axons, followed by the extrusion of cytoplasm and the compaction of the stacked membrane bilayers.

These tightly packed membrane stacks provide electrical insulation around the axons and maximize their conduction velocity. Axonal insulation by myelin not only facilitates rapid nerve conduction but also regulates axonal transport and protects against axonal degeneration. Damage to the myelin sheath, as it for example occurs in multiple sclerosis (MS) results therefore in severe neurological disability also as a result of neurodegeneration. Our main goal is to come up with new approaches of how to promote remyelination in demyelinating diseases such as MS. To realize this goal we need to understand how myelin is formed during normal development.

How oligodendrocytes wrap their plasma membrane around an axon to form myelin with its many layers of a tightly stacked membrane is one of the big unresolved questions in cellular neurobiology. A mystery is how newly synthesized membrane is delivered to the tip of the growing myelin sheath through the many layers of compact membrane and how the force is generated to move the membrane around the axon.

Our aim is to elucidate the cellular machinery that is required for the formation of this membrane. Myelin membrane trafficking and assembly is under extensive control by signal transduction cascades. We are therefore also interested to identify the influence of cell-cell communication on membrane trafficking. These studies aim to understand the complex interplay between neurons and glia in order to gain insights into mechanisms of myelin formation during the development of the central nervous system.

D. Selected peer-reviewed publications

Aggarwal S, Yurlova L, Snaidero N, Reetz C, Frey S, Zimmermann J, Pähler G, Janshoff A, Friedrichs J, Müller DJ, Goebel C, **Simons M** (2011) A Size Barrier Limits Protein Diffusion at the Cell Surface to Generate Lipid-Rich Myelin-Membrane Sheets. *Dev Cell*. Sep 13;21(3):445-56

Hsu C, Morohashi Y, Yoshimura S-I, Manrique-Hoyos N, Jung SY, Lauterbach M, Bakhti M, Grønberg G, Möbius W, Rhee JS, Barr FA, **Simons M** (2010) Regulation of exosome secretion by Rab35 and its GTPase-activating proteins TBC1D10A-C. *J. Cell Biol.* Apr 19;189(2):223-32

Trajkovic K, Hsu C, Chiantia S, Rajendran L, Wenzel D, Wieland F, Schwille P, Brügger B and **Simons M** (2008) Ceramide triggers budding of exosome vesicles into multivesicular endosomes. *Science* 319(5867):1244-7

Fitzner D, Schneider A, Kippert A, Möbius W, Willig KI, Hell SW, Bunt G, Gaus K, and **Simons M** (2006) Myelin basic protein-dependent plasma membrane reorganization in the formation of myelin. *EMBO J.* 25(21):5037-48

Trajkovic K, Dhaunchak AS, Goncalves J, Wenzel D, Bunt G, Nave K-A and **Simons M** (2006) Neuron to glia signalling triggers myelin membrane exocytosis from endosomal storage sites. *J Cell Biol.* 172: 937-48

E. Research Support (selection)

1. Myelin Biogenesis; ERC Starting Grant EU, 01/2009- 12/2012
2. W3 Heisenberg Program; 02/2009-02/2012
3. Oligodendrocyte and axon interaction; DFG, FOR1756, 01/2011-12/2013
4. Myelin and Autoimmunity; DFG; Transregio 43, 01/2012- 12/2015
5. Microbes in the biology of multiple sclerosis; Tschira Stiftung 03/2012-2/2015; PI (Consortium partner).
6. Cell biology and biochemistry of Charcot Marie Tooth disease; BMBF E-Rare 03/2012- 2/2015; PI (Consortium partner).

F. Other activities

Consulting Neurologist, Head of the Multiple Sclerosis Outpatient Clinic

G. Memberships and awards

Awards: Bundesweiter Dissertationspreis anlässlich des 6. deutschen Ärztekongresses, 1995; Ruprechts-Karls-Preis der Universität Heidelberg, 1998; Heinz-Maier-Leibniz Preis, 2001; Akademiepreis der Heidelberger Akademie der Wissenschaften, 2002; Attempto-Preis für Neurobiologie der Universität Tübingen, 2003; EMBO, Young Investigator Award, 2008

NAME STAIGER, Jochen	POSITION / TITLE Director and Professor
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Justus-Liebig-University, Gießen, Germany	Medical Doctor	1992	Medicine
Justus-Liebig-University, Gießen, Germany	Dr. med. (summa cum laude)	1993	Medicine/Neuroanatomy
Heinrich-Heine-University Düsseldorf	Intern and Research Assistant at the Neurological Clinic	1992-1994	Neurology/Neurobiology
Institute of Experimental Medicine, Budapest	Postdoc (Research Stipend of DFG)	1994	Neuroanatomy
Heinrich-Heine-University Düsseldorf	Postdoc	1994-2000	Anatomy/Neurobiology

B. Positions / Academic Appointments

2000-2005	Heinrich-Heine-University Düsseldorf, Assistant Professor for Anatomy/Neuroanatomy
2006-2009	Albert-Ludwigs-University Freiburg, Associate Professor for Anatomy/Cell Biology
2010-present	Georg-August-University Göttingen, Full Professor and Director of the Department of Neuroanatomy

C. Major research interests

The overall main research topic is the analysis of the structural and functional foundations of cortical information processing. A methodologically multifaceted approach aims at the revelation of mechanism of processing tactile stimuli and their experience-dependent plasticity by using the rodent primary somatosensory (barrel) cortex as a model system. A further topic is the pre- and postnatal maturation of cortical circuits and its developmental plasticity. In general we focus on the cellular level taking into consideration molecular and ensemble features of the examined circuits as well. We are working on:

- Developmental plasticity induced by early postnatal deprivation of sensory stimulation in mice with intact or genetically altered thalamo-cortical projections
- Thalamo-cortical interactions as the first stage of cortical information processing
- Microcircuits in columnar modules – examining the Bauplan of synaptic connectivity of neocortex
- Tactile learning: Genomic regulation of experience-dependent plasticity in the trigeminal somatosensory system

D. Selected peer-reviewed publications

*Gentet LJ, Kremer Y, Taniguchi H, Huang ZJ, **Staiger JF**, Petersen CCH (2012) Unique functional properties of somatostatin-expressing GABAergic neurons in mouse barrel cortex. *Nat Neurosci* 15:607-612

*Wagener RJ, David C, Zhao S, Haas CA, **Staiger JF** (2010) The somatosensory cortex of reeler mutant mice shows absent layering but intact formation and behavioral activation of columnar somatotopic maps. *J Neurosci* 30:15700-15709

*Gentet LJ, Avermann M, Matyas F, **Staiger JF**, Petersen CCH (2010) Membrane potential dynamics of GABAergic neurons in the barrel cortex of behaving mice. *Neuron* 65:422-435

***Staiger JF**, Zuschratter W, Luhmann HJ, Schubert D (2009) Local circuits targeting parvalbumin-containing interneurons in layer IV of rat barrel cortex. *Brain Struct Func* 214:1-13; DOI 10.1007/s00429-009-0225-5

*Ascoli GA, Alonso-Nanclares L, Anderson SA, Barrionuevo G, Benavides-Piccione R, Burkhalter A, Buzsaki G, Cauli B, DeFelipe J, Fairén A, Feldmeyer D, Fishell G, Fregnac Y, Freund TF, Karube F, Gardner D, Gardner EP, Goldberg JH, Helmstaedter M, Hestrin S, Kisvarday Z, Lambolez B, Lewis D, Marin O, Markram H, Muñoz A, Packer A, Petersen C, Rockland K, Rossier J, Rudy B, Somogyi P, **Staiger JF**, Tamas G, Thomson AM, Toledo-Rodriguez M, Wang Y, West DC, and Yuste R (2008) Petilla Terminology: Nomenclature of features of GABAergic interneurons of the cerebral cortex. *Nat Rev Neurosci* 9:557-568

E. Research Support (selection)

1. 2009-2011 Deutsche Forschungsgemeinschaft (Sta 431/8-1) Topic *Synaptic connections of GABAergic interneurons mediating local, feedforward or feedback inhibition in a cortical column*

2. 2010-2013 Deutsche Forschungsgemeinschaft (Sta 431/10-1) Topic: *Three-dimensional analysis and quantification of dye-labeled cortical neurons by NeuroLucida*

3. 2011-2014 PI (Project C3) in SFB 889 (*Cellular mechanisms of sensory processing*) Topic: *Integration of afferent sensory and cortical inputs by identified neurons in the somatosensory cortex of rodents*

F. Other activities

Member of the Organizing Committee of the "Barrels Conference" since 2005. Scientific advisor of the joint Hertie-Stiftung/Neurowissenschaftliche Gesellschaft project "Das Gehirn.Info"

G. Memberships and awards

Memberships: Anatomische Gesellschaft, Neurowissenschaftliche Gesellschaft, Gesellschaft Deutscher Naturforscher und Ärzte, Society for Neuroscience,

Awards: Thesis price of the Medical Faculty University of Giessen; Young Scientist Award of the Northrhine-Westfalian Academy of Science.

NAME STEGMÜLLER, Judith	POSITION / TITLE Junior Group Leader, Dr. rer. nat.
----------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Heidelberg, Germany	Diploma	1998	Biology
University of Heidelberg, Heidelberg, Germany	Dr. rer.nat.	2002	Neurobiology
Harvard Medical School, Boston, USA	Postdoctoral fellow	2003-2008	Neurobiology

B. Positions / Academic Appointments

2008-	Junior Group Leader, Max-Planck-Institute of Experimental Medicine, Goettingen, Germany
-------	---

C. Major research interests

My lab is interested in the role of the ubiquitin-proteasome system (UPS) in nervous system development and disease. The UPS consists of several hundred components with E3 ubiquitin ligases being the most numerous ones. E3 ligases recruit the substrate for ubiquitination, which can result in proteasomal degradation or functional modification of the substrate. E3 ligases have been implicated in various aspects of brain development. We are focusing on the RING (really interesting new gene)-type E3 ligases, which act as scaffolds to recruit the substrate and the E3 ubiquitin-conjugating enzyme. Our functional and biochemical analyses include brain-abundant or brain-specific ligases single as well as multi-subunit E3 ligases both that control neuronal survival and morphogenesis and that are implicated in neurodegeneration.

D. Selected peer-reviewed publications

Ikeuchi Y*, **Stegmüller J***, Netherton S, Huynh MA, Masu M, Frank D, Bonni S, Bonni A (2009) A SnoN-Ccd1 pathway promotes axonal morphogenesis in the mammalian brain, *J. Neurosci.* (29)13, 4312-21, * equal contribution

Huynh MA, **Stegmüller J**, Litterman N, Bonni A (2009) Regulation of Cdh1-APC function in axon growth by Cdh1 phosphorylation, *J. Neurosci.* (29)13, 4322-7

Stegmüller J, Huynh MA, Yuan Z, Konishi Y, Bonni A (2008) TGFb-Smad2 Signaling Regulates the Cdh1-APC/SnoN Pathway of Axonal Morphogenesis, *J. Neurosci.* 28(8), 1961-69

Stegmüller J, Konishi Y, Huynh MA, Yuan Z, Dibacco S, Bonni A (2006) Cell-intrinsic regulation of axonal morphogenesis by the Cdh1-APC target SnoN, *Neuron* 50(3), 389-400

Konishi Y, **Stegmüller J**, Mastuda T, Bonni S, Bonni A (2004) Cdh1-APC controls axonal outgrowth and patterning in the mammalian brain, *Science* 303(5660):1026-30

E. Research Support (selection)

1. Max-Planck-Startup grant, 2. DFG STE1117/3, 3. GGNB Junior Group Stipend

NAME STOYKOVA, Anastassia	POSITION / TITLE Research Group Leader and Adj. Professor
------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Medical Academy, Sofia, Bulgaria	MD	1972	Human Medicine
Bulgarian Academy of Sciences, Sofia, Bulgaria	PhD	1985	Neurochemistry
Bulgarian Academy of Science, Sofia/ MPI bpc, Göttingen, Germany	Postdoctoral fellow	1985-1988 1988-1989	Molecular Biology Molecular Biology
Bulgarian Academy of Science, Sofia Georg-August-University, Faculty Medicine, Göttingen	Habilitation Resumption of Habilitation	1985 2002	Neurobiology Developmental Biology

B. Positions / Academic Appointments

1973-1988	Research Associate, Regeneration Research Laboratory, Bulg. Acad. Sci., Sofia
1989-1991	Assistant Research Professor, Institute Mol. Biology, Bulg. Acad. Sci., Sofia
1991-2008	Staff research Scientist and Research Group Leader, Department of Molecular Cell Biology, MPI for Biophysical Chemistry, Göttingen, Germany
2008- Since 2010	Independent Group Research Leader, RG Molecular Developmental Neurobiology MPI for Biophysical Chemistry, Göttingen, Germany Adjunct Professor at the Faculty Human Medicine, Georg-August-University, Göttingen

C. Major research interest

The research interest of the group is focused on molecular mechanisms for patterning and neurogenesis in developing and adult brain with an emphasis on the mammalian corticogenesis. The neocortex is a mammal-specific region of the cerebrum acting as an integrative and executive center, having a critical importance for the human health. The complex organization of the neocortex arises from neural stem cells through precisely controlled phases of cell proliferation, differentiation, migration and death. We are interested in understanding the role of selected transcription factors (e.g. Pax6, Scatch2, Zbtb20) in specification of neuronal subtype identity, layer, and area formation during development as well as in neurogenesis of the adult brain. A second line of research addresses the role of the chromatin remodeling in cortical neurogenesis. We also seek to reveal mechanisms of microRNA-dependent regulation of neurogenesis and brain tumor progression. Using the mouse as a model, we study these processes by manipulation of gene activity in transgenic mice using a range of cell- and molecular biological, biochemical, and genetic approaches.

D. Selected peer-reviewed

Tuoc TC, Radyushkin K, Tonchev AB, Pinon MC, Ashery-Padan R, Molnar Z, Davidoff MS, **Stoykova A.** (2009) Selective cortical layering abnormalities and behavioural deficits in cortex-specific Pax6 knockout-mice. *Neurosci* 29, 8335-8349

Boretius S, Michaelis T, Tammer R, Ashery-Padan R, Frahm J, **Stoykova A** (2009) In Vivo MRI of altered brain anatomy and fiber connectivity in adult Pax6 deficient mice. *Cereb Cortex* 19, 8335-8349

Pinon MC, Tuoc TC, Ashery-Padan R, Molnar Z, **Stoykova A** (2008) Altered molecular regionalization and normal thalamocortical connections in cortex-specific Pax6 knock-out mice. *J Neurosci* 28, 8724-8734.

Tuoc TC, **Stoykova A** (2008) Trim11 modulates the function of neurogenic transcription factor Pax6 through ubiquitin-proteasome system. *Genes Dev* 22, 1972-1986

Fimia GM,* **Stoykova A,*** Romagnoli A,* Giunta L, Di Bartolomeo S, Nardacci R, Corazzari M, Fuoco C, Uvar A, Schwartz P, Gruss P, Piacentini M, Chowdhury K, Cecconi F (2007) Ambra1 regulates autophagy and development of the nervous system. *Nature* 447, 1121-1125.

E. Research Support (selection)

1. DFG-CMPB project: "Pax6-dependent centrosome functioning" (1.04.2011 – 31.12. 2014; IP)
2. DFG-CMPB project: "Role of transcription factor Scratch2 in cortical neurogenesis" (1.10.2007 – 31.03.2011; IP)

F. Other activities

Member/Lecturer at the International MPI Research School (IMPRS), Neuroscience Program; Faculty Member of Göttingen Graduate School for Neuroscience and Molecular Bioscience (GGNB) and EU Marie Curie training site "NEUREST"; Grants reviewer for WELLCOME TRUST, UK , Biotechnology and Biological Science Research Council (BBSRC), UK, and Italian Ministry for Education University and Research (MIUR).

G. Memberships and awards

Membership: Society for Neuroscience

Awards: Special Award (golden medal) of the Bulgarian Medical Academy (1972); Scholarships of the European Neuroscience Foundation (1974; 1976); Alexander von Humboldt Foundation Grant Holder (1980-81; 1988-89).

NAME STÜHMER, Walter	POSITION / TITLE Director and Professor
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Technical University Munich, Germany	Master	1975	Physics
Technical University Munich, Germany and CNR, Camogli, Italy	Dr. rer. nat.	1978-1980	Biophysics
University of Washington, Seattle, USA	Postdoctoral Fellow	1980-1981	Biophysics and Physiology
University of Washington, Seattle, USA	Visiting Scientist	1983	Biophysics and Physiology

B. Positions / Academic

1983-1992	Group leader, Max-Planck-Institute of Biophysical Chemistry, Göttingen, Germany
1992 - present	Group leader, Department of Molecular Biology of Neuronal Signals, Max-Planck-Institute of Experimental Medicine, Göttingen, Germany

C. Major research interests

Our group is interested in processes involved in the electrical signaling among cells. During studies of the function and structure of voltage-gated ion channels, a particular potassium channel, the Eag1 (Kv10.1) called our attention because it was able to induce growth-factor independent cell proliferation in transfected cells. It also was able to induce tumours in immunodeficient mice. A screen of patient samples revealed that in over 70% of all tissue samples, Eag1 was present, making this extracellularly expressed protein a useful cancer target. Currently we are elucidating the mode of action, and have substantial indications that Eag1 might act even downstream of p53 and RB, two well-characterized tumour factors.

Another interest of the group is in optogenetics, where transmembrane conductances can be modulated by light. Together with Prof. Bamberg at the Max-Planck-Institute of Biophysics in Frankfurt, who pioneered the development of light-sensitive ion channels, we have been applying newly developed channelrhodopsins to study neuronal networks. Towards this aim, primary cultured hippocampal neurons are plated in a patterned manner and transfected with the channelrhodopsin on a multielectrode array (MEA). This allows sub-threshold excitation of the network, similar to in-situ conditions in the brain.

D. Selected peer-reviewed publications

Chen Y, Sanchez A, Rubio ME, Kohl T, Pardo LA, **Stühmer W** (2011) Functional KV10.1 Channels Localize to the Inner Nuclear Membrane. PLoS ONE 6, e19257

Weffort de Oliveira RM, Martin S, Lino de Oliveira CL, Milani H, Schiavon AP, Joca S, Pardo LA, **Stühmer W**, Del Bel E (2011) Eag1, Eag2, and SK3 potassium channel expression in the rat hippocampus after global transient brain ischemia. J Neurosci Res 90, 632-640

Kohl T, Lörinczi E, Pardo LA, **Stühmer W** (2011) Rapid internalization of the oncogenic K⁺ channel Kv10.1. PLoS ONE 6, e26329

Hartung F, **Stühmer W**, Pardo LA (2011) Tumor cell-selective apoptosis induction through targeting of KV10.1 via bifunctional TRAIL antibody. Mol Cancer 10, 109

Gonçalves JT, **Stühmer W** (2010) Calmodulin interaction with hEAG1 visualized by FRET microscopy. PLoS ONE 5, e10873

E. Research Support (selection)

1. FP7-NMP: NAMDIATREAM: "Nanotechnological toolkits for multi-modal disease diagnostics and treatment monitoring" 01/10/2011-30/09/2014 Co-PI (with F. Alves and L.A. Pardo).
2. BMBF Verbundprojekt Bernstein Fokus Neurotechnologie – Neurobionische Kontrollsysteme: "Exploring the potential of optical neuro-stimulation using light sensitive ion channels and pumps for closed loop neuro-control" 01/10/08-30/09/13 Co-PI (with F. Wolf).
3. BMBF Verbundprojekt Bernstein Zentrum für Computational Neuroscience, Göttingen – Kooperative Dynamiken und Adaptivität in neuronalen Systemen: "Cooperative dynamics and adaptivity in neuronal systems" 01/05/10-30/04/15 Co-PI (with F. Wolf).
4. EU Project: "Ion transport proteins in control of cancer cell behaviour" 01/10/2011-30/09/2015 Co-PI (with F. Alves).
5. VW-Stiftung: "Signal propagation in networks of cortical neurons" 01/11/11-31/10/14 Co-PI (with F. Wolf).

F. Other activities

Chairperson of the Managing Board of the European Neuroscience Institute; Member of the Scientific Advisory Board of SISSA, Trieste, Italy; Member of the Scientific Advisory Board of OXION, Oxford, U.K.; Visiting Member of the IBRO Visiting Membership Program.

G. Memberships and awards

Memberships: Associated Member of the Molecular Neurobiology Department at the University of Alicante, Spain; Elected member of the Academia de Ciencias de America Latina

Awards: Fellowship from the Max-Kade-Stiftung (1980-1981), Humboldt-Mutis-Prize (1991), The International Amedeo and Frances Herlitzka Prize for Physiology (1998), Cátedra Santiago Ramón y Cajal (2007), Martin Lectureship at the University of Colorado (2008).

NAME STUMPNER, Andreas	POSITION / TITLE Scientific assistant, Professor (apl.)
---------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Erlangen, Germany	Diploma	1977-1984	Biology
University of Erlangen, Germany	Dr. rer. nat.	1984-1988	Neurobiology
Andrews University, Berrien Springs, USA	Postdoc fellow	1990-1991	Neurobiology
University of Göttingen, Germany	Habilitation	1997	Zoology

B. Positions / Academic Appointments

1988-1990	assistant professor University of Erlangen, Germany
1991-1996	assistant professor University of Göttingen, Germany
1996-2001	associate professor, University of Göttingen, Germany
2002-2003	guest professor, University of Zürich. Switzerland
2003 - today	associate professor (from 2004 on permanent), University Göttingen, Germany

C. Major research interests

My research focuses on how a small nervous system recognizes specific frequencies and temporal patterns (in the context of acoustic communication in insects, mainly in Orthoptera). Understanding these processes bears implications also for understanding function and evolution of the same performances of the vertebrate brain. I see the strength of the acoustic and invertebrate system a) in the precise temporal and spectral stimuli one can deliver and the clear (innate) responses on the behavioral and neuronal level, b) in the comparative potential (song recognition in groups of related species and differences in neuronal layout to related non-singing or non-hearing groups) allowing to understand what mechanisms might have played a role in evolution and how evolution of songs and recognition systems depend on each other, c) in the identified neuron-approach allowing to find homologous neurons in related species and indicating evolutionary changes on the cellular level and d) the potential to directly test hypotheses in behavioral experiments. Recent findings from intracellular studies in bush crickets are: Central neurons receive lateral frequency-dependent inhibitions. After blocking such inhibitions the frequency tuning broadens considerably. Such inhibitions obviously occur redundantly on consecutive levels. Species-specificity of a neuron in related species depends on specific inhibitions, not on specific excitations. Homologous neurons in more distantly related species may differ considerably in their properties. In the brain new properties emerge, which correlate to behavior (like long time constants).

D. Selected peer-reviewed publications

Stout J, **Stumpner A**, Jeffery J, Samuel L, Atkins G (2011) Response properties of the prothoracic AN2 auditory interneurone to model calling songs in the cricket *Gryllus bimaculatus*. *Physiol. Entomol.* 36: 343-359

Ostrowski TD, **Stumpner A** (2010) Frequency processing at consecutive levels in the auditory system of bush crickets (Tettigoniidae). *J. Comp. Neurol.* 518: 3101-3116

Creutzig F, Wohlgemuth S, **Stumpner A**, Benda J, Ronacher B, Herz AVM (2009) Time-scale invariant representation of acoustic communication signals by a bursting neuron. *J Neurosci*; 29: 2575-2580

Stritih N, **Stumpner A** (2009) Vibratory interneurons in the non-hearing cave cricket indicate evolutionary origin of sound processing elements in Ensifera. *Zoology*, 112: 48-68

Neuhof D, Wohlgemuth S, **Stumpner A**, Ronacher B (2008) Evolutionarily conserved coding properties of auditory neurons across grasshopper species. *Proc. R. Soc. B* 275, 1965–1974

E. Research Support (selection)

1. Stipend of the Marianne and Dr. Fritz Walter Fischer-Foundation for a PhD project of Tim Ostrowski under my guidance. Completed 2009. The study focused on brain neurons in a bush cricket, which are involved in song recognition

2. DFG 189/7 completed 2008; speciation and extinction of populations in a bush cricket. Study of a flightless bush cricket in Europe, which has a disjunctive occurrence due to avoidance of beech forests. Morphological, behavioral and population ecological study in cooperation with the veterinary institute, performed mainly by a PhD student, Christian Richter.

F. Other activities

Member of two boards of the Biological faculty dealing with studies and examinations.

G. Memberships and awards

Memberships: Neurowissenschaftliche Gesellschaft; Deutsche Zoologische Gesellschaft

NAME TARABYKIN, Victor	POSITION / TITLE Director and Professor
---------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Russian State Medical University, Moscow, Russia	MD	1993	Biology and Medicine
Inst. Of Bioorganic Chemistry, Moscow, Russia	PhD	1995	Molecular Biology
MPI of Biophysical Chemistry, Göttingen		1996-2001	Developmental Neurobiology
University of Göttingen	Habilitation	2008	Molecular Biology and Genetics)

B. Positions / Academic Appointments

2002-2007	Group Leader in the Department of Molecular Biology of Neuronal Signals, Max Planck Institute of Experimental Medicine, Göttingen
2008-2009	Heisenberg Independent Group Leader, Max Planck Institute of Experimental Medicine, Göttingen
2009-	W3 Heisenberg Professor and Acting Director, Institute of Cell Biology and Neurobiology, Charité – Universitätsmedizin Berlin

C. Major research interests

We are interested in the cellular and molecular mechanisms underlying cell fate specification in the mouse cerebral cortex. We focus on the mechanisms controlling the generation, migration and axonal guidance of neurons of different cortical layers and areas. Towards this end we apply a combination of genetic, molecular and cell biological approaches to identify and characterize genes that control cortical development.

D. Selected peer-reviewed publications

Seuntjens E, Nityanandam A, Miquelajauregui A, Debruyne J, Stryjewska A, Goebbels S, Nave K, Huylebroeck D., **Tarabykin V.** Sip1 regulates sequential fate decisions by feedback signaling from postmitotic neurons to progenitors. (2009) *Nature Neuroscience* 12(11):1373-80

Britanova O, de Juan Romero C, Cheung A, Kwan KY, Schwark M, Gyorgy A, Vogel T, Akopov S, Mitkovski M, Agoston D, Sestan N, Molnár Z, **Tarabykin V.** Satb2 is a postmitotic determinant of upper layer neurons specification in the neocortex (2008) *Neuron* 57(3):378-92

Miquelajauregui A., Van de Putte T., Polyakov A., Nityanandam A., Boppana S., Karabinos A., Higasi Y., Seuntjens E., Huylebroeck D., and **Tarabykin V.** Smad-interacting protein-1 (Sip1/Zfx1b) acts upstream of Wnt signaling in the mouse hippocampus and controls its formation (2007) *PNAS* 104 (31) 12919-12924

Britanova O., Depew, MJ, Schwark M, Thomas B.L., Miletich I., Sharpe P., and **Tarabykin V.** Satb2 haploinsufficiency phenocopies 2q32-q33 deletions while loss suggests a fundamental role in the coordination of jaw development (2006) *Am J Hum Genet* 79(4) 668-78

Tarabykin V., Stoykova A., Usman N. and Gruss P. Cortical upper layer neurons derive from the subventricular zone as indicated by Svet1 gene expression (2001) *Development* 128: 1983-1993 .

E. Research Support (selection)

1.DFG/CMPB 2005-2010, "Molecular control of neuronal differentiation in the cerebral cortex by Satb2 transcription factor"

2.Fritz Thyssen Stiftung 2007-2012, "Molecular and genetic dissection of pathways leading to cerebral cortex abnormalities in the mouse model of Mowat-Wilson syndrom"

3.DFG 2008-2011 "The role of genetic interactions between Satb2 and Ctip2 genes in the control of cerebral cortex connectivity.

4.2009-2013, SFB 665 project A10 "Molecular control of production and specification of cortical upper layer neurons" 480,000€

5.2009-2013, SFB 665 project A9 co-applicant "The role of Cdk5rab in the development of brain malfunctions"

6.DFG Heisenberg Professorship- 2008-2013

F. Other activities

SFB665- Vice-Speaker

G. Memberships and awards

EMBO fellowship 1997, Heisenberg fellowship 2008

NAME TREUE, Stefan	POSITION / TITLE Institute Director, Lab Head & Professor
-----------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
M.I.T., Cambridge MA, USA	PhD	1986-1992	Systems Neurosci.
M.I.T., Cambridge MA, USA	Postdoctoral Fellow	1992-1993	Systems Neurosci.
Baylor College of Med., Houston TX, USA	Postdoctoral Fellow	1993-1995	Systems Neurosci.
University of Tuebingen, Germany	Habilitation	2000	Animal Physiology

B. Positions / Academic Appointments

2000-2001	Junior Research Group Leader (assistant professor), Dept. of Neurology, University of Tuebingen, Germany
2000-2001	Lehrstuhlvertretung (substitute professor), Dept. of Biology, University of Tuebingen, Germany
Since 2001	Director of the German Primate Center (DPZ), Head of the Cognitive Neuroscience Laboratory at the DPZ & Professor of Cognitive Neuroscience and Biological Psychology at the University of Göttingen, Germany

C. Major research interests

The focus of the Cognitive Neuroscience Laboratory is the processing of sensory information in the central nervous system and the influence of cognitive factors on these processes. The model system we have concentrated on for our research is the highly developed ability to process visual motion information in higher primates.

Research at the Cognitive Neuroscience Laboratory is aimed at understanding the neural basis of visual perception. Vision is an active process that is far more than a passive registration of our environment. Rather, on its way from the eyes to and through the cortex, visual information is heavily modulated by numerous processes that enhance some aspects while diminishing others. This allows us to filter out unwanted information and concentrate the brain's processing abilities on relevant information. The accurate representation of visual motion in the environment is one of the most important tasks of the visual system. Correspondingly research in the CNL concentrates on this ability as a model for sensory information processing in general.

We use various techniques. While our emphasis is on recording the activity of neurons in the visual cortex of macaque monkeys and measuring human perceptual abilities with psychophysical methods we also use theoretical approaches and functional brain imaging.

D. Selected peer-reviewed publications

Niebergall R, Khayat PS, **Treue S**, Martinez-Trujillo J (2011) Multifocal attention filters out distracter stimuli within and beyond receptive field boundaries of primate MT neurons. *Neuron* 72:1067-1079

Womelsdorf T, Anton-Erxleben K, Pieper F, **Treue S** (2006) Dynamic shifts of visual receptive fields in cortical area MT by spatial attention. *Nature Neuroscience* 9 (19), 1156-1160

Martinez-Trujillo JC & **Treue S** (2002) Attentional modulation strength in cortical area MT depends on stimulus contrast. *Neuron* 35, 365-370

Treue S & Martinez Trujillo JC (1998) Feature-based attention influences motion processing gain in macaque visual cortex. *Nature* 399, 575-579

Treue S & Maunsell JHR (1996) Attentional modulation of visual motion processing in cortical areas MT and MST. *Nature* 382, 539-541

E. Research Support (selection)

1. SFB 889 (DFG): "Cellular mechanisms of sensory processing", PI on one project, sfb889.uni-goettingen.de/
2. Bernstein Center for Computational Neuroscience, PI on one project, www.bccn-goettingen.de/
3. EUPRIM-NET, a EU-funded network of eight European primate centers; PI on one project, www.euprim-net.eu/
4. NEUROPRIM, a PhD-Programm funded by the Leibniz-Association; Coordinator & PI, www.dpz.eu/akn/neuroprim/Willkommen.html
5. NEUROSENSES, a PhD-Programm funded by the State of Lower Saxony; Coordinator & PI, neurosesens.de/neurosesens/Welcome.html

F. Other activities

Coordinator/Speaker of the Center for Systems Neuroscience in Goettingen; Member of the Goettingen Research Council; Scientific Advisory Board of the Institute for Neurobiology, Magdeburg; Scientific Advisory Board of the International Graduate School of Neuroscience, Bochum; Board Member of the Volkswagen Foundation; Member of the Committee on Animals in Research of the German Research Foundation (DFG); Member of the Committee on Animals in Research (CARE) of the Federation of European Neuroscience Societies (FENS); Speaker and chair of EUPREN, the European Primate Resources Network; Coordinator of EUPRIM-NET, a EU-funded network of eight European primate centers

G. Memberships and awards

Memberships: Academy of Sciences Goettingen

Awards: Gottfried Wilhelm Leibniz Prize of the DFG (2010), Attempto Award, University of Tuebingen (2000)

NAME VON STEINBÜCHEL, Nicole	POSITION / TITLE Director and Professor
---------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Institute of Psychology, Munich University	Diploma	1985	Philosophy and Art History
Institute of Medical Psychology, Munich University	Dr. rer. biol.hum.	1993	Theoretical Medicine/Human Biology
Leopold-Franzens University, Innsbruck	Habilitation	1997	Neuro- and Clinical Psychology

B. Positions / Academic Appointments

1993-1998	Professor of Medical Psychology, Institute of Medical Psychology
1999-2000	Research-Professor of the Dorothea-Erxleben Foundation, Magdeburg University
2001-2004	Professor and chair of Gerontopsychology at Geneva University/Department Chair of Neurogerontopsychology at the Unit of Psychogeriatrics at Geneva University Hospital
2004-Present	Director, Department of Medical Psychology and Sociology, Medical Center Georg-August-University of Göttingen

C. Major research interestsQuality of Life after Traumatic Brain Injury (TBI - QOLIBRI)

TBI can result in lifelong physical, cognitive, emotional, behavioural impairments and participation restrictions can severely affect self-image and the person's ability to cope, leading to major impacts upon the person's health-related quality of life (HRQoL). HRQoL represents a person's perspective on his or her subjective health condition, functioning and well-being in the domains of physical, psychological (emotional and cognitive), social, and daily life. N. v. Steinbüchel et. al. (2010 A & B) developed in two international studies in more than 2000 Patients, the QOLIBRI, a new multidimensional disease-specific instrument after TBI. The QOLIBRI contains 37 items and provides a profile of HRQoL in the following six domains: Cognition, Self, Daily Life & Autonomy, Social Relationships, Emotions, and Physical Problems. Second, the QOLIBRI-OS (Overall Scale), a short screening instrument with six items, assesses overall satisfaction within the six aforementioned domains. Now clinical use is internationally under investigation in more than 190 ongoing studies.

Music, Art, and the Brain

We commenced the Music, Art and the Brain project in 2009. Working in conjunction with, among others, the German Institute for International Education Research we are conducting a five year, long-term study examining the possible effects of early music and painting intervention programs on language, and both cognitive and psychosocial functions in 250 preschool children aged 3-5. In addition to verbal and emotional interaction trans-generational cultural modalities such as music and art are of utmost importance for the development of the brain and personality. Research has begun to recognize the significance of this and, as a result, we are exploring these interventions with EEG, psychodiagnostic and experimental methods, observer ratings, behavioral instruments, and self-rated HRQoL.

Artificial Intelligence, Perception, and ROLLAND

In late 2003, N. v. S. began research collaboration with the University of Bremen. The project seeks to combine technology—human relations through the work of ROLLAND, an intelligent-wheelchair equipped with laptop and

touch-screen, GPS functionality. ROLLAND's goal is to expand the autonomy and QOL of its users, the elderly and persons with physical and mental handicaps. Equipped with two scanners, sensitive to spatial and potential obstructions, ROLLAND allows users to navigate their surroundings and engage in activities in a more efficient manner via joystick or touch screen. A safety module (SAM) was tested with a selected population of neurological patients in cooperation with the St. Mauritius Clinic in Meerbusch. Via SAM the laptop controlling ROLLAND can use an uploaded map of an individual's environment (for example, the user's apartment, hospital, etc.) to navigate and arrive at the user's desired location. The project is developing an application that will allow users to engage with ROLLAND by issuing verbal and/or touch commands that ROLLAND subsequently executes.

D. Selected peer-reviewed publications

Jian, C, Schafmeister F, Rachuy, C, Sasse, N, Shi, H, Schmidt, H, **von Steinbüchel, N** (2012) "Evaluating A Spoken Language Interface of a Multimodal Interactive Guidance System for Elderly Persons". *Communications in Computer and Information Science*, Springer-Verlag (in press)

Kiese-Himmel C, Auberlen S, **von Steinbüchel N**: Ausgewählte Sprachentwicklungsstandfacetten von Kindergartenkindern mit Migrationshintergrund in Deutschland (in press)

Djukic M, Schmidt-Samoa C, Nau R, **v. Steinbüchel N**, Eiffert H, Schmidt H (2011) The diagnostic spectrum in patients with suspected chronic Lyme neuroborreliosis – the experience from one year of a university hospital's Lyme neuroborreliosis outpatients clinic. *European Journal of Neurology*, 2011, 18 (4), 547-55

von Steinbüchel N, Wilson L, Gibbons H, Hawthorne G, Höfer S, Schmidt S, Bullinger M, Maas A, Neugebauer E, Powell J, von Wild K, Zitnay G, Bakx W, Christensen AL, Koskinen S, Formisano R, Saarajuri J, Sasse N, Truelle JL (2010) Quality of Life after Brain Injury (QOLIBRI): scale validity and correlates of quality of life. *J Neurotraum (Internet-Ausgabe)*, 27(7): 1157-65

von Steinbüchel N, Wilson L, Gibbons H, Hawthorne G, Höfer S, Schmidt S, Bullinger M, Maas A, Neugebauer E, Powell J, von Wild K, Zitnay G, Bakx W, Christensen AL, Koskinen S, Sarajuuri J, Formisano R, Sasse N, Truelle JL (2010) Quality of Life after Brain Injury (QOLIBRI): scale development and metric properties. *J Neurotrauma (Internet-Ausgabe)*, 27(7): 1167-85

E. Research Support (Selection)

1. „Music, Kids & Brain“. Metzler Stiftung, Gemeinnützige Hertie Stiftung, Niedersächsisches Ministerium für Wissenschaft und Kultur
2. „SharC (Shared Control Interaction): Development of an “intelligent” wheel-chair, “Rolland” and its application and usability for individuals with medical and psychological problems. SFB/TR 8
3. German Validation of new international QOLIBRI-questionnaire (Quality of Life After Traumatic Brain Injury) In cooperation with Hannelore-Kohl-Stiftung For Injuries to the Central Nervous System

F. Other Activities

Vice-Chairperson of the German Society of Medical Psychology (1998-2002); Board member of the Swiss Society of Psychology (2001-2006), AMN Vice-President (Academia Multidisciplinaria Neurotraumatologica) 2011-2013, Founding President of the QOLIBRI-Society (2009 -2012)

G. Awards

Dorothea Erxleben Research Professorship; Lily-Quality of Life Prize

NAME WODARZ, Andreas	POSITION / TITLE Director and Professor
-------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Köln, Germany	Diploma	1990	Biology
University of Köln, Germany	Dr. rer. nat.	1993	Developmental Biology
Stanford University, USA	Postdoctoral Fellow	1994-1997	Cell- and Developmental Biology
University of Düsseldorf, Germany	Habilitation	2001	Cell- and Developmental Biology

B. Positions / Academic Appointments

1997-2001	Junior group leader, University of Düsseldorf, Germany
2001-2004	Assistant Professor, University of Düsseldorf, Germany
2004-2010	Associate (since 2009 Full) Professor of Stem Cell Biology, DFG Research Center Molecular Physiology of the Brain, University of Göttingen, Germany
2010-	Director, Department of Anatomy and Cell Biology, University of Göttingen Medical School

C. Major research interests

The research activities in our lab focus on different aspects of the asymmetric division of neural stem cells and the molecular control of cell polarity. Asymmetric cell division is a fundamental mechanism for the generation of cell diversity in complex organisms. At the same time, asymmetric cell division is essential for the balance between stem cells and differentiating cells in an organism. Disturbances of this balance can cause severe diseases, including cancer and neurodevelopmental disorders. Asymmetric cell division is intricately linked to the control of apical-basal cell polarity, which is investigated in a second research focus. The establishment and maintenance of apical-basal cell polarity is connected to the regulation of planar cell polarity (PCP) and cell adhesion, especially in epithelial tissues. In this context, we investigate the function of the evolutionarily conserved Wnt signal transduction pathway in the regulation of cell adhesion and PCP.

The model organism of our research is mainly the fruit fly *Drosophila melanogaster*, as it is easily accessible to genetic manipulation and is very well suited for cell biological analyses using high-resolution light microscopy.

D. Selected peer-reviewed publications

Gailite I, Egger-Adam D, **Wodarz A** (2012). The phosphoinositide-associated protein Rush hour regulates endosomal trafficking in *Drosophila*. *Mol Biol Cell* 23, 433-447

Morawe T, Honemann-Capito M, von Stein W, **Wodarz A** (2011). Loss of the extraproteasomal ubiquitin receptor Rings lost impairs ring canal growth in *Drosophila* oogenesis. *J Cell Biol* 193, 71-80

Krahn MP, Bückers J, Kastrup L, **Wodarz A** (2010). Formation of a Bazooka-Stardust complex is essential for plasma membrane polarity in epithelia. *J Cell Biol* 190, 751-760

Krahn MP, Klopfenstein D, Fischer N, **Wodarz A** (2010). Membrane targeting of Bazooka/PAR-3 is mediated by direct binding to phosphoinositide lipids. *Curr Biol* 20, 636-642

Krahn MP, Egger-Adam D, **Wodarz A** (2009). PP2A antagonizes phosphorylation of Bazooka by PAR-1 to control apical-basal polarity in dividing embryonic neuroblasts. *Dev Cell* 16, 901-908

E. Research Support (selection)

1. Research Center 103 (DFG): "Molecular Physiology of the Brain", 10/15/2004-09/30/2014. PI on one project.
2. SFB 523 (DFG): "Protein- and membrane transport between cellular compartments", 01/01/2006-12/31/2008. PI on one project.
3. FOR 942 (DFG) "Wnt-associated signaling pathways in development and tumor progression", 01/01/2008-03/31/2014. PI on one project.
4. FOR 1756 (DFG) "Functional dynamics of cell contacts in cellular assemblies and migratory cells", 08/01/2011-07/31/2014. PI on one project.

F. Other activities

Steering Board Member and coordinator of the research field B1 „From neurogenesis to synaptogenesis“ of the DFG Research Center for Molecular Physiology of the Brain (CMPB) at the Georg-August-University Göttingen, Executive Board Member Göttingen Center for Molecular Biosciences (GZMB), Member of the commission for structural development and finances of the University of Göttingen Medical School.

G. Memberships and awards

Memberships: Gesellschaft für Entwicklungsbiologie, Gesellschaft für Genetik, Deutsche Gesellschaft für Zellbiologie.

Awards: Boehringer Ingelheim Fonds predoctoral fellowship (1990), DFG postdoctoral research fellowship (1994).

NAME WOLF, Fred	POSITION / TITLE Research Group Leader at the MPI-DS / Professor
--------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Frankfurt, Germany	Diploma	1992	Physics and Neuroscience
J.W. Goethe Universität, Frankfurt, Germany	Dr. phil. nat.	1999	Theoretical Physics

B. Positions / Academic Appointments

2000	Amos de Shalit Fellow, Racah Institute of Physics and Interdisciplinary Center for Neural Computation, Hebrew Univ., Jerusalem, Israel
2001-2004	Research Associate, Max-Planck-Institut für Strömungsforschung, Göttingen, Germany
2001, 2003, 2004, 2008	Visiting scholar, Kavli Institute for Theoretical Physics, UC Santa Barbara, USA
2004 -	Head of Research Group 'Theoretical Neurophysics' at the Max-Planck-Institute for Dynamics and Self-Organization, Göttingen, Germany
2006-2011	Steering Committee of the International Max Planck Research School Neurosciences, Göttingen, Germany
2008 -	Professor of Physics (hon.), Georg-August-University, Göttingen, Germany
2011	Visiting Professor, Centre International des Rencontres Mathématiques Marseille, France

C. Major research interests

My work focuses on selected problems in neurobiology and biophysics that provide challenging problems for the development of mathematical theory and computational methods in neuroscience and biology and are mature enough to enable precise quantitative experiments. It extends from the formulation and development of novel mathematical approaches tailored to the specifics of neuronal systems dynamics, over the development of analysis methods for turning biological experimental observations into theoretically informative quantitative data, to the development of experimental paradigms specifically designed to provide insight into cooperative and dynamical aspects of nervous system function. To enable a direct interaction of theory and experiment, many projects are pursued in close collaboration with experimental biological research groups around the world.

Currently three problems are at the core of my research agenda:

(1) The self-organization of neuronal circuits in the visual cortex. In this system our analyses demonstrate that biological neural networks follow apparently universal quantitative laws which require the development of adequate mathematical theories of neuronal self-organization. Several lines of evidence indicate that non-local interactions characteristic of neuronal circuits lead to qualitatively novel types of dynamics in such systems (e.g. Kaschube et al. PNAS 2009, Keil et al. PNAS 2010, Kaschube et al. Science 2010, Keil et al. Science 2012).

(2) The dynamics of large networks of pulse-coupled neurons and its impact on the representation of sensory information. Here the ergodic theory of network dynamical systems provides a natural language

that links details of the network dynamics to information representation and decay (e.g. Monteforte & Wolf PRL 2010, Junek et al. Neuron 2010).

(3) The biophysical nature and dynamics of high-bandwidth action potential encoding mechanisms in biological neurons. This problem requires the integration of concepts from non-equilibrium statistical physics with the biophysics of membranes and ion channels. Its solution is essential for the construction of a next generation of dynamically realistic network models (e.g. Naundorf et al. Nature 2006, Tchumatchenko et al. PRL 2010, Wei & Wolf PRL 2011).

D. Selected peer-reviewed publications

Wei W and **Wolf F** (2011) Spike Onset Dynamics and Response Speed in Neuronal Populations. *Phys. Rev. Lett.* 106: 088102

Kaschube M, Schnabel M, Löwel S, Coppola DM, White LE, and **Wolf F** (2010) Universality in the Evolution of Orientation Columns in the Visual Cortex. *Science* 330:1113

Tchumatchenko T, Volgushev M, Geisel T, and **Wolf F** (2010) Correlations and Synchrony in Threshold Neuron Models. *Phys. Rev. Lett.* 104:058102

Naundorf B, **Wolf F**, and Volgushev M (2006) Unique features of action potential initiation in cortical neurons. *Nature* 440: 1060

Wolf F and Geisel T (1998) Spontaneous pinwheel annihilation during visual development. *Nature* 395: 73-78

E. Research Support (selection)

Principal investigator in the following research projects:

Human Frontier Science Program, "Redesigning the Architecture of Visual Cortex: Horizontal Connections and Cortical Column Layout", 2007-2010, with Prof. Dr. Justin Crowley (CMU, Pittsburg, USA), Prof. Dr. Hiroshi Kawasaki (RIKEN, Brain Science Institute, Saitama, Japan)

German-Israeli Foundation, "How sodium channel properties determine action potential encoding by neocortical Neurons", 2008-2011, with Prof. Dr. Micheal J. Gutnick (Hebrew University, Jerusalem), Dr. Ilya Fleidervish (Hebrew University, Jerusalem) and Prof. Dr. Maxim Volgushev (Ruhr-Universität, Bochum)

Deutsche Forschungsgemeinschaft, SFB 889 'Cellular Mechanisms of Sensory Processing', „Single cell precision and spatial heterogeneity of visual cortical representations", 2011-2014

Volkswagen Stiftung, "Sparse information representation in rodent primary visual cortex", 2011-2013, with PH D. Shy Shoham (Technion Israel Institute of Technology Haifa, Israel)

BMBF, "The impact of hair cell synaptic coding on auditory processing", 2005-2010, with Prof. Dr. Tobias Moser (Georg-August Universität, Göttingen)

"The impact of dynamical action potential encoding on cortical function and plasticity" – "Simulation der Entwicklung der Aktionspotential-Kodierung und deren Einfluss auf die neuronale Plastizität im visuellen Kortex", 2007-2010, with Prof. Dr. Siegrid Löwel (Friedrich-Schiller-Universität, Jena) and Prof. Dr. Maxim Volgushev (Bochum, Connecticut, USA)

"Optical neuro-stimulation using light sensitive ion channels and pumps", 2008-2013, with Prof. Dr. Ernst Bamberg (MPI for Biophysics, Frankfurt) and Prof. Dr. Walter Stühmer (MPI for experimental Medicine, Göttingen)

"Fast 3D imaging in intact neural tissue", 2008-2013, with Prof. Dr. Detlef Schild (University Medicine, Göttingen)

"Learning and cortical plasticity in the visual system: Understanding cortical learning mechanisms and their restoration after stroke", 2009-2014, with Prof. Dr. Siegrid Löwel (Friedrich-Schiller-Universität,

Jena), Prof. Dr. Knut Holthoff (Universitätsklinikums, Jena), Prof. Dr. Christian Hübner (Martin-Luther-Universität Halle-Wittenberg, Halle) and Prof. Dr. Otto W. Witte (Universitätsklinikum Jena)

"Optophysiological studies of the firing rate dynamics of cortical neurons", 2010-2015, with Prof. Dr. Walter Stühmer (MPI for experimental Medicine, Göttingen)

"Cellular decomposition of auditory information in the mammalian cochlea", 2010-2015, with Prof. Dr. Tobias Moser and Dr. Alexander Meyer (Georg-August Universität, Göttingen)

"Organization of temporal coding in the Xenopus olfactory system", 2010-2015, with Prof. Dr. Detlef Schild (University Medicine, Göttingen)

BMWi, „Entwicklung einer Vorrichtung zur holographischen Beleuchtung in der Mikroskopie mit ersten Anwendungen im Bereich der Lebenswissenschaften“, 2010-2012, with Dr. Hartwig Spors (Max-Planck-Institut für Biophysik, Frankfurt)

F. Other activities

2011-: Steering board member and Section Coordinator for Computational Neuroscience German Neuroscience Society, University of Göttingen, Germany

2010: Program Director, "Emerging Techniques in Neuroscience", Kavli-Institute for Theoretical Physics, UC Santa Barbara, USA

2009-: Steering Committee of Bernstein Focus for Neurotechnology

2005-: Steering Committee of the Bernstein Center for Computational Neuroscience, University of Göttingen, Germany

G. Memberships and awards

Memberships:

Die Neurowissenschaftliche Gesellschaft (NWG), Germany, Society for Neuroscience (SfN), USA, Die Deutsche Physikalische Gesellschaft (DPG), Germany

Awards:

Altdorf Leibniz-Award (1999), Amos de Shalit Fellowship, MINERVA Foundation (1999), Schloessmann Fellowship, Max-Planck-Society (2000), Human Frontiers Science Program Grant (2003), Human Frontiers Science Young Investigators Grant (2007), German-Israeli Foundation Binational Research Grant (2007)

NAME WOUTERS, Fred S.	POSITION / TITLE Professor
--------------------------	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Utrecht University, the Netherlands	Diploma	1991	Medical Biology
Utrecht University, the Netherlands	Ph. D.	1997	Biochemistry
Cell Biophysics Group at the Imperial Cancer Research Fund (ICRF, now Cancer Research UK), London, UK.	Postdoctoral Fellow	1997-2001	Biophysics and Cell Biology
Cell Biology and Biophysics Program, European Molecular Biology Laboratory (EMBL), Heidelberg, Germany	Postdoctoral Fellow	2001-2002	Biophysics and Cell Biology
University Medicine Göttingen	Habilitation	2006	Physiology

B. Positions / Academic Appointments

2002-2007	Group Leader, Cell Biophysics Group, European Neuroscience Institute Göttingen, Germany
2007-	Professor, Dept. of Neuro- and Sensory Physiology, Laboratory for Molecular and Cellular Systems, University Medicine Göttingen, Germany

C. Major research interests

Our group aims at a molecular understanding of the workings of cellular signaling systems, their decision-making capabilities in physiological responses and their failure in disease. The lab uses and develops quantitative fluorescence microscopy techniques, design new custom-tailored optical biosensors that are based on Förster Resonance Energy Transfer (FRET) and Fluorescence Lifetime Imaging (FLIM).

A major challenge in modern cell biology is to be able to simultaneously detect several signaling events and unravel their interconnections inside the same cell. The group is working on new optical schemes and approaches that allow the monitoring of multiple and/or connected events in cells by the formulation of new assays and sensors. We are working towards the maximization of information content by multimodal detection strategies. Furthermore, we are working on detection paradigms for the highly sensitive detection of sensor signals without the need for high expression levels in cells. Current research interests lie in the fields of synaptogenesis and axonal pathfinding, cell adhesion and motility, cell-cell recognition and morphological differentiation.

D. Selected peer-reviewed publications

Deeg S, Gralle M, Sroka K, Bähr M, **Wouters FS***, Kermer P.* (2010) BAG1 restores formation of functional DJ-1 L166P dimers and DJ-1 chaperone activity. *J Cell Biol.* 188(4): 505-13. *equal contribution.

van den Bogaart G, Holt MG, Bunt G, Riedel D, **Wouters FS**, Jahn R (2010) One SNARE complex is sufficient for membrane fusion. *Nature Struct Mol Biol* 17, 358-365

Gralle M, Botelho MG, **Wouters FS** (2009) Neuroprotective secreted amyloid precursor protein acts by disrupting amyloid precursor protein dimers. *J Biol Chem.* 284(22): 15016-25.

Esposito A, Gralle M, Dani MA, Lange D, **Wouters FS** (2008) pHlameleons: a family of FRET-based protein sensors for quantitative pH imaging. *Biochemistry*. 47(49): 13115-26

Esposito A, Dohm CP, Bähr M, Wouters FS. (2007) Unsupervised fluorescence lifetime imaging microscopy for high content and high throughput screening. *Mol Cell Proteomics*. 6(8):1446-54

E. Research Support (selection)

1. CMPB-C2 (DFG): "Quality control mechanisms in neurodegeneration", 10/2006-09/2010. PI (Consortium partner).
2. CMPB-B2 (DFG): "Synapse formation and Dysfunction in RETT", 10/2010-09/2014. PI (Consortium partner).
3. EXC171 (DFG) "FRET imaging of coupled molecular events", 11/2006-09/2012. PI (Consortium partner).
4. FLI-CAM (BMBF) "Cell biological analytical applications" in the Consortium "Fluorescence Lifetime Imaging Camera (FLI-CAM)", 03/2007-11/2013. PI (Consortium partner).
5. sFLIM (BMBF): "Molecular diagnostics of human neuroblastoma cancer" in the Consortium "spectral FLIM for life cell and tissue imaging", 08/2010-08/2013. PI (Consortium partner).
6. Project grant (HFSP) "Sensitive molecular imaging of in situ axonal pathfinding mechanisms by low-level probe trapping" 01/2010-01/2014. PI (Consortium partner and coordinator)

F. Other activities

Associate Editor of *Analytical Cellular Pathology* (since 2010). Member of ESF (European Science Foundation) EUROCORES review panels (since 2006) and Referee for Alexander von Humboldt personal grants.

G. Memberships and awards

Memberships: Royal Netherlands Society for Chemistry.

Awards: FEBS fellowship (1996-1997), EMBO long-term fellowship (1997-2000).

Anlage 43 – Kurz-Vitae der Lehrenden im Promotionsstudiengang „Behaviour and Cognition“

Mitglieder des Promotionsstudiengangs Behaviour and Cognition (in alphabetischer Reihenfolge):

- Tanya Behne (Biologische Entwicklungspsychologie)
- Margarete Boos (Sozial- und Kommunikationspsychologie)
- Antje Engelhardt (Reproduktionsbiologie, DPZ)
- Claudia Fichtel (Soziobiologie, DPZ)
- Julia Fischer (Kognitive Ethologie)
- Alexander Gail (Kognitive Neurowissenschaften)
- Oliver Gruber (Psychiatrie und Psychotherapie, Universitätsmedizin Göttingen)
- Kurt Hammerschmidt (Kognitive Ethologie, DPZ)
- Igor Kagan (Kognitive Neurowissenschaften, DPZ)
- Peter Kappeler (Soziobiologie)
- Nivedita Mani (Spracherwerb)
- Julia Ostner (Soziale Evolution von Primaten, CRC ESB)
- Hannes Racoczy (Biologische Entwicklungspsychologie)
- Christian Roos (Primatengenetik, DPZ)
- Annekathrin Schacht (Experimentelle Psycholinguistik)
- Hansjörg Scherberger (Neurobiologie)
- Oliver Schülke (CRC ESB)
- Stefan Schulz-Hardt (Wirtschafts- und Sozialpsychologie)
- Dirk Semmann (Evolution von Kooperation, CRC ESB)
- Michael Waldmann (Kognitionswissenschaften und Entscheidungspsychologie)
- Fred Wolf (Theoretische Neurophysik, MPI Dynamik und Selbstorganisation)
- Dietmar Zinner (Kognitive Ethologie, DPZ)

Wenn nichts anderes angegeben, so sind die genannten Personen Mitglieder der Universität (Brückenprofessuren sind der Uni zugerechnet). Nur im Falle der alleinigen Zugehörigkeit zu einer Nicht-universitären Einrichtung ist diese genannt.

Dr. Tanya Behne

Courant Research Centre ‘Evolution of Social Behaviour’ & Department of Developmental Psychology
Faculty of Biology

Education and Employment

- 2009 - Independent Research Fellow, University of Göttingen (incl. maternity leave 2011-12)
2007 - 2009 Lecturer for Developmental Psychology, University of Manchester, UK (incl. maternity leave)
2005 - 2006 Postdoctoral Fellow, MPI Evolutionary Anthropology, Leipzig, Germany
2005 Dr. rer. nat (Psychology), University of Leipzig, Germany

Research funding

“How to choose models and partners - The development of social epistemology and trust in early childhood” (co-applicant; funded by DFG)

Selected Publications

- Matthews, D., **Behne**, T., Lieven, E., & Tomasello, M. (2012). Origins of the human pointing gesture: a training study. *Dev Sci*, 15(6), 817-829.
- Behne**, T., Liskowski, U., Carpenter, M. & Tomasello, M. (2012). Twelve-month-olds’ comprehension and production of pointing. *Brit J Dev Psychol*, 30(3), 359-375
- Callaghan, T. C., Moll, H., Rakoczy, H., Warneken, F., Liskowski, U., **Behne**, T. & Tomasello, M. (2011). Early social cognition in three cultural contexts. *Monogr Soc Res Child*, 76, vii-125.
- Grosse, G., **Behne**, T., Carpenter, M., & Tomasello, M. (2010). Infants communicate in order to be understood. *Dev Psychol*, 46, 1710-1722.
- Liebal, K., **Behne**, T., Carpenter, M., Tomasello, M. (2009). Infants use shared experience to interpret pointing gestures. *Dev Sci*, 12(2), 264-271.
- Gräfenhain, M., **Behne**, T., Carpenter, M., Tomasello, M. (2009). Young children's understanding of joint commitments. *Dev Psychol*, 45, 1430-1443.
- Gräfenhain, M., **Behne**, T., Carpenter, M., Tomasello, M. (2009). One-year-olds' understanding of nonverbal gestures directed to a third person. *Cog Dev*, 24(1), 23-33.

Prof. Dr. Margarete Boos (*1954)

Economic and Social Psychology, Institute for Psychology
Faculty of Biology

Education and Employment

- | | |
|-------------|--|
| 1995 - | Full Professor and Head of Department of Social and Communication Psychology, University Göttingen, Germany |
| 1993 | Habilitation, Psychology, University of Konstanz, Germany |
| 1990 - 1995 | Assistant professor of Social Psychology, University of Konstanz, Germany |
| 1985 - 1990 | Post Doc in a project about „Decision-making processes in public administration“, Special Research Area (SFB 211) „Public administration in change“, University of Konstanz, funded by the German Research Association (DFG) |
| 1984 - 1986 | Research for the Institut für angewandte Sozialwissenschaft (infas), Bonn-Bad Godesberg, Germany |
| 1983 | PhD, Sociology, University of Bonn, Germany |
| 1972 - 1979 | Study of Mathematics and Sociology, University of Bonn, Germany |

Selected Honours and Awards

- | | |
|-------------|--|
| 2012 | Teaching Award – Best Teaching in Bachelor Psychology, University of Göttingen |
| 2010 & 2011 | Innovation Prize Human Resources (Initiative Mittelstand, Landkreis Göttingen) with Malamut TeamCatalyst (university start-up) |
| 2006 | Fellowship at the University St. Gallen, Swiss Centre for Innovations in Learning (SCIL) |

Activities unrelated to teaching

Head of the Scientific Advisory Board of ZESS – Central Institution for Languages and Key Qualifications, University of Göttingen
Member of the Senate Committee for Gender Equality, University of Göttingen
Member of the executive committee of the Interdisciplinary Centre for Sustainable Development, University of Göttingen

Research funding

- | | |
|-------------|---|
| 2012 - 2015 | PhD Program “Academization of small and medium-sized companies” (funded by Hans-Böckler-Stiftung) |
| 2010 - 2014 | “Leadership in distributed teams” (co-applicant; funded by the EU (EFRE)). |
| 2009 - 2011 | Graduate School “Biodiversity” (co-applicant; funded by MWK) |
| 2008 - 2014 | Courant Research Centre “Evolution of Social Behaviour” (co-applicant; funded by the DFG within the German Excellence Initiative) |

Selected Publications

Fernandez Castelao, E., Russo, S. G., Cremer, S., Strack, M., Kaminski, L., Eich, C., Timmermann, A. & **Boos, M.** (2011). Positive impact of crisis resource management training on no-flow time and team member verbalisations during simulated cardiopulmonary resuscitation: A randomised controlled trial. *Resuscitation*, 82(10), 1338-1343.

- Boos, M.**, Kolbe, M., Kappeler, P. M. & Ellwart, T. (eds.) (2011). *Coordination in Human and Primate Groups*. Heidelberg: Springer.
- Boos, M.**, Kolbe, M. & Strack, M. (2011). *An Inclusive Model of Group Coordination*. In: **Boos, M.** et al. (eds.), *Coordination in Human and Primate Groups*. Heidelberg: Springer, pp. 11-35.
- Kolbe, M. & **Boos, M.** (2009). Facilitating Group Decision-Making. Facilitator's Subjective Theories on Group Coordination. *Forum Qualitative Research*, 10(1), 28.
- Boos, M.**, Müller, A. & Cornelius, C. (2008). *Online-Moderation und Teletutoring. Medienkompetenz für Lehrende*. Stuttgart: Kohlhammer.
- Boos, M.** & Jonas, K.J. (2008). Medienvermittelte Kommunikation. In: Batinic, B. & Appel, M. (eds.). *Medienpsychologie*. Heidelberg: Springer, pp. 195-217.
- Boos, M.**, Rack, O. & Schauenburg, B. (2008). Wissenskommunikation in computergestützten Gruppen – Theoretischer Hintergrund und empirische Befunde. *Information – Wissenschaft und Praxis*, 1, 41-48.

Dr. Antje Engelhardt (*1970)

Head of Junior Research Group “Primate Sexual Selection”

Faculty of Biology/German Primate Center

Education and Employment

2009 -	Head of Junior Research Group, Göttingen University and German Primate Center, Göttingen
2008	Post-doc, German Primate Center
2006 - 2007	Post-doc, Primate Research Centre, Bogor, Indonesia
2005	Post-doc, University of Chicago, USA
2004	Post-doc, Free University of Berlin, Germany
2004	Dr. rer. nat (Biology), Free University of Berlin

Selected Honours and Awards

2010	Entry into Academia.net, database of excellent female scientists
2009 -	DFG Emmy Noether Fellow
2006 - 2007	DAAD Post-doctoral Fellow
2005	DPZ Scientific Award “Best doctoral thesis”

Activities unrelated to teaching

2011 -	Fachgruppensprecherin, Behavioural Biology Unit, German Zoological Society Associate Editor <i>Plos One</i> Evaluator for Leakey Foundation and the International Primatological Society
--------	--

Research funding

2011 - 2014	Graduate School “Foundations of Primate Social Behaviour” (co-applicant, funded by Leibniz Gemeinschaft)
2009	“Determinants of male reproductive skew in multimale primate groups” (funded by DFG)
2009	“Female social relationships in wild crested macaques, <i>Macaca nigra</i> , in Orth Sulawesi, Indonesia” (funded by Volkswagenstiftung)
2009	“Costs of mate-guarding in wild male long-tailed macaques (<i>Macaca fascicularis</i>)” (funded by Volkswagenstiftung)
2008	“Sexual signals in male crested black macaques (<i>Macaca nigra</i>) and their significance for male reproductive success” (funded by DFG / Bundesministerium für wirtschaftliche Zusammenarbeit)
2008	“Socio-ecology of wild female <i>Macaca nigra</i> in the Tangkoko Nature Reserve, Indonesia” (funded by Primate Conservation Inc.)

Selected Publications

Higham, J.P., Heistermann, M., Saggau, C., Agil, M., Perwitasari-Farajallah, D. & Engelhardt, A. (2012). Sexual signalling in female crested macaques and the evolution of primate fertility signals. *BMC Evol Biol*, 12, 89.

Dubuc, C., Muniz, L., Heistermann, M., Widdig, A. & **Engelhardt, A.** (2012). Do males time their mate-guarding effort with the fertile phase in order to secure fertilisation in Cayo Santiago rhesus macaques? *Horm Behav*, 61(5), 696-705

Engelhardt, A., Fischer, J., Neumann, C., Pfeifer, J.-B. & Heistermann, M. (2012). Information content of female copulation calls in wild long-tailed macaques (*Macaca fascicularis*). *Behav Ecol Sociobiol*, 66, 121–134.

Girard-Buttoz, C., Higham, J.P., Heistermann, M., Wedegärtner, S., Maestriperi, D. & **Engelhardt, A.** (2011). Urinary c-peptide measurement as a marker of nutritional status in macaques. *PLoS One*, 6, e18042.

Neumann, C., Assahad, G., Hammerschmidt, K., Farajallah, D.P. & **Engelhardt, A.** (2010). Loud calls in male *Macaca nigra* – a signal of dominance in a tolerant primate species. *Anim Behav* 79, 187–193.

Dr. Claudia Fichtel

Behavioral Ecology and Sociobiology Unit
German Primate Center

Education and Employment

2004 -	Scientific assistant, Göttingen University and German Primate Center, Göttingen
2003	Postdoctoral Fellow, MPI Evolutionary Anthropology, Leipzig, Germany
2002	Postdoctoral Fellow, Dept. Biological Anatomy and Anthropology Duke University and Duke Lemur Center, USA.
2001	Dr. rer. nat (Biology), Free University Berlin, Germany

Selected Honours and Awards

2001	PhD Thesis award of the Förderverein des Deutschen Primatenzentrums e.V.
------	--

Activities unrelated to teaching

2012 -	Vice President of Communication, International Primatological Society
2010 -	Editor <i>Lemur News</i>
2009 -	Secretary of the Ethologische Gesellschaft e.V.
2008 -2009	Auditor Ethologische Gesellschaft e.V.
2002 - 2004	Board member of the Deutsche Gesellschaft für Primatologie

Research funding

2009 - 2012	“Biodiversity of the brown lemur complex – Taxonomy and phylogeography of <i>Eulemur fulvus</i> ssp.” (together with P.M. Kappeler, funded by DFG)
2008 - 2010	“Gruppenkoordination bei Rotstirnmakis (<i>Eulemur fulvus rufus</i>)” (together with P.M. Kappeler, funded by DFG)

Selected Publications

- Schnoell, A.S. & **Fichtel, C.** (2012). Wild redfronted lemurs (*Eulemur rufifrons*) use social information to learn new foraging techniques. *Anim Cogn*, 15(4), 505-516.
- Pflüger, F.J., **Fichtel, C.** (2012). On the function of redfronted lemur's close calls. *Anim Cogn*, 15, 823-831.
- Kappeler, P.M. & **Fichtel, C.** (2012). Female reproductive competition in *Eulemur rufifrons*: Eviction and reproductive restraint in a plurally breeding Malagasy primate. *Mol Ecol*, 21, 685-698.
- Fichtel, C.**, Zucchini, W. & Hilgartner, R. (2011). Out of sight but not out of mind. Behavioral coordination in red-tailed sportive lemurs. *Int J Primatol*, 32, 1383-1396.
- Pyritz, L., Kappeler, P.M. & **Fichtel, C.** (2011). Coordination of group movements in wild red-fronted lemurs: Processes and influence of ecological and reproductive seasonality. *Int J Primatol*, 32, 1325-1347.
- Pyritz, L., King, A.J., Sueur, C. & **Fichtel, C.** (2011). Reaching a consensus: Terminology and concepts used in coordination and decision-making research. *Int J Primatol*, 32, 1268-1278.
- Fichtel, C.** & Kappeler, P.M. (2010). Human universals and primate symplesiomorphies: establishing the lemur baseline. In: Kappeler, P.M. & Silk, J. (eds.). *Mind the gap: Tracing the origins of human universals*. Heidelberg: Springer, pp. 395-426.

Prof. Dr. Julia Fischer (*1966)

Cognitive Ethology Laboratory

Faculty of Biology/German Primate Center

Education and Employment

- 2004 - Professor, Göttingen University and German Primate Center, Göttingen
- 2000 - 2004 Postdoctoral Fellow, MPI Evolutionary Anthropology, Leipzig, Germany
- 1997 - 2000 Postdoctoral Fellow, University of Pennsylvania, Philadelphia, USA
- 1996 Dr. rer. nat (Biology), Free University Berlin, Germany

Selected Honours and Awards

- 2009 - Corresponding Member Akademie der Wissenschaften zu Göttingen
- 2007 - Member Berlin-Brandenburgischen Akademie der Wissenschaften
- 2004 DFG Heisenberg Fellow
- 2003 - 2008 Member of Die Junge Akademie (president 2004-2005)

Activities unrelated to teaching

- 2012 - 2014 Panel Chair European Research Council Starting Grants
- 2011 - Scientific Advisory Board of the Ernst-Strüngmann Forum
- 2010 - 2013 President of the European Federation of Primatology
- 2010 - Consulting Editor *Frontiers in Comparative Psychology*
- 2010 Co-Chair of the Strüngmann Forum on “Animal Thinking”, Frankfurt Institute for Advanced Studies, Frankfurt am Main
- 2007 - 2011 Member of the Executive Board of the LMU München
- 2007 - 2010 President of the Gesellschaft für Primatologie
- 2005 - Academic Editor *Plos Biology*
- 2001 - Consulting Editor *Folia Primatologica*

Research funding

- 2011 - 2014 Graduate School “Foundations of Primate Social Behaviour” (main applicant, funded by Leibniz Gemeinschaft)
- 2010 - 2014 Bernstein Center for Computational Neuroscience
- 2009 - 2012 “Vocal and Social Behaviour of Guinea Baboons” (funded by DFG)
- 2008 - 2011 NEUROPRIM – Leibniz Graduate School (WGL Pakt für Forschung und Innovation; co-applicant)
- 2008 - 2014 Courant Research Centre “Evolution of Social Behaviour” (co-applicant; funded by the DFG within the German Excellence Initiative)

Selected Publications

Fischer, J. (2012). Affengesellschaft. Berlin: Suhrkamp Verlag.

Schmitt, V., Pankau, B. & **Fischer, J.** (2012). Old World monkeys compare to apes in the Primate Cognition Test Battery. *PLoS One* 7(4), e32024.

- Schell, A., Rieck, K., Schell, K., Hammerschmidt, K. & **Fischer, J.** (2011). Adult but not juvenile Barbary macaques spontaneously recognize group members from pictures. *Anim Cogn*, 14, 503-509.
- Schmitt, V. & **Fischer, J.** (2011). Representational format determines numerical competence in monkeys. *Nat Comm*, 2, 257
- Teufel, C., Gutmann, A., Pirow, R. & **Fischer, J.** (2010). Facial expressions modulate the ontogenetic trajectory of gaze-following among monkeys. *Dev Sci*, 13, 913-922.
- Henkel, S., Heistermann, M. & **Fischer, J.** (2010). Infants as costly social tools in male Barbary macaque networks. *Anim Behav*, 79, 1199-1204.
- Pfefferle, D., Brauch, K., Heistermann, M., Hodges, J. K. & **Fischer, J.** (2008). Female Barbary macaque (*Macaca sylvanus*) copulation calls do not reveal the fertile phase but influence mating outcome. *P Roy Soc B-Biol Sci*, 275, 571-578.

Prof. Dr. Alexander Gail

Sensorimotor Neuroscience Lab

Faculty of Biology/German Primate Center

Education and Employment

2012 -	Professor, Göttingen University and German Primate Center, Göttingen
2006 - 2012	Group leader, German Primate Center, Göttingen
2003 - 2006	Postdoctoral Fellow, California Institute of Technology, Pasadena, USA
2002 - 2003	Postdoctoral Fellow, Philipps University Marburg, Germany
2002	Dr. rer. nat. (Physics), Philipps University Marburg, Germany

Selected Honours and Awards

2011	Co-chair GAFOS Program, Neuroscience section, Alexander von Humboldt Foundation and US National Academy of Sciences
2003	Postdoctoral fellowship, California Institute of Technology
2002	Dr. rer. nat. graduate “ <i>summa cum laude</i> ”, Philipps University Marburg
1997	Diploma graduate “ <i>summa cum laude</i> ”, Philipps University Marburg
1995 - 1997	Scholarship Award Studienstiftung des Deutschen Volkes

Activities unrelated to teaching

2011 -	Expert consultant: e.g. Alexander von Humboldt Foundation, FWF Wissenschaftsfond (A)
2009 -	Symposium organizer and Program Committee member (various conferences)
2008 - 2011	Co-chair GAFOS Program of the Alexander von Humboldt Foundation and US National Academy of Sciences
2006 -	Coordinator of research activities (several internationally (EU) and nationally (BMBF))

Research funding

2011 – 2013	MYOPLANT-II (BMBF (subcontract; Fraunhofer-Institut für Biomedizinische Technik, St. Ingbert)
2011 – 2014	SFB 889 – Project C5 (funded by DFG)
2011 – 2014	EUPRIM-Net II – WP9 (project leader; EU FP7 262443)
2010 – 2015	BCCN-II – Research Project D2 (project leader; BMBF 01 GQ 1005C)
2010 – 2013	Lower Saxony – Israel Grant (project leader; State of Lower Saxony VWZN2563)
2009 – 2012	NEUROPRIM – Leibniz Graduate School (WGL Pakt für Forschung und Innovation; co-applicant)
2008 – 2013	BFNT – Research Project T3d (project leader; BMBF 01 GQ 0814)
2008 – 2011	MYOPLANT; (Source: BMBF 16SV3695 (subcontract; Fraunhofer-Institut für Biomedizinische Technik, St. Ingbert)
2008 – 2011	BCCN-I upgrade (BMBF 01 GQ 0433)

Selected Publications

Klaes, C., Schneegans, S., Schöner, G. & Gail, A. (2012). Sensorimotor learning biases choice behavior: A learning neural field model for decision making. *PLoS Comput Biol*, 8(11), e1002774

- Chakrabarti, S., Hebert, P., Wolf, M.T., Campos, M., Burdick, J.W. & **Gail, A.** (2012). Expert-like performance of an autonomous spike tracking algorithm in isolating and maintaining single units in the macaque cortex. *J Neurosci Meth*, 205(1), 72-85.
- Westendorff, S. & **Gail, A.** (2011). What is 'anti' about anti-reaches? - How reference frames affect reach reaction times. *Exp Brain Res*, 208(2), 287-296.
- Klaes, C., Westendorff, S., Chakrabarti, S. & **Gail, A.** (2011). Choosing goals, not rules: Deciding among rule-based action plans. *Neuron*, 70, 536-548.
- Westendorff, S., Klaes, C. & **Gail, A.** (2010). The cortical timeline for deciding on reach motor-goals. *J Neurosci*, 30(15), 5426-5436.
- Gail, A.**, Klaes, C. & Westendorff, S. (2009). Implementation of Spatial Transformation Rules for Goal-Directed Reaching via Gain Modulation in Monkey Parietal and Premotor Cortex. *J Neurosci*, 29, 9490-9499.

Prof. Dr. med. Oliver Gruber

Department of Psychiatry and Psychotherapy
University Medical Center

Education and Employment

- 2007 - 2012 Professor of Systems Neuroscience and Psychiatry, Deputy Chairman and Assistant Medical Director, Head of the Centre for Translational Research in Systems Neuroscience and Clinical Psychiatry
- 2006 Habilitation, Psychiatry and Psychotherapy, Saarland University, Homburg, Germany
- 2004 - 2007 Junior Professor of Cognitive Neuroscience in Psychiatry, Department of Psychiatry and Psychotherapy, Saarland University, Homburg, Germany
- 2004 – 2006 Acting Director, Dept. of Medical and Clinical Psychology, Saarland University, Homburg, Germany
- 2003 – 2004 Group Leader and Head of Neuroimaging Lab, Dept. of Psychiatry and Psychotherapy, Saarland University, Homburg, Germany
- 2001 – 2003 Assistant Doctor and Postdoctoral Fellow, Dept. of Psychiatry III, University of Ulm, Germany
- 2001 – 2005 Research Associate, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
- 1999 Dr. med., Medicine, Psychiatry, J. W. Goethe University Frankfurt, Germany
- 1998 – 2001 Assistant Doctor and Postdoctoral Research Fellow, Max Planck Institute of Cognitive and Brain Sciences, Leipzig, Day-care Clinic for Cognitive Neurology, University of Leipzig, Germany
- 1997 – 1998 Assistant Doctor and Postdoctoral Research Fellow, Dept. of Neurology, Heinrich Heine University Düsseldorf, and Institute of Medicine at Research Center Jülich, Germany
- 1995 – 1996 Resident, Department of Psychiatry and Psychotherapy, Friedrich Wilhelm University, Bonn, Germany
- 1995 State examination, Medicine (M. D.), J. W. Goethe University Frankfurt and J. Liebig University Giessen, Germany
- 1988 - 1994 University studies of Medicine, Psychology, Philosophy and Biological Anthropology, J. W. Goethe University Frankfurt, Germany

Selected Honours and Awards

- 2008 Essex Pharma Research Award
- 2008 Research Award, German Society of Biological Psychiatry
- 2008 Poster Award, Three-Countries-Symposium for Biological Psychiatry
- 2006 Best Poster Award, International Society for Bipolar Disorders
- 2005 WFSBP Poster Award (World Congress of Biological Psychiatry)

Activities unrelated to teaching

- 2011 - Member of the Executive Committee, German Association for Psychiatry and Psychotherapy (DGPPN)

- 2008 - Vice Chairman of the Neurobiology and Genetics Section, German Association for Psychiatry and Psychotherapy (DGPPN)
- 2008 - Chairman of the Neuroimaging Section, German Society of Biological Psychiatry (DGBP)

Research funding

- 2011 - „Translationale Bildgebungsstudien zu Genotyp-Phänotyp-Beziehungen im longitudinalen Verlauf von Psychosen“ (funded by DFG)
- 2007 - 2010 “Multimodal Neuroimaging and Experimental Neuropsychology Lab” (funded by Niedersachsen VW-Vorab)
- 2007 - 2010 „Neuregulin-1-Risikohaplotyp HAP_{ICE} und Hippocampusfunktion bei Schizophrenie“ (funded by KNS/BMBF)
- 2006 - 2009 „Untersuchung funktioneller Dyskonnektivitäten neuronaler Netzwerke mit Arbeitsgedächtnisfunktionen bei Patienten mit Schizophrenie mittels funktioneller Kernspintomographie“ (funded by Fritz Thyssen Foundation)
- 2003 - 2010 “Dynamic Interactions between Complementary Components of Executive Control: Combination of Behavioral Experiments and Functional Neuroimaging” (funded by DFG)

Selected Publications

Diekhof, E.K. & **Gruber, O.** (2010). When desire collides with reason: functional interactions between anteroventral prefrontal cortex and nucleus accumbens underlie the human ability to resist impulsive desires. *J Neurosci*, 30 (4), 1488-1493.

Gruber, O., Tost, H., Henseler, I., Schmael, C., Scherk, H., Ende, G., Ruf, M., Falkai, P. & Rietschel, M. (2010). Pathological amygdala activation during working memory performance: evidence for a pathophysiological trait marker in bipolar affective disorder. *Hum Brain Mapp*, 31, 115-125.

Pajonk, F.G., Wobrock, T., **Gruber, O.**, Scherk, H., Berner, D., Kaizl, I., Kierer, A., Müller, S., Oest, M., Meyer, T., Backens, M., Schneider-Axmann, T., Thornton, A.E., Honer, W.G. & Falkai, P. (2010). Hippocampal plasticity in response to exercise in schizophrenia. *Arch Gen Psychiat*, 67(2), 133-143.

Dr. Kurt Hammerschmidt (*1954)

Cognitive Ethology Laboratory
German Primate Center

Education and Employment

2005 -	Senior Scientist, German Primate Center, Göttingen
2001 - 2004	Senior Scientist, Section of Addiction Research, Department of Psychiatry, University Hospital Tübingen
1997 - 2001	Senior Scientist, Department of Neurobiology, German Primate Center, Göttingen
1995 - 1996	Visiting Scientist, National Institute of Child Health and Human Development, NIH, USA
1991 - 1994	Postdoctoral Fellow, Institute of Behavioral Biology, FU Berlin
1991	Dr. rer. nat (Zoology), FU Berlin, Germany

Selected Publications

- Hammerschmidt, K.**, Reisinger, E., Westekämper, K., Ehrenreich, L., Strenzke, N. & Fischer, J. (2012). Mice do not require auditory input for the normal development of their ultrasonic vocalizations. *BMC Neurosci*, 13, 40.
- Meyer, D., Hodges, J.K., Rinaldi, D., Wijaya, A., Roos, C. & **Hammerschmidt, K.** (2012). Acoustic structure of male loud-calls support molecular phylogeny of Sumatran and Javanese leaf monkeys (genus *Presbytis*). *BMC Evol Biol*, 12, 16.
- Fischer, J. & **Hammerschmidt, K.** (2011). Ultrasonic vocalizations in mouse models for speech and socio-cognitive disorders: insights into the evolution of vocal communication. *Genes Brain Behav* 10(1), 17-27.
- Maciej, P., Fischer, J. & **Hammerschmidt, K.** (2011). Transmission Characteristics of Primate Vocalizations: Implications for Acoustic Analyses. *Plos One* 6, e23015.
- Thinh VN, Hallam C, Roos C, **Hammerschmidt K** (2011) Concordance between vocal and genetic diversity in crested gibbons. *BMC Evol Biol*, 11, 36.
- Enard, W., Gehre, S., **Hammerschmidt, K.**, et al. (2009). A Humanized Version of Foxp2 Affects Cortico-Basal Ganglia Circuits in Mice. *Cell*, 137, 961-971.
- Hammerschmidt, K.**, Radyushkin, K., Ehrenreich, H. & Fischer, J. (2009). Female mice respond to male ultrasonic 'songs' with approach behaviour. *Biol Lett* 5, 589-592.
- Hammerschmidt, K. & Fischer, J.** (2008). Constraints in primate vocal production. In: Griebel, U. & Oller, K. (eds.). *The evolution of communicative creativity: From fixed signals to contextual flexibility*. Cambridge, MA: The MIT Press, pp. 93-119.

Dr. Igor Kagan (*1972)

Group Leader, Decision and Awareness Group

Cognitive Neuroscience Laboratory, German Primate Center

Education and Employment

2011 -	Group Leader, German Primate Center, Göttingen, Germany
2009 - 2010	Senior Research Fellow, Andersen Lab, Caltech, Pasadena, CA, USA
2003 - 2008	Postdoctoral Scholar, Andersen Lab, Caltech, Pasadena, CA, USA
2003	Ph.D. in Biomedical Engineering, Technion – Israel Institute of Technology, Haifa, Israel, and Schepens Eye Research Institute, Harvard Medical School, Boston, MA, USA
1996	B.Sc. in Biology, Faculty of Life Sciences, Tel Aviv University, Israel
1989 - 1991	Department of Biophysics, Faculty of Physics and Mechanics, St. Petersburg State Technical University, Russia

Selected Honours and Awards

2008	Invited speaker, Minerva-Weizmann Active Sensing Workshop, Weizmann Institute of Science, Israel.
------	---

Research funding

“Neural basis of spatial neglect symptoms in thalamo-cortical circuits” (co-applicant; funded by DFG)

“Spatial decision-making and interhemispheric interactions in monkeys and humans” (co-applicant, funded by Schilling foundation)

“Role of thalamo-cortical interactions in spatial awareness, cortico-cortical communication and visuomotor coordination” (co-applicant; funded by Schilling foundation)

Selected Publications

Wilke M.*, **Kagan I.*** & Andersen R.A. (2012). Functional imaging reveals rapid reorganization of cortical activity after parietal inactivation in monkeys. *P Natl Acad Sci USA*, 109(21), 8274-8279. *Equal contri.

Kagan I. (2012) Active vision: fixational eye movements help seeing space in time. *Curr Biol*, 22(6), R186-R188.

Kagan I., Iyer A., Lindner A. & Andersen R.A. (2010). Space representation for eye movements is more contralateral in monkeys than in humans. *P Natl Acad Sci USA*, 107(17), 7933-7938.

Iyer A., Lindner A., **Kagan I.** & Andersen R.A. (2010). Motor preparatory activity in posterior parietal cortex is modulated by subjective absolute value. *PLoS Biol* 8(8), e1000444.

Lindner A., Iyer A., **Kagan I.** & Andersen R.A. (2010). Human posterior parietal cortex plans where to reach and what to avoid. *J Neurosci*, 30(35), 11715-11725.

Kagan I., Gur M. & Snodderly D. M. (2008). Saccades and drifts differentially modulate neuronal activity in V1: Effects of retinal image motion, position, and extraretinal influences. *J Vision* 8(14), 19.1-25.

Prof. Dr. Peter Kappeler (*1959)

Dept. Sociobiology/Anthropology

Faculty of Biology

Education and Employment

- 2003 - Professor and Head of Department Sociobiology/Anthropology, Georg August University Göttingen and Head of Department Behavioral Ecology and Sociobiology, German Primate Center (“Brückenprofessur”)
- 1993 - 1998 Habilitation, Zoology, Julius Maximilian University Würzburg
- 1987 - 1992 PhD thesis, Department of Zoology, Duke University (USA)
- 1981 - 1987 Study of Biology at the University of Tübingen and Duke University (USA)

Activities unrelated to teaching

- 2008 - 2015 Member of Fachkollegium Zoologie (DFG)

Research funding

- 2011 - 2013 „The effects of kinship on structuring complex social networks: a cross-sectional study in Mandrills (*Mandrillus sphinx*)” (co-applicant; funded by DFG)
- 2011 - 2013 „Behavioral and feeding ecology of a small-bodied folivorous primate (*Lepilemur leucopus*) in Southern Madagascar” (funded by DFG)
- 2011 - 2014 Graduate School “Foundations of Primate Social Behaviour” (co-applicant, funded by Leibniz Gemeinschaft)
- 2009 - 2012 „Mating strategies and genetic constitution in the gray mouse lemur (*Microcebus murinus*) in Kirindy Forest, Madagascar” (co-applicant; funded by DFG)
- 2009 - 2012 „Biodiversity of the brown lemur complex – Taxonomy and phylogeography of *Eulemur fulvus* ssp.” (co-applicant; funded by DFG)
- 2008 - 2010 "Social organisation and mating strategies of the fossa (*Cryptoprocta ferox*) in Kirindy Forest CFPF, Madagascar" (funded by DFG)
- 2008 - 2010 "Gruppenkoordination bei Rotstirnmakis (*Eulemur fulvus rufus*)" (co-applicant; funded by DFG)

Selected Publications

Huchard, E., Canale, C.I., Le Gros, C., Perret, M., Henry, P.-Y. & **Kappeler, P.M.** (2012). Convenience polyandry or convenience polygyny? Costly sex under female control in a promiscuous primate. *P Roy Soc B-Biol Sci*, 279,1371-1379.

Kappeler, P.M., Mass, V. & Port, M. (2009). Even adult sex ratios in lemurs: potential costs and benefits of subordinate males in Verreaux’s sifaka (*Propithecus verreauxi*) in the Kirindy Forest/CFPF. Madagascar. *Am J Phys Anthropol*, 140, 487-497.

Kappeler, P.M. & Fichtel, C. (2012). Female reproductive competition in *Eulemur rufifrons*: eviction and reproductive restraint in a plurally breeding Malagasy primate. *Mol Ecol*, 21, 685-698.

Port, M. & **Kappeler, P.M.** (2010). Current models of reproductive skew and their applicability to male mammals - a review. *Evol Anthropol*, 19, 46-56.

Prof. Dr. Nivedita Mani (*1980)

Junior Professor

Language Acquisition Junior Research Group, Institute of Psychology

Faculty of Biology

Education and Employment

2010 -	Junior Professor, Language Acquisition Junior Research Group, Georg-August-Universität Göttingen, Germany
2008 - 2010	British Academy Post-doctoral Research Fellow, University College London, UK
2006 - 2008	Postdoctoral Fellow, Department of Experimental Psychology, University of Oxford, UK
2006	D.Phil., University of Oxford, UK

Selected Honours and Awards

2012	Lichtenberg Associate Fellow, Lichtenberg Kolleg, Göttingen
2008 - 2010	British Academy Post-doctoral Fellowship grant
2010	Visiting researcher, Max Planck Institute for Psycholinguistics

Research funding

2011 - 2012	“Phonological priming in infancy” (co-applicant; funded through DAAD-Bilateral Cooperation grant)
2009 - 2010	“The acquisition of native language phonological alternations: Compensating for assimilation” (co-applicant; funding through British Academy grant)
2008 - 2011	“Investigating phonological priming in infancy” (funding through British Academy grant)

Selected Publications

- Skoruppa, K., **Mani, N.**, & Peperkamp, S. (in press). Toddlers' processing of phonological rules: Early compensation for assimilation in English and French. *Child Dev.*
- Mani, N.** & Huettig, F. (2012). Prediction is a piece of cake – but only for skilled producers. *J Exp Psychol Human*, 38, 843-847.
- Mani, N.**, Durrant, S., & Floccia, C. (2012). Activation of phonological and semantic codes in toddlers. *J Mem Lang*, 66, 612-622.
- Mani, N.**, Mills, D. & Plunkett, K. (2012). Vowels in early words: An event-related potential study. *Dev Sci*, 15, 2-11.
- Mani, N.** & Plunkett, K. (2011). Phonological priming and cohort effects in toddlers. *Cognition*, 121, 196-206.
- Mani, N.** & Plunkett, K. (2010). In the infant's mind's ear: Evidence for implicit naming in 18-month-olds. *Psychol Sci*, 21, 908-913.

Prof. Dr. Julia Ostner (*1970)

Junior Professor & Group Leader

Research Group “Social Evolution in Primates”, Courant Research Centre Evolution of Social Behaviour

Faculty of Biology

Education and Employment

- 2008 - Junior Professor, Göttingen University, Göttingen
- 2005 - 2010 Leader of Independent Max Planck Junior Research Group, MPI Evolutionary Anthropology, Leipzig, Germany
- 2003 - 2005 Postdoctoral Fellow, Dept. of Anthropology, Stony Brook Univ., USA
- 1999 - 2003 Dr.rer.nat (Biology): University Würzburg, Würzburg, Germany

Selected Honours and Awards

- 2011 Entry into Academia Net, Robert Bosch Foundation
- 2003 - 2005 Feodor-Lynen Postdoctoral Scholarship, Alexander von Humboldt Foundation

Activities unrelated to teaching

- 2005 - Co-director of *Assamese Macaque Research Project*, Phu Khieo Wildlife Sanctuary, Thailand
- 2010 - Associate Editor *ISRN Zoology*
- 2010 - Member of *Conservation Committee* of International Primatological Society
- 2005 - 2009 Board member *Gesellschaft für Primatologie*

Research funding

- 2011 - 2014 Graduate School “Foundations of Primate Social Behaviour” (co-applicant, funded by Leibniz Gemeinschaft)
- 2012 - 2013 “Sources of stress” (funded by Leakey Foundation)

Selected Publications

- Berghänel, A., Schülke, O. & **Ostner, J.** (2011). Coalition formation among male Barbary macaques: the influence of scramble competition. *Anim Behav*, 80, 675-682.
- Franz, M., van der Post, D., Schülke, O. & **Ostner, J.** (2011). The evolution of cooperative turn-taking in animal conflict. *BMC Evol Biol*, 11, 323.
- Fürtbauer, I., Schülke, O., Heistermann, M. & **Ostner, J.** (2011). Concealed fertility and extended female sexuality in a nonhuman primate (*Macaca assamensis*). *PLoS One*, 6, e23105.
- Ostner, J.**, Heistermann M. & Schülke, J. (2011). Male competition and its hormonal correlates in wild Assamese macaques (*Macaca assamensis*). *Horm Behav*, 59, 105-113.
- Schülke, O., Bhagavatula, J., Vigilant, L. & **Ostner, J.** (2010). Social bonds enhance reproductive success in male macaques. *Curr Biol*, 20, 2207-2210.
- Ostner, J.**, Nunn, C. & Schülke, O. (2008). Female reproductive synchrony predicts biased paternity across primates. *Behav Ecol*, 19, 1150-1158.

Ostner, J., Heistermann, M. & Schülke, O. (2008). Dominance, aggression and physiological stress in wild male Assamese macaques (*Macaca assamensis*). *Horm Behav*, 54, 613-619.

Prof. Dr. Hannes Rakoczy (*1975)

Department of Developmental Psychology/Cognitive Development and Comparative Cognition,
Institute of Psychology
Faculty of Biology

Education and Employment

- 2009 - Professor of Developmental Psychology, University of Göttingen
- 2006 - 2009 Researcher in the Department of Developmental and Comparative Psychology, Max-Planck-Institute for Evolutionary Anthropology, Leipzig
- 2004 - 2006 Lecturer in the Department of Psychology, University of Leipzig
- 2004 Ph.D. in psychology, Department of Psychology, University of Leipzig
- 2000 - 2004 Researcher in the Department of Developmental and Comparative Psychology, Max-Planck-Institute for Evolutionary Anthropology, Leipzig

Selected Honours and Awards

- 2010 - Elected member of the Wilhelm-Wundt-Gesellschaft
- 2007 - 2012 Elected member of the Junge Akademie an der Berlin-Brandenburgischen Akademie der Wissenschaften und der deutschen Akademie der Naturforscher Leopoldina

Research funding

- 2012 - “The ontogeny of social epistemology” (funded by DFG)
- 2011 - “Understanding the Normative Dimensions of Human Conduct: Conceptual and Developmental Issues” (co-applicant; funded by ESF)
- 2011 - Graduate School “Foundations of Primate Social Behaviour” (co-applicant, funded by Leibniz Gemeinschaft)
- 2006 - 2009 “Interdisciplinary Anthropology” (co-applicant; funded BMBF)

Selected Publications

- Rakoczy, H.**, Harder-Kasten, A. & Sturm, L. (2012). The decline of theory of mind in old age is (partly) mediated by developmental changes in domain-general abilities. *Brit J Psychol*, 103, 58-72.
- Schmidt, M., **Rakoczy, H.** & Tomasello, M. (2012). Young children enforce social norms selectively depending on the violator’s group affiliation. *Cognition*, 124(3), 325-333.
- Callaghan, T. C., Moll, H., **Rakoczy, H.**, Warneken, F., Liszkowski, U., Behne, T., et al. (2011). Early social cognition in three cultural contexts. *Monogr Soc Res Child*, 76(2), vii-125.
- Mendes, N., **Rakoczy, H.** & Call, J. (2011). Primates do not spontaneously use shape properties for object individuation: A competence or a performance problem? *Anim Cogn*, 14, 407-414.
- Rakoczy, H.** (2010). Executive function and the development of belief-desire psychology. *Dev Sci*, 13(4), 648-661.
- Matsui, T., **Rakoczy, H.**, Miura, Y. & Tomasello, M. (2009). Understanding of speaker certainty and false-belief reasoning: A comparison of Japanese and German preschoolers. *Dev Sci*, 12(4), 602-613.
- Rakoczy, H.** & Tomasello, M. (2009). Done wrong or said wrong? Young children understand the normative directions of fit of different speech acts. *Cognition*, 13(2), 205-212.

Abraham, A., Werning, M., **Rakoczy, H.**, von Cramon, D. Y. & Schubotz, R. (2008). The neural underpinnings of higher-order intentionality: Decomposing the theory-of-mind network. *Conscious Cogn*, 17, 438–450.

Mendes, N., **Rakoczy, H.** & Call, J. (2008). Ape metaphysics: Object individuation without language. *Cognition*, 106(2), 730-749.

Rakoczy, H. (2008). Taking fiction seriously: Young children understand the normative structure of joint pretend games. *Dev Psychol*, 44(4), 1195-1201.

Rakoczy, H., Warneken, F. & Tomasello, M. (2008). The sources of normativity: Young children's awareness of the normative structure of games. *Dev Psychol*, 44(3), 875-881.

Dr. Christian Roos (*1972)

Gene Bank of Primates
Primate Genetics Laboratory
German Primate Center

Education and Employment

2008 - Senior Scientist, University and German Primate Center, Göttingen
2004 - 2007 Postdoctoral Fellow, University and German Primate Center, Göttingen
2003 Dr. rer. nat (Biology), Technical University Munich

Selected Honours and Awards

2004 Young Scientists' Award, German Primate Center, Göttingen

Activities unrelated to teaching

2012 - Leopoldina Working Group Member Challenges for Taxonomic Research in the “-omics”-Age
2012 - President, Changes for Nature e.V.
2012 - Member 10K Genome Project
2006 - Deputy Regional Coordinator IUCN/SSC Primate Specialist Group, Section Southeast Asia
1995 - Head Gene Bank of Primates

Research funding

2012 “Gene flow dynamics in the West African baboon contact zone” (co-applicant; funded by Leakey Foundation)
2012 “Analysis of ranging behaviour of the endangered Guizhou snub-nosed monkey (*Rhinopithecus brelichi*) to improve its protection in Fanjingshan National Nature Reserve, Guizhou province, China” (co-applicant; funded through Conservation and Research Grant, Margot Marsh Biodiversity Fund)
2010 - 2012 “Camera Trap Survey of Primates and other Species in the Fanjingshan National Nature Reserve” (co-applicant; funded through Conservation and Research Grant, The Mohamed bin Zayed Species Conservation Fund)
2009 - “Impact of hybridization on the evolution of green monkeys (*Chlorocebus*)” (co-applicant; funded by Volkswagenstiftung)
2009 “Hybridization in Primates - Evidence, Extent, Evolutionary Impact and Problems” (co-applicant; funded through Symposium grant by the Volkswagenstiftung, Symposium Grant)

Selected Publications

Liedigk, R., Yang, M., Jablonski, N., Momberg, F., Geissmann, T., Lwin, N., Htin Hla, T., Liu, Z., Wong, B., Li, M., Yongcheng, L., Zhang, Y.-P., Nadler, T., Zinner, D. & **Roos, C.** (2012). Evolutionary history of the odd-nosed monkeys and the phylogenetic position of the newly described Myanmar snub-nosed monkey *Rhinopithecus strykeri*. *PLoS One*, 7, e37418.

Ting, N., Astaras, C., Hearn, G., Honarvar, S., Corush, J., Burrell, A.S., Phillips, N., Morgan, B.J., Gadsby, E.L., Raaum, R. & **Roos, C.** (2012). Genetic signatures of a demographic collapse in a large-bodied forest dwelling primate (*Mandrillus leucophaeus*). *Ecol Evol*, 2, 550-561.

Meyer, D., Rinaldi, I.D., Ramlee, H., Perwitasari-Farajallah, D., Hodges, J.K. & **Roos, C.** (2011). Mitochondrial phylogeny of leaf monkeys (genus *Presbytis*, Eschscholtz, 1821) with implications for taxonomy and conservation. *Mol Phylogenet Evol*, 59, 311-319.

Perelman, P., Johnson, W.E., **Roos, C.**, Seuanez, H.N., Horvath, J.E., Moreira, M.A.M., Kessing, B., Pontius, J., Roelke, M., Rumpler, Y., Schneider, M.P.C., Silva, A., O'Brien, S.J. & Pecon-Slattery, J. (2011). A molecular phylogeny of living primates. *PLoS Genet*, 7, e1001342.

Roos, C., Zinner, D., Kubatko, L.S., Schwarz, C., Yang, M., Meyer, D., Nash, S.D., Xing, J., Batzer, M.A., Brameier, M., Leendertz, F.H., Ziegler, T., Perwitasari-Farjallah, D., Nadler, T., Walter, L. & Osterholz, M. (2011). Nuclear versus mitochondrial DNA: evidence for hybridization in colobine monkeys. *BMC Evol Biol*, 11, 77.

Thinh, V.N., Mootnick, A.R., Geissmann, T., Li, M., Ziegler, T., Agil, M., Moisson, P., Nadler, T., Walter, L. & **Roos C.** (2010). Mitochondrial evidence for multiple radiations in the evolutionary history of small apes. *BMC Evol Biol*, 10, 74.

Prof. Dr. Annekathrin Schacht (*1976)

Junior Research Group Leader “Experimental Psycholinguistics”, Courant Research Centre Text Structures

Faculty of Biology

Education and Employment

2011	Habilitation in Psychology, Humboldt-Universität zu Berlin (HUB), Germany
2010	Guest Professor of Cognitive Neuroscience, HUB, Germany
2009	Interim Professor of Psychology of Motivation and Emotion, University of Potsdam, Germany
2008-2010	Project leader, “Emotions in Word and Face Processing”, funded by the Cluster of Excellence “Languages of Emotion”, Berlin, Germany
2008	PhD (Dr. rer. nat., Psychology), HUB, Germany

Selected Honours and Awards

2010	Prize of the Berlin-Brandenburg Academy of Sciences and Humanities for the Support of Young Scholars
2010	Invited Professor, CISA, Geneva, Switzerland
2009	Top Reviewer in 2009 for <i>Biological Psychology</i>

Selected Publications

Bayer, M., Sommer, W. & **Schacht**, A. (2011). Emotional Words Impact the Mind but not the Body: Evidence from Pupillary Responses. *Psychophysiology*, 48, 1553–1561.

Bayer, M., Sommer, W. & **Schacht**, A. (2012). Font Size Matters - Emotion and Attention in Cortical Responses to Written Words. *PLoS One* 7(5), e36042.

Schacht, A., Adler, N., Chen, P., Guo, T. & Sommer, W. (2011). Association with Positive Outcome induces Early Effects in Event-related Brain Potentials. *Biol Psychol*, 86, 130-136.

Schacht, A., Dimigen, O. & Sommer, W. (2010). Emotions in Cognitive Conflicts are Not Aversive but are Task Specific. *Cogn Affect Behav Ne*, 10, 349-356.

Schacht, A. & Sommer, W. (2009). Emotions in Word and Face Processing: Early and Late Cortical Responses. *Brain Cognition*, 69, 538-550.

Schacht, A. & Sommer, W. (2009). Time Course and Task Dependence of Emotion Effects in Word Processing. *Cogn Affect Behav Ne*, 9, 28-43.

Prof. Dr. Hansjörg Scherberger (*1965)

Research Group Neurobiology

Faculty of Biology/German Primate Center

Education and Employment

2008 -	Professor, Göttingen University and German Primate Center, Göttingen
2004 - 2009	Independent junior group leader (Oberassistent). Institute of Neuroinformatics, ETH / University of Zürich, Switzerland
1998 - 2004	Postdoctoral Fellow. California Institute of Technology, Pasadena, CA, USA
1995 - 1998	Postdoctoral Fellow. Dept of Neurology, University of Zürich, Switzerland
1996	Dr. med., Albert-Ludwigs-University Freiburg, Germany
1993	Dipl. math., Albert-Ludwigs-University Freiburg, Germany

Selected Honours and Awards

2005 - 2007	Research Award of the University of Zürich, Switzerland
2000 - 2002	Research Award from the Christopher Reeve Paralysis Foundation, USA

Selected Publications

Schaffelhofer, S. & **Scherberger, H.** (2012). A new method of accurate hand- and arm- tracking for small Primates. *J Neural Eng*, 9, 026025.

Townsend, B.R., Subasi, E. & **Scherberger, H.** (2011). Grasp movement decoding from premotor and parietal cortex. *J Neurosci*, 31, 14386-14398.

Fluet, M.C., Baumann, M. & **Scherberger, H.** (2010). Context-specific grasp movement representation in macaque ventral premotor cortex. *J Neurosci*, 30, 15175-15184.

Baumann, M., Fluet, M.C. & **Scherberger, H.** (2009). Context-Specific Grasp movement representation in the macaque anterior intraparietal area. *J Neurosci*, 29, 6436-6448.

Scherberger, H. (2009). Neural control of motor prostheses. *Curr Opin Neurobiol*, 19, 629-633.

Dr. Oliver Schülke (*1970)

Independent Researcher

Courant Research Centre Evolution of Social Behaviour

Faculty of Biology

Education and Employment

- 2008 - Independent Researcher, CRC ESB, University of Göttingen
- 2005 - 2008 Postdoc, Integrative Primate Socio-Ecology, MPI Evolutionary Anthropology, Leipzig, Germany
- 2003 - 2005 Postdoctoral Fellow and Adjunct Assistant Professor, Stony Brook University, NY, USA
- 2003 Dr. rer. nat (Biology), University of Würzburg, Germany

Selected Honours and Awards

- 2003 Feodor Lynen Post-Doctoral Fellowship, Alexander v. Humboldt Foundation

Activities unrelated to teaching

- 2009 - Associate Editor *International Journal of Primatology*
- 2006 - 2010 Board Member Gesellschaft für Primatologie e.V.

Research funding

- 2011 - “The tolerant chimpanzee – quantifying the costs and benefits of sociality in bonobos”

Selected Publications

- Franz, M., van der Post, D., **Schülke, O.** & Ostner, J. (2011). The evolution of cooperative turn-taking in animal conflict. *BMC Evol Biol*, 11, 323.
- Berghänel, A., Ostner, J. & **Schülke, O.** (2011). Coalitions destabilize dyadic dominance relationships in male Barbary macaques (*Macaca sylvanus*). *Behaviour*, 148, 1257-1275.
- Berghänel, A., Ostner, J., Schröder, U. & **Schülke, O.** (2011). Social bonds predict future cooperation in male Barbary macaques (*Macaca sylvanus*). *Anim Behav*, 81, 1109-1116.
- Schülke, O.**, Bhagavatula, J., Vigilant, L. & Ostner, J. (2010). Social bonds enhance reproductive success in male macaques. *Curr Biol*, 20, 2207-2210.
- Richter, C., Mevis, L., Malaivijitnond, S., **Schülke, O.** & Ostner, J. (2009). Male social relationships in stump-tail macaques (*Macaca arctoides*) at Wat Khuha Sattarayam, Thailand. *Int J Primatol*, 30, 625-642.
- Ostner, J., Heistermann, M. & **Schülke, O.** (2008). Dominance, aggression and physiological stress in wild male Assamese macaques (*Macaca assamensis*). *Horm Behav*, 54, 613-619.
- Schülke, O.** & Ostner, J. (2008). Male reproductive skew and female social relationships. *Am J Primatol*, 70, 695-698.

Prof. Dr. Stefan Schulz-Hardt (*1967)

Economic and Social Psychology, Institute of Psychology

Faculty of Biology

Education and Employment

- 2007/2008/2010 Dean of the Faculty of Biology and Psychology, Göttingen University
- 2004 - Full Professor for Industrial, Economic, and Social Psychology, Georg-August-University Göttingen
- 2003 - 2004 Full Professor for Social and Financial Psychology, University of Dresden
- 2002 Habilitation, Psychology, Ludwig-Maximilians-University Munich
- 1998 - 2002 PostDoc at Ludwig-Maximilians-University München
- 1996 - 1998 PostDoc at the University of Kiel
- 1993 - 1996 PhD-Thesis, Department of Psychology, University of Kiel
- 1987 - 1993 Study of Psychology at the University of Kiel

Activities unrelated to teaching

- 2012 - Associate Editor *Journal of Economic Psychology*
- 2010 - Geschäftsführender Direktor des Instituts für Psychology und Dekanatsvertreter für Psychologie für die Biologische Fakultät
- 2009 - 2011 Associate Editor *European Journal of Social Psychology*
- 2007 - Consulting Editor *Social Psychology*
- 2009 - 2010 Mitglied des Fakultätsrates der Biologischen Fakultät der Universität Göttingen
- 2008 - 2010 Prodekan der Biologischen Fakultät der Universität Göttingen
- 2008 Leiter der Arbeitsgruppe „Schlüsselkompetenzen“ Beratungsgruppe für das Präsidium der Universität Göttingen
- 2006 - Mitglied des Vorstands des Georg-Elias-Müller-Instituts für Psychologie der Universität Göttingen
- 2006 - Mitglied der Habilitationskommission der Wirtschaftswissenschaftlichen Fakultät der Universität Göttingen

Research funding

- „Psychische Sättigung im Arbeitskontext“ (co-applicant; funded by DFG)
- „Schuldig bei Verdacht: Entstehung von Falschbeschuldigungen durch Selbstätigungstendenzen beim Testen sozialer Hypothesen“ (co-applicant; funded by DFG)
- „Präferenzkonsistenter Informationsaustausch bei Gruppendiskussionen und Gruppenentscheidungen“ (co-applicant; funded by DFG)
- „Verlusteskalationen: Meinungskonsistenter Umgang mit Expertenmeinungen bei zweifelhaftem Entscheidungserfolg“ (funded by DFG)
- „Koordinationsgewinne durch Gruppenlernen bei diskretionären Gruppenaufgaben“ (funded by DFG)
- „Prozess- und Ergebnisverantwortlichkeit bei Gruppenentscheidungen“ (co-applicant; funded by DFG)

Selected Publications

- Schultze, T., Pfeiffer, F. & **Schulz-Hardt, S.** (2012). Biased information processing in the escalation paradigm: Information search and information evaluation as potential mediators of escalating commitment. *J Appl Psychol*, 97, 16-32.
- Häusser, J. A., Mojzisch, A., Niesel, M. & **Schulz-Hardt, S.** (2010). Ten years on: A review of recent research on the Job-Demand-Control (-Support) Model and psychological well-being. *Work Stress*, 24, 1-35.
- Mojzisch, A. & **Schulz-Hardt, S.** (2010). Knowing others' preferences degrades the quality of group decisions. *J Pers Soc Psychol*, 98, 794-808.
- Schulz-Hardt, S.**, Thurow-Kröning, B. & Frey, D. (2009). Preference-based escalation: A new interpretation for the responsibility effect in escalating commitment and entrapment. *Organ Behav Hum Dec*, 108, 175-186.

Prof. Dr. Dirk Semmann (*1970)

Juniorprofessor

Junior Research Group Evolution of Cooperation and Prosocial Behavior, Courant Research Center

Evolution of Social Behavior

Faculty of Biology

Education and Employment

- 2008 - Junior professorship, University of Göttingen, Göttingen, Germany
- 2006 - 2008 Postdoctoral fellow / DFG research fellowship, University of Vienna, Austria
- 2005 - 2006 Project manager, Cemet GmbH, Lübeck, Germany
- 2004 - 2005 Postdoctoral fellow / Max Planck post-doc scholarship, Max Planck Institute for Evolutionary Biology, Plön, Germany
- 2004 Dr. rer. nat. (Biology), University of Kiel, Germany

Selected Publications

- Fehl, K., van der Post, D. J. & **Semmann, D.** (2011). Co-evolution of behaviour and social network structure promotes human cooperation. *Ecol Lett*, 14, 546-551.
- van der Post, D.J. & **Semmann, D.** (2011). Local orientation and the evolution of foraging: Changes in decision making can eliminate evolutionary trade-offs. *PLoS Comput Biol*, 7, e1002186.
- van der Post, D.J. & **Semmann, D.** (2011). Patch depletion, niche structuring and the evolution of cooperative foraging. *BMC Evol Biol*, 11, 355.
- Melis, A.P. & **Semmann, D.** (2010). How is human cooperation different? *Philos T Roy Soc B*, 365, 2663-2674.
- Traulsen, A., **Semmann, D.**, Sommerfeld, R. D., Krambeck, H.-J. & Milinski, M. (2010). Human strategy updating in evolutionary games. *P Natl Acad Sci USA*, 107, 2962-2966.

Prof. Dr. Michael Waldmann (*1953)

Cognitive and Decision Sciences, Institute of Psychology

Faculty of Biology

Education and Employment

- 1998 - Associate and Full Professor for Cognitive and Decision Sciences, Georg-August-University Göttingen
- 1995 Habilitation, Psychology, University of Tübingen
- 1994 - 1998 Senior research scientist at the Max Planck Institute for Psychological Research, Munich
- 1987 - 1994 Research and teaching positions at the Universities of Frankfurt, Tübingen
- 1988 - 1990 Postdoc at the Department of Psychology, UCLA
- 1982 - 1987 Graduate Student, Max Planck Institute for Psychological Research, Munich
- 1981 Diploma, University of Munich

Selected Honours and Awards

- 2010 Fellow of the Association of Psychological Science
- 1996 Early career research award from the German Society for Psychology ("Charlotte- und Karl-Bühler-Preis")

Activities unrelated to teaching

- 2010 - Associate Editor *Journal of Experimental Psychology: Learning, Memory, and Cognition*
- 2010 - Consulting Editor *Experimental Psychology*
- 2002 - 2010 Consulting Editor *Journal of Experimental Psychology: Learning, Memory, and Cognition*
- 2006 - 2009 Consulting Editor *Memory and Cognition*

Research funding

- 2011 - "Agents and causes: Reconciling competing theories of causal reasoning" (funded by DFG)
- 2010 - "The Psychology of Moral Dilemmas" (funded by DFG)
- 2010 - "New frameworks of rationality" (co-applicant; funded through DFG Priority program)
- 2005 - 2011 "Causal Bayes Nets as Psychological Theories" (co-applicant; funded by DFG)

Selected Publications

Nagel, J. & **Waldmann, M. R.** (in press). Deconfounding distance effects in judgments of moral obligation. *J Exp Psychol Learn.*

Waldmann, M. R. & Hagmayer, Y. (in press). Causal reasoning. In: Reisberg, D. (ed.). *Oxford Handbook of Cognitive Psychology*. New York: Oxford University Press.

Waldmann, M. R., Schmid, M., Wong, J. & Blaisdell, A. P. (2012). Rats distinguish between absence of events and lack of evidence in contingency learning. *Anim Cogn*, 15(5): 979-990.

Hagmayer, Y., Meder, B., von Sydow, M. & **Waldmann, M. R.** (2011). Category transfer in sequential causal learning: the unbroken mechanism hypothesis. *Cogn Sci*, 35, 842-873.

Waldmann, M. R., Meder, B., von Sydow, M. & Hagmayer, Y. (2010). The tight coupling between category and causal learning. *Cogn Process*, 11, 143-158.

Prof. Dr. Fred Wolf (*1965)

Department of Nonlinear Dynamics

Max-Planck Institute for Dynamics and Self-Organization

Education and Employment

2011	Visiting Professor, Centre International des Rencontres Mathématiques Marseille, France
2011 -	Steering board member and Section Coordinator for Computational Neuroscience German Neuroscience Society, University of Göttingen, Germany
2010	Program Director, “Emerging Techniques in Neuroscience”, Kavli-Institute for Theoretical Physics, UC Santa Barbara, USA
2009 -	Steering Committee of Bernstein Focus for Neurotechnology
2008 -	Professor of Physics (hon.), Georg-August-University, Göttingen, Germany
2006 - 2011	Steering Committee of the International Max Planck Research School Neurosciences, Göttingen, Germany
2005 -	Steering Committee of the Bernstein Center for Computational Neuroscience, University of Göttingen, Germany
2004 -	Head of Research Group 'Theoretical Neurophysics' at the Max-Planck-Institute for Dynamics and Self-Organization, Göttingen, Germany
2001, 2003, 2004, 2008	Visiting scholar, Kavli Institute for Theoretical Physics, UC Santa Barbara, USA
2001 - 2004	Research Associate, Max-Planck-Institut für Strömungsforschung, Göttingen,
2000	Amos de Shalit Fellow, Racah Institute of Physics and Interdisciplinary Center for Neural Computation, Hebrew Univ., Jerusalem, Israel
1999	Dr. phil. nat. (Theoretical Physics), J.W. Goethe Universität, Frankfurt, Germany

Selected Honours and Awards

2007	German-Israeli Foundation Binational Research Grant
2007	Human Frontiers Science Young Investigators Grant
2003	Human Frontiers Science Program Grant
2000	Schloessmann Fellowship, Max-Planck-Society
1999	Altdorf Leibniz-Award
1999	Amos de Shalit Fellowship, MINERVA Foundation

Selected Publications

- Wei, W. & **Wolf, F.** (2011). Spike Onset Dynamics and Response Speed in Neuronal Populations. *Phys Rev Lett*, 106, 088102.
- Kaschube, M., Schnabel, M., Löwel, S., Coppola, D.M., White, L.E. & **Wolf, F.** (2010). Universality in the Evolution of Orientation Columns in the Visual Cortex. *Science*, 330, 1113.
- Tchumatchenko, T., Volgushev, M., Geisel, T. & **Wolf, F.** (2010). Correlations and Synchrony in Threshold Neuron Models. *Phys Rev Lett*, 104, 058102.

Dr. Dietmar Zinner (*1957)

Cognitive Ethology Laboratory

Faculty of Biology/German Primate Center

Education and Employment

2004 -	Senior Scientist, Cognitive Ethology Laboratory, German Primate Center, Göttingen
1996 - 2004	Scientist, Department of Ethology and Ecology, German Primate Center, Germany
1994 - 1995	Postdoctoral Fellow, Center for Tropical Ecology, Duke University, USA
1993 - 1994	Postdoctoral Fellow, Department of Ethology and Ecology, German Primate Center, Germany
1993	Dr. rer. nat (Biology), University of Göttingen, Germany

Selected Honours and Awards

1993	Best Thesis Award of the Faculty of Natural Sciences, University of Göttingen
1993	Young Scientists' Award, German Primate Center, Göttingen

Activities unrelated to teaching

Membership in the IUCN Primate Specialist Group

Research funding

2012	“Gene flow dynamics in the West African baboon contact zone” (co-applicant; funded by Leakey Foundation)
2012	“Analysis of ranging behaviour of the endangered Guizhou snub-nosed monkey (<i>Rhinopithecus brelichi</i>) to improve its protection in Fanjingshan National Nature Reserve, Guizhou province, China” (co-applicant; funded through Conservation and Research Grant, Margot Marsh Biodiversity Fund)
2010 - 2012	“Camera Trap Survey of Primates and other Species in the Fanjingshan National Nature Reserve” (co-applicant; funded through Conservation and Research Grant, The Mohamed bin Zayed Species Conservation Fund)
2009 - 2012	“Impact of hybridization on the evolution of green monkeys (<i>Chlorocebus</i>)” (co-applicant; funded by Volkswagenstiftung)
2009 - 2012	“Social behaviour and communication of free-ranging Guinea baboons (<i>Papio papio</i>)” (co-applicant; funded by DFG)
2009	“Hybridization in Primate - Evidence, Extent, Evolutionary Impact and Problems” (co-applicant; funded through (Volkswagenstiftung, Symposium Grant)

Selected Publications

Zinner, D. & Wheeler, B. (in press). Violence among our close relatives. Aggression in non-human primate societies. In: Kortüm, H.H. & Heinze, J. (eds.). *Aggression in Humans and other Primates. Biology, Psychology, Sociology*. Berlin: de Gruyter.

Grueter, C.C., Chapais, B. & **Zinner, D.** (2012). Evolution of multilevel social systems in nonhuman primates and humans. *Int J Primatol.*, 33(5), 1002-1037.

Hilgartner, R., Fichtel, C., Kappeler, P.M. & **Zinner, D.** (2012). Determinants of pair-living in red tailed sportive lemurs (*Lepilemur ruficaudatus*). *Ethology*, 118, 466-479.

Zinner, D., Arnold, M.L. & Roos, C (2011). The strange blood - hybridization in primates. *Evol Anthropol* 20, 96-103.

Zinner, D., Arnold, M.L. & Roos, C. (2009). Is the new primate genus *Rungwecebus* a baboon? *PLoS One*, 4, e4859.

Zinner, D., Groeneveld, L.F., Keller, C. & Roos, C. (2009). Mitochondrial phylogeography of baboons (*Papio* spp.) – Indication for introgressive hybridization? *BMC Evol Biol*, 9, 83.

Stückle, S. & **Zinner, D.** (2008). To follow or not to follow: decision making and leadership during the morning departure in chacma baboons. *Anim Behav*, 75, 1995-2004.

Anlage 44 – Kurz-Vitae der Lehrenden im Promotionsstudiengang „Molecular Medicine“

GAUSS-Mitglieder /Promotionsstudiengang Molecular Medicine

1. Alves, Frauke, Prof. Dr., Abt. Hämatologie und Onkologie, UMG
2. Bähr, Mathias, Prof. Dr., Abt. Neurologie, UMG
3. Bastians, Holger, Prof. Dr., Abt. Molekulare Onkologie, UMG
4. Bayer, Thomas, A., Prof. Dr., Leiter der Arbeitsgruppe Molekulare Psychiatrie, Klinik für Psychiatrie, UMG
5. Beißbarth, Tim, Prof. Dr., Abt. Biostatistik, UMG
6. Bickeböller, Heike, Prof. Dr., Abt. Genetische Epidemiologie, UMG
7. Bodenschatz, Eberhard, Prof. Dr., MPI für Dynamik und Selbstorganisation
8. Brembeck, Felix, Prof. Dr., Abt. Hämatologie und Onkologie, UMG
9. Brockmöller, Jürgen, Prof. Dr., Abteilung Klinische Pharmakologie, UMG
10. Brose, Nils, Prof. Dr., MPI für Exp. Medizin, Abteilung Molekulare Neurobiologie
11. Brück, Wolfgang, Prof. Dr., Abt. Neuropathologie, UMG
12. Brunner, Edgar, Prof. Dr., Abt. Medizinische Statistik, UMG
13. Burckhardt, Gerhard, Prof. Dr., Abt. Vegetative Physiologie und Pathophysiologie, UMG
14. Burfeind, Peter, Prof. Dr., Abt. Humangenetik, UMG
15. Dechent, Peter, PD Dr., AG MR-Forschung in der Neurologie und Psychiatrie, UMG
16. Dobbstein, Matthias, Prof. Dr., GZMB, Molekulare Onkologie, UMG
17. Doenecke, Detlev, Prof. Dr., Abt. Molekularbiologie, UMG
18. Ehrenreich, Hannelore, Prof. Dr., MPI-em, Abtl. Klinische Neurowissenschaften, UMG
19. Eichele, Gregor, Prof. Dr., MPI für Biophysikalische Chemie, Abt. Gene und Verhalten,
20. Engel, Wolfgang, Prof. Dr., Abt. Humangenetik, UMG
21. Fischer, Andre, Dr., European Neuroscience Institute Göttingen,
22. Gärtner, Jutta, Prof. Dr., Neuropediatrics, UMG
23. Groß, Uwe, Prof. Dr., Abt. Med. Mikrobiologie, UMG
24. Hahn, Heidi, Prof. Dr., Zentrum für Hygiene und Humangenetik, Molekulare Entwicklungsgenetik, UMG
25. Hanisch, Uwe-Karsten, Prof. Dr., Abt. Neuropathologie, UMG
26. Hülsmann, Swen, Prof. Dr., Abteilung Neuro- und Sinnesphysiologie, UMG
27. Jarry, Hubertus, Prof. Dr., Abteilung Klinische und Experimentelle Endokrinologie, UMG
28. Johnsen, Steven A., Prof. Dr., Abt. Molekulare Onkologie, UMG
29. Katschinski, Dörthe, Prof. Dr., Abt. Herz- und Kreislaufphysiologie, UMG
30. Kehlenbach, Ralph, Prof. Dr., Abteilung Biochemie I, UMG
31. Kessel, Michael, Prof. Dr., MPI für Biophysikalische Chemie, Molekulare Zellbiologie

32. Klopfenstein, Dieter, Dr., III. Physikalisches Institut - Biophysik,
33. Kube, Dieter, Prof. Dr., Abt. Hämatologie & Onkologie, UMG
34. Lutz, Susanne, Prof. Dr., Abt. Pharmakologie, UMG
35. Mansouri, Ahmed, Prof. Dr., MPI für Biophysikalische Chemie, Arbeitsgruppe Molekulare Zelldifferenzierung,
36. Marquardt, Till, Dr., European Neuroscience Institute Göttingen
37. Meyer, Thomas Prof. Dr., Abt. Psychokardiologie, UMG
38. Moser, Tobias, Prof. Dr., Abt. Hals-Nasen-Ohrenheilkunde, UMG
39. Nave, Klaus-Armin, Prof. Ph.D., MPI für Exp. Medizin, Abteilung Neurogenetik
40. Nikolaev, Viacheslav O., Dr., Abt. Kardiologie und Pneumologie, UMG
41. Oppermann, Martin, Prof. Dr., Abt. Zelluläre und Molekulare Immunologie, UMG
42. Pardo, Luis, Dr., MPI für Exp. Medizin
43. Paulus, Walter, Prof. Dr., Abt. Klinische Neurophysiologie, UMG
44. Pieler, Tomas, Prof. Dr., Abt. Entwicklungsbiochemie, UMG
45. Outeiro, Tiago, Prof. Dr., Abt. Neurodegeneration und Neurorestaurationsforschung, UMG
46. Rehling, Peter, Prof. Dr., Abt. Biochemie II, UMG
47. Reichardt, Holger, Prof. Dr., Abt. Zelluläre und Molekulare Immunologie, UMG
48. Reiss, Jochen, Prof. Dr., Abt. Humangenetik, UMG
49. Schild, Detlev, Prof. Dr. Dr., Abt. Neurophysiologie und Zelluläre Biophysik, UMG
50. Schön, Michael, Prof. Dr., Abt. Dermatologie und Venerologie, UMG
51. Schu, Peter, Prof. Dr., Biochemie II, UMG
52. Schwappach, Blanche, Prof. Dr., Abt. Biochemie I, UMG
53. Simons, Mikael, Prof. Dr., Abteilung Neurologie, UMG
54. Sopper, Sieghart, PD Dr., DPZ, Abt. Virologie und Immunologie
55. Stühmer, Walter, Prof. Dr., MPI für Exp. Medizin, Abteilung Molekulare Biologie Neuronaler Signale
56. Thumm, Michael, Prof. Dr., Abt. Biochemie II, UMG
57. Urlaub, Henning, Prof. Dr., MPI für Biophysikalische Chemie, Bioanalytical Mass Spectrometry Group
58. Walter, Lutz, Prof. Dr., DPZ, Primatengenetik,
59. Wienands, Jürgen, Prof. Dr., Abt. Zelluläre und Molekulare Immunologie, UMG
60. Wingender, Edgar, Prof. Dr., Abt. Bioinformatik, UMG
61. Wintermeyer, Wolfgang, Prof. Dr., MPI für Biophysikalische Chemie
62. Wodarz, Andreas, Prof. Dr., Abt. Stammzellbiologie, UMG
63. Zeisberg, Michael, Prof. Dr., Abt. Nephrologie und Rheumatologie, UMG
64. Zimmermann, Wolfram Hubertus, Prof. Dr., Abt. Pharmakologie, UMG

NAME	POSITION / TITLE	DEPARTMENTS
ALVES, Frauke	Group Leader and Professor	UMG: Dept. of Hematology/ Oncology MPIEM: Molecular Biology of Neuronal Signals

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
UMG, Göttingen	State Board Exam	1987	Medicine
UMG, Göttingen	Dr. med.	1991	Medicine
MPI of Biochemistry, Martinsried	Postdoctoral Fellow	1991-1994	Medicine, Molecular Biology
Georg-August-Univ. Göttingen	Habilitation	2002	Medicine
UMG Göttingen	MC, Internal Medicine	2003	Medicine
UMG Göttingen	Apl. Professorship of Internal medicine	2009	Medicine

B. Positions / Academic Appointments

1995-	Medical Doctor at UMG, Leader of own Research Group, Dept. of Hematology and Oncology, Göttingen
2004 -	Establishment of an interdisciplinary small animal imaging group at the UMG
2008-	Group Leader at MPI Exp. Medicine, Dept. of MBNS, Göttingen to develop as a clinician a thorough bench to bedside approach in the cancer field

C. Major research interests

Investigations of mechanisms of tumor progression, angiogenesis, inflammation and the validation of novel anti-tumor therapies by applying non invasive imaging techniques in transgenic mouse tumor models and orthotopic xenografts in immuno-incompetent mice.

D. Selected peer-reviewed publications

Jannasch K, Dullin C, Heinlein C, Krepulat F, Wegwitz F, Deppert W, **Alves F** (2009). Detection of different tumor growth kinetics in single transgenic mice with oncogene induced mammary carcinomas by flat-panel Volume Computed Tomography. *Int J Cancer* 1, 62-70.

Napp J, Dullin C, Müller F, Uhland K, Petri JB, van de Loch A, Steinmetzer T, **Alves F** (2010). Time-domain in vivo near infrared fluorescence imaging for evaluation of matriptase as a potential target of novel, inhibitor-based tumour therapies. *Int. J Cancer* 127, 1958-74

Napp J, Behnke T, Fischer L, Würth C, Wottawa M, Katschinski DM, **Alves F**, Resch-Genger U, Schäferling M (2011). Targeted luminescent NIR polymer-nanoprobes for in vivo imaging of tumor hypoxia. *Analytical Chemistry*, 83, 9039 - 9046.

Mathejczyk JE, Pauli J, Dullin C, Resch-Genger U, **Alves F**, Napp J (2012). High-sensitivity detection of breast tumors in vivo by use of a pH-sensitive near-infrared fluorescence probe. *J Biomed Opt.* 17:076028.

E. Research Support selected

DFG Schwerpunktprogramm SPP 1190: „Functional and anatomical monitoring of tumor progression by non-invasive imaging devices in various tumor models“, 2007-2011.

Deutsche Krebshilfe Antrag 109315: „A mouse model for mammary carcinogenesis for evaluation of therapeutic concepts targeting tumor cell dissemination and metastasis“, 2010-2012.

Marie Curie Industry-Academia Partnerships and Pathways, FP7-PEOPLE-2007-3-1-IAPP: “Public Private Partnership for Asthma Imaging and Genomics, **P³AGI**, People Marie Curie Actions“, 2009-2013.

NAMDIATREAM/NM-LA-2010-246479: “Nanotechnological toolkits for multi-modal disease diagnostics and treatment monitoring“, 2010-2014.

Marie Curie Initial Training Network/PITN-GA-2011-289648: „Ion transport proteins in control of cancer cell behaviour“, 2011-2015.

Large Collaborative project NMP-2010-2.2.3; Novel biomaterials and bioinspired material: “Innavobone Layered hierarchical structured scaffolds with injectable self setting bioactive gel for clinical bone tissue repair“, 2011-1015.

F. Other activities

Associate Member of the Board of the UMG Mentoring Program, Elected Member of the Animal Ethic Commission UMG.

G. Memberships and awards

Memberships: Interdisziplinäres Netzwerk Molekulare Bildgebung, DGVS, DGHO, and ESMI.

Awards: Stipends of “Deutsche Gesellschaft für Verdauungs- und Stoffwechselerkrankungen e.V.“, „Max Planck Society“ and of the „Novartis-Stiftung für therapeutische Forschung“.

NAME	POSITION / TITLE	DEPARTMENT
BÄHR, Mathias	Head, Department of Neurology / Prof. Dr.	Neurology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Department of Neurology, University, Tübingen	M.D.	1986	Medicine
Residency in the Departments of Neurology, Universities of Düsseldorf and Tübingen	Board Certification	1993	Neurology
Department of Neurology, University, Tübingen	Habilitation	1993	Neurology

B. Positions / Academic Appointments

1986-1987	Department of Neurology, University Düsseldorf, Research Assistant
1987-1989	Max Planck Institute for Developmental Biology, Tübingen, DFG-Fellow
10/1988-4/1989	Washington University St. Louis, Department of Anatomy and Neurobiology (Prof. R.P. Bunge), Max-Planck-Fellowship
1994-1996	Department of Neurology, University of Tübingen, Registrar (Oberarzt)
1996-2001	Department of Neurology, University of Tübingen, Schilling-Foundation-Professorship
1998-2001	Department of Neurology, University of Tübingen, Vice chairman
2001-	Department of Neurology, University of Göttingen Medical Center, Germany, Head

C. Major research interests

The main interest of the research in my lab has been the analysis of axonal and neuronal degeneration in stroke, aggregation disorders and inflammation.

D. Selected peer-reviewed publications (2007 – 2012)

Frank T, Klinker F, Falkenburger BH, Laage R, Lühder F, Göricke B, Schneider A, Neurath H, Desel H, Liebetanz D, Bähr M, Weishaupt JH (2012) Pegylated granulocyte colony-stimulating factor conveys long-term neuroprotection and improves functional outcome in a model of Parkinson's disease. *Brain*. 2012 Mar 16. [Epub ahead of print]

Koch JC, Knöferle J, Tönges L, Michel U, Bähr M, Lingor P. Imaging of rat optic nerve axons in vivo. *Nat Protoc* 6(12), 1887-96.

Krumova P, Meulmeester E, Garrido M, Tirard M, Hsiao HH, Bossis G, Urlaub H, Zweckstetter M, Kügler S, Melchior F, Bähr M, Weishaupt JH (2011) Sumoylation inhibits alpha-synuclein aggregation and toxicity. *J Cell Biol* 194(1), 49-60.

Knöferle J, Koch JC, Ostendorf T, Michel U, Planchamp V, Vutova P, Tönges L, Stadelmann C, Brück W, Bähr M, Lingor P (2010) Mechanisms of acute axonal degeneration in the optic nerve in vivo. *Proc Natl Acad Sci USA* 107(13), 6064-9.

Lingor P, Tönges L, Pieper N, Bermel C, Barski E, Planchamp V, Bähr M (2008) ROCK inhibition and CNTF interact on intrinsic signalling pathways and differentially regulate survival and regeneration in retinal ganglion cells. *Brain* 131 (Pt 1), 250-63.

E. Research Support (selection)

1. DFG / FZT 103: "Research Center Molecular Physiology of the Brain" and DFG / EXC 171: Cluster of Excellence "Microscopy at the nanometer range", since 11/2006. Co-coordinator (together with S. Hell and D. Schild) and PI on several projects.

2. EU / FP7 Collaborative project: "Neugene – advanced gene therapy tools for treatment of CNS specific disorders", since 8/2008. Co-Coordinator (together with S. Kügler). PI.

3. Schilling Foundation, Professor for Clinical and Experimental Neurology, University of Tübingen.

4. BMBF: German Center for Neurodegenerative Disorders (DZNE), Göttingen.

F. Other activities

Member of the DFG panel Neurosciences; member of the National Stem cell approval committee.

G. Memberships and awards

Memberships: GIF Board; Leopoldina; Göttingen Academy of Neurosciences; Royal Society of Physicians; ENI-G steering committee (since 2001); Chair of the Institute for Multiple Sclerosis Research Göttingen (2002-06); President of the German Neuroscience Society (2006-08).

Awards: Attempto Award of the University of Tübingen (1994), Award of the Kuratorium CNS und the Hannelore-Kohl-Foundation (1995), Young Investigator Award of the Ministeriums für Wissenschaft, Forschung und Kunst Baden-Württemberg (1995), Herrmann und Lilly Schilling Foundation Professorship (1996), Heinrich-Pette-Award, German Society for Neurology (1998).

NAME BASTIANS, Holger	POSITION / TITLE Prof. Dr.	DEPARTMENT Molecular Oncology, UMG
--------------------------	-------------------------------	---------------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Osnabrück, Germany	Diploma	1993	Biology
German Cancer Research Center, Heidelberg	Dr. rer.nat.	1996	Cancer Research
Harvard Medical School, Boston, USA	Postdoctoral fellow	1996-1999	Cancer Research
Philipps University Marburg, Germany	Habilitation	2006	Molecular Biology

B. Positions / Academic Appointments

1999-2008	Junior Group Leader, Phillips University Marburg, Germany
2008-2010	Heisenberg Fellow, Philipps University Marburg, Germany
2010-2011	Heisenberg Fellow, University of Göttingen, Germany
2011-	Heisenberg Professor of Cellular Oncology, University of Göttingen, Germany

C. Major research interests

Our group is interested in mitotic signaling pathways that are often deregulated in human cancer and are directly associated with the missegregation of sister chromatids resulting in chromosomal instability (CIN) and aneuploidy.

D. Selected peer-reviewed publications

Stolz A, Ertych N, Kienitz A, Vogel C, Schneider V, Fritz B, Jacob R, Dittmar G, Weichert W, Petersen I, Bastians H (2010) The CHK2-BRCA1 tumor suppressor pathway ensures chromosomal stability in human somatic cells. *Nature Cell Biology* 12, 492-499.

Kaestner P, Stolz A, Bastians H (2009) Determinants for the efficiency of anti-cancer drugs targeting either Aurora-A or Aurora-B kinases. *Mol Cancer Ther* 8, 2046-2056.

Stolz A, Vogel C, Schneider V, Ertych N, Kienitz A, Yu H, Bastians H (2009) Pharmacologic abrogation of the mitotic spindle checkpoint by an indolocarbazole discovered by cellular screening efficiently kills cancer cells. *Cancer Research* 69, 3874-3883.

Vogel C, Hager C, Bastians H (2007) Mechanisms of mitotic cell death induced by chemotherapy mediated G2 checkpoint abrogation. *Cancer Research* 67, 339-345.

Kienitz A, Vogel C, Morales I, Müller R, Bastians H (2005) Partial downregulation of MAD1 causes spindle checkpoint inactivation and aneuploidy, but does not confer resistance towards taxol. *Oncogene* 24, 4301-4310.

E. Research Support (selection)

1. KFO179 (DFG): "The role of the AURORA-A oncogene in tumorigenesis and in the therapy response in colorectal and rectal cancer", 2/2011 - 2/2014. PI on one project.
2. FOR942 (DFG): "The role of the Wnt signaling pathway for the maintenance of chromosomal stability", 3/2011 - 3/2014. PI on one project.
3. DFG grant: "Functional cross-talk of mitosis and apoptosis", 12/2009 - 12/2012. PI on the project.

F. Other activities

Member of the advisory board of 4SC Pharma, Martinsried, Germany.

Reviewer for the DFG, Cancer Research UK, Research Grant Council, Hong Kong, Spanish National Agency for Science, Netherlands Organisation for Scientific Research, etc.

G. Memberships and awards

Memberships: German Society for Cell Biology

Awards: DFG postdoctoral fellowship (1996), DFG Heisenberg Fellowship (2007), DFG Heisenberg Professorship (2010).

NAME	POSITION / TITLE	DEPARTMENT
BAYER, Thomas A.	Group leader / Professor	Molecular Psychiatry, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Stuttgart and Whitney Lab Florida	Diploma	1984-1989	Biology
University of Cologne (PhD Thyssen Graduate School)	PhD	1989-1993	
University of Cologne, Cologne	Postdoctoral Research Fellow	1993	
University of Bonn Medical Center	Postdoctoral Research Fellow	1993-1997	

B. Positions / Academic Appointments

1997-2002	Lab leader, Department of Psychiatry, University of Bonn Medical Center, Bonn
2002-2007	Head of Neurobiology Lab, University of Saarland Medical Center, Homburg
2004	Appointment to apl Professor at the University Medical Center Saarland
2007-	University Professor in “Molecular Psychiatry” at the Georg-August-University Göttingen, University Medicine Göttingen

C. Major research interests

pathogenesis of Alzheimer’s disease, neuronal cell death mechanisms, preclinical proof-of-concept studies; characterization and development of mouse models for Alzheimer’s disease (neuropathology, anatomy, biochemistry, behavioural tests), preclinical therapy studies in mouse models, blood and CSF biomarker analysis, coordination and design of a phase II clinical study with Alzheimer’s disease patients

D. Selected peer-reviewed publications

Wirths O, Breyhan H, Cynis H, Schilling S, Demuth H-U, Bayer TA (2009) Intraneuronal pyroglutamate-Abeta 3-42 triggers neurodegeneration and lethal neurological deficits in a transgenic mouse model. *Acta Neuropathol.* 118:487–496

Marcello A, Wirths O, Schneider-Axmann T, Degerman-Gunnarsson M, Lannfelt L, Bayer TA (2011) Reduced levels of IgM autoantibodies against N-truncated pyroglutamate Aβ in plasma of patients with Alzheimer’s disease. *Neurobiol Aging*, 32:1379–1387

Wirths O, Erck E, Martens H, Harmeier A, Geumann C, Jawhar S, Kumar S, Multhaup G, Walter J, Ingelsson M, Degerman-Gunnarsson M, Kalimo H, Huitinga I, Lannfelt L, Bayer TA (2010) Identification of low molecular weight pyroglutamate Aβ oligomers in Alzheimer disease: a novel tool for therapy and diagnosis pyroglutamate Aβ oligomers in Alzheimer disease: a novel tool for therapy and diagnosis. *Journal of Biological Chemistry* 53:41517-24

Jawhar S, Wirths O, Schilling S, Graubner S, Demuth HU, Bayer TA (2011) Overexpression of glutaminyl cyclase, the enzyme responsible for pyroglutamate abeta formation, induces behavioral deficits and glutaminyl cyclase knock-out rescues the behavioral phenotype in 5XFAD mice. *Journal of Biological Chemistry* 286(6):4454–4460.

Wittnam JL, Portelius E, Zetterberg H, Gustavsson MK, Schilling S, Koch B, Demuth H-U, Blennow K, Wirths O, Bayer TA (2012) Pyroglutamate Amyloid β (A β) Aggravates Behavioral Deficits in Transgenic Amyloid Mouse Model for Alzheimer Disease. *J. Biol. Chem.* 287 (11): 8154–8162.

Bayer TA and Wirths O (2010) Intracellular accumulation of amyloid-beta – a predictor for synaptic dysfunction and neuron loss in Alzheimer’s disease. *Front. Ag. Neurosci.* 2(8): 1-10

Bayer TA, Wirth O (2011) Intraneuronal Aβeta as a trigger for neuron loss: can this be translated into human pathology? *Biochem. Soc. Trans.* 39(4): 857-61

Jawhar S, Wirths O, Bayer TA (2011) Pyroglutamate Aβeta a hatchet man in Alzheimer disease. *J. Biol. Chem.* VOL. 286, NO. 45, pp. 38825–38832

E. Research Support (selection)

Federal Ministry of Research

F. Other activities

Personal tutor of the Studienstiftung des Deutschen Volkes, Editorial board of the *Journal of Biological Chemistry*, Patent applications on animal model, therapy and diagnosis of Alzheimer disease

G. Memberships and awards

1986 – 1989 Scholarship: Studienstiftung des Deutschen Volkes; 1989 – 1993 Fritz Thyssen Foundation, Ph.D. fellowship; 2000 NARSAD Young Investigator Award; 2000 Alzheimer Forschung Initiative e.V.; 2004 Research award of the Saarland University Hospital; 2004 Alzheimer Forschung Initiative e.V.; 2011 Life time award from the International Copper Association (New York).

Scientific societies: European College of Neuropsychopharmacology (ECNP); Neurowissenschaftliche Gesellschaft (NWG); The American Society for Biochemistry and Molecular Biology.

Scientific advisory board of Probiobdrug AG, Halle; AlzProtect, Lille (France); Uppsala Berzelii Technology Centre for Neurodiagnostics (Sweden); Alzheimer Foundation Göttingen.

NAME	POSITION / TITLE	DEPARTMENT
BEISSBARTH, Tim	Prof. Dr.	Medical Statistics, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Cologne, Germany	Diplom	1998	Biology (Computer Science)
University of Heidelberg, Germany	Dr. rer. nat.	2001	Bioinformatics

B. Positions / Academic Appointments

1998-2001	Research fellow, German Cancer Research Center, Dept. of Theoretical Bioinformatics (Martin Vingron), Heidelberg, Germany		
2001-2002	Postdoctoral fellow, Max Planck Institute for Molecular Genetics, Dept. of Computational Biology, Berlin, Germany		
2002-2005	Postdoctoral fellow, Walter & Eliza Hall Institute of Medical Research, Dept. of Bioinformatics (Terry Speed), Melbourne, Australia		
2005-2008	Group leader, Bioinformatics and Modeling Group, German Cancer Research Center (DKFZ), Dept. Molecular Genome Analysis, Heidelberg, Germany		
2008-	Professor of Biostatistics, group leader Statistical Bioinformatics, Dept. Medical Statistics, Göttingen, Germany		

C. Major research interests

The Statistical Bioinformatics group is developing statistical applications and methods for biomedical research. The focus of the group is the development of methods and tools to analyze biomedical data and to reconstruct biological networks.

D. Selected peer-reviewed publications

Bender C, Heyde S, Henjes F, Wiemann S, Korf U, Beißbarth T (2011) Inferring signalling networks from longitudinal data using sampling based approaches in the R-package 'ddepn'. BMC Bioinformatics 12, 291.

Johannes M, Fröhlich H, Sültmann H, Beißbarth T (2011) pathClass: an R-package for integration of pathway knowledge into support vector machines for biomarker discovery. Bioinformatics 27(10), 1442-3.

Jung K, Becker B, Brunner B, Beißbarth T (2011) Comparison of Global Tests for Functional Gene Sets in Two-Group Designs and Selection of Potentially Effect-causing Genes. Bioinformatics 27(10), 1377-83.

Bender C, Henjes F, Fröhlich H, Wiemann S, Korf U, Beißbarth T (2010) Dynamic Deterministic Effect Propagation Networks: learning signalling pathways from longitudinal protein array data. Bioinformatics 26(18), i596-602.

Johannes M, Brase JC, Fröhlich H, Gade S, Gehrman M, Fälth M, Sültmann H, Beißbarth T (2010) Integration Of Pathway Knowledge Into A Reweighted Recursive Feature Elimination Approach For Risk Stratification Of Cancer Patients. Bioinformatics 26(17), 2136-44.

E. Research Support (selection)

1. BMBF / e:Bio: "MetastaSys: Analysis of Molecular Markers and Pathways in Cancer Cells and Microenvironment that determine the Fate and Localization of Tumor Metastases", 2013-2016. Leader of the consortium; PI of WP1, 9 and 11.

2. BMBF / MedSys: "BreastSys: Identifying novel therapeutic strategies for breast cancer by data-driven modeling of tumor progression", 2009-2013, Leader of the consortium; PI of WP6.

3. DFG / SP8: "Development of statistical and computational methods, tools, and infrastructure" in the Clinical Research Group 179 "Biological Basis of Individual Tumor Response in Patients with Rectal Cancer" (Consortium leader Prof. Dr. Michael Ghadimi), 2011-2013. PI.

4. DFG / SP8: "Bioinformatics approach to establish a new graph-based WNT model for metastasis formation in breast cancer cells" in the Research Group 942 "Wnt Signaling in Development and Tumor Progression" (Spokesperson Prof. Dr. Lorenz Trümper), 2011-2013. PI.

5. Helmholtz Initiative on Systems Biology: Project V.9 "Analysis of RNAi and screening data to identify novel network components" in the consortium "Systems Biology of Signaling in Cancer (SBCancer)" (Consortium leader Prof. Dr. Roland Eils), 2008-2012. PI.

F. Other activities

Associate Editor of BMC Bioinformatics (since 2008); associate Editor of BMC Cancer (since 2009); leader of the joint work group "Statistical Method in Bioinformatics" of the associations IBS and GMDS (since 2009).

G. Memberships and awards

Member of the International Biometrical Society (IBS), the German Society for medical Informatics, Biometry and Epidemiology (GMDS) and the International Society on Computational Biology (ISCB).

NAME	POSITION / TITLE	DEPARTMENT
BICKEBÖLLER, Heike	Director and Professor	Genetic Epidemiology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Heinrich Heine University, Düsseldorf	MSc (teaching)	1988	Mathematics, physics
University of Washington, Seattle	MSc	1986	Statistics
University of Washington, Seattle	PhD	1993	Statistics
INSERM, Paris	Postdoctoral Fellow	1994-95	Genetic epidemiology
Fac Medicine, Tech Univ of Munich	Habilitation	1998	Medical statistics, epidemiology

B. Positions / Academic Appointments

1998-2001	Faculty of Medicine, TU Munich. "Assistant Professor" (Privatdozent)
1999-2001	Institute for Epidemiology, GSF Research Center for the Environment & Health. Head, Genetic Epidemiology Work Group
2001-	Faculty of Medicine & University Hospital, University of Göttingen. Director, Department of Genetic Epidemiology

C. Major research interests

Genetic Epidemiology of complex diseases, Statistical Genetics

D. Selected peer-reviewed publications

Bickeböllner H, Fischer C (2007) Einführung in die Genetische Epidemiologie. Springer, Heidelberg.

Bickeböllner H, Houwing-Duistermaat JJ, Wang X, Yan X (2011) Dealing with high dimensionality for the identification of common and rare variants as main effects and for gene-environment interaction. *Genet Epidemiol* 35, S35-40.

Landi MT, Chatterjee N, Yu K, ..., **Bickeböllner H, ...Caporaso NE** (2009) A genome-wide association study of lung cancer identifies a region of chromosome 5p15 associated with risk for adenocarcinoma. *Am J Hum Genet* 85, 679-691.

E. Research Support (selection)

EU / MRTN-CT-2004-512253, Marie Curie Research Training Network TRANS-NET, Spokesperson: (SP) A. Dickenson, Newcastle, UK, 2005-2009.

BMBF / 01GR0462;01GS0422;... National Genome Research Network – projects on statistical method development and support for heart insufficiency and neurodegenerative diseases. 2001-.

EU / ECP-21006-EDU-410018 – EUROGENE, e-EUROGENE, SP: G. Romeo, Bologna, Italy, 2007-2010.

DFG / GRK 1034: Die Bedeutung genetischer Polymorphismen in der Onkologie: Von den Grundlagen zur individualisierten Therapie, SP: J. Brockmöller, UMG; 2005 -2013.

NIH / 1U19CA148127-02: Transdisciplinary Research in Cancer of the Lung. SP: C. Amos, USA, 2010-2014.

DFG / KFO 241 / BI 576/5-1: Genotype-phenotype relationships and neurobiology of the longitudinal course of psychosis, spokesperson: T. Schulze, 2012-2014.

GRK 1644/1: Scaling Problems in Statistics, Spokesperson T. Kneib, Fac of Economics, GAU, 2010 –2015.

F. Other activities

Vice-dean of center of statistics 2011-; head equality committee of Georg-August-University 2006-2012; host European Mathematical Genetics Meeting 2012; editor Genetic Analysis Workshop 2012

G. Memberships and awards

current president Dt. Gesell. f. Med. Informatik, Biometrie und Epidemiologie (GMDS).

leadership award International Genetics Epidemiology Society 2011; Sarah Denny Fellowship "leadership role in TA community" (teaching), UW, USA; Fulbright Scholarship 1985-1986.

NAME BODENSCHATZ, Eberhard	POSITION / TITLE Director / Prof.	DEPARTMENT Physics, MPI Dynamics and Self Organization
-------------------------------	--------------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Bayreuth	Diploma	1985	Physics
University of Bayreuth	Dr. rer. nat.	1989	Theoretical Physics

B. Positions / Academic Appointments

1989 -1992	Postdoctoral Fellow in Experimental Physics, UCSB, USA
1992 -1998	Assistant Professor of Physics, Cornell University, USA
1995	Visiting Professor at the MPI For Polymer Research, Mainz
1998 -2002	Associate Professor of Physics, Cornell University, USA
2003 -2005	Full Professor of Physics, Cornell University, USA
2003 -2005	Adjunct Director, MPI for Dynamics and Self-Organization, Göttingen
since 2005	Adjunct Professor of Physics and of Mechanical and Aerospace Engineering, Member of the Graduate School in Physics, Cornell University, USA
since 2005	Director and Managing Director, MPI for Dynamics and Self Organization, Göttingen
since 2007	Full Professor of Physics, University of Göttingen

C. Major research interests

Experimental and theoretical investigations of self-organizing complex systems: spatiotemporal dynamics and applications in Biology, Geophysics, Hydrodynamics, and Medicine. Nanobiocomplexity: cellular signaling and intracellular biochemical networks. Cardiac dynamics: electrophysiological turbulence, arrhythmia, fibrillation, and sudden cardiac death. Lagrangian properties of fully developed turbulence. Microfluidics. Development of imaging and image processing techniques.

D. Selected peer-reviewed publications (2007 – 2012)

Amselem G, Theves M, Bae A, Beta C, **Bodenschatz E**. Control parameter description of eukaryotic chemotaxis. *Phys Rev Lett*. 2012 Sep 7;109(10):108103

Luther S, Fenton FH, Kornreich BG, Squires A, Bittihn P, Hornung D, Zabel M, Flanders J, Gladuli A, Campoy L, Cherry EM, Luther G, Hasenfuss G, Krinsky VI, Pumir A, Gilmour RF Jr, **Bodenschatz E**. Low-energy control of electrical turbulence in the heart. *Nature*. 2011 Jul 13;475(7355):235-9.

Bae AJ, **Bodenschatz E**. On the swimming of *Dictyostelium amoebae*. *Proc Natl Acad Sci U S A*. 2010 Nov 2;107(44):E165-6.

Bodenschatz E, Malinowski SP, Shaw RA, Stratmann F. 13. Atmospheric science. Can we understand clouds without turbulence? *Science*. 2010 Feb 19;327(5968):970-1.

Vincenzi, D., Jin, S., **Bodenschatz, E.** and Collins, L.R. (2007) Stretching of polymers in isotropic turbulence: A statistical closure. *Phys. Rev. Lett.* 98, 024503

Xu, H., Ouellette, N.T. and **Bodenschatz, E.** (2007) Curvature of Lagrangian trajectories in turbulence. *Phys. Rev. Lett.* 98, 050201

E. Research Support (selection)

F. Other activities

G. Memberships and awards

NAME BREMBECK , Felix H.	POSITION / TITLE Prof. Dr. med.	DEPARTMENT Hematology and Oncology, UMG
------------------------------------	------------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Free University Berlin	Dr. med.	1997	Medicine
Harvard Medical School, Boston, and University of Pennsylvania, Philadelphia, USA	Postdoctoral Fellow	1998-2000	Cancer Biology of the GI-Tract
Max-Delbrueck-Center For Molecular Medicine, Berlin	Senior Postdoctoral Researcher	2000-2008	Epithelial Differentiation, Invasion and Metastasis
Georg-August-Universität Göttingen	Professor	since 2008	Tumor Biology and Signal Transduction

B. Positions / Academic Appointments

2008-current	Project Leader DFG Forschergruppe FOR942 "Wnt signaling in tumor progression and development"
--------------	---

C. Major research interests

Main topic of our research is the molecular analysis of epithelial proliferation and differentiation in vitro and in vivo during development and tumorigenesis in human and mice. One current focus is the canonical Wnt/beta-catenin signaling pathway and the role of their specific co-factors, BCL9 and Pygopus. We analyze their role as oncogenes for the initiation and progression of tumors and characterize the mechanisms of gene regulation in the context of the Wnt- and other signaling pathways.

D. Selected peer-reviewed publications

F. H. Brembeck*, M. Wiese, N. Zatula, T. Grigoryan, Y. Dai, J. Fritzmann, and W. Birchmeier, BCL9-2 promotes early stages of intestinal tumor progression, (2011) *Gastroenterology*, 141:1359-1370. (* corresponding author)

U. Stelzl, U. Worm, M. Lalowski, C. Haenig, **F. H. Brembeck**, H. Goehler, M. Stroedicke, M. Zenkner, A. Schoenherr, S. Koeppen, J. Timm, S. Mintzlauff, C. Abraham, N. Bock, S. Kietzmann, A. Goedde, E. Toksoz, A. Droege, S. Krobitch, B. Korn, W. Birchmeier, H. Lehrach, and E. E. Wanker, A human protein-protein interaction network: a resource for annotating the proteome, (2005) *Cell*, 122:957-968.

F. H. Brembeck, T. Schwarz-Romond, J. Bakkers, S. Wilhelm, M. Hammerschmidt, and W. Birchmeier, Essential role of BCL9-2 in the switch between beta-catenin's adhesive and transcriptional functions, (2004) *Genes Dev.*, 18:2225-2230.

E. Research Support (selection)

Since 2008: DFG BR 1806/2-1 and 2-2 (FOR942 1-1 and 1-2) „The role of the novel BCL9/BCL9-2 oncoproteins in tumorigenesis“

Since 2012: Wilhelm-Sander-Foundation (2011.093.1) „Die Mechanismen der De-regulation der neuen Onkogene BCL9-2 und Pygopus2 während der Tumorentwicklung im Darm“

F. Other activities

Member of the PhD Program of GAUSS, GGNB2 and Molecular Medicine

G. Memberships and awards

DFG Postdoctoral research grant, Scholar grant of the Studienstiftung des Deutschen Volkes

NAME BROCKMÖLLER, Jürgen	POSITION / TITLE Director and Professor	DEPARTMENT Clinical Pharmacology, UMG
------------------------------------	--	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Free University Berlin	State Board Exam	1983	Medicine
Max Planck Institute for Molecular Genetics and Free University Berlin	Dr. med.	1987	Protein chemistry
Free University Berlin	Board certification	1993	Clinical Pharmacology
Humboldt University of Berlin	Habilitation	1996	Molecular epidemiology

B. Positions / Academic Appointments

1984 - 1987	Max Planck Institute for Molecular Genetics, Berlin, doctoral fellow
1987 - 1993	Institute of Clinical Pharmacology, Free University Berlin, Wissenschaftlicher Mitarbeiter
1993 - 2000	Institute of Clinical Pharmacology, Humboldt University Berlin, Hochschulassistent C1/C2
2000 -	Director Department of Clinical Pharmacology, University Medicine Göttingen

C. Major research interests

We are analyzing inherited human genomic variation in relation to the outcomes of drug therapy with the aims to understand causes behind individually variable response to drugs and variable risk for adverse drug effects and to contribute to individualized drug therapies.

D. Selected peer-reviewed publications

Genetic variability of drug-metabolizing enzymes: the dual impact on psychiatric therapy and regulation of brain function. Stingl JC, **Brockmöller J**, Viviani R. Mol Psychiatry. Online publication: 8 May 2012

Genetically polymorphic OCT1: another piece in the puzzle of the variable pharmacokinetics and pharmacodynamics of the opioidergic drug tramadol. Tzvetkov MV, Saadatmand AR, Lötsch J, Tegeder I, Stingl JC, **Brockmöller J**. Clin Pharmacol Ther. 2011; 90: 143-50.

A functional polymorphism in the NAD(P)H oxidase subunit CYBA is related to gene expression, enzyme activity, and outcome in non-Hodgkin lymphoma. Hoffmann M, Schirmer MA, Tzvetkov MV, Kreuz M, Ziepert M, Wojnowski L, Kube D, Pfreundschuh M, Trümper L, Loeffler M, **Brockmöller J** Cancer Res. 2010;70:2328-38

Genetic variation in the renal sodium transporters NKCC2, NCC, and ENaC in relation to the effects of loop diuretic drugs. Vormfelde SV, Sehr D, Toliat MR, Schirmer M, Meineke I, Tzvetkov M, Nürnberg P, **Brockmöller J**. Clin Pharmacol Ther. 2007; 82: 300-9.

E. Research Support (selection)

DFG GRK 1034: The impact of genetic polymorphism in Oncology, 2005-2013, Spokesperson: J. Brockmöller
BMBF 01ES1102 Biomarker assisted personalized immunosuppression following liver transplantation, 2012-2014, Spokesperson: J. Brockmöller

DFG TZ 74/1-1 Effects of genetic polymorphisms in the organic cation transporter OCT1 on cellular uptake and metabolism of antidepressants and other drugs 2011-2013

DFG KFO179 Biological Basis of Individual Tumor Response in Patients with Rectal Cancer, work package 6: Toxicity and pharmacogenomics 2008-2014

DFG KFO241 Genotype-phenotype relationships and neurobiology of the longitudinal course of psychosis: work package 3: Difficult-to-treat psychosis: Clinical pharmacology and functional pharmacogenetics 2012-2014

F. Other activities

Chairman, research ethics committee and member of the research strategy committee, University of Göttingen

G. Memberships and awards

Deutsche Gesellschaft für Pharmakologie und Toxikologie, American Society Clinical Pharmacology and Therapeutics

NAME BROSE, Nils	POSITION / TITLE Director /Prof. Dr.	DEPARTMENT MPI Exp. Medicine
---------------------	---	---------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Oxford, UK	M.Sc.	1987	Physiology
University of Munich (LMU), Germany	Dr. rer. nat.	1990	Biology
Salk Institute, La Jolla, CA, USA	Postdoctoral Fellow	1991-1993	Neuroscience
UTSW Medical Center, Dallas, TX, USA	Postdoctoral Fellow	1993-1995	Neuroscience

B. Positions / Academic Appointments

1995-2001	Research Group Leader, Departments of Molecular Neurobiology and Neurogenetics, Max Planck Institute of Experimental Medicine, Göttingen
since 2001	Director, Department of Molecular Neurobiology, Max Planck Institute of Experimental Medicine, Göttingen, Germany
since 2002	Adjunct Professor of Biochemistry, University of Göttingen Medical Center
since 2005	Adjunct Professor of Biochemistry, Faculty of Biology, University of Göttingen

C. Major research interests

We explore the molecular basis of nerve cell development and function. We focus (i) on the role of protein ubiquitylation and SUMOylation as key regulatory principles in nerve cell differentiation and function, (ii) on the role of synaptic cell adhesion proteins in the maturation, function, and plasticity of synapses between nerve cells, and (iii) on molecular mechanisms by which presynaptic transmitter release is regulated. We also explore the role that aberrations of these processes play in neuropsychiatric disorders.

D. Selected Peer-Reviewed Publications

Herzog E, Nadrigny F, Silm K, Biesemann C, Helling J, Bersot T, Steffens H, Schwartzmann R, Nägerl UV, El Mestikawy S, Rhee J-S, Kirchhoff F, Brose N (2011) In vivo imaging of inter-synaptic vesicle exchange using VGLUT1^{Yenus} knock-in mice. *J Neurosci* 31, 15544-15559.

Kawabe H, Neeb A, Dimova K, Young SM Jr, Takeda M, Katsurabayashi S, Mitkovski M, Malakhova OA, Zhang D-E, Umikawa M, Kariya K, Goebels S, Nave K-A, Rosenmund C, Jahn O, Rhee J-S, Brose N (2010) Regulation of Rap2A by the ubiquitin ligase Nedd4-1 controls neurite development in cortical neurons. *Neuron* 65, 358-372.

Jamain S, Radyushkin K, Hammerschmidt K, Granon S, Boretius S, Varoquaux F, Ramanantsoa N, Gallego J, Ronnenberg A, Winter D, Frahm J, Fischer J, Bourgeron T, Ehrenreich H, Brose N (2008) Reduced social interaction and ultrasonic communication in a mouse model of monogenic heritable autism. *Proc Natl Acad Sci USA* 105, 1710-1715.

Jockusch W, Speidel D, Sigler A, Sørensen J, Varoquaux F, Rhee J-S, Brose N (2007) CAPS-1 and CAPS-2 are essential synaptic vesicle priming proteins. *Cell* 131, 796-808.

Varoquaux F, Aramuni G, Rawson RL, Mohrmann R, Missler M, Gottmann K, Zhang W, Südhof TC, Brose N (2006) Neuroligins determine synapse maturation and function. *Neuron* 51, 741-754.

E. Research Support (Current, Selected)

Consortium EUROSPIN (EU): "Synaptic protein networks in neurological and psychiatric diseases". PI (Consortium Coordinator).

Consortium SynSys (EU): "Synaptic systems: dissecting brain function in health and disease". PI.

SFB 889 (DFG): "Cellular mechanisms of sensory processing". Co-PI.

SPP 1365 (DFG): "Ubiquitin family network". Co-PI.

IMI Consortium EU-AIMS (EU): "Autism Research in Europe". PI.

F. Other Activities (Current, Selected)

Minerva Foundation Fellowship Committee (Chair); Scientific Advisory Board of the Institute of Biology at Ecole Normale Supérieure Paris; EMBO Membership Committee; Scientific Advisory Board of the Leibniz Institute of Molecular Pharmacology Berlin (Chair).

G. Memberships and Awards

Memberships: EMBO

Awards: E.P. Abraham Cephalosporin Fund Fees Scholarship, The Queen's College, Oxford, UK (1986), Florey European Scholarship, The Queen's College, Oxford, UK (1986), Helmholtz Fellowship 'Neurobiology', German Federal Ministry for Research and Technology, Bonn, Germany (1995-1997), Gerhard Hess Prize of the DFG, Bonn, Germany (1997-2002), Heisenberg Fellowship of the DFG, Bonn, Germany (1998-2001).

NAME BRÜCK, Wolfgang	POSITION / TITLE Director/Prof. Dr.	DEPARTMENT Department of Neuropathology, UMG
--------------------------------	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Johannes Gutenberg University in Mainz	MD	1986	Medicine
University Medical Center Göttingen	Residency in Neuropathology	1988-1994	Neuropathology
University Medical Center Göttingen	Habilitation	1996	Neuropathology

B. Positions / Academic Appointments

1997-2002	Associate professorships for neuropathology at the Charité in Berlin
Since 2002	Head, Department of Neuropathology, University Medical Center Göttingen

C. Major research interests

Immunopathology of multiple sclerosis- Brain-specific mechanisms of immune response in multiple sclerosis- Axonal damage in inflammatory demyelination and mechanisms of remyelination

D. Selected peer-reviewed publications

Kloppfleisch S, Merkler D, Schmitz M, Klöppner S, Schedensack M, Jeserich G, Althaus HH, Brück W. Negative impact of statins on oligodendrocytes and myelin formation in vitro and in vivo. *J. Neurosci.*, 28: 13609-13614

Kuhlmann T, Mirron V, Cuo Q, Antel J, Brück W. Differentiation block of oligodendroglial progenitor cells as a cause for remyelination failure in chronic MS. *Brain*, 131: 1749-1758, 2008

Nikić I, Merkler D, Sorbara C, Brinkoetter M, Kreutzfeldt M, Bareyre FM, Brück W, Bishop D, Misgeld T, Kerschensteiner M. A reversible form of axon damage in experimental autoimmune encephalomyelitis and multiple sclerosis. *Nat Med.*, 17:495-499, 2011

Lucchinetti CF, Popescu BF, Bunyan RF, Moll NM, Roemer SF, Lassmann H, Brück W, Parisi JE, Scheithauer BW, Giannini C, Weigand SD, Mandrekar J, Ransohoff RM. Inflammatory cortical demyelination in early multiple sclerosis. *N Engl J Med.*, 365:2188-2197, 2011

Metz I, Radue EW, Oterino A, Kümpfel T, Wiendl H, Schippling S, Kuhle J, Sahraian MA, Gray F, Jakl V, Häusler D, Brück W. Pathology of immune reconstitution inflammatory syndrome in multiple sclerosis with natalizumab-associated progressive multifocal leukoencephalopathy. *Acta Neuropathol.*, 123:235-245, 2012

Manrique-Hoyos N, Jürgens T, Grønborg M, Kreutzfeldt M, Schedensack M, Kuhlmann T, Schrick C, Brück W, Urlaub H, Simons M, Merkler D. Late motor decline after accomplished remyelination: Impact for progressive multiple sclerosis. *Ann. Neurol.*, 71:227-244, 2012

E. Research Support (selection)

Transregio SFB TRR43, TP B9: Axonal and neuronal damage as pathological substrates of disease progression in MS

F. Memberships and awards

2002 Hans Heinrich Georg Queckenstedt Award for Multiple Sclerosis Research

2008 HG Mertens Award for innovative research in neurology

2011 Kohn Award of the British Society of Toxicological Pathologists

NAME	POSITION / TITLE	DEPARTMENT
BRUNNER, EDGAR	Prof. emeritus	Medical Statistics, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
TU Aachen	Diploma Mathematics	1969	
TU Aachen	Dr. rer. nat. (Math.)	1971	Nonparametric Statistics

B. Positions / Academic Appointments

1976 - 2009	Professor of Medical Statistics and Head of Department , University of Göttingen,
2010 -	Professor emeritus

C. Major research interests

Nonparametric Statistics, Clinical Trials, Diagnostic Trials, Longitudinal Data, High-Dimensional Repeated Measures

D. Selected peer-reviewed publications (recent 15 years)

1. Akritas, M. G., Arnold, S. F. and Brunner, E. (1997). Nonparametric hypotheses and rank statistics for unbalanced factorial designs. *Journal of the American Statistical Association* 92, 258-265.
2. Akritas, M. G. und Brunner, E. (1997). A unified approach to ranks tests in mixed models. *Journal of Statistical Planning and Inference* 61, 249-277.
3. Brunner, E., Dette, H. und Munk, A. (1997). Box-Type Approximations in Nonparametric Factorial Designs. *Journal of the American Statistical Association* 92, 1494-1502.
4. Brunner, E. and Puri, M. L. (2001). Nonparametric Methods in Factorial Designs. *Statistical Papers* 42, 1-52.
5. Kaufmann, J., Werner, C., and Brunner, E. (2005). Nonparametric methods for analyzing the accuracy of diagnostic tests with multiple readers. *Statistical Methods in Medical Research* 14, 129–146.
6. Brunner, E., Bathke, A. and Placzek, M. (2012). Estimation of Box's ϵ for Low- and High-Dimensional Repeated Measures Designs with Unequal Covariance Matrices. *Biometrical Journal* 54, 301-316.
7. Konietschke, F., Hothorn, L. A., Brunner, E. (2012). Rank-based multiple test procedures and simultaneous confidence intervals. *The Electronic Journal of Statistics* 6, 737-758.

E. Research Support (selection, recent 10 years)

(1) DFG projects DFG-Br655 / 11-1,2,3 (Longitudinale Daten), DFG-Br655 / 12-1 (Ordinale Daten), DFG-Br655 / 15 (KLIFO 179), DFG-Br655 / 16 (Simultane Konfidenzintervalle für nichtparametrische Effekte in faktoriellen Modellen), (2) BMBF (Common project MÄQNU, Leader: Sigfried Kropf, Magdeburg)

F. Other activities

Lecturer Master Study Program “Medizinische Biometrie”, University of Heidelberg (1999 -)

G. Memberships and awards

- (1) American Statistical Association
- (2) International Biometric Society / Deutsche Region
- (3) Deutsche Mathematiker Vereinigung / Hochschullehrer für Stochastik
- (4) GMDS (Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie)

Honorary Member:

International Biometric Society / Deutsche Region

Editor:

Biometrical Journal (2004 – 2008)

Associate Editor:

Journal of Statistical Planning and Inference (2000 - 2011), Biometrical Journal (2009 -)

NAME BURCKHARDT, Gerhard	POSITION / TITLE Director and Professor	DEPARTMENT Systemic Physiology and Pathophysiology, UMG
------------------------------------	---	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Frankfurt am Main	State Board Exam	1972	Medicine
University of Frankfurt am Main	Dr. med.	1973	Biochemistry
University of Frankfurt am Main	Habilitation	1988	Physiology

B. Positions / Academic Appointments

1973-1978	Research Assistant, Johann Wolfgang Goethe-University of Frankfurt am Main
1979-1991	Group leader, Max-Planck-Institute for Biophysics, Frankfurt
1991 -	Director of the Department Systemic Physiology and Pathophysiology, UMG

C. Major research interests

My group is interested in the trans-membrane translocation of negatively charged endogenous and exogenous compounds by Organic Anion Transporters (OATs). In renal proximal tubules, OATs are crucial for excretion of widely prescribed anionic drugs and their conjugates. We are searching for transcription factors involved in male-predominant renal expression of OAT1 and OAT3. Moreover, we found that OATs as well as Organic Cation Transporters (OCTs) are expressed in some tumor cells and can be used to direct antineoplastic drugs into these cells, increasing their chemosensitivity.

D. Selected peer-reviewed publications (2007-2012)

Hagos Y., Bahn A., Vormfelde, S.V., Brockmüller, J., Burckhardt G. Torasemide transport by organic anion transporters contributes to hyperuricemia. *J. Am. Soc. Nephrol.* 18: 3101-3109, 2007

Shnitsar V, Eckardt R, Gupta S, Müller GA, Koepsell H, Burckhardt G, Hagos Y. Expression of human organic cation transporter 3 in kidney carcinoma cell lines increases chemosensitivity to melphalan, irinotecan and vincristine. *Cancer Res.* 69: 1494-1501, 2009

Gupta S, Wulf G, Henjakovic M, Koepsell H, Burckhardt G, Hagos Y. Human organic cation transporter 1 is expressed in lymphoma cells and increases the susceptibility to irinotecan and paclitaxel. *J. Pharmacol. Exp. Ther.* 341:16-23, 2012

Wegner W, Burckhardt BC, Burckhardt G, Henjakovic M. Male-dominant activation of rat renal organic anion transporter 1 (Oat1) and 3 (Oat3) expression by transcription factor BCL6. *PlosOne* 7(4): e35556, 2012

E. Research Support (selection)

DFG / GRK 1034 Cancer Pharmacogenomics

DFG / BU 571/8-1 Geschlechtsabhängige Expression renaler Transporter für organische Anionen

F. Other activities

2008-2014 Dean of Study Affairs

G. Memberships and awards

Deutsche Akademie der Naturforscher Leopoldina – Nationale Akademie der Wissenschaften (since 2002)

Preis des Jahres 1975 zur Förderung des Wissenschaftlichen Nachwuchses, Paul-Ehrlich-Stiftung

Deutsche Physiologische Gesellschaft (President in 2005)

NAME BURFEIND, Peter	POSITION / TITLE Group Leader / Professor	DEPARTMENT Human Genetics, UMG
-------------------------	--	-----------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Goettingen, Germany	Diploma	1988	Developmental Biology
University of Goettingen, Germany	PhD	1992	Developmental Biology
Case Western Reserve University, OH, USA	Postdoctoral Fellow	1993-1996	Tumor Biology
University of Goettingen, Germany	Habilitation	2005	Molecular Human Genetics and Tumor Biology
University of Goettingen, Germany	APL-Professor	2009	Molecular Human Genetics and Tumor Biology

B. Positions / Academic Appointments

2001-2005	Head of Cytogenetic Diagnostics, Dep. of Human Genetics, University Medical Center Goettingen
Since 2006	Head of Molecular Genetic Diagnostics and Co-Head of Cytogenetic Diagnostics, Dep. of Human Genetics, University Medical Center Goettingen

C. Major research interests

Studying the influence of receptor tyrosine kinases (RTKs), e.g. the IGF-IR and EGFR, on the progression of prostate and colorectal cancer. Especially, the analyses of the blockade of these RTKs in cancer cells and the effects on downstream signaling pathways regulating proliferation, apoptosis, invasion and metastasis.

D. Selected peer-reviewed publications

Kaulfuß S, von Hardenberg S, Schweyer S, Herr A, Laccone F, Wolf S, Burfeind P (2009). Leupaxin acts as a mediator in prostate carcinoma progression through deregulation of p120catenin expression. *Oncogene*; 28: 3971-3982.

Kaulfuß S, Burfeind P, Gaedcke J, Scharf JG. Dual silencing of insulin-like growth factor-I receptor and epidermal growth factor receptor in colorectal cancer cells is associated with decreased proliferation and enhanced apoptosis. *Mol Cancer Ther* 2009; 8(4):821-833.

Kaulfuß S, Grzmil M, Hemmerlein B, Thelen P, Schweyer S, Neesen J, Bubendorf L, Glass AG, Jarry H, Auber B, Burfeind P. Leupaxin, a novel co-activator of the androgen receptor, is expressed in prostate cancer and plays a role in adhesion and invasion of prostate carcinoma cells. *Mol Endocrinol*, 2008, 22(7):1606-1621.

E. Research Support (selection)

Deutsche Krebshilfe / 108065: „Der Einfluss des Phytoöstrogens Tectorigenin auf das Insulin-like-Growth-Factor-System im Prostatakarzinom“, 2008-2012.

DFG / SCHA 700/3-1: Role of the insulin-like growth factor axis in combination with other growth factor signaling pathways in the resistance or response of rectal adenocarcinoma to neoadjuvant radiochemotherapy“, 2008-2011, with Prof. J.-G. Scharf.

DFG / BU 992/5-1: SP7 „Role of growth factor receptors and their downstream signaling pathways in the resistance or response of rectal adenocarcinoma to neoadjuvant radiochemotherapy“, 2011-2014. KFO-179-2, Spokesperson: Prof. M. Ghadimi.

F. Other activities

Reviewer for the internal research promotion program of the University Medical Center Goettingen. Member of the managing board of the center Hygiene and Humangenetik of the University Medical Center Goettingen.

G. Memberships and awards

Member in the German Society of Human Genetics (GfH). Corresponding member in the American Association for Cancer Research (AACR).

NAME DECHENT, Peter	POSITION / TITLE Group Leader / PD Dr.	DEPARTMENT Cognitive Neurology, UMG
-------------------------------	--	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Mainz	Studies of Biology	1991-2001	
Max-Planck-Institute for Biophysical Chemistry, Göttingen / University of Mainz	Diploma in Biology	1997-1998	Biomedical NMR Research
Max-Planck-Institute for Biophysical Chemistry, Göttingen / University of Mainz	Dr.rer.nat. (Biology)	1998-2001	Biomedical NMR Research
Max-Planck-Institute for Biophysical Chemistry, Göttingen	Postdoc	2001-2003	Biomedical NMR Research
Medical Faculty, University Göttingen	Habilitation	2009	Biomedical NMR Research

B. Positions / Academic Appointments

1994	Scientific Assistant at the Biophysical Institute, University of Mainz
1996-1997	Scholarship of the Erasmus-Program, University of Manchester, England
1996	Research Fellow, Neuroscience Department, Karolinska Institute, Stockholm, Sweden
since 2004	Group leader 'MR-Research in Neurology and Psychiatry', Cognitive Neurology, Medical Faculty, University Göttingen

C. Major research interests

Combination of functional magnetic resonance imaging (fMRI) with non-invasive brain stimulation techniques like transcranial Direct / Alternating Current Stimulation (tDCS/tACS) and Transcranial Magnetic Stimulation (TMS) to modulate functional brain networks in healthy and pathologic conditions.

Characterization of hemodynamic processes, the basis of blood oxygenation level dependent (BOLD) changes in standard fMRI investigations.

Application of modern MR techniques to investigate the human brain in healthy and pathologic conditions. Applied methods comprise structural MRI, diffusion-weighted- and diffusion-tensor-imaging (DWI/DTI), and localized MR-spectroscopy (MRS).

D. Selected peer-reviewed publications

Antal A*, Polania R*, Schmidt-Samoa C, Dechent P*, Paulus W*. Transcranial direct current stimulation over the primary motor cortex during fMRI. *Neuroimage* 2011; 55:590-6

Dechent P, Schütze G, Helms G, Merboldt KD, Frahm J. Basal cerebral blood volume during the poststimulation undershoot in BOLD MRI of the human brain. *J Cereb Blood Flow Metab* 2011; 31:82-9

Morawetz C, Baudewig J, Treue S, Dechent P. Effects of spatial frequency and location of fearful faces on human amygdala activity. *Brain Res* 2011; 1371:87-99

Antal A, Polania R, Saller K, Morawetz C, Schmidt-Samoa C, Baudewig J, Paulus W, Dechent P. Differential activation of the middle-temporal complex to visual activation in migraineurs. *Cephalalgia* 2010; 31:338-45

Frahm J, Baudewig J, Kallenberg K, Kastrup A, Merboldt KD, Dechent P. The post-stimulation undershoot in BOLD fMRI of human brain is not caused by elevated cerebral blood volume. *Neuroimage* 2008; 40:473-481

Seseke S*, Baudewig J*, Kallenberg K, Ringert RH, Seseke F, Dechent P. Gender differences in voluntary micturition control - An fMRI study. *Neuroimage* 2008; 43:183-91

E. Research Support (selection)

Land Niedersachsen (VW-Vorab): Aufbau der Forschungsgruppe MR-Forschung in der Neurologie und Psychiatrie. 2004-2008

BMBF: The Social Phobia Psychotherapy Research Network - Teilprojekt C2: Neural functional and structural changes in patients with social phobia (SP) treated with short-term psychodynamic psychotherapy (STPP) and cognitive-behavioral therapy (CBT). 2006-

DFG: Klinische Forschergruppe: Genotype-phenotype relationships and neurobiology of the longitudinal course of psychosis - Teilprojekt 2: Translational neuroimaging studies on genotype-phenotype relationships in the longitudinal course of psychosis. 2010-

F. Memberships and awards

Center for Systems Neuroscience Göttingen, German Neuroscience Society, German Chapter of the International Society for Magnetic Resonance in Medicine, Organization for Human Brain Mapping

NAME	POSITION / TITLE	DEPARTMENT
DOBBELSTEIN, Matthias	Director and Professor	Molecular Oncology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Munich, Germany	State Board Exam	1992	Medicine
University of Munich, Germany	Dr. med.	1993	Biochemistry
Princeton University, NJ, USA	Postdoctoral Fellow	1993-1996	Molecular Biology
University of Marburg, Germany	Habilitation	2004	Tumor Biology and Virology

B. Positions / Academic Appointments

2004-2005	Professor of Molecular Oncology and Cell Biology, University of Southern Denmark
2005-	Director of a division committed to experimental and translational oncology

C. Major research interests

We are trying to understand the molecular basis of cancer chemotherapy. In particular, we are studying how chemotherapeutics induce a DNA damage response, and how this can be modulated by interfering with specific signaling targets.

D. Selected peer-reviewed publications (2007 – 2012)

Beyer U, Moll-Rocek J, Moll UM, Dobbelstein M (2011) Endogenous retrovirus drives hitherto unknown proapoptotic p63 isoforms in the male germ line of humans and great apes. *Proc Natl Acad Sci USA* 108(9), 3624-3629, highlighted in the "this week in PNAS" section, and in the "Editors' Choice" chapter of the journal *Science*.

Braun CJ, Zhang X, Savelyeva I, Wolff S, Moll UM, Schepeler T, Orntoft TF, Andersen CL, Dobbelstein M (2008) p53-Responsive micrnas 192 and 215 are capable of inducing cell cycle arrest. *Cancer Res* 68, 10094-10104.

Kranz D, Dohmesen C, Dobbelstein M (2008) BRCA1 and Tip60 determine the cellular response to ultraviolet irradiation through distinct pathways. *J Cell Biol* 182, 197-213.

E. Research Support (2007 - 2012) selected

EU / LSHC-CT-2004-503576: "δNp73/63 and tumor growth. Manipulation tumor suppression - a key to improve cancer therapy", 2004-2009. Spokesperson: G. Blandino, Rome, Italy.

DFG / Do 500/4-1: „TP 5 Interaktion und Kooperation des Tumorsuppressor-Homologen p63 mit Faktoren der LEF/TCF-Familie. Wnt assoziierte Signalwege in Entwicklung und Tumorprogression, 2007-2010. Spokesperson: L. Trümper.

DFG / Do 500/5-1: "TP 5 Chemoresistance as a consequence of Wnt-induced epithelial-mesenchymal transition", 2011-2014.

Deutsche Krebshilfe / 108775: "The Role of p63 in Cancer", 2009-2012, with Prof. U. Moll.

Deutsche Krebshilfe / 109428: "P53-regulating micro-RNAs", 2011 – 2014.

José Carreras Stiftung: „Die Kinase MK2 in der Therapie akuter Leukämien mit Cytarabin“, 2011-2014.

F. Other activities

Vice-dean of GGNB; Spokesman, GGNB program Molecular Biology of Cells; Spokesman PhD program Molecular Medicine.

G. Memberships and awards

Memberships: Arbeitsgemeinschaft experimentelle Krebsforschung der Deutschen Krebsgesellschaft (Vorstandsmitglied)

Awards: Robert Koch Prize for postdoctoral fellows 1999,

Postdoctoral Stipend of Infectious Biology (AIDS-Stipend) by the German Cancer Research Center, 1993-1996.

NAME	POSITION / TITLE	DEPARTMENT
DOENECKE , Detlef	Director and Professor (retired)	Department of Biochemistry I, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Univ. of Saarland Medical School	State Board Exam	1966	Medicine
University Saarland Medical School	Dr. med.	1967	Medicine
University of Marburg	Postdoc and Privatdozent	1969-1972 1975-1987	Biochemistry
UC San Francisco	Postdoc	1972-1974	Biochemistry and Biophysics
University of Marburg	Habilitation	1975	Biochemistry

B. Positions / Academic Appointments

1987-2010	Head of the Department of Molecular Biology at the Institute of Biochemistry and Molecular Cell Biology, coopted member of Biological Faculty
-----------	---

C. Major research interests

The main interest of the laboratory is in the structure, function, regulation of synthesis and nuclear import of nuclear proteins including chromosomal proteins and other protein factors involved in the control of transcription.

D. Selected peer-reviewed publications

Talbert PB, Ahmad K, Almouzni G, **Doenecke D** et al. (2012) A unified phylogeny-based nomenclature for histone variants. *Epigenetics and Chromatin* 5, 7 (19 pp)

Happel N, **Doenecke D** (2009) Histone H1 and its isoforms: contribution to chromatin structure and function. *Gene* 431, 1-12

Happel N, Warneboldt J, Hänecke K, Haller F, **Doenecke D** (2009) H1 subtype expression during cell proliferation and cell type arrest. *Cell Cycle* 15: 2226-2232

Walker P, **Doenecke D**, Kahle J (2009) Importin 13 mediates nuclear import of histone fold-containing chromatin accessibility complex heterodimers. *J Biol Chem* 284: 11652-11662

Kahle J, Piaia E, Neimanis S, Meisterernst M, **Doenecke D** (2009) Regulation of nuclear import and export of negative cofactor 2. *J Biol Chem* 284: 9382-9393

Happel N, Stoldt S, Schmidt B, **Doenecke D** (2009) M phase-specific phosphorylation of histone H1.5 at threonine 10 by GSK-3. *J Mol Biol* 386: 339-350

Neimanis S, Albig W, **Doenecke D**, Kahle J (2007) Sequence elements in both subunits of the DNA fragmentation factor are essential for nuclear transport. *J Biol Chem* 282: 35821-35830

E. Research Support selected

DFG/GRK 521: Speaker and PI in RTG "Protein-protein interactions during the intracellular transport of macromolecules" (1999-2008)

DFG/SFB 523: PI in project A20N of CRC "Protein and membrane transport between cellular compartments" (2006-2008)

F. Other activities

Board member of GGNB and GAUSS

G. Memberships and awards

Member of associations for Biochemistry and Molecular Biology (GBM), Developmental Biology (GfE), Cell Biology (DGZ) and Genetics (GfG)

Award: Albrecht von Haller Medal of the Medical Faculty of the Georg August University Göttingen (2011)

NAME	POSITION / TITLE	DEPARTMENTS
EHRENREICH , Hannelore	Professor	MPI Exp. Med. Clinical Neuroscience

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Universities of Hannover/Munich	Graduation from Veterinary Medicine,	1980	
Universities of Munich	Doctor of Veterinary Medicine	1981	
University of Munich	Graduation from Medicine	1987	
University of Munich	Doctor of Medicine	1989	
University Göttingen	Habilitation	1994	Neurology, Psychiatry, Neuroendocrinology
Göttingen	Board Certificate for Neurology & Psychiatry	1995	
Göttingen	Board Certificate for Psychotherapy	2004	

B. Positions / Academic Appointments

1982-1984	Research Fellow, Max Planck Institute of Psychiatry, Munich
1984-1986	Clinical Fellow, Department of Internal Medicine, University of Munich
1987-1988	Residency, Department of Neurology, University of Munich
1989-1991	Postdoctoral Fellow NIAID (Dr. A.S. Fauci), NIH, Bethesda, MD, USA
1992-1995	Residency, Departments of Neurology and Psychiatry, University of Göttingen
1996-2003	Consultant (Oberarzt) for Neurology and Psychiatry, University of Göttingen
1995-present	Head, Division of Clinical Neuroscience, MPI of Experimental Medicine
1998	Adjunct Professor of Psychiatry and Neurology, University of Göttingen
2008	Adjunct Professor of Biology and Psychology, University of Göttingen

C. Major research interests

Translational Neuroscience: (1) **Molecular-cellular basis of neuropsychiatric diseases** with focus on mechanisms of disease and on endogenous neuroprotection/neuroregeneration (erythropoietin/EPO variants); (2) **Clinical research on neuroprotection/neuroregeneration** in acute (ischemia/hypoxia, neurotrauma) and chronic brain diseases (schizophrenia, autism, MS, alcoholism); (3) **Phenotype-based genetic association studies (PGAS)** as a tool to understand the genotype contribution to (disease) phenotypes

D. Selected peer-reviewed publications

Hagemeyer N, Goebbels S, Papiol S, Kästner A, Hofer S, Begemann M, Gerwig UC, Boretius S, Wieser GL, Ronnenberg A, Gurvich A, Heckers SH, Frahm J, Nave KA, Ehrenreich H (2012) A myelin gene causative of a catatonia-depression syndrome upon aging. **EMBO Molecular Medicine**, *in press*.

Ribbe K, Ackermann V, Schwitulla J, Begemann M, Papiol S, Grube S, Sperling S, Friedrichs H, Jahn O, Sillaber I, Gefeller O, Krampe H, Ehrenreich H (2011) Prediction of the risk of comorbid alcoholism in schizophrenia by interaction of common genetic variants in the corticotropin releasing factor system. **Arch Gen Psych**, 68: 1247-56.

Wüstenberg T, Begemann M, Bartels C, Gefeller O, Stawicki S, Hinze-Selch D, Mohr A, Falkai P, Aldenhoff JB, Knauth M, Nave KA, Ehrenreich H (2011) Recombinant human erythropoietin delays loss of gray matter in chronic schizophrenia. **Molecular Psychiatry**, 16: 26-36.

Begemann M, Klaus S, Papiol S, Malzahn D, Krampe H, Ribbe K, Friedrichs H, Radyushkin KA, El-Kordi A, Benseler F, Hannke K, Sperling S, Schwerdtfeger D, Thanhäuser I, Gerchen MF, Ghorbani M, Gutwinski S, Hilmes C, Leppert R, Ronnenberg A, Sowislo J, Stawicki S, Stödtke M, Szuszies C, Reim K, Riggert J, Falkai P, Bickeböller H, Nave KA, Brose N, Ehrenreich H (2010) Complexin2 gene polymorphisms modify cognitive performance in schizophrenia. **Arch Gen Psych**, 67: 879-88.

E. Memberships and award

1985 DAAD Guest Lecturer, University of the Philippines, Manila; 1988 – 1991 BMBF Postdoctoral Fellowship (3 years) NIH, Bethesda, U.S.A.; 1992 – 1995 DFG Habilitation Stipend (3 years), University of Göttingen; 2000 – 2002 Vice President, Georg-August-University, Göttingen; 2002 – present Member of several US Advisory Boards Neuroprotection/Neuroregeneration; 2003 – present Member of the Advisory Board, Medical University, Hannover; 2005 Wilhelm-Fuerlein Award for Addiction Research; 2010 – present Member of the Scientific Advisory Board, German Primate Center

NAME EICHELE, Gregor	POSITION / TITLE Director / Prof.	DEPARTMENT Genes and Behavior, MPI Biophysical Chem.
--------------------------------	--------------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
	Diploma		
University of Basel, Switzerland	PhD	1976 - 80	Protein Crystallography
University of California, San Francisco	Postdoctoral training	1981 - 84	Developmental Biology

B. Positions / Academic Appointments

1985-1990	Assistant Professor of Cellular and Molecular Physiology, Harvard Medical School, Boston, USA
1991-1998	Associate Professor of Biochemistry and Neuroscience, Baylor College of Medicine, Houston, USA
1998-	Director at the Max Planck Institute of Experimental Endocrinology, Dept. of Molecular Embryology, Hanover and since 2006 at the Max Planck Institute of Biophysical Chemistry, Goettingen, Germany

C. Major research interests

Dynamic interplay between gene expression, brain development and architecture and behaviour.

D. Selected peer-reviewed publications

Lein, E.S. et al. (2007). Genome-Wide Atlas of Gene Expression in the Adult Mouse Brain. *Nature* 445, 168-176

Jakubcakova, V., Oster, H., Tamanini, F., Cadenas, C., Leitges, M., van der Horst, G.T., **Eichele, G.** (2007). Light entrainment of the mammalian circadian clock by a PRKCA-dependent posttranslational mechanism. *Neuron* 54:831-43

Kießling, S., **Eichele, G.** and Oster, H. (2010) Adrenal glucocorticoids have a key role in circadian resynchronization in a mouse model of jet lag. *Journal of Clinical Investigation* 120: 2600-2609

Whelan, G., Kreidl, E., Wutz, G., Egner, A., Peters, J.M., and **Eichele, G.** (2011) Cohesion acetyltransferase Escp2 is a cell viability factor and is required for cohesion in pericentric heterochromatin. *Embo J.* 18/31(1): 71-82

Geffers L, Herrmann B, **Eichele G.** Web-based digital gene expression atlases for the mouse. *Mamm Genome.* 2012 Oct;23(9-10):525-38

Geffers, L., B. Tetzlaff B, X. Cui, J. Yan and **G. Eichele.** METscout: a pathfinder exploring the landscape of metabolites, enzymes and transporters.

Nucleic Acids Res. 2012 Sep 27

E. Research Support (selection)**F. Other activities**

Managing Director of the Max-Planck-Institute of Biophysical Chemistry, Goettingen

Honorary Professor at the University of Goettingen

Adjunct Professor in the Dept. of Biochemistry & Molecular Biology at the Baylor College of Medicine, Houston, USA

G. Memberships and awards

1988 Friedrich Miescher Award, Swiss Biochemical Society

1991 McKnight Neuroscience Development Award

1997 A. Romansky Professor of Biochemistry

2000 Burroughs Wellcome Innovation Award in Functional Genomics

NAME	POSITION / TITLE	DEPARTMENT
ENGEL, Wolfgang	Head of Department / Prof. Dr.	Human Genetics, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Freiburg, Germany	Dr. med.	1967	Medicine
Hospital Schorndorf, Germany	Physician	1966-1968	Medicine
University of Freiburg, Germany	Habilitation	1974	Human Genetics

B. Positions / Academic Appointments

1968-1977	Postdoc, Institute of Human Genetics and Anthropology, University of Freiburg
1977-	Professor of Human Genetics and Director of the Institute, University of Göttingen

C. Major research interests

Our research is focused on the molecular analysis of normal human variability and genetic disturbances of development and differentiation. Isolated genes are analysed in detail with respect to their functional properties using animal models (transgenic and knock-out mice). For suitable genetic diseases, therapeutic strategies (substitution; gene therapy) are being developed and initial evaluation of such strategies is carried out in the mouse. An additional research focus is the genetic analysis of tumor formation and strategies for therapeutic options. Male germ cell differentiation and male infertility are studied since many years in the institute. This research resulted in the isolation and characterization of spermatogonial stem cells of adult testis and in trials to use these stem cells for regenerative medicine.

D. Selected peer-reviewed publications

Zheng Y, Tan X, Pyczek J, Nolte J, Pantakani D V K, Engel W (2012) Generation and characterization of yeast two-hybrid cDNA libraries derived from two distinct mouse pluripotent cell types. *Mol Biotechnol*, doi 10.1007/s12033-012-9561-4.

Xu X, Pantakani K, Lührig S, Tan X, Khromov T, Nolte J, Dressel R, Zechner U, Engel W (2011) Stage-specific germ-cell marker genes are expressed in all mouse pluripotent cell types and emerge early during induced pluripotency. *PLoS One.*, 6, e22413.

Glaser T, Opitz T, Kischlat T, Konang R, Sasse P, Fleischmann BK, Engel W, Nayernia K, Brüstle O (2008) Adult germ line stem cells as a source of functional neurons and glia. *Stem Cells* 26, 2434-2443.

Zovoilis A, Nolte J, Drusenheimer N, Zechner U, Hada H, Guan K, Hasenfuß G, Nayernia K, Engel W (2008) Multipotent adult germline stem cells and embryonic stem cells have similar microRNA profiles. *Molecular Human Reproduction* 14, 521-529.

Guan K, Wagner S, Unsöld B, Maier LS, Kaiser D, Hemmerlein B, Nayernia K, Engel W, Hasenfuss G (2007) Generation of functional cardiomyocytes from adult mouse spermatogonial stem cells. *Circulation Research* 100, 1615-1625.

E. Research Support (2007 - 2012) selected

DFG EN 84/22-1: "Defining the pluripotency of spermatogonial stem cells from adult testis", 2008 – 2011.

DFG NO 941/1-2, together with Dr. J. Nolte: "Pluripotency and cellular reprogramming", 2011 – 2014.

DFG EN 84/23-1: "FG Germ cell potential – TP 02 Spermatogonial stem cells and their potential -", 2008 – 2011.

DFG NO 941/2-2, together with Dr. J. Nolte: "FG Germ cell potential - TP02 Zum Potential spermatogonialer Stammzellen", 2011 – 2014.

F. Other activities

1986 – 1992: Coordinator of the DFG-Forschergruppe "Molekularbiologische Untersuchungen zur Keimzellendifferenzierung und frühen Embryonalentwicklung beim Säuger", Göttingen, Germany

1994 – 2002: Coordinator of the Sonderforschungsbereich (DFG) „Molekulare Genetik morphoregulatorischer Prozesse“ (SFB 271), Göttingen, Germany

1999 - 2011: Member of Fakultätsrat, Medical Faculty, University of Göttingen, Göttingen, Germany

1986 – 1989 and 1995 – 1996: Dean of the Medical Faculty, University of Göttingen, Göttingen, Germany

G. Memberships and awardsMemberships:

British Society of Developmental Biology; Deutsche Gesellschaft für Anthropologie und Humangenetik; Deutsche Gesellschaft für Humangenetik; Deutsche Gesellschaft für Endokrinologie; Deutsche Gesellschaft zum Studium der Fertilität und Sterilität; European Society of Human Genetics; European Society of Human Reproduction; Gesellschaft für Entwicklungsbiologie; Gesellschaft für Genetik

Awards:

Gödecke Award of the University of Freiburg, Germany (1967)

Hans-Nachtsheim Award of the Society of Human Genetics and Anthropology (1979)

Eduard Grosse Award of the Society of Andrology (1988)

Honorary Member of the Czech Society of Medical Genetics (1990)

Werner G. Gehring Foundation Award (1993)

NAME	POSITION / TITLE	DEPARTMENT
FISCHER, Andre	Prof. Dr.	European Neuroscience Institute

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University Goettingen/MPI Exp. MED	Dr. rer. nat. (PhD)	2002	
Harvard Medical School, Department of Pathology, Boston, USA; Picower Center for Learning and Memory, M.I.T, Cambridge, USA	Postdoctoral fellow	2003-2006	

B. Positions / Academic Appointments

2007-2011	Independent Group Leader at the European Neuroscience Institute
2011-present	Professor for Epigenetics and Neurodegenerative Diseases

C. Major research interests

Our group aims to understand the molecular mechanisms underlying learning and memory processes under physiological and pathological conditions. To this end we combine molecular, biochemical, pharmacological and behavioral approaches using mice as model organisms. We are particularly interested to understand cognitive impairment associated with normal aging as well as the pathogenesis of mental and neurodegenerative diseases, such as anxiety disorders and Alzheimer's disease. Using animal models we deeply aim to identify therapeutic strategies that would help to reinstate neuroplasticity, learning behavior and the retrieval of lost long-term memories in patients suffering from such devastating diseases.

D. Selected peer-reviewed publications

Bahari-Javan, S., Maddalena, A., Kerimoglu C, Wittnam, J., Held, T., Bähr, M., Burkhardt, S., Delalle, I., Kügler, S., Fischer, A., Sananbenesi, F. HDAC1 regulates fear extinction in mice. *J. Neurosci*, 32(15):5062-73, 2012

Zovoilis A, Agbemenyah HY, Agis-Balboa RC, Stilling RM, Edbauer D, Rao P, Farinelli L, Delalle I, Schmitt A, Falkai P, Bahari-Javan S, Burkhardt S, Sananbenesi F, Fischer A. microRNA-34c is a novel target to treat dementias. *EMBO J.* 2011 Sep 23;30(20):4299-308. doi: 10.1038/emboj.2011.327.

Agis-Balboa RC, Arcos-Diaz D, Wittnam J, Govindarajan N, Blom K, Burkhardt S, Haladyniak U, Agbemenyah HY, Zovoilis A, Salinas-Riester G, Opitz L, Sananbenesi F, Fischer A. A hippocampal insulin-growth factor 2 pathway regulates the extinction of fear memories. *EMBO J.* 2011 Aug 26;30(19):4071-83. doi: 10.1038/emboj.2011.293.

Peleg, S., Sananbenesi, F., Zovoilis, A., Burkhardt, S., Bahari-Javan, S., Agis-Balboa, R.C., Cota, P., Wittnam, J.L., Gogol-Doering, A., Opitz, L., Salinas-Riester, G., Dettenhoffer, M., Farinelli, L., Chen, W., Fischer, A. Altered histone H4 lysine 12 acetylation is associated with age-dependent memory impairment in mice. *Science*, 328; 753, 2010

Sananbenesi, F., Fischer, A., Wang, X., Schrick, C, Neve, R. Radulovic, J. Tsai, L.H. (2007) A hippocampal Cdk5 pathway regulates the extinction of contextual fear. *Nature Neuroscience*, 10, 1012-9.

Fischer, A., Sananbenesi F., Wang X., Dobbin M., Tsai L.H. (2007) Recovery of learning and memory is associated with chromatin remodeling. *Nature* 447, 178-82. (AF is corresponding author)

Schrick, C, Fischer, A., Srivastava, DP, Tronson, NC., Penzes, P., Radulovic, J. (2007) N-Cadherin regulates cytoskeletonally-associated IQGAP/ERK signaling and memory formation. *Neuron*, 55, 786-798

E. Research Support (selection)

Euryi Award: Epigenetic mechanisms in learning processes, age related cognitive decline and neurodegenerative diseases, Jan 2008 to Dec 2012. Schram-Foundation: The cellular mechanisms by which chromatin plasticity affects neuronal gene-expression in the aging brain. Oct 2009 to Sep 2012; ERA-NET Neuron, FP7, EPITHERAPY, coordinator, Feb 2009 to Jan 2012.

F. Other activities

Speaker of the German Center for Neurodegenerative Disease (DZNE) Göttingen

G. Memberships and award

Memberships: American Society for Neuroscience, Molecular and Cellular Cognition Society, European Neuroscience Network, Center for Systems Neuroscience, Editorial Board, Neuropsychobiology, Board Member: Kleekamp Foundation, Board Member: Hans und Ilse Breuer Foundation, German Neuroscience Society, European Molecular Biology Organization (EMBO)

Awards: 2011, EMBO Young Investigator award; 2010, Amsterdam Young Scientist Award of the European Neuroscience Society; 2009, Dr. Wilmar Schwabe Preis der Deutschen Hirnliga e.V.; 2009, Alzheimer Research Award of the Hans und Ilse Breuer Foundation; 2009, Junior Faculty Award of the Alzheimer's disease/Parkinson's Disease Organization; 2008, Heinz Maier Leibnitz Award of the German Research Foundation (DFG); 2007, European Young Investigator (EURYI) award of the European Science Foundation, 2003-2005, Feodor Lynen Fellowship of the Alexander von Humboldt Foundation; 2002, PhD, summa cum laude, Georg-August University Göttingen, Thesis award of the University Göttingen

NAME GÄRTNER, Jutta	POSITION / TITLE Professor and Chair	DEPARTMENT Pediatrics, UMG
-------------------------------	---	-------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Université Catholique de Louvain, Belgium		1981-1983	Medicine, Preclinical Training
University Hamburg, Germany	Dr. med.	1983-1988	Medicine, Clinical Training
Kennedy Krieger Institute for Handicapped Children; Johns Hopkins School of Medicine Baltimore, U.S.A.	Clinical Fellow in Neurology and Postdoctoral Fellow	1988-1990	Pediatrics and Neurosciences
Johns Hopkins Hospital, Division of Pediatrics and Human Genetics; Johns Hopkins School of Medicine Baltimore, U.S.A.	Clinical Fellow in Pediatrics and Human Genetics and Postdoctoral Fellow	1990-1993	Pediatrics and Neurosciences
University Childrens Hospital, Düsseldorf, Germany	Research and Clinical Fellow in Pediatrics	1993-1995	Pediatrics and Neurosciences

B. Positions / Academic Appointments

1995-2000	Associate Professor, Department of Pediatrics, Heinrich Heine University Düsseldorf
2000-2002	University Professor; Department of Pediatrics and Pediatric Neurology, Heinrich Heine University Düsseldorf, Germany
since 2002	University Professor and Chair; Department of Pediatrics, UMG

C. Major research interests

Clinical, biochemical, molecular and therapeutic aspects of inborn errors of metabolism, Peroxisomal disorders, Neurodegenerative disorders with manifestation in childhood (childhood dementia), Leukodystrophies, Childhood multiple sclerosis.

D. Selected peer-reviewed publications

Henneke M, Diekmann S, Ohlenbusch A, Kaiser J, Engelbrecht V, Kohlschütter A, Krätzner R, Madruga-Garrido M, Mayer M, Opitz L, Rodriguez D, Rüschemdorf F, Schumacher J, Thiele H, Thoms S, Steinfeld R, Nürnberg P, Gärtner J (2009): RNASET2 deficient cystic leukoencephalopathy resembles congenital cytomegalovirus brain infection. *Nat Genet* 41:773-775.

Steinfeld R, Grapp M, Krätzner R, Dreha-Kulaczewski S, Helms G, Dechent P, Wevers R, Grosso S, Gärtner J (2009): Folate receptor alpha defect causes cerebral folate transport deficiency: a new treatable neurodegenerative disorder associated with disturbed myelin metabolism. *Am J Hum Genet* 85:354-363.

Huppke P, Brendel C, Kalscheuer V, Korenke GC, Marquardt I, Freisinger P, Christodoulou J, Hillebrand M, Pitelet G, Wilson C, Gruber-Sedlmayr U, Ullmann R, Haas S, Elpeleg O, Nürnberg G, Nürnberg P, Dad S, Birk Møller L, Kaler SG, Gärtner J (2012): Mutations in *SLC33A1* cause a lethal autosomal recessive disorder with congenital cataracts and hearing loss associated with low serum copper and ceruloplasmin. *Am J Hum Genet* 90:61-68.

Rosewich H, Thiele H, Ohlenbusch A, Maschke U, Altmüller J, Frommolt P, Zirn B, Ebinger F, Siemes H, Nürnberg P, Brockmann K, Gärtner J (2012): Heterozygous de-novo mutations in *ATP1A3* in patients with alternating hemiplegia of childhood: a whole-exome sequencing gene-identification study. *Lancet Neurol* 11:764-773.

E. Research Support (selection, last 5 years)

BMBF, Netzwerke seltene Erkrankungen; BMBF, Krankheitsspezifische Kompetenznetze (KKNMS), DFG (GA 354/7-1); DFG(GA 354/8-1), GEROK-Stelle; DFG (GA 354/9-1), Trilaterales Projekt (D, Israel, Palestina).

F. Other activities (Selection)

since 2003: Research Council, Faculty of Medicine, Georg August University Göttingen; since 2004: Review Board Medicine, Deutsche Forschungsgemeinschaft; 2008-2012: Deputy Spokesperson, Review Board Medicine, Deutsche Forschungsgemeinschaft; since 2007: Member of the Drug Commission for Children and Adolescents, Federal Institute for Drugs and Medical Devices.

G. Memberships and awards (Selection)

Membership: Society for the Study of Inborn Errors of Metabolism, Council Member; German Pediatric Society, Council Member, Competence Network Multiple Sclerosis, Council Member, AcademiaNet of excellent female scientists, Robert Bosch Foundation

Awards: 1990, Child Health Research Award, National Institute of Health, U.S.A.; 1993, Invitation to the National Academy of Sciences, U.S.A. – Frontiers of Science; 1996, Gerhard Hess Award from the DFG; 1996, Adalbert Czerny Award from the German Pediatric Society, 2008, Fundraising Award for the German Center of Multiple Sclerosis in Childhood and Adolescent from the "Stiftungsausschuss" Georg August University Göttingen

NAME	POSITION / TITLE	DEPARTMENT
GROSS, Uwe	Head of Department, Prof. Dr.	Medical Microbiology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Hamburg, Germany	Staatsexamen	1986	Medicine
University of Hamburg, Germany	Dr. med.	1987	Medical Microbiology
University of California at Los Angeles (UCLA), CA, USA	Postdoctoral Fellow	1987-1989	Rheumatology
University Würzburg, Germany	Habilitation	1995	Microbiology and Hygiene

B. Positions / Academic Appointments

1989-1998	Lecturer, Group Leader, and Assistant Professor (C1 Assistant), Institute for Hygiene and Microbiology, Julius-Maximilians University Würzburg, Germany
1998-1999	Associate Professor of Parasitology, Julius-Maximilians University Würzburg, Germany
1999-	Full Professor of Bacteriology and Director, Department of Medical Microbiology, University of Göttingen Medical Center, Göttingen, Germany

C. Major research interests

My group is investigating the protozoan parasite *Toxoplasma gondii* which usually causes asymptomatic infections in immunocompetent adults leading to lifelong persistence especially in the brain and in muscle tissue. In addition, the intestinal bacterial pathogen *Campylobacter jejuni* is amongst our main interests. Currently, we are focusing on the identification of putative virulence-associated factors of both model organisms. Within our function as the “German National Reference Center for Systemic Mycoses”, we are investigating fungal factors and mechanisms that are involved in pathogenesis of mycoses. Finally, we perform epidemiological projects on infectious diseases especially in sub-Saharan Africa within the “Göttingen International Health Network” that has been established in 2011.

D. Selected peer-reviewed publications

Hotop A, Hlobil H, Groß U (2012) Efficacy of rapid treatment initiation following primary *Toxoplasma gondii* infection during pregnancy. *Clin Infect Dis* 2012, Mar 29 [Epub ahead of print].

Bereswill S, Fischer A, Plickert R, Haag LM, Otto B, Kühl AA, Dasti JI, Zautner AE, Muñoz M, Loddenkemper C, Groß U, Göbel UB, Heimesaat MM (2011) Novel Murine Infection Models Provide Deep Insights into the “Ménage à Trois” of *Campylobacter jejuni*, Microbiota and Host Innate Immunity. *PLoS One* 6(6), e20953.

Lin SS, Groß U, Bohne W (2011) Two internal type II NADH dehydrogenases of *Toxoplasma gondii* are both required for optimal tachyzoite growth. *Mol Microbiol* 82, 209-221.

Groß U, Amuzu SK, de Ciman R, Kassimova I, Groß L, Rabsch W, Rosenberg U, Schulze M, Stich A, Zimmermann O (2011) Bacteremia and antibiotic drug resistance over time, Ghana. *Emerg Infect Dis* 17, 1879-1882.

Vutova P, Wirth M, Hippe D, Groß U, Schulze-Osthoff K, Schmitz I, Lüder CGK (2007) *Toxoplasma gondii* inhibits Fas/CD95-triggered cell death by inducing aberrant processing and degradation of caspase 8. *Cell Microbiol* 9, 1556-1570.

E. Research Support (2007-2012)

1. DFG GR 906/15-1: “Identification and characterization of virulence-associated factors of *Campylobacter jejuni* by using a high throughput negative selection method”, 2010-2012

2. BMBF 01KI1002B: “Determination of risk factors for transmission of *Toxoplasma gondii* to humans and of prognostic markers for the clinical outcome of infection”, 2007-2013.

3. Consortium CANDICOL (ERANET): Understanding colonisation and the transition to pathogenic dissemination by *Candida* species: towards early diagnostic and therapeutic approaches”, 2011-2014, PI on one project.

4. BMG: “National Reference Center for Systemic Mycoses”, 2001-2013.

5. DAAD: “Indonesian-German Health Education Partnership (IGHEP)”, 2007-2014.

F. Other activities

Coordinator/Spokesperson of the Göttingen International Health Network, Head of the German National Consulting Laboratory for Toxoplasmosis, Member and Vice-Chair of the Central Committee for Biological Safety (ZKBS).

G. Memberships and awards

Advancement Award of the German Society of Hygiene and Microbiology (1992), Major Award of the Eugen-Grimminger-Foundation (1996).

NAME	POSITION / TITLE	DEPARTMENT
HAHN, Heidi	Prof. Dr.	Human Genetics, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
General Medical Council Bayern	Approbation	1993	Medicine
University of Würzburg	Dr. med.	1993	Toxicology
Technical University of Munich	Habilitation	2001	Experimental Pathology

B. Positions / Academic Appointments

1992-1993	Research associate at the Institute of Virology / Würzburg, Germany
1994	Research associate, Institute for Medical Radiobiology and Cell Biology / Würzburg
1994-1996	Postdoc at the National Cancer Institute, Frederick MD, USA
1996-1998	Postdoc at the National Institute of Mental Health, Bethesda MD, USA
1999-2001	Leader of a Biofuture research Group sponsored by the BMBF at the Technical University of Munich / Helmholtz Centre Munich - German Research Centre for Environmental Health, Germany
Since Oct 2001	Professorship Department Human Genetics/Molecular Developmental Genetics, University of Göttingen Medical Center, Germany

C. Major research interests

Our group is interested in the role of the Hedgehog/Patched (Hh/Ptch) signaling cascade in the development of solid tumors. The focus is on rhabdomyosarcoma and basal cell carcinoma.

D. Selected peer-reviewed publications (2007 – 2012)

Nitzki F, Zibat A, Frommhold A, Schneider A, Schulz-Schaeffer W, Braun T, Hahn H (2011) Uncommitted precursor cells might contribute to increased incidence of embryonal rhabdomyosarcoma in heterozygous Patched1 mutant mice. *Oncogene* 30(43), 4428-36.

Nitzki F, Zibat A, König S, Wijgerde M, Rosenberger A, Brembeck F, Carstens PO, Frommhold A, Uhmman A, Klingler S, Reifenberger J, Pukrop T, Aberger F, Schulz-Schaeffer W, Hahn H (2010) Tumor stroma-derived Wnt5a induces differentiation of basal cell carcinoma of Ptch mutant mice via CaMKII. *Cancer Research* 70(7), 2739-48.

Ecke I, Petry F, Rosenberger A, Tauber S, Mönkemeyer S, Hess I, Dullin C, Kimmina S, Pirngruber J, Johnsen SA, Uhmman A, Nitzki F, Wojnowski L, Schulz-Schaeffer W, Witt O, Hahn H (2009) Antitumor effects of a combined 5-aza-2'-deoxycytidine and valproic acid treatment on rhabdomyosarcoma and medulloblastoma in Ptch mutant mice. *Cancer Research* 69, 887-95.

Uhmman A, Dittmann K, Nitzki F, Dressel R, Koleva M, Frommhold A, Zibat A, Binder C, Adham I, Nitsche M, Heller T, Armstrong V, Schulz-Schaeffer W, Wienands J, Hahn H (2007) The Hedgehog receptor Patched controls lymphoid lineage commitment. *Blood* 110(6), 1814-23.

E. Research Support (selection)

Wilhelm-Sander Stiftung : "Untersuchung der Rolle des Shh/Ptch/Gli1 Signalwegs bei der Entstehung von Rhabdomyosarkomen" (2003.112.3). 2010- 2011 (2 years). PI.

GRK 1034 DFG: "Abhängigkeit der Therapieantwort von der genetischen Wirts- und Tumorvariabilität im Mausmodell". 2005-2014 (9 years). PI.

FOR 942 DFG: "Interaktion zwischen Hh/Ptch und Wnt5a Signalweg bei der Progression von Basalzellkarzinomen (HA 2197/5-2)". 2011-2013 (3years). PI.

DFG: "Funktion des Hedgehog-Rezeptors Patched in T Zellen (HA 2197/6-1)". 2009-2010 (2 years). Co-PI (with A. Uhmman and H. Reichardt).

KoSAR Deutsche Krebshilfe: "Identification and evaluation of molecular targets in childhood sarcoma (109837)". 2012-2015 (3 years). Co-PI (with S. Fulda, T. Klingebiel, E. Koscielniak).

DFG: "Rolle von embryonalen Muskelvorläuferzellen bei der Entstehung von Rhabdomyosarkomen (HA2197/7-1)". 2012-2015 (3 years). PI.

F. Other activities

Lecturing in preclinical and clinical Medicine; reviewer for several journals (including PNAS and Cancer Research); reviewer for the DFG, Wilhelm-Sander-Stiftung, Wellcome Trust a.o.

G. Memberships and awards

Biofuture 2000, Siegfried-Stettendorf Preis 2009

NAME	POSITION / TITLE	DEPARTMENT
HANISCH, Uwe-Karsten	Prof. Dr.	Institute for Neuropathology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Leipzig, Germany	Diploma Degree	1986	Biochemistry
University of Leipzig, Germany	Ph.D. (Dr. rer. nat.)	1990	
University of Leipzig, Germany	Habilitation	1999	Biochemistry/Neurobiology

B. Positions / Academic Appointments

1991-1993	Douglas Hospital Research Centre, McGill University, Montreal, Canada
1993-2002	Cellular Neurosciences, Max Delbrück Center for Molecular Medicine Berlin, Germany
2002-2004	Professor for Biochemistry, University of Applied Sciences Lausitz, Germany
2002-2004	Project leader, Max Delbrück Center for Molecular Medicine Berlin, Germany
since 2004	Professor for Experimental Neurobiology, University of Göttingen, Germany
2007-2009	Guest Professor Medical Physiology, University of Groningen, The Netherlands

C. Major research interests

functions of cytokines in the CNS, mechanisms of microglial activation and activities, response diversity of microglia, plasma factors as signals for microglia

D. Selected peer-reviewed publications

Scheffel J, Regen T, van Rossum D, Seifert S, Ribes S, Nau R, Parsa R, Harris RA, Boddeke HWGM, Chuang HN, Pukrop T, Wessels JT, Jürgens T, Merkler D, Brück W, Schnaars M, Simons M, Kettenmann H, Hanisch UK, Toll-like receptor activation reveals developmental reorganization and responder subsets of microglia. *Glia* (in press)

Regen T, van Rossum D, Scheffel J, Kastri ME, Revelo NH, Prinz M, Brück W, Hanisch UK (2011) CD14 and TRIF govern distinct responsiveness and responses in mouse microglial TLR4 challenges by structural variants of LPS. *Brain Behav Immun* 25: 957-970.

Fitzner D, Schnaars M, van Rossum D, Krishnamoorthy G, Dibaj P, Bakhti, M, Regen T, Hanisch UK, Simons M (2011) Selective transfer of exosomes from oligodendro-cytes to microglia by macropinocytosis. *J Cell Sci* 124: 447-458.

Heneka MT, Nadrigny F, Regen T, Dumitrescu-Ozimek L, Terwel D, Jardanhazi-Kurutz D, Walter J, Kirchhoff F, Hanisch UK, Kummer MP (2010) Locus ceruleus controls Alzheimer disease pathology by modulating microglial functions through norepinephrine. *PNAS* 107: 6058-6063.

Prinz M, Schmidt H, Mildner A, Knobloch KP, Hanisch UK, Detje C, Gutcher I, Mages J, Lang R, Martin R, Merkler D, Raasch J, Gold R, Becher B, Brück W, Kalinke U (2008) Distinct and nonredundant in vivo functions of IFNAR on myeloid cells and autoimmunity in the central nervous system. *Immunity* 28: 675-86

Mildner A, Schmidt H, Nitsche M, Merkler D, Hanisch UK, Mack M, Heikenwälder M, Brück W, Priller J, Prinz M (2007) Microglia in the adult brain arise from Ly-6Chi monocytes only under defined host conditions. *Nat Neurosci* 10: 1544-1553

Hanisch UK, Kettenmann H (2007) Microglia: active sensor and versatile effector cells in the normal and pathologic brain. *Nat Neurosci* 10: 1387-1393

E. Research Support (selection)

DFG/SFB-TRR43 Project A5, DFG/FOR942 Project 2, DFG/FOR1336 Project A1; BMBF/e:Bio MetastaSys

F. Other activities

Editorial Board of *Glia*, Board of SFB-TRR43, Speaker of the Graduate College in the SFB-TRR43

G. Memberships and awards

German Society for Biochemistry and Molecular Biology (GBM), German Society for Neurosciences (NWG)

NAME	POSITION / TITLE	DEPARTMENT
HÜLSMANN, Swen	Prof. Dr. med., Group leader	Department of Neurophysiology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Münster	Dr. med.	1995	
University of Münster, Dept. of Neurosurgery	Postdoctoral fellow	1995-1996	
University of Göttingen, Dept. of Neurophysiology	Postdoctoral fellow	1996-2001	
University of Göttingen	Habilitation	2005	Neurophysiology
University of Göttingen	Apl. Prof.	2010	Neurophysiology

B. Positions / Academic Appointments

since 2001	Group leader (wissenschaftlicher Assistent) Neurophysiology
since 2002	Principle Investigator at the DFG Research Center for Molecular Physiology of the Brain (CMPB)

C. Major research interests

The majority of cells in the human brain are glial cells, outranging the number of neurons by a factor of 10. However, most behavioral aspects of life are attributed to neurons, leaving a rather white spot of knowledge about the function of the different types of glial cells. Our group aims to identify and clarify the mechanisms that allow glial cells, e.g. astrocytes to modulate and stabilize the most vital behavior of breathing.

D. Selected peer-reviewed publications

Schnell C, Fresemann J, **Hülsmann S** (2011) Determinants of Functional Coupling between Astrocytes and Respiratory Neurons in the Pre-Bötzing Complex. PLoS ONE 6:e26309.

Latal, A.T.*, T. Kremer*, J. Gomeza, V. Eulenburg, **S. Hülsmann** (2010) Development of synaptic inhibition in glycine transporter 2 deficient mice, Mol. Cell. Neurosci. 44, 342-52.

Winter, S.M., J. Fresemann, C. Schnell, Y. Oku, J. Hirrlinger, **S. Hülsmann** (2009) Glycinergic interneurons are functionally integrated into the inspiratory network of mouse medullary slices. Pflügers Arch 458, 459-469

Härtel K, C. Schnell, S. Hülsmann (2009) Astrocytic calcium signals induced by neuromodulators via functional metabotropic receptors in the ventral respiratory group of neonatal mice. Glia 5: 815-827

IF(JCR2011) 4.820

E. Research Support (selection)

2012 – 2015 Multidisciplinary reconstruction of the pan-network physiome generating spontaneous synchronized neural activity in the mammalian brain". DFG Sachbeihilfe (Strategic Japanese-German Cooperative Programme on "Computational Neuroscience") DFG Sachbeihilfe Hu797/8-1 (1x BATIIa/2, 45000 € Sachmittel)

2010 – 2013 Die Bedeutung und Entwicklung von Neuronen mit Co-Transmission von GABA und Glyzin im respiratorischen Netzwerk. DFG Sachbeihilfe Hu797/7-1 (1x BATIIa/2, 63.832 € Sachmittel)

DFG Research Center Molecular Physiology of the Brain (CMPB)

2006 - 2014 CMPB Research Field B2 Developmental Disturbances: From Synaptopathies to System Dysfunction im DFG-Forschungszentrums für Molekularphysiologie des Gehirns (1x BATIIa/2, 50.000 € Sachmittel)

F. Memberships and awards

2010 Sertürner Preis 2009, zusammen mit Till Manzke, Marcus Niebert, Uwe R. Koch, Alex Caley, Steffen Vogelgesang, Evgeni Ponimaskin, Ulrike Müller, Trevor G. Smart, Robert J. Harvey und Diethelm W. Richter

NAME JARRY, Hubertus	POSITION / TITLE Prof. Dr.	DEPARTMENT Animal Ethics Officer, UMG
-------------------------	-------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Göttingen	diploma	1976-1980	Biochemistry
Department of Biochemistry, University of Göttingen	PhD	1980-1983	Biochemistry, Organic chemistry
Clinical and Experimental Endocrinology, UMG	Habilitation	1991	Endocrinology
Clinical and Experimental Endocrinology, UMG	Professor	1995	Endocrinology

B. Positions / Academic Appointments

1985-1986	Michigan State University, Dept. Pharmacology and Toxicology
1986-2010	Research Associate Dept. Clinical and Experimental Endocrinology University of Göttingen
2010-	Animal Ethics Officer University Medical Center Göttingen

C. Major research interests

In focus of our studies are nuclear receptors, in particular estrogen receptors, in the CNS and gonads. Hormonal feedback signals are crucial for the development of the CNS but also for ageing and neurodegeneration. The molecular and neurochemical mechanisms of ageing are studied in rodents with cell biological and animal experimental tools.

D. Selected peer-reviewed publications (2007-2012)

Böttner M, Leonhardt S, Wuttke W, Wedel T, Jarry H. Expression of estrogen receptors in the hypothalamo-pituitary-ovarian axis in middle-aged rats after re-instatement of estrus cyclicity. *Biogerontology*. 2010;11:75-85.

Loutchanwoot P, Wuttke W, Jarry H. Effects of a 5-day treatment with vinclozolin on the hypothalamo-pituitary-gonadal axis in male rats. *Toxicology*. 2008; 243:105-15.

Böttner M, Leonhardt S, Wuttke W, Jarry H. Changes of expression of genes related to the activity of the gonadotrophin-releasing hormone pulse generator in young versus middle-aged male rats. *J Neuroendocrinol*. 2007;19:779-87.

Klammer H, Schlecht C, Wuttke W, Schmutzler C, Gotthardt I, Köhrle J, Jarry H. Effects of a 5-day treatment with the UV-filter octyl-methoxycinnamate (OMC) on the function of the hypothalamo-pituitary-thyroid function in rats. *Toxicology*. 2007;238:192-9

E. Research Support (selection)

DFG JA 398/6-2 Molecular mechanisms of ageing of reproductive function in the CNS

DFG JA398/9-1- GnRH and Estradiol synthesis in the hippocampus

F. Memberships and awards

Memberships: Endocrine Society, German Endocrine Society, GV-SOLAS

Awards: 1990 Schölller-Junkmann-Prize German Endocrine Society

NAME KATSCHINSKI, Dörthe M.	POSITION / TITLE Director and Profesor	DEPARTMENT Cardiovascular Physiology, UMG
---------------------------------------	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Lübeck	State Bord Exam	1994	Medicine
University of Lübeck	Dr. med.	1994	Immunology
University of Lübeck	Ärztin im Praktikum	1995-1996	Oncology
University of Wisconsin, USA	Post-Doc	1996-1998	Cell Physiology
University of Lübeck	Post-Doc	1998-2002	Physiology
University of Lübeck	Habilitation	2001	Physiology

B. Positions / Academic Appointments

2003-2006	Independent Junior Group Leader (BMBF), Martin-Luther University of Halle
2006-	Director of Cardiovascular Physiology, Georg August University Göttingen

C. Major research interests

Cellular and molecular hypoxia sensing, signaling and adaptation. Exploitation of the cellular oxygen sensing system for treatment of ischemic diseases

D. Selected peer-reviewed publications (2007-2012)

Hölscher M, Schäfer K, Krull S, Farhat K, Hesse A, Silter M, Lin Y, Pichler BJ, Thistlethwaite P, El-Armouche A, Maier LS, **Katschinski DM**, Ziesenis A. Unfavourable consequences of chronic cardiac HIF-1 α stabilization. (2012) *Cardiovasc Res.*94(1):77-86.

Vogel S, Wottawa M, Farhat K, Ziesenis A, Schnelle M, Le Huu S, von Ahlen M, Malz C, Camenisch G, **Katschinski DM**. (2010) PHD2 affects cell migration and F-actin formation via RhoA/ROCK-dependent cofilin phosphorylation. (2010) *J Biol Chem* 285(44), 33756-63

Köditz J, Nesper J, Stiehl DP, Franke C, Myllyharju J, Wenger RH, **Katschinski DM**. (2007) Oxygen-dependent ATF-4 stability is mediated by the PHD3 oxygen sensor *Blood* 110, 3610-3617.

E. Research Support (2007-2012) selected

DFG Ka1269/11-1 Klinische Forschergruppe 155, „Protektiver Effekt von HIF-1 bei erhöhter mechanischer Belastung des Herzens“, 2008-2011.

Wilhelm Sander Stiftung, „Bedeutung des Prolyl-4-Hydroxylase Domäne (PHD) 2 Sauerstoffsensors für Tumorzell-Migration/Adhäsion und Tumorzell-Sensitivität gegenüber Chemotherapie“, 2008-2012.

HypoxiaNet EU, Hypoxia sensing, signalling and adaptation, 2010-2013.

F. Other activities

German chair of the International Graduate Programme in Cardiovascular Science (together with the British Heart Foundation of Research Excellence Centre at Kings College London)

G. Memberships and awards

Memberships: HypoxiaNet, German Physiological Society

Awards: Wilhelm Roux Award, Medical Faculty Martin-Luther University Halle; Du Bois-Reymond Award, German Physiological Society

NAME KEHLENBACH , Ralph	POSITION / TITLE Prof. Dr.	DEPARTMENT Department of Biochemistry I, UMG
-----------------------------------	-------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Bonn	Diploma in biology	1992	Biology
University of Heidelberg	Dr. rer. nat.	1995	Cell biology, molecular biology
The Scripps Research Institute, USA	Postdoctoral fellow	1996-2000	Cell biology, biochemistry
University of Göttingen	Habilitation	2007	Cell biology, biochemistry

B. Positions / Academic Appointments

2000-2004	Group leader, University of Heidelberg
since 2005	Group leader, University of Göttingen

C. Major research interests

Transport of macromolecules between the nucleus and the cytoplasm occurs through nuclear pore complexes (NPCs), that are embedded between the outer and the inner nuclear membrane. We established a number of assays to analyze nuclear import and nuclear export in living cells as well as in permeabilized cells. We are interested in the role of individual nucleoporins, components of the NPC, on different transport pathways. Another focus is on CRM1, the major nuclear protein export receptor.

D. Selected peer-reviewed publications (2007-2012)

Wälde S, Thakar K, Hutten S, Spillner C, Nath A, Rothbauer U, Wiemann S, **Kehlenbach RH** (2012) The nucleoporin Nup358/RanBP2 promotes nuclear import in a cargo- and transport receptor-specific manner. *Traffic*. 13, 218-233.

Waldmann I, Spillner C, **Kehlenbach RH** (2012). The nucleoporin like protein NLP1/hCG1 promotes CRM1-dependent nuclear protein export. *J. Cell Science*.124, 144-154.

Hilliard, M, Frohnert, C., Spillner, C., Nath, A.,, Lampe, T., Marcone, S., Fitzgerald., D., and **Kehlenbach, R.H.** (2010). The anti-inflammatory prostaglandin 15-Deoxy-D12,14PGJ2 inhibits CRM1-dependent nuclear protein export. *J. Biol. Chem.* 285, 22202-22210.

Hutten S, Wälde S, Spillner C, Hauber J, **Kehlenbach RH** (2009). The nuclear pore component Nup358 promotes transportin-dependent nuclear import. *J. Cell Science*. 122, 1100-1100.

Hutten S, Flotho A, Melchior F, **Kehlenbach RH** (2008) The Nup358-RanGAP complex is required for efficient importin alpha/beta-dependent nuclear import. *Mol Biol Cell* 19, 2300-2310

Waldmann I, Wälde S, **Kehlenbach RH** (2007) Nuclear import of c-Jun is mediated by multiple transport receptors. *J Biol Chem* 282, 27685-27692

E. Research Support (selection)

DFG: KE 660/5-2: "The function of Nup358 in nuclear protein import"

DFG: KE 660/9-1: "Analysis of the Nup214-CRM1 interaction in nuclear protein export"

F. Memberships and awards

Awards: Heidelberger Doktorandenpreis, 1996

HFSP-postdoctoral fellowship, 1996-1998

NAME KESSEL, Michael	POSITION / TITLE Group leader, Professor	DEPARTMENT Molecular Cell Biology, MPI Biophysical Chemistry
-------------------------	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Kiel, Germany	Diploma,	1976	Microbiology, Biochemistry
University of Kiel, Germany	Dr. rer. nat.	1981	Biochemistry
National Cancer Institute, NIH, Bethesda, USA University of Heidelberg, Germany	Postdoctoral fellow	1981-1983 1983-1986	Molecular Biology
University of Göttingen, Germany	Habilitation	1992	Molecular Biology

B. Positions / Academic Appointments

1979-1981	Scientific assistant, Biochemical Institute, University of Kiel, Germany
1986-1991	Staff scientist, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany
1992-	Research group leader, Max Planck Institute for Biophysical Chemistry
2001-	Adjunct Professor at the University of Göttingen

C. Major research interests

The group is interested in the coordination between cell cycle and developmental control processes in mice. In particular we are currently studying the essential role of the Geminin protein for pluripotency, and the function of the Mad2l2 protein in the epigenetic reprogramming of primordial germ cells.

D. Selected peer-reviewed publications

Asli NS, Kessel M (2010) Spatiotemporally restricted regulation of generic motor neuron programs by miR-196-mediated repression of Hoxb8. *Dev Biol* 344, 857-868.

Pitulescu ME, Teichmann M, Luo L, Kessel M (2009) TIPT2 and geminin interact with basal transcription factors to synergize in transcriptional regulation. *BMC Biochem* 10, 16.

Wittler L, Saborowski M, Kessel M (2008) Expression of the chick Sizzled gene in progenitors of the cardiac outflow tract. *Gene Expr Patterns* 8(6), 471-6.

Luo L, Uerlings Y, Happel N, Asli NS, Knoetgen H, Kessel M (2007) Regulation of geminin functions by cell cycle dependent nuclear-cytoplasmic shuttling. *Mol Cell Biol* 27, 4737-4744.

E. Research Support (selection)

Research is supported by the Max Planck Society.

NAME	POSITION / TITLE	DEPARTMENT
KLOPFENSTEIN, Dieter	Group Leader / PhD	III. Physical Institut, University Göttingen

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Biozentrum, University of Basel, Switzerland	Diploma	1994-1995	Cell Biology
Biozentrum, University of Basel, Switzerland	Dr. rer. nat.	1995-1999	Biochemistry
University of California, San Francisco, USA	(Postdoc)	1999-2003	Biochemistry

B. Positions / Academic Appointments

2003-2009	Junior Group Leader, Center for Molecular Physiology of the Brain, Biochemistry II, University of Göttingen, Germany
2009-present	Group Leader, Biophysics, University of Göttingen, Germany

C. Major research interests

We are interested in the molecular mechanisms of motor-based cargo transport. The long-range transport of vesicles and organelles along the axonal cytoskeleton is an essential for neuronal development and proper function of synaptic transmission. Thus, we analyze the molecular motor proteins of the kinesin and dynein family in neurons of the nematode *C. elegans* *in vivo*. We use structure/function approaches to define cargo binding and regulatory domains on motor proteins. Proper axonal transport is investigated using physiological read-outs as locomotion (neuro-muscular junctions), sensitivity to neurotoxins (chemosensation), fertility (behavior), and touch-response (mechanosensation). Analysis of rescue and loss-of-function phenotypes in RNAi-gene knock-down screens allows the identification of proteins involved in cargo interaction and motor regulation.

D. Selected peer-reviewed publications

LChua JJ, Butkevich E, Warseck JM, Kittelmann M, Gronborg M, Behrmann E, Stelzl U, Pavlos NJ, Lalowski M, Eimer S, Wanker EE, Klopfenstein DR, Jahn R (2012) Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter. *Proc Natl Acad Sci USA*, in press.

Gerson-Gurwitz A, Thiede C, Movshovich N, Fridman V, Podolskaya M, Danieli T, Lakämper S, Klopfenstein DR, Schmidt CF, Gheber L (2011) Directionality of individual kinesin-5 Cin8 motors is modulated by loop 8, ionic strength and microtubule geometry. *EMBO J* 30(24), 4942-54.

Kumar J, Chowdhary B., Metpally R, Ramanathan S, Zheng Q, Nonet ML, Klopfenstein DR, Koushika SP (2010) The *C. elegans* kinesin motor UNC-104 is degraded upon loss of specific binding to cargo. *PLoS Genetics* 6(11), e1001200.

Krahn MP, Klopfenstein DR, Fischer N, Wodarz A (2010) Membrane targeting of Bazooka/PAR-3 is mediated by direct binding to phosphoinositide lipids. *Curr Biol* 20(7), 636-42.

Wagner OI, Esposito A, Wouters F, Shen K, Wenzel D, Klopfenstein DR. (2009) Active zone protein SYD-2/liprin-alpha regulates kinesin UNC-104/KIF1A motility and motor clustering along axons. *Proc Natl Acad Sci USA* 106(46), 19605-10.

E. Research Support

1. Human Frontier Science Program Young Investigator Grant RGY72: "Investigation of regulation of synaptic transport", 2006-2010. PI.

2. DFG KL1952-1: "Role of phosphatidylinositolphosphates in membrane traffic", 2006-2009. PI.

F. Other activities

Lecturing Professorship Biochemistry II, University of Göttingen, 2011-2012.

G. Memberships and awards

Memberships: American Society for Cell Biology (ASCB), Swiss Society for Biochemistry.

Awards: ASCB Travel award 1998, Gian Thöndury prize of the Swiss Society for Anatomy, Histology and Embryology 1999, EMBO Long Term Fellowship 1999-2001, Swiss National Science Foundation fellowship 2001-2003

NAME KUBE, Dieter	POSITION / TITLE Group leader	DEPARTMENT Hematology and Oncology, UMG
-----------------------------	----------------------------------	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Max-Delbrück center Berlin	Postdoc	1992	Virology
Med Center University Cologne	Postdoc	92-99	Oncology
Med Center University Tübingen	Habilitation	99-2001	Immunology
Med Center University Göttingen	Um-Habilitation	2003	Immunology and Oncology
Med Center University Göttingen	APL-Prof	2008	Immunology and Oncology

B. Positions / Academic Appointments

Med Center University Tübingen	Group leader
Med Center University Göttingen	Group leader

C. Major research interests

The group is interested in describing biomarkers for diagnostic and predictive measurements in lymphoma patients and to understand their functional relevance.

D. Selected peer-reviewed publications

Heemann C, Kreuz M, Stoller I, Schoof N, von Bonin F, Ziepert M, Löffler M, Jung W, Pfreundschuh M, Trümper L, **Kube D**. Circulating levels of TNF- receptor II are prognostic for patients with peripheral T-cell Non-Hodgkin lymphoma. Clin Cancer Res. 2012 18(13):3637-3647.

Schrader A, S Bentink, R Spang, D Lenze, M Hummel, M Kuo, JR Arrand, PG Murray, L Trümper, **D Kube**, and M Vockerodt High Myc activity is an independent negative prognostic factor for diffuse large B cell lymphomas. Int J Cancer 2011 131(4):E348-61

Maneck M, Schrader A, **Kube D**, Spang R. Genomic data integration using guided clustering. Bioinformatics. 2011 ; 27(16):2231-8.

Schoof N., von Bonin F. , M. , Trümper L., **Kube D**. Hsp90 is essential for Jak-STAT signaling in classical Hodgkin lymphoma cells. Cell Commun Signal 2009 7:17

Kube D., Hua T-D., von Bonin F. , Schoof N. , Zeynalova S., Klöss M., Gocht D., Potthoff B., Tzvetkov M., Brockmüller J., Löffler M., Pfreundschuh M., Trümper L. Impact of IL-10 gene polymorphisms on clinical outcome of patients with aggressive Non-Hodgkin Lymphoma: an exploratory study Clin Cancer Research 2008 ,14/12:3777-84

E. Research Support (selection)

Member of the the ICGC-Lymphoma, e:Med Myc-Sys, DFG GRK1034, HämatoSys

F. Other activities

Member of the advisory board of study affairs: Bachelor, Master and PhD programs in Molecular Medicine, member of the GGNB program „Molecular biology of cells“

G. Memberships and awards

DGfI, AEK, DGV, STS, Deutsche Krebsgesellschaft, EACR

NAME LUTZ, Susanne	POSITION / TITLE Professor, Group Leader	DEPARTMENT Pharmacology, UMG
------------------------------	---	---------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Konstanz	Dipl. Biol.	1995	Biology
University of Heidelberg	Dr. rer. nat	2002	Biology/Cardiology
University of Heidelberg	Habilitation	2010	Pharmacology and Toxicology

B. Positions / Academic Appointments

2010-2011	Group leader ProFutura, Pharmacology, University Medical Center Göttingen
2011-	Professor, Pharmacology, University Medical Center Göttingen

C. Major research interests

Our research focuses on signal cascades involved in heart diseases, e.g. we try to understand how G proteins are involved in processes like cardiac fibrosis and cardiomyocyte hypertrophy.

D. Selected peer-reviewed publications

Vettel C, Wittig K, Vogt A, Wuertz CM, El-Armouche A, **Lutz S**, Wieland T. A novel player in cellular hypertrophy: G(i)βγ/PI3K-dependent activation of the RacGEF TIAM-1 is required for α(1)-adrenoceptor induced hypertrophy in neonatal rat cardiomyocytes. *J Mol Cell Cardiol.* 2012; 53(2):165-75.

Wuertz CM, Lorincz A, Vettel C, Thomas MA, Wieland T, **Lutz S**. p63RhoGEF-a key mediator of angiotensin II-dependent signaling and processes in vascular smooth muscle cells. *FASEB J.* 2010; 24(12):4865-76.

Lutz S, Shankaranarayanan A, Coco C, Ridilla M, Nance MR, Vettel C, Baltus D, Evelyn CR, Neubig RR, Wieland T, Tesmer JGG. Structure of Gαq-p63RhoGEF-RhoA complex reveals a pathway for activation of RhoA by GPCRs. *Science.* 2007, 318(5858): 1923-7.

E. Research Support (selection)

DFG-Förderung:

Einzelantrag LU1486/1-1 (since 01.01.2009)

Projekt: „p63RhoGEF als Mediator der Gq/11-vermittelten Aktivierung von RhoA – Bedeutung für Physiologie und Pathophysiologie im kardiovaskulären System“

Graduiertenkolleg 880 (01.07.2008-31.1.2010)

Projekt 17: „The Role of NO/cGMP-induced RhoGEF17 activation in the vasculature“

TR-SFB 23 (01.07.2009-31.1.2010)

Projekt B06: „Endotheliale Guaninnukleotid Austauschfaktoren für RhoGTPasen als Regulatoren der Angiogenese“

SFB 1002 (since 1.7.2012)

Projekt C2: „RhoGTPasen und ihre Bedeutung für die Last-abhängige Myokardfibrose“

F. Other activities

Mitglied der Studienkommission Molekulare Medizin

Reviewer for Cardiovascular Research, DFG, Deutsche Herzstiftung

G. Memberships and awardsMembership:

Deutsche Gesellschaft für Kardiologie

Deutsche Gesellschaft für Pharmakologie und Toxikologie

International Society for Heart Research

NAME	POSITION / TITLE	DEPARTMENT
MANSOURI, Ahmed	Research Group Leader / Professor	Mol. Cell Biol., MPI Bioph. Chem.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Technical University of Braunschweig	Diploma	1975	Chemistry
Technical University of Braunschweig	PhD	1978	Technical Chemistry
Institute of Human Genetics, Göttingen	Postdoctoral Fellow	1982-86	Human Genetics
MPI in Tübingen and Freiburg	Postdoctoral Fellow	1986-89	Developmental Biology
University of Göttingen Medical Center	Habilitation	1999	Developmental Genetics

B. Positions / Academic Appointments

1989-2002	Staff scientist, Department Mol. Cell Biol., MPI for Biophys. Chem., Göttingen
Since 2002	Research Group leader, Department Molecular Cell Biology, MPI for Biophysical Chemistry, Molecular Cell Differentiation Group, Göttingen, Germany
Since 2005	Professor, University of Göttingen Medical Center, Department of Clinical Neurophysiology, Göttingen, Germany

C. Major research interests

We are using mouse genetics to study the role of transcription factors during cell differentiation in the endocrine pancreas and in the ventral midbrain.

D. Selected peer-reviewed publications

Kordowich S, Collombat P, Mansouri A, Serup P (2011) Arx and Nkx2.2 compound deficiency redirects pancreatic alpha- and beta-cell differentiation to a somatostatin/ghrelin co-expressing cell lineage. *BMC Dev Biol* 11, 52-67.

Griesel G, Krug C, Yurlova L, Diaconu M, Mansouri A (2011) Generation of knockout mice expressing a GFP-reporter under the control of the Lmx1a locus. *Gene Expr Patterns* 11(5-6), 345-358.

Collombat P, Xu X, Ravassard P, Sosa-Pineda B, Dussaud S, Billestrup N, Ole Madsen OD, Serup P, Heimberg H, Mansouri A (2009) The ectopic expression of Pax4 in the mouse pancreas converts progenitor cells into a - and subsequently b -cells. *Cell* 138, 449-462.

Dressel R, Schindehütte J, Kuhlmann T, Elsner L, Novota P, Baier PC, Schillert A, Bickeböller H, Herrmann T, Trenkwalder C, Paulus W, Mansouri A (2008) The tumorigenicity of mouse embryonic stem cells and in vitro differentiated neuronal cells is controlled by the recipients' immune response. *PLoS ONE* 3(7), e2622.

Collombat P, Hecksher-Sørensen J, Krull J, Berger J, Riedel D, Herrera PL, Serup P, Mansouri A (2007) Embryonic endocrine pancreas and mature beta cells acquire alpha and PP cell phenotypes upon Arx misexpression. *J Clin Invest* 117(4), 961-70.

E. Research Support (selection)

1. NIH: Beta-cell Biology Consortium (BCBC) NIH, Aug 2005 - Jul 2010. Co-Investigator.

2. BMBF-Project: "Evaluation of induced Pluripotent cells (iPS) from Parkinson patients", Feb 2009 - Apr 2012 (A. Mansouri) Coordinator.

Partners: Universitätsmedizin Göttingen (Prof. W. Paulus; Prof. R. Dressel), Paracelsus-Elena Klinik Kassel (Prof. C. Trenkwalder).

3. BMBF-ANR Project: "In vitro and in vivo generation of insulin-producing beta-cells from pancreatic cells", Jul 2010 - Jun 2013 (A. Mansouri). Coordinator.

Partners: INSERM Nice (France) Faculté des Sciences, Parc Valrose (P. Collombat); INSERM, Faculté Necker, Paris (R. Scharfmann); CNRS, INSERM Hôpital Pitié Salpêtrière, Paris (P. Ravassard).

4. DFG Center Molecular Physiology of the Brain (CMPB): "Role of the transcription factor Lmx1a in neural crest development", since 2002. Co-Investigator.

5. JDRF- Project: "Generation of functional beta-cells from alternative pancreatic cell subtypes", Dec 2010 - Nov 2013 (A. Mansouri). Co-Investigator.

Partners: INSERM Nice (France) Faculté des Sciences, Parc Valrose (P. Collombat), Broad Institute, Cambridge, Boston, USA (B. Wagner Kelly; S. Alykhan; S. Schreiber), Hagedorn Research Institute Copenhagen, Denmark (J. Heckescher-Sorensen), CEMM Vienna (Austria) (S. Kubicek).

F. Memberships and awards

Dr. Helmut Storz Donation Professorship (2005)

NAME	POSITION / TITLE	DEPARTMENT
MARQUARDT, Till	Group leader / Principal Investigator	European Neuroscience Institute

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Max-Planck Institute of biophysical Chemistry and University of Göttingen, Germany	Diploma	1993-1998	Developmental Biology, Genetics
Max-Planck Institute of biophysical Chemistry and University of Göttingen, Germany	Dr.rer.nat.	1998-2001	Developmental Biology, Genetics
The Salk Institute for biological Studies, La Jolla, USA	Postdoctoral Fellow	2002-2006	Developmental Neuroscience

B. Positions / Academic Appointments

2002-2005	Postdoctoral Fellow, The Salk Institute for biological Studies, La Jolla, USA
2006	Staff scientist, The Salk Institute for biological Studies, La Jolla, USA
2007-now	Group leader, European Neuroscience Institute, Göttingen, Germany

C. Major research interests

The neuromuscular system represents the final common path in the generation of behaviors by linking the central nervous system with the movement apparatus. The assembly of this circuitry depends on genetically hardwired programs that lay down the fundamental pattern of neuromuscular connectivity during embryonic and postnatal development. While work in the past 15 years provided a mechanistic framework for understanding how motor neuron-muscle connections are established, insights into how these connectivity patterns become integrated into functional sensory-motor circuits remain sparse. These early processes are inherently linked to the functional refinement of neural properties and connections, including the high degree of adaptive plasticity of the neuromuscular circuitry throughout adult life. Research in my lab centers around three main focus areas tackling the following questions:

- (1) How is wiring specificity achieved in the sensory-motor circuitry?
- (2) What are the molecular pathways driving the functional specification and plasticity of motor units?
- (3) What are the determinants underlying motor unit type-specific vulnerability?

D. Selected peer-reviewed publications

Marquardt, T., Shirasaki, R., Ghosh, S., Carter, N., Andrews, S.E., Hunter, T., and Pfaff, S.L. (2005). Co-expressed EphA receptors and ephrin-A ligands mediate opposing actions on growth cone navigation from distinct membrane sub-domains. *Cell* 121, 127-139.

Gallarda, B., Bonanomi, D., Müller, D., Brown, A., Alaynick, W.A., Lemke, G., Pfaff, S.L. and **Marquardt, T.** (2008). Segregation of axial sensory and motor pathways through heterotypic trans-axonal signaling. *Science* 320: 233-236.

Wang, L., Klein, R., Zheng, B., and **Marquardt, T.** (2011). Anatomical coupling of sensory and motor nerve trajectory through axon tracking. *Neuron* 71: 263-277.

Bonanomi, D., Chivatakarn, O., Bai, G., Lettieri, K., Abdesselem, H., **Marquardt, T.**, Pierchala, B.A., and Pfaff, S.L. (2012). Ret is a multifunctional co-receptor that integrates diffusible- and contact-axon guidance signals. *Cell* 148: 568-582.

Wang, L. and **Marquardt, T.** (2012). Live monitoring of heterotypic axonal interactions in vitro. *Nature Protocols* 7: 351-363.

E. Research Support (selection)

1. Emmy Noether Programm (DFG), Signaling mechanisms in Neuromuscular circuit assembly, 2007-2012, PI
2. Isreal-Niedersachsen Grant (VW-Stiftung), Boundary Cell-Dependent Assembly of Hindbrain Axonal Pathways, 2011-2014, Co-PI with Prof. D. Sera-Sonnenfeld, Jehovot, Israel
3. CMPB-B1 (DFG), Mechanisms driving Neuromuscular synapse specificity, PI

F. Other activities

Teaching (lectures, courses, seminars and lab rotations): International Max-Planck research school (IMPRS) MSc/PhD Program in Molecular Biology (since 2011); IMPRS MSc/MD/PhD Programme in Neurosciences, Göttingen (since 2007); University of Göttingen, BS/MSc program in Developmental, Neural and Behavioral Biology

G. Memberships and awards

Damon Runyon Fellowship Award (2002), Pioneer Fund Endowment Award (2006)

NAME MEYER, Thomas	POSITION / TITLE Professor	DEPARTMENT Psychosomatic Medicine, UMG
------------------------------	-------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Free University of Berlin	State Board Exam	1989	Medicine
Free University of Berlin	Diploma	1990	Sociology
Free University of Berlin	Diploma	1992	Biochemistry
University of Göttingen	Dr. med.	1994	Cardiovascular Medicine
Free University of Berlin	Dr. phil.	1996	Political Sociology
University of Göttingen	Habilitation	1998	Molecular Cardiology
Free University of Berlin	Dr. rer.nat.	2004	Biochemistry

B. Positions / Academic Appointments

2006-2011	Professor for Molecular Cardiology, University of Marburg
2011-	Professor for Molecular Psychocardiology, University of Göttingen

C. Major research interests

Our main research focus is in the field of cytokine-induced signal transduction. In particular, we are studying molecular mechanisms on how the transcription factor STAT1 (signal transducer and activator of transcription 1) activates interferon-responsive target genes.

D. Selected peer-reviewed publications

Koch V, Staab J, Ruppert V, Meyer T (2012). Two glutamic acid residues in the DNA-binding domain are engaged in the release of STAT1 dimers from DNA. *BMC Cell Biol.* 13, 22

Meyer T, Ruppert V, Ackermann S, Richter A, Perrot A, Sperling SR, Posch MG, Maisch B (2012). Novel mutations in the sarcomeric protein myopalladin in patients with dilated cardiomyopathy, *European Journal of Human Genetics*, 15 Aug [Pubmed ahead of print]

Meyer T, Buss U, Herrmann-Lingen C (2010) The role of cardiac disease severity in the predictive value of anxiety for all-cause mortality, *Psychosom Med* 72, 9-15

Detje CN, Meyer T, Schmidt H, Kreuz D, Prinz M, Rose JK, Bechmann I, Kalinke U (2009) Brain-specific IFNAR signaling provides protection against neurotropic virus spread within the CNS. *J Immunol*, 182, 2297-2304.

Meyer T, Begitt A, Vinkemeier U (2007) Green fluorescent protein-tagging reduces the nucleocytoplasmic shuttling specifically of unphosphorylated STAT1. *FEBS J* 274, 815-826.

E. Research Support

DFG / Me 1648/4-1 „Kooperation von STAT1- und IRF1-Transkriptionsfaktoren bei inflammatorischen Prozessen“.

Behring-Röntgen-Stiftung: „Die Rolle von Cardiotrophin-1 bei der Stammzell-Differenzierung während der Ischämie/Reperfusion des Herzens“ with Prof. Sauer.

Deutsche Krebshilfe / 107903/912: „STAT5 als hämatopoetisches Onkogen“ with Dr. Carstanjen

DFG / Me 1648/1: Pathologie hyperaktiver Mutanten des Transkriptionsfaktors STAT1.

F. Other activities

Co-Editorship: Meyer U, Meyer T, Handschel J, Wiesmann HP. *Fundamentals of Tissue Engineering and Regenerative Medicine*, Springer Verlag, 2009, 1049 pages

NAME	POSITION / TITLE	DEPARTMENT
MOSER, Tobias	Research Director/ Professor	Otolaryngology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Leipzig, Germany	n.a.	1988-1990	Medicine
University of Jena/Erfurt, Germany	Staatsexamen	1990-1994	Medicine
University of Jena, Germany	MD	1995	Physiology
University of Göttingen Medical Center	Board Certificate	1998-2002	Otolaryngology
University of Göttingen Medical Center	Habilitation	2003	Otolaryngology

B. Positions / Academic Appointments

1997-2001	Junior group leader, MPI for biophysical Chemistry, Göttingen
2001-2005	Research group leader, Dept. of Otolaryngology, UMG
2005	Associate Professor of Experimental and Clinical Audiology, Research group leader, Dept. of Otolaryngology, University of Göttingen Medical Center
2007-	(full) Professor of Auditory Neuroscience and Research Director, Dept. of Otolaryngology, University of Göttingen Medical Center

C. Major research interests

Our work focuses on the molecular physiology and pathology of sound encoding at the hair cell ribbon synapse. We have physiologically and morphologically characterized synapses of wild-type and mutant mice with defects in hair cell synaptic coding from the molecular to the systems level.

D. Selected peer-reviewed publications

Frank T, Rutherford MA, Strenzke N, Pangrsic T, Khimich D, Fejtova A, Gundelfinger ED, Liberman MC, Harke B, Bryan KE, Lee A, Egner A, Riedel D, Moser T (2010). Bassoon and the synaptic ribbon organize Ca²⁺ channels and vesicles to add release sites and promote refilling. *Neuron* 68 724–738.

Pangrsic T, Lasarow L, Reuter K, Takago H, Schwander M, Riedel D, Frank T, Tarantino LM, Bailey JS, Strenzke N, Müller U, Brose N, Reisinger E*, Moser T* (2010) Hearing requires otoferlin-dependent efficient replenishment of synaptic vesicles in hair cells. *Nat Neurosci* 13(7):869-76.

Meyer AC, Frank T, Khimich D, Hoch G, Riedel D, Chapochnikov, NM, Yarin YM, Harke B, Hell S, Egner A, Moser T (2009) Tuning of Synapse Number, Structure and Function in the Cochlea, *Nat Neurosci* 12:444-534.

Khimich, D., Nouvian, R., Pujol, R., tom Dieck, S., Egner, A., Gundelfinger, E.D., Moser, T. (2005) Hair Cell Synaptic Ribbons are Essential for Synchronous Auditory Signaling. *Nature* 434, 889-94.

E. Research Support (selection)

1. SFB 889 (DFG): “Cellular mechanisms of sensory processing”, 01/01/2011-12/31/2014. Coordinator, PI and Co-PI (with S. Rizzoli) on two projects.

2. Center for Nanoscopy and Molecular Physiology of the Brain (DFG), 2010-2015, Co-PI with Erwin Neher and Stefan Hell.

3. Bernstein Center for Computational Neuroscience (BMBF), 2010-2015. Co-PI (with Fred Wolf and Alexander Meyer) on one project.

4. Bernstein Focus for Neurotechnology (BMBF), 2008-2013. Co-PI (with Ernst Bamberg and Alexander Egner) on two projects.

F. Other activities

Coordinator/spokesperson of the SFB889 (since 2011) and PhD program Sensory and Motor Neuroscience (since 2007), Board-member: Bernstein Center for Computational Neuroscience, Bernstein Focus for Neurotechnology, Board-member & Vice-President of the German Society for Audiology.

G. Memberships and awards

Awards: Fellow of the “Studienstiftung des deutschen Volkes” (1993), Thesis Award 1996 of the University of Jena, Marius-Tausk Award of the German Society for Endocrinology (1997), Meyer-zum-Gottesberge Award of the German Society for Audiology (2004), Habilitation Award of the University of Göttingen (2005).

NAME	POSITION / TITLE	DEPARTMENT
NAVE, Klaus-Armin	Director / Professor	Neurogenetics, MPI Exp. Medicine

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Heidelberg, Germany	Diploma	1983	Biology, Chemistry, Physics
University of California, San Diego, CA, USA	Ph.D.	1987	Neuroscience
The Salk Institute, La Jolla, CA, USA	Postdoctoral Fellow	1988-90	Neuroscience
University of Heidelberg, Germany	Habilitation	1996	Molecular Biology

B. Positions / Academic Appointments

1991-1997	Independent Group Leader, ZMBH, University of Heidelberg, Germany
1998-1999	Professor of Biology (C4), ZMBH, University of Heidelberg, Germany (Since 2000 Adjunct Professor, University of Heidelberg)
2000-	Director, Department of Neurogenetics, MPI for Experimental Medicine, Göttingen

C. Major research interests

We are studying the interaction of neurons and glial cells in the mammalian nervous system, and are concentrating on the ensheathment of long axons by myelinating oligodendrocytes and Schwann cells. This research includes the cell biology of myelination in development and in regeneration, but also the role of mature glial cells in maintaining normal axon function and survival throughout adult life.

D. Selected peer-reviewed publications

Fünfschilling U, Supplie LM, Mahad D, Boretius S, Saab AS, Edgar J, Brinkmann BG, Kassmann CM, Tzvetanova ID, Möbius W, Diaz F, Meijer D, Suter U, Hamprecht B, Sereda MW, Moraes CT, Frahm J, Goebbels S, Nave KA (2012) Glycolytic oligodendrocytes maintain myelin and long-term axonal integrity. *Nature*, in press.

Nave KA (2010) Myelination and the trophic support of long axons. *Nat Rev Neurosci* 11, 275-283.

Nave KA (2010) Myelination and support of axonal integrity by glia. *Nature* 468, 244-252.

Brinkmann BG, Agarwal A, Sereda MW, Garratt AN, Wende TH, Stassart RM, Nawaz S, Humml C, Velanac V, Radyuschkin K, Goebbels S, Fischer TM, Franklin RJ, Lai C, Ehrenreich H, Birchmeier C, Schwab MH, Nave KA (2008) Neuregulin-1/ErbB signaling serves distinct functions in myelination of the peripheral and central nervous system. *Neuron* 59, 581-595.

Kassmann CM, Lappe-Siefke C, Baes M, Brügger B, Mildner A, Werner HB, Natt O, Michaelis T, Prinz M, Frahm J, Nave KA (2007) Axonal loss and neuroinflammation caused by peroxisome-deficient oligodendrocytes. *Nat Genet* 39, 969-976.

Michailov GV, Sereda MW, Brinkmann BG, Fischer TM, Haug B, Birchmeier C, Role L, Lai C, Schwab MH, Nave KA (2004) Axonal neuregulin-1 regulates myelin sheath thickness. *Science* 304, 700-703.

Sereda MW, Meyer zur Hörste G, Suter U, Uzma N, Nave KA (2003) Therapeutic administration of progesterone antagonist in a model of Charcot-Marie-tooth disease (CMT-1A). *Nat Med* 9, 1533-1537.

E. Research Support (selection)

1. SFP/TR44 (DFG): "Secondary neuroinflammation in the CNS white matter", 01/01/2012-12/31/2015.
2. Integrated Project LEUKOTREAT (EU-FP7), Consortium partner, 2009-2012.
3. Integrated Project NGIDD (EU-FP7), Consortium partner, 2009-2012.
4. BMBF LEUKONET, Consortium Partner, 2010-2012.
5. ERC Advanced Grant "AxoGLIA", 2011-2015.

F. Other activities

- - - - - ; Scientific Advisory Board, Center for Molecular Medicine (ZMMK), University of Cologne Scientific Advisory Board, Center for Molecular Neurobiology (ZMNH), University of Hamburg; Member, Göttingen Research Council.

G. Memberships and awards

Memberships: (2004) EMBO Membership

Awards: (2001) Sobek Prize for Multiple Sclerosis Research; (2004) Felix-Jerusalem-Prize; (2010) ERC Advanced Investigator Grant

NAME	POSITION / TITLE	DEPARTMENT
NIKOLAEV, VIACHESLAV	Group leader and PD	Cardiology and Pneumology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Saint Petersburg State Chemical Pharmaceutical Academy	Diploma	2002	Pharmacy
University of Würzburg	Dr. rer. nat	2005	Pharmacology
University of Würzburg	Habilitation	2012	Pharmacology

B. Positions / Academic Appointments

2005-2010	Postdoctoral Scientist, Bioimaging Center, University of Würzburg
2009-2010	Research Associate and Honorary Research Associate, National Heart and Lung Institute, Imperial College London
2010-	Group leader, Emmy Noether Group of the DFG, Dept. of Cardiology and Pneumology, UMG, Göttingen

C. Major research interests

Compartmentalized cAMP and cGMP signalling in heart muscle cells, its role in cardiac physiology and alterations in heart failure. FRET-based biosensors for cAMP and cGMP

D. Selected peer-reviewed publications (2012-2007)

Börner S, Schwede F, Schlipp A, Berisha F, Calebiro D, Lohse MJ, Nikolaev VO (2011) FRET measurements of intracellular cAMP concentrations and cAMP analogue permeability in intact cells. *Nat Protocols* 6, 427-438.
 Nikolaev VO, Moshkov A, Lyon AR, Miragoli M, Novak P, Paur H, Lohse MJ, Korchev YY, Harding SE, Gorelik J (2010) Beta2-Adrenergic receptor redistribution in heart failure changes cAMP compartmentation. *Science* 327, 1653-1657.

Calebiro D*, Nikolaev VO*, Gagliani MC, de Filippis T, Dees C, Tacchetti C, Persani L, Lohse MJ. (2009) Persistent cAMP-signals triggered by internalized G-protein-coupled receptors. *PLoS Biol.* 7, e1000172

Herget S, Lohse MJ, Nikolaev VO. (2008) Real-time monitoring of phosphodiesterase inhibition in intact cells. *Cell Signal.* 20, 1423-1431

Nikolaev VO, Boivin V, Stork S, Angermann CE, Ertl G, Lohse MJ, Jahns R. (2007) A novel fluorescence method for the rapid detection of functional beta1-adrenergic receptor autoantibodies in heart failure. *J Am Coll Cardiol* 50, 423-431.

E. Research Support (selection)

DFG / Emmy-Noether Programme NI 1301-1/1 "Local cyclic nucleotide signalling and cAMP/cGMP interactions in regulation of cardiac function and disease, 2010-2015

DFG / SFB1002, TP A01: "cAMP and cGMP microdomains in hypertrophy and heart failure", 2012-2016

University of Göttingen Medical Center "Pro Futura" Programme: "Molecular Imaging of the Heart", 2010-2015

F. Other activities

Member of the board SFB 1002

G. Memberships and awards

Memberships: American Society for Biochemistry and Molecular Biology (ASBMB), American Heart Association (AHA), International Society for Heart Research (ISHR)

Awards: Wollheim Price for the best PhD thesis 2006, Human Frontier Research Programme short-term Fellowship 2009, Scientific Price of Lower Saxony 2011

NAME OPPERMANN, Martin	POSITION / TITLE Prof. Dr. med. / Group leader	DEPARTMENT Cellular and Molecular Immunology, UMG
---------------------------	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Göttingen	State Board Exam	1985	Medicine
University of Göttingen	Dr. med.	1985	Immunology
Medical Council Lower Saxony	Specialist degree	1992	Clinical Chemistry
Duke University, NC, USA	Postdoctoral Fellow	1993-1996	Cell Biology
University of Göttingen	Habilitation	1997	Immunology

B. Positions / Academic Appointments

1997-	Group leader at the Dept. of Cellular and Molecular Immunology, Göttingen
2003-2004	Acting director of the Dept. of Immunology, UMG

C. Major research interests

We are interested in mechanisms which regulate the function and cell surface expression of chemokine receptors / HIV coreceptors. A second line of research relates to the role of complement regulatory proteins in human diseases.

D. Selected peer-reviewed publications (2007-12)

L.A. Hecker, A.O. Edwards, E. Ryu, N. Tosakulwong, K.H. Baratz, W.L. Brown, P. Charbel Issa, H.P. Scholl, B. Pollok-Kopp, K.E. Schmid-Kubista, K.R. Bailey, M. Oppermann. 2010. Genetic control of the alternative pathway of complement in humans and age-related macular degeneration. *Hum Mol Genet.* 19:209-15
M. Oppermann. 2010. Anti-infectives: current challenges and future perspectives. *Curr Opin Pharmacol.* 2010 Oct;10(5):505-6. (Section Editor)
B. Pollok-Kopp, F. Hüttenrauch, S. Redthorn, M. Oppermann. 2007. Dynamics of protein kinase C mediated phosphorylation of the C5a receptor on serine-334. *J Biol Chem* 282:4345-53

E. Research Support (2007-2012) selected

Collaborative research unit SFB 523 (Protein and Membrane Transport between Cellular Compartments), Project A10: "Intracellular trafficking of chemokine receptors" 1999-2008
DFG / Op42/10-1 and -2 "Identification and functional characterization of chemokine receptor interacting proteins" 2009- (ongoing)

F. Other activities, selected

Spokesman of the doctoral committee (Dr.med./dent, Dr.sci.hum.), Erasmus coordinator, coordinator of the curriculum committee of the medical faculty

G. Memberships and awards

DGfI, ASBMB
Habilitation stipend of the DFG 1993-1996

NAME OUTEIRO, Tiago Fleming	POSITION / TITLE Director/Prof. Dr.	DEPARTMENT Department of NeuroDegeneration and Restorative Research
--	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Porto, Porto, Portugal	B.S.	1994-1998	Biochemistry Faculty of Sciences
Institute for Biomedical Research, MIT, Cambridge, USA University of Chicago (UC), Chicago, USA	Ph.D. in Molecular and Cell Biology	1999-2004	Biomedical Sciences
Harvard University, USA	Postdoctoral Research Fellow	2004-2007	Neurobiology
Faculdade de Medicina da Universidade de Lisboa, Portugal	Auxiliar Professor	since 2007	

B. Positions / Academic Appointments

2004	Consultant and Research Scientist, FoldRx Pharmaceuticals, Inc, Cambridge, USA
2007-2011	Principal Investigator and Group Leader at Instituto de Medicina Molecular, Lisbon, Portugal
2007-2008	Visiting Scientist, Massachusetts General Hospital, Harvard Medical School, Boston, USA.

C. Major research interests

Our research is focused on the understanding of the molecular mechanisms which lead to neurodegeneration in diseases such as Parkinson's, Huntington's, or Alzheimer's disease. These diseases are intimately associated with protein misfolding and aggregation in specific regions of the brain.

Because the molecular pathways involved in protein homeostasis are highly conserved, we employ a wide variety of model organisms, from the simple but powerful budding yeast to mammalian cell culture and mice, to study the origin of the problems.

We are also developing novel in vivo imaging approaches based on multi-photon microscopy to observe protein misfolding and aggregation in the living brain.

D. Selected peer-reviewed publications

Hansen C, Angot E, Bergström AL, Steiner JA, Pieri L, Paul G, **Outeiro TF**, Melki R, Kallunki P, Fog K, Li JY, Brundin P. (2011) α -Synuclein propagates from mouse brain to grafted dopaminergic neurons and seeds aggregation in cultured human cells. *J Clin Invest.* 2011 Feb 1;121(2):715-25. doi: 10.1172/JCI43366. Epub 2011 Jan 18. PubMed PMID: 21245577; PubMed Central PMCID: PMC3026723.

Outeiro TF, Kontopoulos E, Altmann SM, Kufareva I, Strathearn KE, Amore AM, Volk CB, Maxwell MM, Rochet JC, McLean PJ, Young AB, Abagyan R, Feany MB, Hyman BT, Kazantsev AG (2007) Sirtuin 2 inhibitors rescue alpha-synuclein-mediated toxicity in models of Parkinson's disease. *Science.* 2007 Jul 27;317(5837):516-9. Epub 2007 Jun 21. PubMed PMID: 17588900.

Outeiro TF, Lindquist S (2007) Yeast cells provide insight into alpha-synuclein biology and pathobiology. *Science.* 2003 Dec 5;302(5651):1772-5. PubMed PMID: 14657500; PubMed Central PMCID: PMC1780172.

E. Research Support (selection)

CNMPB, DFG

F. Other activities

Vice-President of the Portuguese Society of Movement Disorders

G. Memberships and awards

Member of the American Society for Neuroscience, German Neuroscience Society

Tosteson Award, Massachusetts General Hospital, Boston, USA – 2004-2006.

NAME	POSITION / TITLE	DEPARTMENT
PARDO, Luis A.	Group Leader / Prof.	Neuronal Signals, MPI Exp. Medicine

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Oviedo, Spain	M.D.	1986	Medicine
University of Oviedo, Spain	PhD	1990	Biochemistry
Max-Planck Institute of Biophysical Chemistry	Postdoctoral fellow	1991-93	Electrophysiology

B. Positions / Academic Appointments

1994-1996	Researcher, University of Oviedo, Spain
1997-2000	Senior researcher, Max-Planck Institute of Experimental Medicine
2001-2003	Chief Scientific Officer, iOnGen AG
since 2004	Group leader at the Max-Planck Institute of Experimental Medicine

C. Major research interests

Our research interest focuses on the role of ion channels in the initiation and progression of tumors. For this, we take advantage of the knowledge of the physiology and molecular biology of channels and use electrophysiological techniques along with advanced microscopy, protein engineering and animal models. Most of our work has been on a particular potassium channel frequently expressed (75%) in human tumors. We try to take advantage of the particular features of ion channels (for example, their surface expression) to design novel diagnostic and therapeutic procedures.

We also try to understand the mechanisms underlying the role of ion channels in tumors, regarding both permeation properties as well as non-canonical functions

D. Selected peer-reviewed publications

Kohl T, Lörinczi E, **Pardo LA**, Stühmer W (2011) Rapid internalization of the oncogenic K⁺ channel Kv10.1 PLoS ONE 6, e26329

Hartung F, Stühmer W, **Pardo LA** (2011) Tumor cell-selective apoptosis induction through targeting of kv10.1 via bifunctional trail antibody. Mol Cancer 10, 109

Chen Y, Sánchez A, Rubio ME, Kohl T, **Pardo LA**, Stühmer W (2011) Functional Kv10.1 channels localize to the inner nuclear membrane. PLoS ONE 6, e19257

Gómez-Varela D, Kohl T, Schmidt M, Rubio ME, Kawabe H, Nehring RB, Schafer S, Stühmer W, **Pardo LA** (2010) Characterization of Eag1 channel lateral mobility in rat hippocampal cultures by single-particle-tracking with quantum dots. PLoS ONE 5, e8858

Agarwal J, Griesinger F, Stühmer W, **Pardo L** (2010) The potassium channel ether a go-go is a novel prognostic factor with functional relevance in acute myeloid leukemia. Molecular Cancer 9, 18

Wulf H, Castle N, **Pardo LA** (2009) Voltage-gated potassium channels as therapeutic drug targets. Nature Reviews Drug Discovery

Pardo LA, Stühmer W (2008) Eag1: an emerging oncological target. Cancer Res 68: 1611-3

Gomez-Varela D, Zwick-Wallasch E, Knotgen H, et al. (2007) Monoclonal antibody blockade of the human Eag1 potassium channel function exerts antitumor activity. Cancer Res 67: 7343-9

E. Research Support (selection)

NAMDIATREAM (Nanotechnological toolkits for multi-modal disease diagnostics and treatment monitoring; FP7-NMP-2009-LARGE-3 – 246479)

IonTraC (Marie Curie Initial Training Network (ITN) FP7-PEOPLE-2011-ITN 289648)

F. Memberships and awards

Member of the American Society for Biochemistry and Molecular Biology, Society for Neuroscience, European Association for Cancer Research, Sociedad Española de Ciencias Fisiológicas

NAME PAULUS , Walter	POSITION / TITLE Prof. Dr.	DEPARTMENT Department of Clinical Neurophysiology, UMG
--------------------------------	-------------------------------	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Düsseldorf	Dr. med.	1978	
Neurology and Clinical Neurophysiology in Munich	Habilitation		
Department of Clinical Neurophysiology	Professor	1992	

B. Positions / Academic Appointments

	Training in Neurology at the Universities of Düsseldorf, UCL London, and Munich
--	---

C. Major research interests

Our main research goal is to development new neurophysiologically based therapies for neurological diseases incorporating excitability changes of the brain. For this we use repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (TDCS). TMS induces a short electric current in the human brain. Both rTMS and TDCS offer the prospect of inducing LTD and LTP like effects in the human brain. Diseases in our focus are Parkinson's disease, epilepsy, migraine, stroke and dystonia.

Both methods may also be used to measure excitability changes in the motor cortex or alterations in visual perception thresholds. We also evaluate rTMS and TDCS induced changes in motor cortex excitability by functional MR imaging.

D. Selected peer-reviewed publications

Restless legs syndrome: pathophysiology, clinical presentation and management. Author(s): Trenkwalder, C.; **Paulus, W.** Source: Nature Reviews Neurology Volume: 6 Issue: 6 Pages: 337-346 Published: 2010

Thermal hypoaesthesia differentiates secondary restless legs syndrome associated with small fibre neuropathy from primary restless legs syndrome. Bachmann CG, Rolke R, Scheidt U, Stadelmann C, Sommer M, Pavlakovic G, Happe S, Treede RD, **Paulus W.** Brain. 2010 Mar;133(Pt 3):762-70. Epub 2010 Feb 28

Modulating functional connectivity patterns and topological functional organization of the human brain with transcranial direct current stimulation. Polanía R, Nitsche MA, **Paulus W.** Hum Brain Mapp. 2010 Jul 6. [Epub ahead of print]

Serotonin affects transcranial direct current-induced neuroplasticity in humans. Nitsche MA, Kuo MF, Karrasch R, Wächter B, Liebetanz D, **Paulus W.** Biol Psychiatry. 2009 Sep 1;66(5):503-8. Epub 2009 May 9. PMID: 19427633 [PubMed - indexed for MEDLINE]

The importance of timing in segregated theta phase-coupling for cognitive performance. Polanía R, Nitsche MA, Korman C, Batsikadze G, **Paulus W.** Curr Biol. 2012 Jul 24;22(14):1314-8. Epub 2012 Jun 7.

NAME	POSITION / TITLE	DEPARTMENT
PIELER, Tomas	Director / Professor	Developmental Biochemistry, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Max Planck Institute for Molecular Genetics, Berlin	Diploma	1981	Biochemistry
Free University of Berlin	Dr. rer. nat.	1984	Biochemistry
Free University of Berlin and Rockefeller University, New York	Postdoctoral Fellow	1984-1988	
Free University of Berlin	Habilitation	1992	Biochemistry

B. Positions / Academic Appointments

1988-1992	Junior group leader, Otto-Warburg-Laboratorium, Max Planck Institute for Molecular Genetics, Berlin
Since 1992	Professor and Director of the Department of Developmental Biochemistry, University of Goettingen

C. Major research interests

Cellular asymmetries as well as complex signaling circuits are the major driving force for the development of cellular diversity during early stages of vertebrate embryogenesis. Our primary research interest is in the characterization of the corresponding gene networks in *Xenopus*.

We have identified a group of mRNAs which localize to the vegetal cortex of the oocyte; our aims are to elucidate the molecular mechanisms underlying vegetal RNA transport and to define the function of the corresponding proteins in early embryogenesis. One such function is in germ cell specification and directional migration. Another project deals with the process of primary neurogenesis and neuronal subtype specification in *Xenopus* embryos; we have been able to identify different transcription factors that are part of the gene network that drives these processes. Finally, we also analyze the formation of pancreatic precursor cells in the early *Xenopus* endoderm with the aim to define experimental protocols that allow pancreas formation in vitro from pluripotent, early embryonic ectodermal cells.

D. Selected peer-reviewed publications

Souopgui J, Rust B, Vanhomwegen J, Heasman J, Henningfeld KA, Bellefroid E, Pieler T (2008) The RNA-binding protein XSeb4R: a positive regulator of VegT mRNA stability and translation that is required for germ layer formation in *Xenopus*. *Genes Dev* 22(17), 2347-52.

Arthur PK, Claussen M, Koch S, Tarbashevich K, Jahn O, Pieler T (2009) Participation of *Xenopus* Elr-type proteins in vegetal mRNA localization during oogenesis. *J Biol Chem* 284(30), 19982-92.

Koebnick K, Löber J, Arthur P, Tarbashevich K, Pieler T (2010) Elr-type proteins protect *Xenopus* Dead end mRNA from miR-18-mediated clearance in the soma. *Proc Nat Acad Sci* 107, 16148-16153.

Tarbashevich K, Dzementsei A, Pieler T (2011) A novel function for Kif13B in germ cell migration. *Dev Biol* 349, 169-178.

Zhao, H, Han, D, Dawid, IB*, Pieler, T* and Chen, Y* (2012) hhcx induced conversion of intestinal to ventral pancreatic precursors results in the formation of giant pancreata in *Xenopus* embryos. *PNAS* 109, 8594-8599 *equal contribution

E. Research Support (selection)

DFG Research Unit "Functional dynamics of cell contacts in cellular assemblies and migratory cells", Project title: "Cellular and molecular dynamics of cell-cell contact formation in the context of directional germ cell migration during *Xenopus* embryogenesis", 2011-2014.

DFG Einzelförderung "Primordial germ cell development", 2012-2014.

DFG Research Center Molecular Physiology of the Brain (CMPB): "Molecular mechanisms of neurogenesis with pluripotent embryonic precursor cells from *Xenopus*", 2002-2014.

F. Other activities

Fachgutachter DFG, 2000-2004.

Executive Director of the Göttingen Center for Molecular Biosciences (GZMB), 2003-2009.

Dean for Science, University of Göttingen Medical Center, since 2009.

G. Memberships and awards

1984 Ernst-Reuter-Price

1987 Heisenberg Stipend

1998 EMBO Membership

NAME PÖHLMANN, Stefan	POSITION / TITLE Unit Head and Professor	DEPARTMENT Infection Biology Unit, German Primate Center
--------------------------	---	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Friedrich-Alexander-University Erlangen-Nürnberg	PhD	2000	Virology
University of Pennsylvania, USA	Postdoctoral fellow	2000-2003	Virology
Friedrich-Alexander-University Erlangen-Nürnberg	Habilitation in Virology	2004	Virology

B. Positions / Academic Appointments

2003-2007	Head of junior research group within SFB466: Lymphoproliferation and viral immunodeficiency. Institute for Clinical and Molecular Virology, Friedrich-Alexander-University Erlangen-Nürnberg
2007-2010	Professor for Experimental Virology, Institute of Virology, Hannover Medical School
2010-	Head of the Infection Biology Unit, German Primate Center, Göttingen

C. Major research interests

Host cell interactions of HIV and emerging viruses

D. Selected peer-reviewed publications

Kühl, A., Münch J, Sauter D, Bertram S, Glowacka I, Steffen I, Specht A., Hofmann H, Schneider H, Behrens G, Pöhlmann S. Nat Med. 2010; 16:155-6.

Münch J., Ständker L., Adermann K., Schulz A., Schindler M., Chinnadurai R., Pöhlmann S., Chaipan C., Biet T., Peters T., Meyer B., Wilhelm D., Lu H., Jing W., Jiang S., Forssmann W.G., Kirchhoff F. Cell 2007; 129:263-75.

Hofmann H., Pyrc K., van derHoek L., Geier M., Berkhout B., Pöhlmann S. Proc. Natl. Acad. Sci. U S A. 2005; 102:7988-93.

Turville S.G., Cameron P.U., Handley A., Lin G., Pöhlmann S., Doms R.W., Cunningham A.L. Nat. Immunol. 2002; 3: 975-83.

Pöhlmann S., Soilleux E.J., Baribaud F., Leslie G.J., Morris L.S., Trowsdale J., Lee B., Coleman N., Doms R.W. Proc. Natl. Acad. Sci. USA, 2001; 98: 2670-5.

E. Research Support (selection)

Leibniz Graduate School for Emerging Infectious Diseases (EIDIS)

BMBF consortium „Ecology and pathogenesis of SARS, an archetypical zoonosis“, project 2 „Role of host cell proteases in SARS-coronavirus infection“

F. Other activities

Spokesman of the GGNB doctoral program “Emerging Infectious Diseases”.

G. Memberships and awards

Member of the editorial board of Journal of Virology, Virology and Viruses, academic editor for PLoS One.

AIDS Award of the H.W. & J. Hector foundation, Germany, (jointly with G. Behrens and A. Kühl), 2011

Robert-Koch Post Doc Award, Robert-Koch Foundation, Germany, 2002

NAME	POSITION / TITLE	DEPARTMENT
REHLING, Peter	Director / Professor	Biochemistry II, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Ruhr-University Bochum, Germany	Diploma	1987-93	Biology
Ruhr-University Bochum, Germany	Dr. rer. nat.	1993-96	Biology
Ruhr-University Bochum, Germany	Postdoctoral Fellow	1996-98	Physiological Chem.
HHMI University of California San Diego, USA	Postdoctoral Fellow	1998-00	Cell Biology
University of Freiburg, Germany	Habilitation	2003	Biochem. /Mol.Biol.

B. Positions / Academic Appointments

2000-2004	Junior group leader, Institute of Biochemistry and Molecular Biology, Freiburg
2004-2007	Assistant Professor, Institute of Biochemistry and Molecular Biology, Freiburg
2007-	Director, Department for Biochemistry II, Göttingen
2010-	Associated research group, MPI for Biophysical Chemistry, Göttingen,

C. Major research interests

Our research aims to analyze the biogenesis of mitochondria and how malfunction leads to human disorders. The focus is to understand the molecular mechanisms by which proteins are transported across the mitochondrial membranes and to understand how multi-protein complexes in the inner membrane (TIM complexes; translocation machineries of the inner membrane) mediate this task.

D. Selected peer-reviewed publications

Vukotic M, Oeljeklaus S, Wiese S, Vögtle FN, Meisinger C, Meyer HE, Zieseniss A, Katschinski DM, Jans DC, Jakobs S, Warscheid B, Rehling P*, Deckers M (2012) Rcf1 mediates cytochrome oxidase assembly and respirasome formation, revealing heterogeneity of the enzyme complex. *Cell Metab* 7, 336-347. (*corresponding author).

Schulz C, Lytovchenko O, Melin J, Chacinska A, Guiard B, Neumann P, Ficner R, Jahn O, Schmidt B, Rehling P (2011) Tim50's presequence receptor domain is essential for signal driven transport across the TIM23 complex. *J Cell Biol* 195, 643-656.

Mick DU, Vukotic M, Piechura H, Meyer HE, Warscheid B, Deckers M, Rehling P (2010) Coa3 and Cox14 are essential for negative feedback regulation of COXI translation in mitochondria. *J Cell Biol* 191, 141-154.

Van der Laan M, Meinecke M, Dudek J, Hutu DP, Lind M, Perschil I, Guiard B, Wagner R, Pfanner N, Rehling P (2007) Motor-free mitochondrial presequence translocase drives membrane integration of preproteins. *Nature Cell Biol* 9, 1152-1159.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 7/1/2010-6/30/2014. PI of projects B1.

2. FOR 967 (DFG): "Functions and mechanisms of ribosomal tunnel exit ligands", 01/04/2011-01/03/2014. PI of project 6.

3. RE 1384/5-1 (DFG): "Molekulare Analyse der Funktion von SURF1/Shy 1 in den frühen Schritten der Cytochrom c Oxidase Assemblierung", 08/08/2008-04/30/2013. PI on the project.

4. RE1384/7-1 (DFG): "Mechanisms and components of mitochondrial turn-over and quality control by mito-phagy". 06/14/2011-06/13/2014. PI on the project.

F. Other activities

Spokesperson study section Molecular Cell Biology of the German Society for Cell Biology; Vice Spokesperson SFB860; Editorial Board "Biological Chemistry"; Board of Scientific Directors of the University of Göttingen Medical Center.

G. Memberships and awards

Memberships: German Society for Biochemistry and Molecular Biology (GBM), American Society for Cell Biology, European Neuroscience Institute Göttingen (associated member), Max Planck Institute for Biophysical Chemistry (associated research group).

Awards: Young Investigator Award of the German Society for Biochemistry and Molecular Biology & Scheringstiftung, Habilitation Award of the University of Freiburg.

NAME REICHARDT, Holger	POSITION / TITLE Professor and Vice Director	DEPARTMENT Cellular and Molecular Immunology, UMG
----------------------------------	--	---

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Universities of Tübingen/Germany and Fribourg/Switzerland	Diploma	1989-1993	Biochemistry
University of Heidelberg, Germany	PhD	1994-1997	Molecular Biology
DKFZ Heidelberg, Germany	Junior group leader	1997-2001	Molecular Biology
University of Würzburg	Group leader	2001-2002	Immunology

B. Positions / Academic Appointments

2002-2006	Professor of Molecular Immunology, University of Würzburg, Germany
since 2007	Professor of Experimental Immunology, University of Göttingen, Germany

C. Major research interests

Inflammatory diseases such as Multiple Sclerosis, Asthma and Graft-versus-Host-Disease are major health problems in the western world and often require lifetime medical treatment. Therefore our work aims at better understanding the mechanisms underlying traditional and new treatment regimens for chronic inflammatory diseases with a specific focus on T lymphocytes and myeloid cells. First and foremost our approaches concern the mode of action of glucocorticoids, which are the mainstay of many therapies employed in the clinic. Since such regimens are accompanied by metabolic side effects, we also address the impact of anti-inflammatory therapies on muscle, liver, bone and the gastrointestinal tract.

D. Selected peer-reviewed publications

Tischner, D., Theiss, J., Karabinskaya, A., van den Brandt, J., Reichardt, S.D., Karow, U., Herold, M.J., Lühder, F., Utermöhlen, O., and Reichardt H.M. (2011). Acid Sphingomyelinase is required for protection of effector memory T cells against glucocorticoid-induced cell death. *Journal of Immunology* 187, 4509-4516.

Müller, N., van den Brandt, J., Odoardi, F., Tischner, D., Herath, J., Flügel, A., and Reichardt, H.M. (2008). A CD28 superagonistic antibody elicits 2 functionally distinct waves of T cell activation in rats. *Journal of Clinical Investigation* 118, 1405-1416.

Tischner, D., Weishaupt, A., van den Brandt, J., Müller, N., Beyersdorf, N., Ip, C.W., Toyka, K.V., Hünig, T., Gold, R., Kerkau, T., and Reichardt, H.M. (2006). Polyclonal expansion of regulatory T cells interferes with effector cell migration in a model of Multiple Sclerosis. *Brain* 129, 2635-2647.

E. Research Support (selection)

Deutsche Krebshilfe (108713): 2009-2012

DFG (RE 1631/7-1): 2009-2013

DFG (RE 1631/10-1): 2011-2014

SFB/TRR 34 (Project B13): 2012-2015

F. Other activities (selection)

Spokesperson, Study Program Bachelor and Master Molecular Medicine, UMG

Member, Strategy Committee of the Senate of the Georg-August University of Göttingen

Liaison lecturer, German National Academic Foundation

G. Memberships and awards (selection)

Membership: German Immunological Society

Award: Roche Molecular Biochemicals Research Award for Cell Biology (1999)

NAME	POSITION / TITLE	DEPARTMENT
REISS, Jochen	Akademischer Rat, Apl. Professor	Human Genetics, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University Bayreuth, Germany	Diplom	1985	Biology
University Bayreuth, Germany	Dr. rer.nat.	1987	Genetics

B. Positions / Academic Appointments

1987-1999	Postdoctoral fellow in Human, Genetics, Göttingen, and Habilitation
1999-2002	Sabbatical for MALDI-TOF-MS methods in Medical Physics, Münster

C. Major research interests

We study the genetics and pathophysiology of molybdenum cofactor deficiencies. With the help of animal models we try to develop novel therapies for these otherwise lethal conditions.

E. Selected peer-reviewed publications

Hahnewald, R., Wegner, W., **Reiss, J.** (2009) AAV-mediated gene therapy for metabolic diseases: dosage and reapplication studies in the molybdenum cofactor deficiency model
Genet Vaccines Ther 7:9

Veldman, A., Santamaria-Araujo, J.A., Sollazzo, S., Pitt, J., Gianello, R., Yaplito-Lee, J., Wong, F., Ramsden, C. A., **Reiss, J.**, Cook, I., Fairweather, J., Schwarz, G. (2010) Successful treatment of molybdenum cofactor deficiency type A with cyclic pyranopterin monophosphate
Pediatrics 125:1249-1254

Reiss, J., Hahnewald, R. (2011) Molybdenum cofactor deficiency: Mutations in GPHN, MOCS1, and MOCS2
Hum Mutat 32:10-18 (IF = 7)

Reiss, J., Acquaviva-Bourdain, C., Mulliez-Mention, K., Chekaf-Joriot, S., Holder-Espinasse, M. (2011) A GPHN point mutation leading to molybdenum cofactor deficiency
Clin Genet 80:598-599 (IF = 3)

E. Research Support (selection)

„Molybdän-Cofaktor-Defizienzen beim Menschen“ (DFG Re768/10-1)

„Tiermodell und Therapie für die Molybdän-Cofaktor-Defizienz vom Typ B“
(DFG Re768/13-1)

„AAV-vermittelte Gentherapie erblicher Stoffwechselkrankheiten“ (DFG Re768/12-1)

„Enzymsubstitutionstherapien bei Molybdän-Cofaktor-Defizienz“ (DFG Re768/16-1)

F. Other activities

Habilitationskommission

G. Memberships and awards

2000 Habilitationspreis der Medizinischen Fakultät Göttingen

2005 Novartis-Preis für Therapierrelevante Pharmakologische Forschung

2005 Innovationspreis der Stiftung Familie Klee

2007 Preis der Maximilian-May-Stiftung

2010 Förderpreis der Klüh-Stiftung zur Förderung der Innovation in Wissenschaft und Forschung

NAME SCHILD, Detlev	POSITION / TITLE Prof. Dr. med. Dr. rer. nat.	DEPARTMENT Department of Neurophysiology and Cellular Biophysics , UMG
------------------------	--	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Göttingen	Diploma	1979	Physics
University of Göttingen	M.D	1982	Medicine
University of Göttingen	Dr. rer. nat.	1985	Physics
University of Göttingen	Dr. med.	1987	Medicine
University of Göttingen	Habilitation	1991	Physiology

B. Positions / Academic Appointments

1997	Professor of Physiology and appointed Head of the Dept. Neurophysiology and Cellular Biophysics, Medical School, University of Göttingen
2009	Professor in the Faculty of Physics, University of Göttingen

C. Major research interests

Membrane biophysics (functions and actions of ion channels in neurons and at synapses); Quantitative fluorescence microscopy; Computational Neurosciences; Synaptic transmission (at reciprocal synapses in the olfactory bulb and at intraglomerular synapses); Single molecule detection and dynamics using fluorescence correlation spectroscopy (FSC; diffusion within neurons and neuronal processes).

D. Selected peer-reviewed publications (2007-2012)

Alevra M, Schwartz P, Schild D (2012) Direct measurement of diffusion in olfactory cilia using a modified FRAP approach. PLOS ONE 7(7), e39628.

Breunig E, Kludt E, Czesnik D, Schild D (2011) The styryl dye FM1-43 suppresses odorant responses in a subset of olfactory neurons by blocking cyclic nucleotide-gated (CNG) channels. J BIOL CHEM, 286: 28041-8.

Junek S, Kludt E, Wolf F, Schild D (2010) Olfactory coding with patterns of response latencies. Neuron 67, 872–884

Breunig E, Manzini I, Piscitelli F, Gutermann B, Di Marzo V, Schild D, and Czesnik D (2010) The endocannabinoid 2-AG controls odor sensitivity in larvae of *Xenopus laevis*. J. Neurosci. 30, 8965-8973

Hassenklöver T, Schwartz P, Schild D, Manzini I (2009) Purinergic signaling regulates cell proliferation of olfactory epithelium progenitors. Stem Cells, 27, 2022-2031

Chen T-W, Lin B-J, Schild D (2009) Odor coding by modules of coherent mitral/tufted cells in the vertebrate olfactory bulb. PNAS 106, 2401-2406

Czesnik D, Schild D, Kuduz J, Manzini I (2007) Endocannabinoid actions in the olfactory epithelium. PNAS, 104, 2967-2972

E. Research Support (selection)

2002-current DFG Research Center Molecular Physiology of the Brain (FZT 103)

2006-2011 Cluster of Excellence Microscopy at the Nanometer Range

F. Other activities

Spokesperson: Cluster of Excellence 171; Scientific Advisory Board: GOSPEL network to the European Commission; Member of UoG Foundation Council; Editorial Board: J Exp. Physiology; Reviewer of: numerous journals, German State ministries, DFG, Research Councils UK, National Science Foundation/USA; Teaching of Students (Medical, Physics and Neurosciences)

G. Memberships and awards

1984 ESF Fellow, University of Sussex, Dept. Experimental Psychology

2008 Cozzarelli Prize of the National Academy of Sciences USA

NAME SCHÖN, Michael P.	POSITION / TITLE Professor and Chairman	DEPARTMENT Dermatology, Venereology and Allergology, UMG
----------------------------------	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Ulm	State Board Exam	1992	Medicine
University of Ulm	Dr. med.	1992	Molecular Oncology
Harvard Medical School		1994-1997	Immunology
University of Düsseldorf	Habilitation	2000	Dermatology

B. Positions / Academic Appointments

2000-2003	Ass. Professor of Dermatology, University of Magdeburg
2003-2008	Professor of Dermatology and Experimental Biomedicine, Rudolf Virchow Center, DFG Research Center for Experimental Biomedicine, University of Würzburg
2008-present	Professor of Dermatology, University Medical Center Göttingen

C. Major research interests

Mechanisms of leukocyte recruitment to inflamed tissues.
 Pathogenesis and selective therapies of inflammatory disorders.
 Mechanisms of tumor progression and metastasis.
 Overcoming chemoresistance of malignant tumors.

D. Selected peer-reviewed publications

Zibert JR, Wallbrecht K, Schön M, Mir LL, Jacobsen GK, Trochon-Joseph V, Bouquet C, Villadsen LS, Cadossi R, Skov L, Schön MP (2011) Halting angiogenesis by non-viral somatic gene therapy alleviates psoriasis and murine psoriasiform skin lesions. *J Clin Invest* 121, 410-421
 Erpenbeck L, Schön MP (2010) Deadly allies: the fatal interplay between platelets and metastasizing tumor cells. *Blood* 115, 3427-3436
 Schön M, Wienrich BG, Kneitz S, Schlickum S, Sennefelder H, Amschler K, Vöhringer V, Hüttinger-Kirchhof N, Stiewe T, Ziegelbauer K, Schön MP (2008) KINK-1, a novel small-molecule inhibitor of IKK β , and the susceptibility of melanoma cells to antitumoral treatment. *J Natl Cancer Inst* 100, 862-875

E. Research Support (2007-2012)

European Union , Deutsche Krebshilfe, Deutsche Forschungsgemeinschaft, Wilhelm Sander Stiftung, Volkswagen-Stiftung

F. Other activities

Vice-dean for academic affairs, 3/2012-8/2012 acting dean Faculty of Medicine
 Spokesperson "Verein der Freunde und Förderer der Medizinischen Fakultät der Georgia Augusta"
 Editor-in-Chief "Journal der Deutschen Dermatologischen Gesellschaft"

G. Memberships and selected awards

Memberships Deutsche Krebsgesellschaft, Arbeitsgemeinschaft Dermatologische Onkologie, Deutsche Dermatologische Gesellschaft, Deutsche Gesellschaft für Immunologie, Society for Investigative Dermatology

Awards Oscar-Gans-Preis (1997), Dr.-Günther-Wille-Forschungspreis (2000), Gottron-Just-Wissenschaftspreis (2000), Novartis-Preis für Therapierelevante Pharmakologische Forschung (2003), Wissenschaftspreis für Klinische Forschung der GlaxoSmith Kline Stiftung (2003), G.-K.-Steigleder-Preis (2003), DFG-Forschungsprofessur (2003-2008), Galenus-von-Pergamon-Preis (2003), Georges-Köhler-Preis (2003), Forschungspreis der Berliner Stiftung für Dermatologie (2004), Akademiepreis der Berlin-Brandenburgischen Akademie der Wissenschaften (2005), Paul-Langerhans-Preis (2006), Deutscher Hautkrebspreis (2006), Siegfried Stettendorf Preis (2007), Molecular Targeted Therapy of Cancer Award (2008), Janssen-Preis Dermatologie und Immunologie (2011)

NAME SCHU, Peter	POSITION / TITLE Senior scientist and Prof.	DEPARTMENT Biochemistry II, UMG
---------------------	--	------------------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University Freiburg i. Brsg., Germany, Faculty for Chemistry and Pharmacy	Diploma Chemistry	1979-1986	Biochemistry
University Freiburg i. Brsg., Germany, Faculty for Chemistry and Pharmacy	Dissertation Dr. rer. nat.	1986-1991	Biochemistry, Cell Biology
'Howard-Hughes-Medical-Institut Cellular and Molecular Medicine', UCSD, USA	Postdoctoral Fellow	1991-1993	Biochemistry, Cell Biology
Faculty for Medicine, University Göttingen	Habilitation	2001	Biochemistry, Cell Biology

B. Positions / Academic Appointments

1994	Independent Researcher Biochemistry-II Georg-August-University Göttingen
2008	Professor ad personam awarded by the Faculty of Medicine, University Göttingen
2007-2008	Professor for Molecular Biology (Representation), University Göttingen
since 2009	Group Leader funded by the German Research Foundation (DFG)

C. Major research interests

Vesicular Protein Sorting in the Secretory and Endocytic pathways – Molecular mechanisms and functions in Cellular Communication & Development. Vesicular protein transport in the secretory and endocytic pathway is facilitated by cytoplasmic proteins called adaptors, which bind specifically to membranes and to the cytoplasmic tails of cargo proteins. They recruit a number of cytoplasmic proteins to the site of transport vesicle formation, which facilitate and regulate membrane vesiculation. We are using mouse 'knock-out' models to study the tissue specific functions of vesicle proteins as well as their molecular mechanisms.

D. Selected peer-reviewed publications (2004-2012)

Glyvuk N, Tsytsyura Y, Geumann C, D'Hooge R, Hüve J, Kratzke M, Baltes J, Boening D, Klingauf J. and Schu P. (2010), AP-1/ σ 1B-adaptin mediates endosomal synaptic vesicle recycling, learning and memory. *EMBO J.* 29 (8), 1318-1330

Zizioli, D., Forlanelli, E., Guarienti, M., Nicoli, S., Fanzani, A., Bresciani, R., Borsani, G., Preti, A., Cotelli, F. and Schu, P. (2010), Characterization of the AP-1 μ 1A and μ 1B adaptins in zebrafish (*Danio rerio*). *Dev. Dyn.* 239, 2404-2412

Medigeshi, G.R., Krikunova, M., Karthikeyan, R., Wenzel, D., Klingauf, J. and Schu, P. (2008), AP-1 membrane-cytoplasm recycling regulated by μ 1A. *Traffic* 9, 121-132

Camus, G., Segura-Morales, C., Molle, D., Lopez-Vergès, S., Begon-Pescia, C., Schu, P., Benarous, R., Bertrand, E., Berlioz-Torrent, C. and Basyuk, E. (2007), The clathrin adaptor complex AP-1 binds HIV-1 and MLV Gag and facilitates their budding. *Mol. Biol. Cell.* 18, 3193-3203

Kyttälä, A., Yliannala, K., Schu, P., Jalanko, A. and Luzio, J.P. (2005), AP-1 and AP-3 facilitate lysosomal targeting of Batten disease protein CLN3 via its dileucine motif. *J. Biol. Chem.* 280, 10277-10283

Saint-Pol, A., Yélamos, B., Mills, I., Dugast, M., Tenza, D., Schu, P., Antony, C., McMahon, H.T., Lamaze, C. and Johannes, L. (2004), Clathrin adaptor epsinR is required for retrograde sorting on early endosomal membranes. *Dev. Cell* 4, 525-538

E. Research Support (selection)

Funding is provided by the DFG

F. Memberships and awards

Postdoctoral Stipend by the DFG for research at the 'Howard-Hughes-Medical-Institut for Cellular and Molecular Medicine', UCSD, USA, 1991-1993

NAME	POSITION / TITLE	DEPARTMENT
SCHWAPPACH, Blanche	Professor	Biochemistry I, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Konstanz, Germany	Diploma	1992	Biology
University of Hamburg, Germany	Dr. rer. nat.	1996	Biology
University of California, San Francisco, USA	Postdoctoral Fellow	1997-00	Cell Biology
University of Heidelberg, Germany	Habilitation	2004	Mol. Biol./Cell Biol.

B. Positions / Academic Appointments

2000-2007	Independent research group leader at the Zentrum für Molekulare Biologie der Universität Heidelberg (ZMBH), University of Heidelberg, Germany
2007-2010	Wellcome Trust Senior Research Fellow and Senior Lecturer, Faculty of Life Sciences, University of Manchester, UK
2010-	Professor of Biochemistry, director of Department Biochemistry I, Universitätsmedizin Göttingen, University of Göttingen, Germany

C. Major research interests

The group works on different aspects of membrane protein biogenesis and trafficking under (patho)physiological conditions in genetically tractable model organisms such as yeast or mouse. In transgenic mouse models we focus on the analysis of native membrane proteins in brain, heart and liver.

D. Selected peer-reviewed publications (2007 – 2012)

Braun NA, Morgan B, Dick TP, and Schwappach B (2010) The yeast CLC protein counteracts vesicular acidification during iron starvation. *J Cell Sci* 123, 2342-2350.

Leznicki P, Clancy A, Schwappach B and High S (2010) Bat3 promotes the membrane integration of tail-anchored proteins. *J Cell Sci* 123, 2170-2178.

Jonikas MC, Collins SR, Denic V, Oh E, Quan EM, Schmid V, Weibezahn J, Schwappach B, Walter P, Weissman JS, Schuldiner M (2009) Comprehensive characterization of genes required for protein folding in the endoplasmic reticulum. *Science* 323, 1693-1697.

Schuldiner M, Metz J, Schmid V, Denic V, Rakwalska M, Schmitt HD, Schwappach B* and Weissman JS* (2008, *co-corresponding) The GET Complex Mediates Insertion of Tail-Anchored Proteins into the ER. *Cell* 134, 635-645.

Michelsen K, Schmid V, Metz J, Heusser K, Liebel U, Schwede T, Spang A, and Schwappach B (2007) Novel cargo-binding site in the beta and delta subunits of coatamer. *J Cell Biol* 179, 209-217.

E. Research Support (selection)

1. Senior Research Fellowship in Basic Biomedical Science (Wellcome Trust; 081671/Z06/Z): "Sorting of ion transport proteins – assembly-dependent cell surface transport of multimeric membrane proteins and ion homeostasis in the early secretory pathway", 01/08/2007-31/07/2012. PI

2. FOR 1086/2 (DFG; SCHW 823/2-1): TP 9 „Mechanismen der Regulation des intrazellulären Transports von TASK-1 und TASK-3“ der Forschergruppe „K2P-Kanäle vom Molekül zur Physiologie“, 01/08/2011-31/07/2014. PI (project TP9).

3. SFB1002 (DFG): TPB01 „ATP-empfindliche Kalium(KATP)kanäle als kardiale Energiestoffwechsel-Sensoren“ des Sonderforschungsbereiches „Modulatorische Einheiten bei Herzinsuffizienz“

F. Other activities

Wellcome Trust Expert Review Group "Cellular and Molecular Neuroscience", Scientific Advisory Board of C.H.S.-Stiftung zur Förderung Biomedizinischer Forschung, Vertrauensdozentin der Studienstiftung des deutschen Volkes

G. Memberships and awards

Karl-Freudenberg Award of the Heidelberg Academy of Sciences (2004), EMBO Young Investigator (2003)

NAME	POSITION / TITLE	DEPARTMENT
SIMONS, Mikael	W3-Heisenberg Professorship	Neurology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Medical School Heidelberg, Germany	MD	1991-1997	Medicine
Residency in Neurology, Tübingen, Germany	“Facharzt”	1997-2004	Clinical Neurology
University of Tübingen, Germany	Habilitation	2005	Neurology

B. Positions / Academic Appointments

2004-2008	Junior Group leader, Biochemistry, Göttingen
2007-present	Consulting Neurologist, Department of Neurology, Göttingen
2009-present	Research Group leader with an ERC Starting Grant, MPI for Experimental Medicine, Göttingen
2009-present	W3-Heisenberg-Professorship, Department of Neurology, Göttingen

C. Major research interests

Our main goal is to come up with new approaches of how to promote remyelination in demyelinating diseases such as MS. To realize this goal we need to understand how myelin is formed during normal development. Our aim is to elucidate the cellular machinery that is required for the formation of this membrane. Myelin membrane trafficking and assembly is under extensive control by signal transduction cascades.

D. Selected peer-reviewed publications

Aggarwal S, Yurlova L, Snaidero N, Reetz C, Frey S, Zimmermann J, Pähler G, Janshoff A, Friedrichs J, Müller DJ, Goebel C, Simons M (2011) A Size Barrier Limits Protein Diffusion at the Cell Surface to Generate Lipid-Rich Myelin-Membrane Sheets. *Dev Cell* 21(3), 445-56.

Hsu C, Morohashi Y, Yoshimura S-I, Manrique-Hoyos N, Jung SY, Lauterbach M, Bakhti M, Grønborg G, Möbius W, Rhee JS, Barr FA, Simons M (2010) Regulation of exosome secretion by Rab35 and its GTPase-activating proteins TBC1D10A-C. *J Cell Biol* 189(2), 223-32.

Trajkovic K, Hsu C, Chiantia S, Rajendran L, Wenzel D, Wieland F, Schwille P, Brügger B, Simons M (2008) Ceramide triggers budding of exosome vesicles into multivesicular endosomes. *Science* 319(5867), 1244-7.

Fitzner D, Schneider A, Kippert A, Möbius W, Willig K-I, Hell SW, Bunt G, Gaus K, Simons M (2006) Myelin basic protein-dependent plasma membrane reorganization in the formation of myelin. *EMBO J* 25(21), 5037-48.

Trajkovic K, Dhaunchak AS, Goncalves J, Wenzel D, Bunt G, Nave K-A, Simons M (2006) Neuron to glia signalling triggers myelin membrane exocytosis from endosomal storage sites. *J Cell Biol* 172, 937-48.

E. Research Support (selection)

1. ERC Starting Grant, EU: “Myelin Biogenesis“, 01/2009 - 12/2012.
2. W3 Heisenberg Program, 02/2009-02/2012.
3. DFG, FOR1756: “Oligodendrocyte and axon interaction“, 01/2011-12/2013.
4. DFG, Transregio 43: “Myelin and Autoimmunity“, 01/2012- 12/2015.
5. Tschira Stiftung: “Microbes in the biology of multiple sclerosis“, 03/2012 - 2/2015. PI (Consortium partner).
6. BMBF E-Rare: “Cell biology and biochemistry of Charcot Marie Tooth disease“, 03/2012- 2/2015. PI (Consortium partner).

F. Other activities

Consulting Neurologist, Head of the Multiple Sclerosis Outpatient Clinic.

G. Memberships and awards

Awards: Bundesweiter Dissertationspreis anlässlich des 6. deutschen Ärztekongresses, 1995; Ruprechts-Karls-Preis der Universität Heidelberg, 1998; Heinz-Maier-Leibniz Preis, 2001; Akademiepreis der Heidelberger Akademie der Wissenschaften, 2002; Attempto-Preis für Neurobiologie der Universität Tübingen, 2003; EMBO, Young Investigator Award, 2008.

NAME SOPPER, Sieghart	POSITION / TITLE Research group leader	DEPARTMENT Virology
--------------------------	---	------------------------

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Graz, Austria	Mag. rer. nat.	1989	Biology
University of Würzburg, Germany	Dr. rer. nat.	1995	Virology
University of Würzburg, Germany	Postdoctoral Fellow	1995-2001	Infection Immunology
University of Würzburg, Germany	Habilitation	2002	Neurovirology

B. Positions / Academic Appointments

2001-2004	Research asspciate, Virology, University of Würzburg, Germany
2004-2010	Assistant professor of Virology, University of Göttingen
2004-2010	Group leader Infection Immunology, German Primate Center, Göttingen
2010-	Head Tumorimmunology Lab and Flow Cytometry Unit, University Innsbruck, Austria

C. Major research interests

Investigating the role of the immune system, especially intrinsic antiviral factors in the pathogenesis of AIDS. Understanding the heterogeneity of tumor cells and infiltrating immune cells in ovarian cancer.

D. Selected peer-reviewed publications (2007-2012)

B. Mußil, U. Sauermaun, D. Motzkuş, C. Stahl-Hennig, S. Sopper (2011): Increased APOBEC expression is associated with prolonged survival in SIV-infected macaques. *Retrovirology* 8:77

W. Ochieng, U. Sauermaun, R. Schulte, YS Suh, YC Sung, G. Hunsmann, C. Stahl-Hennig and S. Sopper (2009). Susceptibility to simian immunodeficiency virus (SIV) ex vivo predicts outcome of a prime-boost vaccine after SIVmac239 challenge. *JAIDS*, 52:162-169

M.C. Marcondes, S. Sopper, U. Sauermaun, T.H Burdo, D. Watry, M Zandonatti, H.S. Fox (2008). CD4 deficits and disease course acceleration can be driven by a collapse of the CD8 response in SIV-infected Rhesus Macaques. *AIDS*, 22:1441-1452

G. Arendt, T. Nolting, C. Frisch, I. Husstedt, N. Gregor, E. Koutsilieri, M. Maschke, A. Angerer, M. Obermann, E. Neuen-Jacob, O. Adams, S. Loeffert, P. Riederer, V. ter Meulen and S. Sopper (2007). Intrathecal viral replication and cerebral deficits in different stages of HIV-infection. *J NeuroVirool.* 13:225-232

E. Research Support (2007-2012) selected

BMBF 01KI 0211: The role of the dopaminergic sytem in the progression of HIV-dementia, German Competence Network HIV/AIDS, 2002-2007. Spokesperson: N. Brockmeyer, Bochum

EU FP6 LSHP-CT-2006-037416: Generation of a coronavirus-based multigene AIDS vaccine and evaluation in a preclinical SIV model, 2006-2008. Spokesperson: B. Ludewig, St. Gallen, Switzerland

EU FP6 LSHP-CT-2006-037611: European vaccines and microbicides enterprise, 2006-2011. Spokesperson: R. Shattock, London, GB

GfAIDS Forschung: Characterization of plasmacytoid dendritic cells in the SIV macaque model, 2009-2013

F. Other activities

Competence network HIV/AIDS, Member of the scientific board; Consultant for clinical studies, GSK.

NAME	POSITION / TITLE	DEPARTMENT
STÜHMER, Walter	Director / Prof.	Neuronal Signals, MPI Exp. Medicine

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Camogli, Italy	PhD	1978 - 80	Biophysics
Department of Physiology and Biophysics in Seattle, USA	Postdoctoral fellow	1980 - 83	Physiology and Biophysics

B. Positions / Academic Appointments

1983 - 1992	Group leader at the Max Planck Institute for Biophysical Chemistry in Göttingen with Dr. E. Neher
1992 - present	Director of the Department Molecular Biology of Neuronal Signals at the Max Planck Institute for Experimental Medicine in Göttingen

C. Major research interests

The principal aim of the department "Molecular Biology of Neuronal Signals" is the study of signaling within cells and between cells. To this end, molecular biology, genetics and electrophysiology are used to elucidate structure-function relationships of membrane-bound proteins, especially ion channels and receptors. Specific tools such as antibodies and toxins are developed and used to interfere with signaling pathways relevant for cell cycle control, ion selectivity and the secretion of cells in culture and in primary cells.

D. Selected peer-reviewed publications (2007-2012)

Martin S, Lino de Oliveira C, Mello de Queiroz F, Pardo LA, **Stühmer W**, and Del Bel E (2008) Eag1 potassium channel immunohistochemistry in the CNS of adult rat and selected regions of human brain. *Neuroscience* 155, 833-844

Downie BR, Sánchez A, Knötgen H, Contreras-Jurado C, Gymnopoulos M, Weber C, **Stühmer W**, and Pardo LA (2008) Eag1 expression interferes with hypoxia homeostasis and induces angiogenesis in tumors. *J. Biol. Chem.* 283, 36234-36240

Alves F, Dullin C, Napp J, Missbach-Guentner J, Jannasch K, Mathejczyk J, Pardo LA, **Stühmer W**, and Tietze L-F (2009) Concept of a selective tumour therapy and its evaluation by near-infrared fluorescence imaging and flat-panel volume computed tomography in mice. *Eur. J. Radiology* 70, 286-293

Gonçalves, J.T. and **Stühmer, W.** (2010) Calmodulin interaction with hEAG1 visualized by FRET microscopy. *PLoS ONE* 5(5): e10873

Pardo, L.A., Gómez-Varela, D., Major, F., Sansuk, K., Leurs, R., Downie, B.R., Tietze, L.F. and **Stühmer, W.** (2012) Approaches targeting $K_v10.1$ open a novel window for cancer diagnosis and therapy. *Current Med. Chem.* 19, 675-682.

E. Research Support (selection)

Marie Curie Initial Training Network/ PITN-GA-2011-289648: „Ion transport proteins in control of cancer cell behaviour“, 2011-2015.

BMBF/01GQ0813: „Verbundprojekt Bernstein Fokus Neurotechnologie – Neurobionische Kontrollsysteme“, 2010-2015.

BMBF/01GQ1005E: „Verbundprojekt Bernstein Zentrum für Computational Neuroscience – Kooperative Dynamiken und Adaptivität in neuronalen Systemen“, 2010-2015.

F. Other activities

Managing Director of the MPI of Experimental Medicine

Chairperson of Board of Directors of the European Neuroscience Institute in Göttingen

Vice-Chairperson of the Board of Directors of XLAB e.V.

G. Memberships and awards

Martin Lectureship at the University of Colorado (2008)

Cátedra Santiago Ramón y Cajal (2007)

The International Amedeo and Frances Herlitzka Prize for Physiology (1998)

Humboldt-Mutis-Prize (1991)

NAME	POSITION / TITLE	DEPARTMENT
THUMM, Michael	Group leader / Professor	Biochemistry II, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Stuttgart, Germany	Diploma	1984	Chemistry
University of Stuttgart, Germany	Dr. rer. nat.	1987	Biochemistry
University of Stuttgart, Germany	Habilitation	1997	Biochemistry

B. Positions / Academic Appointments

1998-2003	Privatdozent, University of Stuttgart, Germany
2003-	Professor, University of Göttingen, Germany

C. Major research interests

Our group is interested in the molecular mechanism and physiological relevance of macro- and microautophagy in *Saccharomyces cerevisiae*. Research topics include the origin of autophagosomal membranes and the mechanism of autophagosome biogenesis. We are further interested in selective variants of autophagy such as piecemeal microautophagy of the nucleus and mitophagy.

Another open question is how autophagic bodies are broken down within the vacuole, the lytic compartment of yeast.

D. Selected peer-reviewed publications

Krick R, Busse RA, Scacioc A, Stephan M, Janshoff A, Thumm M*, Kühnel K.* Structural and functional characterization of the two phosphoinositide binding sites of PROPPINs, a β -propeller protein family. 2012 Proc Natl Acad Sci U S A, 109: E2042–9. * corresponding author

Krick R, Bremer S, Welter E, Schlotterhose P, Muehe Y, Eskelinen E-L, Thumm M (2010) Cdc48/p97 and Shp1/p47 regulate autophagosome biogenesis in concert with ubiquitin-like Atg8. J Cell Biol 190(6), 965-973.

Krick R, Muehe Y, Prick T, Bremer S, Schlotterhose P, Eskelinen E-L, Millen J, Goldfarb DS, Thumm M (2008) Piecemeal microautophagy of the nucleus requires the core macroautophagy genes. Mol Biol Cell (19), 4492-4505.

Krick R, Henke S, Tolstrup J, Thumm M (2008) Dissecting the localization and function of Atg18, Atg21 and Ygr223c. Autophagy 4(7), 896-905.

R. Krick, Y. Muehe, T. Prick, S. Bremer, P. Schlotterhose, E.-L. Eskelinen, J. Millen, D. S. Goldfarb and M. Thumm, Piecemeal microautophagy of the nucleus requires the core macroautophagy genes. 2008 Mol. Biol. Cell (19) 4492-4505.

E. Research Support (selection)

1. SFB 860 (DFG): "Structure and Function of WD-40 repeat containing Atg-Proteins" 1/7/2010- 30/6/2014. Co-PI (with K. Kühnel).

2. Th752/6-1 (DFG): "Mechanisms and components of mitochondrial turnover and quality control by mitophagy", 7/2011-7/2014.

F. Other activities

Member of the Forschungskommission.

G. Memberships and awards

Memberships: Editor "AUTOPHAGY".

Awards: Promotionsstipendium of the Robert Bosch Foundation.

NAME	POSITION / TITLE	DEPARTMENT
URLAUB, Henning	Group leader / Professor	Bioanalytical MS, MPI Biophysical Chemistry

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Free University Berlin, Germany	Diploma	1992	Biochemistry
Max Delbrück Center for Molecular Medicine, Berlin, Germany	Dr. rer. nat.	1993-1996	Protein Chemistry
University of Marburg, Germany	Postdoctoral fellow	1997 - 2000	RNA Biochemistry
MPI for Biophysical Chemistry Göttingen	Postdoctoral fellow	2000-2004	Mass Spectrometry

B. Positions / Academic Appointments

2004-2010	Group leader, Bioanalytical Mass Spectrometry, MPI for Biophysical Chemistry
2010	Professor, University Göttingen, Group leader Bioanalytical Mass Spectrometry and Bioanalytics, Department of Clinical Chemistry, UMG, Göttingen

C. Major research interests

Developing analytical strategies that use state-of-the-art mass spectrometry to elucidate quantitative changes of proteins and their post-translational modifications. Projects include: (i) identification of proteins associated with nucleosomes, (ii) elucidation of novel Importin alpha/beta-dependent cargos in nuclear-cytoplasmic transport; (iii) unraveling quantitative changes of the phosphoproteome of spliceosomal complexes in human and yeast cells, (iv) analysis of the B cell receptor dependent phosphoproteome and its malignant deregulation, and (v) analysis of glycoproteome of cell surfaces.

D. Selected peer-reviewed publications

Schmitzová J, Rasche N, Dybkov O, Kramer K, Fabrizio P, **Urlaub H**, Lührmann R, Pena V (2012) Crystal structure of Cwc2 reveals a novel architecture of a multipartite RNA-binding protein. *EMBO J.* 31, 2222-34.

Nikolov M, Stuetzer A, Mosch K, Krasauskas A, Soeroes S, Stark H, Urlaub H*, Fischle W (2011) Chromatin affinity purification and quantitative mass spectrometry defining the interactome of histone modification patterns. *Mol Cell Proteomics*, 10, M110.005371, *co-corresponding author.

Oellerich T, Bremes V, Neumann K, Bohnenberger H, Dittmann K, Hsiao H-H, Engelke M, Schnyder T, Batista F, Urlaub H*, Wienands J (2011) The B cell antigen receptor signal through a preformed transducer module of SLP65 and CIN85. *EMBO J.*, 30, 3620-3634, *co-corresponding author.

Kramer K, Hummel P, Hsiao HH, Luo X, Wahl M, Urlaub H (2011) Mass-spectrometric analysis of proteins cross-linked to 4-thio-uracil- and 5-bromo-uracil-substituted RNA. *Int J Mass Spec* 304, 184-194.

Schmidt C, Lenz C, Grote M, Lührmann R, Urlaub H. (2010) Determination of protein stoichiometry within protein complexes using absolute quantification and multiple reaction monitoring. *Anal Chem* 82, 2784-96.

E. Research Support (selection)

SFB 860, INST 186/859-1: "Integrative structural biology of dynamic macromolecular assemblies", 01/07/2010-30/06/2014, PI on one project.

SFB 889, INST 186/907-1: "Cellular mechanisms of sensory processing", 01/01/2011-12/31/2014. Co-PI (with R. Jahn) on one project.

FOR 1680 UR 225/1-1: "Unravelling the procaryotic immune system", 01/01/2012-12/31/2014, PI on one project.

F. Other activities

2011, co-organizer of EMBO practical course "Protein-protein and protein nucleic acid crosslinking and mass spectrometry"; 2009/2011 co-organizer of "Proteomic Forum", Berlin; 2007-2012 co-organizer of the 1st to 5th EU Summer School "Proteomic Basics"; 2004-2006 co-organizer of the 1st to 3rd BMBF Summer School "Proteomic Basics".

G. Memberships and awards

Since 2011, Member of the Editorial Board of Molecular Cellular Proteomics; since 2007 member of the editorial board of Journal of Proteomics; 2007-2011 member of the executive board of the German Society of Proteome Research; 2006-2009 member of the scientific advisory board for Proteomics of Qiagen Company; since 2006 independent referee for the Landesstiftung Baden-Württemberg; Member of American Society for Mass Spectrometry (ASMS), German Society for Mass Spectrometry (DGMS), German Society for Proteome Research (DGPF), Society for Biochemistry and Molecular Biology (GBM), Göttingen Proteomic Forum (GPF).

NAME	POSITION / TITLE	DEPARTMENT
WALTER, Lutz	Department head and Professor	Primate Genetics, DPZ

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
University of Göttingen, Germany	Diploma	1992	Biology
University of Göttingen, Germany	Dr. rer. nat.	1994	Immunogenetics
University of Göttingen, Germany	Postdoctoral fellow	1994-1999	Genomics, Immunogenetics
University of Göttingen, Germany	Habilitation	2005	Immunology, Immunogenetics

B. Positions / Academic Appointments

1994-1999	Postdoctoral position, University of Göttingen, Germany
1999-2004	Group leader, University of Göttingen, Germany
2004-	Head of Department of Primate Genetics, German Primate Center, Leibniz Institute for Primate Research, Göttingen, Germany

C. Major research interests

Research in my group involves the biology of Natural Killer (NK) cells, their receptors and cognate ligands. In particular, we are interested in the genetic diversity of NK receptors and ligands and the role of this variability in infections with immunodeficiency virus in a non-human primate model of AIDS.

Further, we are studying changes of non-coding RNAs upon viral infections and we are exploring targeted delivery of RNA interference-inducing molecules for therapeutic use in viral infections and models of cancer.

D. Selected peer-reviewed publications

Rosner C, Kruse PK, Hermes M, Otto N, **Walter L** (2011) Rhesus macaque inhibitory and activating KIR3D interact with Mamu-A-encoded ligands. *J Immunol* 186, 2156-2163.

Brameier M, Herwig A, Renhardt R, **Walter L**, Gruber J (2011) Human box C/D snoRNAs with miRNA like functions: expanding the range of regulatory RNAs. *Nucleic Acids Res* 39, 657-686.

Abi-Rached L, Kuhl H, Roos C, ten Hallers B, Zhu B, Carbone L, de Jong PJ, Mootnick AR, Knaust F, Reinhardt R, Parham P, **Walter L** (2010) A Small, Variable and Irregular Killer cell Immunoglobulin-like Receptor (KIR) Locus Accompanies the Absence of MHC-C and MHC-G in Gibbons. *J Immunol* 184, 1379-1391.

Averdam A, Petersen B, Rosner C, Neff J, Roos C, Eberle M, Aujard F, Münch C, Schempp W, Carrington M, Shiina T, Inoko H, Knaust F, Coggill P, Sehra H, Beck S, Abi-Rached L, Reinhardt R, **Walter L** (2009) A novel system of polymorphic and diverse NK cell receptors in primates. *PLoS Genet* 5(10), e1000688.

Averdam A, Kuhl H, Sontag M, Becker T, Hughes AL, Reinhardt R, **Walter L** (2007) Genomics and diversity of the common marmoset monkey natural killer complex (NKC). *J Immunol* 178, 7151-7161.

E. Research Support (selection)

1. National Genome Research Network (BMBF): “RNomics of viral infections”, 01/09/2008-31/08/2013. PI (Consortium partner).

2. Industrial cooperation: “Analysis of antibody dependent cellular cytotoxicity by Natural killer cells”, 15/11/2009-14/11/2010.

NAME	POSITION / TITLE	DEPARTMENT
WIENANDS, Jürgen	Director / Professor	Cell. Mol. Immunology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Köln, Germany	Diploma	1989	Biology
Albert-Ludwigs-University of Freiburg	Dr. rer. nat.	1992	Immunology, Biochemistry
Preclinical Research Institute Sandoz, Basel, Switzerland	Postdoctoral Fellow	1992-1994	Immunology, Signal Transduction, Target Identification
Max Planck Institute for Immunobiology, University of Freiburg, Germany	Postdoctoral Fellow	1994-1996	Immunology, Biochemistry
University of Freiburg, Germany	Habilitation	2001	Immunology and Biochemistry

B. Positions / Academic Appointments

1996-2001	Group leader, Institute of Biology III, University of Freiburg, Germany
2001-2004	Full Professor for Biochemistry and Immunology, Institute of Biochemistry and Molecular Immunology, University of Bielefeld, Germany
2004-	Director, Full Professor for Immunology, Department of Cellular and Molecular Immunology, University of Göttingen, Germany

C. Major research interests

The development and function of B lymphocytes depends on signals emanating from their clonotypic antigen receptor (BCR). We are studying the molecular details of BCR signal transduction in health and disease using genetic, biochemical and microscopic imaging techniques. Following the identification of the central BCR effector protein SLP65 (for: SH2 domain-containing leukocyte adaptor of 65 kDa) we are now investigating the dynamic assembly of multimeric signaling platforms in BCR-stimulated B cells, and how these signalosomes shuttle between the cytosol and the plasma membrane during the generation of second messengers such as Ca²⁺. Several of the identified signaling proteins appeared to play a major role in human immunodeficiencies. Another focus is given to the elucidation of signaling differences that distinguish BCR activation in newly generated B cells from that in antigen-experienced (or memory) B cells. Upon antigen recall, memory B cells respond with increased efficiency, which provides the fundamental basis for vaccinations. However, memory B cell responses are only poorly understood. Collectively, we are aiming at a better understanding of primary and secondary antibody responses and how the underlying signal networks are disturbed in human diseases.

D. Selected peer-reviewed publications

Oellerich T, Bremes V, Neumann K, Bohnenberger H, Dittmann K, Hsiao H-H, Engelke M, Schnyder T, Batista FD, Urlaub H, Wienands J (2011) The B-cell antigen receptor signals through a preformed transducer module of SLP65 and CIN85. *EMBO J* 30, 3620-3634.

Engels N, König LM, Heemann C, Lutz J, Tsubata T, Griep S, Schrader V, Wienands J (2009) Recruitment of the cytoplasmic adaptor Grb2 to surface IgG and IgE provides antigen receptor-intrinsic costimulation to class-switched B cells. *Nat Immunol* 183, 1018-1025.

Stork B, Neumann K, Goldbeck I, Alers S, Kähne T, Naumann M, Engelke M, Wienands J (2007) Subcellular localization of Grb2 by the adaptor protein Dok-3 restricts the intensity of Ca²⁺ signaling in B cells. *EMBO J* 26, 1140-1149.

E. Research Support (selection)

1. SFB 860 (DFG): "Integrative Strukturbiologie dynamischer makromolekularer Komplexe", 07/01/2010-06/30/2014. Co-PI with C. Griesinger.

2. Niedersächsisch-israelisches Gemeinschaftsvorhaben (Nieders. Vorab – Niedersächsisches Ministerium für Wissenschaft und Kultur): "Molecular Mechanisms of Lymphocyte Activation: Positive and negative regulation of Tec-family kinases by SLP- and Dok-family adaptor proteins", 12/01/2008-06/30/2012. Co-PI with H. Urlaub and D. Yablonski.

F. Other activities

Elected Full Member of the Advisory Board of the German Government, Central Commission on Biosafety (ZKBS); Member of the Advisory Board of the German Society of Immunology (DGfI); Coordinator of the PhD School Current Concepts in Immunology of the Academia for Immunology (DGfI); Chairman of the Study Group Biology of B Lymphocytes (DGfI); Elected Member of the Professional Council 201 of the DFG.

G. Memberships and awards

Memberships: The Henry Kunkel Society, Signal Transduction Society, German Society of Immunology, Göttingen Academy of Sciences

NAME WINGENDER, Edgar	POSITION / TITLE Director/Prof. Dr.	DEPARTMENT Dept. of Bioinformatics, UMG
---------------------------------	--	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Technical University of Braunschweig	Dipl.-Chem.	1977	Chemistry
Technical University of Braunschweig	Dr. rer. nat	1980	Molecular Biology
University of Marburg	Postdoctoral Researcher	1981-1986	Molecular Biology
Department of Bioinformatics, UMG	Professor of Bioinformatics	since 2002	

B. Positions / Academic Appointments

1986-2002	Staff scientist, project leader and head of the Research Group Bioinformatics at the German Research Center for Biotechnology, Braunschweig
2001-2010	CSO & President of BIOBASE GmbH, Wolfenbüttel
2002-	Professor of Bioinformatics; Director of the Department of Bioinformatics, University Medical Center Göttingen
2010-	CEO of geneXplain GmbH, Wolfenbüttel

C. Major research interests

Our research is focused on the computational re-construction and analysis of regulatory biological networks. We develop methods for the identification of regulatory elements in genomic sequences and identify potential regulator-target relations for the construction of transcriptional networks. Integration with post-transcriptional regulation by microRNAs results in regulatory networks which are comparatively analyzed together with signaling and metabolic networks. In connection with the Heart Research Center, we apply our methodology to the differentiation of stem cells to cardiomyocytes.

D. Selected peer-reviewed publications (2007-2012)

Wang, J., Haubrock, M., Cao, K.-M., Hua, X., Zhang, C.-Y., **Wingender, E.** and Li, J.: Regulatory coordination of clustered microRNAs based on microRNA-transcription factor regulatory network. *BMC Syst. Biol.* 5, 199 (2011).

Ante, M., **Wingender, E.** and Fuchs, M.: Integration of gene expression data with prior knowledge for network analysis and validation. *BMC Res. Notes* 4, 520 (2011).

Stegmaier, P., Voss, N., Meier, T., Kel, A., **Wingender, E.** and Borlak, J.: Advanced computational biology methods identify molecular switches for malignancy in an EGF mouse model of liver cancer. *PLoS ONE* 6 (3), e17738 (2011).

Demir, E., et al.: The BioPAX community standard for pathway data sharing. *Nat. Biotechnol.* 28, 935-942 (2010).

Potapov, A. P., Goemann, B. and **Wingender, E.**: The pairwise disconnectivity index as a new metric for the topological analysis of regulatory networks. *BMC Bioinformatics* 9, 227 (2008).

Wingender, E.: TRANSFAC project as an example of framework technology that supports the analysis of genomic regulation. *Brief. Bioinformatics* 9, 326-332 (2008).

Dönitz, J., Goemann, B., Lizé, M., Michael, H., Sasse, N., **Wingender, E.** and Potapov, A. P.: EndoNet: An information resource about regulatory networks of cell-to-cell communication. *Nucleic Acids Res.* 36, D689-D694 (2008).

E. Research Support (selection) (2007-2012)

EU / HEALTH 2007-2.1.1-6, 202272: LipidomicNet; coordinator: Prof. G. Schmitz, Univ. Regensburg (2007-2012); ETB-2007-37: GlobCell (2008-2010); EFRE: Molecular representation of disease states in biological regulatory networks (2009-2010); EU / LSH-2005-1.2.5-4, : Net2Drug; coordinator: Dr. A Kel, BIOBASE GmbH, Wolfenbüttel (2006-2010)

F. Other activities

Editor-in-Chief of *In Silico Biology* (until 2010); reviewing for scientific journals (*Bioinformatics*, *BMC Bioinformatics*, *BMC Systems Biology*, *Briefings in Bioinformatics*, *Genome Biology*, *In Silico Biology*, *J. Molecular Biology*, *Nature Methods*, *Nucleic Acids Research*, *Theoretical Biology & Medical Modelling*); managing 2 further EU grants and 2 BMBF grants at geneXplain GmbH.

G. Memberships and awards

Concurrent professor of Nanjing University; Visiting professor at Tokyo Medical and Dental University

NAME	POSITION / TITLE	DEPARTMENT
WINTERMEYER, Wolfgang	Group leader / Prof.	Molecular Biology, MPI Biophysical Chem.

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
LMU München	Diploma	1962-1969	Chemistry
LMU München	Dr. rer. nat.	1972	
LMU München	Habilitation	1979	

B. Positions / Academic Appointments

1982-1987	Heisenberg-Fellow
1985	Associate Professor, LMU München
1987-2009	Full Professor for Molecular Biology, University of Witten/Herdecke
1991-2007	Dean Faculty of Life Sciences, University of Witten/Herdecke
2004-2005	CEO, University of Witten/Herdecke
2009	Professor emeritus and Max-Planck-Fellow,

C. Major research interests

Research interests of the group are focused on various aspects of protein synthesis in bacteria. We are studying the functions of GTPases on the ribosome, in particular of elongation factor G (EF-G). One major question is how the energy of GTP hydrolysis and release of inorganic phosphate is coupled to conformational rearrangements of the ribosome.

In another project we are examining the function of the signal recognition particle (SRP) in the biosynthesis of proteins of the bacterial plasma membrane. SRP binds to ribosomes synthesizing membrane proteins and, by an interaction with the SRP receptor, targets those ribosomes to the translocation pore in the membrane. We are studying the interactions between these components and the role of GTP hydrolysis by SRP and the SRP receptor in the targeting process. We use methods of biochemistry and molecular biology as well as biophysical methods, such as fluorescence spectroscopy (FRET), rapid kinetics (stopped flow, quench flow), isothermal calorimetry, single-molecule fluorescence and others.

D. Selected peer-reviewed publications (2007 – 2012)

Kuhlenkoetter S., **Wintermeyer W.**, Rodnina M.V (2011) Different substrate-dependent transition states in the active site of the ribosome. *Nature* 476, 351-354.

Fischer N., Konevega A.L. **Wintermeyer W.**, Rodnina M.V., Stark H. (2010) Ribosome dynamics and tRNA movement by time-resolved electron cryomicroscopy. *Nature* 466, 329-333.

Savelsbergh A., Rodnina M.V., **Wintermeyer W.** (2009) Distinct functions of elongation factor G in ribosome recycling and translocation. *RNA* 15, 772-780

Buskiewicz I.A., Jöckel J., Rodnina M.V., **Wintermeyer W.** (2009) Conformation of the signal recognition particle in ribosomal targeting complexes. *RNA* 15, 44-54

Bornemann T., Jöckel J., Rodnina M.V., **Wintermeyer W.** (2008) Signal sequence-independent membrane targeting of ribosomes containing short nascent peptides within the exit tunnel. *Nat. Struct. Mol. Biol.* 15, 494-499

E. Research Support (2007-2012)

The two main research projects of the group were supported by the DFG over many years until 2009.

NAME	POSITION / TITLE	DEPARTMENT
WODARZ, Andreas	Director / Professor	Anatomy and Cell Biology, UMG

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Köln, Germany	Diploma	1990	Biology
University of Köln, Germany	Dr. rer. nat.	1993	Developmental Biology
Stanford University, USA	Postdoctoral Fellow	1994-97	Cell- and Developmental Biology
University of Düsseldorf	Habilitation	2001	Cell- and Developmental Biology

B. Positions / Academic Appointments

1997-2001	Junior group leader, University of Düsseldorf, Germany
2001-2004	Assistant Professor, University of Düsseldorf, Germany
2004-2010	Associate (since 2009 Full) Professor of Stem Cell Biology, DFG Research Center Molecular Physiology of the Brain, University of Göttingen, Germany
2010-	Director, Department of Anatomy and Cell Biology, UMG

C. Major research interests

The research activities in our lab focus on different aspects of the asymmetric division of neural stem cells and the molecular control of cell polarity. The model organism of our research is mainly the fruit fly *Drosophila melanogaster*. Asymmetric cell division is a fundamental mechanism for the generation of cell diversity in complex organisms. At the same time, asymmetric cell division is essential for the balance between stem cells and differentiating cells in an organism. Disturbances of this balance can cause severe diseases, including cancer and neurodevelopmental disorders. Asymmetric cell division is intricately linked to the control of apical-basal cell polarity. The establishment and maintenance of apical-basal cell polarity is connected to the regulation of planar cell polarity (PCP) and cell adhesion, especially in epithelial tissues. In this context, we investigate the function of the evolutionarily conserved Wnt signal transduction pathway in the regulation of cell adhesion and PCP.

D. Selected peer-reviewed publications

Gailite I, Egger-Adam D, Wodarz A (2012) The phosphoinositide-associated protein Rush hour regulates endosomal trafficking in *Drosophila*. *Mol Biol Cell* 23, 433-447.

Morawe T, Honemann-Capito M, von Stein W, Wodarz A (2011) Loss of the extraproteasomal ubiquitin receptor Rings lost impairs ring canal growth in *Drosophila* oogenesis. *J Cell Biol* 193, 71-80.

Krahn MP, Bückers J, Kastrup L, Wodarz A (2010) Formation of a Bazooka-Stardust complex is essential for plasma membrane polarity in epithelia. *J Cell Biol* 190, 751-760.

Krahn MP, Klopfenstein D, Fischer N, Wodarz A (2010) Membrane targeting of Bazooka/PAR-3 is mediated by direct binding to phosphoinositide lipids. *Curr Biol* 20, 636-642.

Krahn MP, Egger-Adam D, Wodarz A (2009) PP2A antagonizes phosphorylation of Bazooka by PAR-1 to control apical-basal polarity in dividing embryonic neuroblasts. *Dev Cell* 16, 901-908.

E. Research Support (selection)

1. Research Center 103 (DFG): "Molecular Physiology of the Brain", 10/15/2004-09/30/2017.

2. FOR 942 (DFG) "Wnt-associated signaling pathways in development and tumor progression", 01/01/2008-03/31/2014.

3. FOR 1756 (DFG) "Functional dynamics of cell contacts in cellular assemblies and migratory cells", 08/01/2011-07/31/2014.

F. Other activities

Steering Board Member and coordinator of the research field B1 „From neurogenesis to synaptogenesis“ of the DFG Research Center for Molecular Physiology of the Brain (CMPB) at the Georg-August-University Göttingen, Executive Board Member Göttingen Center for Molecular Biosciences (GZMB), Member of the commission for structural development and finances of the University of Göttingen Medical Center.

G. Memberships and awards

Memberships: Gesellschaft für Entwicklungsbiologie, Deutsche Gesellschaft für Zellbiologie, Gesellschaft für Genetik, Gesellschaft für Stammzellbiologie.

Awards: Boehringer Ingelheim Fonds predoctoral fellowship (1990-1993), DFG postdoctoral research fellowship (1994-1996).

NAME ZEISBERG, Michael	POSITION / TITLE Professor of Experimental Nephrology	DEPARTMENT Nephrology & Rheumatology, UMG
----------------------------------	--	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
Georg-August University, Göttingen	State Board Exam	1998	Medicine
Georg-August University, Göttingen	Dr. med.	2001	Medicine/ Nephrology
Harvard Medical School, Boston	Post-doctoral Fellow	2001-2006	Matrix Biology

B. Positions / Academic Appointments

2006-2010	Assistant Professor of Medicine, Harvard Medical School, Boston
2010- ongoing	Professor of Experimental Nephrology, Georg-August University, Göttingen

C. Major research interests

We are trying to understand the molecular mechanisms which underlie fibroblast activation in tissue fibrosis and cancer progression. In particular, we are studying how aberrant promoter methylation impacts gene transcription and alternate splicing, how this drives disease progression and how this knowledge can be utilized to develop novel therapeutic and diagnostic strategies.

D. Selected peer-reviewed publications (2007-2012)

Sugimoto H, Lebleu VS, Bosukonda D, Keck P, Taduri G, Bechtel W, Okada H, Carlson W, Bey P, Rusckowski M, Tampe B, Tampe D, Kanasaki K, Zeisberg M, Kalluri R. 2012. Activin-like kinase 3 is important for kidney regeneration and reversal of fibrosis. *Nat Med.* 2012 ;18(3):396-404.

Bechtel W, McGoohan S, Zeisberg EM, Muller GA, Kalbacher H, Salant DJ, Muller CA, Kalluri R, Zeisberg M. Methylation determines fibroblast activation and fibrogenesis in the kidney. *Nat Med.* 2010; 16(5):544-50.

Zeisberg M, Yang C, Martino M, Duncan M, Rieder F, Tanjore H, Kalluri R. Fibroblasts derive from hepatocytes in liver fibrosis via epithelial to mesenchymal transition. *J Biol Chem.* 2007; 10;282(32):23337-47.

E. Research Support (2007-2012) selected

2009-2010 NIH, R01 DK081576, Epigenetic Modifications in Renal Fibrogenesis

2010-2012 EKFS, Else-Kröner-Memorial Stipendium: Regulation of BMP7 activity in the kidney

2011-2013 GRIP, Mechanisms of Hypermethylation in Progression of Chronic Kidney Disease

2012-2014 DFG, Molecular Determinants of Chronic Progressive Kidney Disease

F. Other activities

Section Editor, Fibrogenesis and Tissue Repair; Editorial Board Member, Journal of the American Society of Nephrology; Editorial Board Member, Kidney International; Editorial Board Member, Frontiers in Genetics, Epigenomics

G. Memberships and awards

Franz-Volhard Award of the Deutsche Gesellschaft für Nephrology (2012), Bernd-Tersteegen Award of the Verband Deutscher Nierenzentren (2011), Genzyme Renal Innovations Program (GRIP) Award (2010), NIH Mentored Clinical Scientist Development Award (2006), Carl W. Gottschalk Award of the American Society of Nephrology (2006), Else-Köner-Fresenius Memorial Award of the Else-Kröner-Fresenius Foundation (2005), Award of the GlaxoSmithKline Foundation in Basic Medical Research (2004), Georg-Haas Doctoral Thesis Award of the Deutsche Dialysegemeinschaft niedergelassener Ärzte e.V.(2001)

NAME ZIMMERMANN, Wolfram-H.	POSITION / TITLE Director and Professor	DEPARTMENT Pharmacology, UMG
--	---	--

A. Professional Education / Postdoctoral Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Hamburg, Germany	State Board Exam	1998	Medicine
University of Hamburg, Germany	Dr. med.	2000	Pharmacology
University of Hamburg, Germany	Post-Graduate Study	2000	Molecular Biology
University of Erlangen-Nuremberg, Germany	Resident	1999-2003	Clinical Pharmacology
University of Hamburg, Germany	Board Certification	2006	Pharmacology and Toxicology
University of Hamburg, Germany	Habilitation	2007	Pharmacology and Toxicology

B. Positions / Academic Appointments

2004-2008	W1-Professor (Juniorprofessor) for Cardiac Tissue Engineering, University of Hamburg
2008-	W3-Professor and Director, Department of Pharmacology, University of Göttingen

C. Major research interests

Stem cell-based organogenesis (tissue engineering) for drug development, safety-pharmacology, and organ repair with a particular focus on heart, skeletal muscle, brain, and liver.

D. Selected peer-reviewed publications

Soong PL, Tiburcy M, Zimmermann WH (2012) Cardiac Differentiation of Human Embryonic Stem Cells and their Assembly into Engineered Heart Muscle. *Curr Protoc Cell Biol* 55:23.8.1-23.8.21.

Tiburcy M, Didié M, Boy O, Christalla P, Doeker S, Naito H, Karikkineth BC, El-Armouche A, Grimm M, Nose M, Eschenhagen T, Zieseniss A, Katschinski D, Hamdani N, Linke WA, Yin X, Mayr M, Zimmermann WH (2011) Terminal Differentiation, Advanced Organotypic Maturation, and Modeling of Hypertrophic Growth in Engineered Heart Tissue. *Circ Res.* 109:1105-1114.

Yildirim Y, Naito H, Didié M, Chandapillai Karrikineth B, Biermann D, Eschenhagen T, Zimmermann WH (2007) Development of a Biological Ventricular Assist Device (BioVAD): Preliminary Data from a Small Animal Model. *Circulation* 116:116-23.

E. Research Support (selection)

NHLBI Progenitor Cell Biology Consortium Ancillary Project (PIs: C. Murry, G. Keller, W.-H. Zimmermann)

German Center for Cardiovascular Research

SFB 1002 C03: Myocardial micromilieu control by fibroblasts

DFG KFO 155 ZI 708/10-1: Biomechanical load as regulator of myocardial differentiation of embryonic mesodermal progenitors

BMBF DLR FKZ 01 GN 0957: Autologous bioartificial myocardium for heart repair

DFG FOR 604 ZI 708/8-1: Identification of biophysical and paracrine factors governing electrical integration of cardiomyocytes into a functional syncytium

F. Other activities

Coordinator, German Center for Cardiovascular Research - Göttingen Partner site and Heart Failure Program; SFB 1002, Executive Board; Founding member of Heart Research Center Göttingen

G. Memberships and awards (selection)

Memberships: German Society of Pharmacology and Toxicology, German Society of Cardiology (Chair, Committee for Experimental Cardiology and Member of executive board 2009-2011), American Heart Association, International Society for Stem Cell Research

Awards: Oskar-Lapp Award (2001), Fraenkel-Award (2005), Dr. Martini Award (2007)

Anlage 45: Absolventinnen und Absolventen im Promotionsstudiengang „Molecular Medicine“

Absolventinnen und Absolventen, Bewertungen sowie Prüfende seit 2009:

				DISPUTATION					
lfd. Nr.	Bewertung Dissertation	Bewertung Disputation	Datum Disputation	1. Prüfer	2. Prüfer	3. Prüfer	4. Prüfer	5. Prüfer	6. Prüfer
1	magna cum laude	magna cum laude	28.10.2009	Prof. Bayer	Prof. Hanisch	Prof. Ehrenreich	Prof. Alves	Prof. Simons	A. Fischer
2	magna cum laude	cum laude	23.03.2010	Prof. Bayer	Prof. Ehrenreich	Prof. Hanisch	Prof. Simons	A. Fischer	(verhindert)
3	magna cum laude	magna cum laude	21.06.2010	Prof. Hanisch	Prof. Nave	Prof. Wienands	Prof. Hahn	Prof. Bayer	Prof. Kube
4	magna cum laude	magna cum laude	08.11.2010	Prof. Bähr	Prof. Bayer	PD Dr. Simons	Prof. Groß	Wouters	A. Fischer
5	magna cum laude	magna cum laude	24.01.2011	PD Dr. Simons	Prof. Hanisch	Prof. Wienands	Prof. Ehrenreich	Prof. Doenecke	Prof. Stadelmann
6	magna cum laude	magna cum laude	07.02.2011	Prof. Bayer	PD Dr. Simons	Prof. Wouters	Prof. Ehrenreich	Prof. Doenecke	Prof. Johnsen
7	magna cum laude	magna cum laude	20.05.2011	Prof. J.B. Schulz	Prof. R. Schuh	Prof. Hunsmann	Prof. Simons	Dr. Marquardt	PD Dechent
8	magna cum laude	magna cum laude	08.06.2011	Prof. Wienands	Prof. Pieler	Prof. Kube	Prof. Walther	Prof. Brück	Prof. Stühmer
9	magna cum laude	magna cum laude	04.07.2011	Prof. Hanisch	Prof. Hahn	Prof. Wodarz	Prof. Wienands	Prof. Kube	Prof. Johnsen
10	magna cum laude	magna cum laude	18.08.2011	Prof. Stühmer	PD Dr. Walter	Dr. Klopfenstein	Prof. Oppermann	Prof. Hahn	Prof. Dobbstein
11	magna cum laude	magna cum laude	22.09.2011	PD Dr. Kube	Prof. Hahn	Prof. Oppermann	Prof. Doenecke	Prof. Wodarz	Prof. Bastians
12	magna cum laude	magna cum laude	02.11.2011	Prof. Hunsmann	Prof. Bayer	Prof. Groß	Prof. Pöhlmann	Prof. Walther	Prof. Hanisch
13	magna cum laude	magna cum laude	09.11.2011	Dr. Borchers	Prof. Hahn	Prof. Wodarz	Prof. Bucher	Prof. Doenecke	Prof. Johnsen
14	magna cum laude	magna cum laude	15.12.2011	PD Dr. Alves	Prof. Hahn	Prof. Oppermann	Prof. Schön	Prof. Jarry	Prof. Katschinski
15	cum laude	magna cum laude	27.03.2012	Prof. Hahn	Prof. Kube	Prof. Brockmüller	Prof. Burfeind	Prof. Alves	Prof. Brembeck
16	magna cum laude	magna cum laude	02.04.2012	Prof. Schulz	Prof. Wimmer	Dr. Marquardt	Prof. Simons	Prof. Outeiro	PD Dr. Dechent
17	magna cum laude	summa cum laude	11.04.2012	Prof. Wienands	Prof. Johnsen	Prof. Hanisch	Prof. Wodarz	Prof. Kube	Prof. Groß
18	magna cum laude	magna cum laude	27.04.2012	Prof. Kube	Prof. Johnsen	Prof. Bickeböller	Prof. Alves	Prof. Burfeind	Prof. Hanisch
19	magna cum laude	summa cum laude	21.06.2012	Prof. Wienands	Dr. Klopfenstein	Prof. Urlaub	Prof. Wodarz	Prof. Hanisch	Prof. Walter
20	cum laude	magna cum laude	22.06.2012	PD Dr. Sopper	Prof. Reichardt	Prof. Kube	Prof. Pöhlmann	Prof. Oppermann	Prof. Hahn

				DISPUTATION					
lfd. Nr.	Bewertung Dissertation	Bewertung Disputation	Datum Disputation	1. Prüfer	2. Prüfer	3. Prüfer	4. Prüfer	5. Prüfer	6. Prüfer
21	cum laude	cum laude	04.07.2012	Prof. Bayer	PD Simons	Prof. Hanisch	Dr. S. Kügler	Prof. A. Fischer	Prof. R. Heinrich
22	cum laude	magna cum laude	14.08.2012	Prof. Schön	Prof. Brockmöller	Prof. Kramer	Prof. Kube	Prof. Bastians	Prof. Doenecke
23	magna cum laude	magna cum laude	24.09.2012	Prof. Schön	Prof. Wienands	Prof. Dobbstein	Prof. Hahn	Prof. Hanisch	Prof. Hoyer-Fender
24	magna cum laude	magna cum laude	17.10.2012	PD Pukrop	Prof. Hanisch	Prof. Kube	Prof. Wodarz	Prof. Burfeind	Prof. Reichardt
25	magna cum laude	magna cum laude	23.10.2012	Prof. Simons	Prof. Rizzoli	Dr. Stegmüller	Prof. Nave	Prof. Dobbstein	Prof. Ehrenreich
26	summa cum laude	summa cum laude	24.10.2012	Prof. Zimmermann	Prof. Wodarz	Prof. Luther	Prof. Katschinski	Prof. Lutz	Prof. Nikolaev
27	magna cum laude	magna cum laude	25.10.2012	Prof. Brockmöller	Prof. Burckhardt	Prof. von Ahsen	Prof. Jarry	Prof. Kügler	Prof. Nikolaev
28	cum laude	magna cum laude	30.10.2012	Prof. Kube	Prof. Oppermann	Prof. Simons	Prof. Hanisch	Prof. Lutz	Prof. Brembeck
29	magna cum laude	magna cum laude	13.12.2012	Prof. Kessel	Prof. Dobbstein	Prof. Mansouri	Prof. Wodarz	Prof. Pieler	Dr. Fischle
30	magna cum laude	summa cum laude	24.01.2013	Prof. Wienands	Prof. Mansouri	Prof. Paulus	Prof. Hoyer-Fender	Prof. Alves	Prof. Dressel
31	summa cum laude	summa cum laude	29.01.2013	Prof. Brembeck	Prof. Dobbstein	Prof. Hanisch	Prof. Hoyer-Fender	Prof. Hahn	Prof. Wimmer
32	magna cum laude	magna cum laude	29.01.2013	Prof. Burckhardt	Prof. Brockmöller	Prof. Groß	Prof. Wodarz	Prof. M. Müller	Dr. Klopfenstein
34	magna cum laude	magna cum laude	12.03.2013	Prof. Brück	Prof. Wienands	Prof. Simons	Prof. Hanisch	Prof. Ehrenreich	Prof. Fuchs
33	magna cum laude	magna cum laude	13.03.2013	Prof. Brück	Prof. Simons	Prof. Fuchs	Prof. Gärtner	Prof. Stadelmann	Dr. Odoardi

Absolventen

Promotionsstudiengang *Molecular Medicine*

Name	Prenome	Supervisor	Date of Disputation	Dissertation online :
Christensen	Ditte	Prof. Bayer	28.10.2009	http://webdoc.sub.gwdg.de/diss/2010/christensen/
Marcello	Andrea	Prof. Bayer	23.03.2010	http://webdoc.sub.gwdg.de/diss/2010/marcello/
Scheffel	Jörg	Prof. Hanisch	21.06.2010	http://webdoc.sub.gwdg.de/diss/2010/scheffel/
Gawinecka	Joanna	Prof. Bähr	08.11.2010	http://webdoc.sub.gwdg.de/diss/2011/gawinecka/
Schnaars	Mareike	PD Dr. Simons	24.01.2011	http://webdoc.sub.gwdg.de/diss/2011/schnaars/
Strauss	Katrin	Prof. Bayer	07.02.2011	http://webdoc.sub.gwdg.de/diss/2011/strauss/
Butzlaff	Malte	Prof. Schulz	20.05.2011	http://webdoc.sub.gwdg.de/diss/2011/butzlaff/
Lösing	Marion	Prof. Wienands	08.06.2011	http://webdoc.sub.gwdg.de/diss/2011/loesing/
Chuang	Eugenia	Prof. Hanisch	04.07.2011	Veröffentlichungsfrist verlängert
Hartung	Franziska	Prof. Stühmer	18.08.2011	http://webdoc.sub.gwdg.de/diss/2011/hartung/
Schrader	Alexandra	PD Dr. Kube	22.09.2011	http://webdoc.sub.gwdg.de/diss/2012/schrader/
Schmädicke	Ann-Christin	Prof. Hunsmann	02.11.2011	http://webdoc.sub.gwdg.de/diss/2011/schmaedicke/
Podleschny	Martina	Dr. Borchers	09.11.2011	http://webdoc.sub.gwdg.de/diss/2012/podleschny/
Mathejczyk	Julia	PD Dr. Alves	15.12.2011	http://webdoc.sub.gwdg.de/diss/2012/mathejczyk/
Marklein	Diana	Prof. Hahn	27.03.2012	http://webdoc.sub.gwdg.de/diss/2012/marklein/
Voßfeldt	Hannes	Prof. Schulz	02.04.2012	
König	Lars	Prof. Wienands	11.04.2012	Veröffentlichungsfrist verlängert
Heemann	Christina	Prof. Kube	27.04.2012	
Bremes	Vanessa	Prof. Wienands	21.06.2012	http://webdoc.sub.gwdg.de/diss/2012/bremes/
Javed	Aneela	PD Dr. Sopper	22.06.2012	http://webdoc.sub.gwdg.de/diss/2012/javed/
Hillmann	Antje	Prof. Bayer	04.07.2012	http://webdoc.sub.gwdg.de/diss/2012/hillmann/

QUESTIONNAIRE :
PhD Molecular Medicine, Alumni

Name:	<i>Ditte Christensen</i>
PhD supervisor:	<i>Prof. Thomas Bayer</i>
Date of Disputation:	<i>28.10.2009</i>
Professions and Tasks after graduation:	<i>Scientist at Lundbeck pharma, Denmark</i>
Publication, direct outcome of PhD project:	<p><i>Christensen, D.Z., Kraus, S.L., Flohr, A., Cotel, M.C., Wirths, O., Bayer, T.A., 2008. Transient intraneuronal Aβ rather than extracellular plaque pathology correlates with neuron loss in the frontal cortex of APP/PS1KI mice. Acta Neuropathol. 116, 647-655.</i></p> <p><i>Christensen, D.Z., Bayer, T.A., Wirths, O., 2009. Formic acid is essential for immunohistochemical detection of aggregated intraneuronal Aβ peptides in mouse models of Alzheimer's disease. Brain Research 1301, 116-125.</i></p> <p><i>Christensen, D.Z., Bayer, T.A., Wirths, O., 2010a. Intracellular A[βeta] triggers neuron loss in the cholinergic system of the APP/PS1KI mouse model of Alzheimer's disease. Neurobiol. Aging 31, 1153-1163.</i></p> <p><i>Christensen, D.Z., Schneider-Axmann, T., Lucassen, P.J., Bayer, T.A., Wirths, O., 2010b. Accumulation of intraneuronal Aβ correlates with ApoE4 genotype. Acta Neuropathol. 119, 555-566.</i></p> <p><i>Cotel, M.C., Jawhar, S., Christensen, D.Z., Bayer, T.A., Wirths, O., 2012. Environmental enrichment fails to rescue working memory deficits, neuron loss, and neurogenesis in APP/PS1KI mice. Neurobiol. Aging 33, 96-107.</i></p>

Name:	<i>Andrea Marcello</i>
PhD supervisor:	<i>Prof. Thomas Bayer</i>
Date of Disputation:	<i>21.03.2010</i>
Professions and Tasks after graduation:	<i>MITO Technology (Italian IP firm), then Philips: Licensing manager: Design of exploitation plans for start-up companies, Patent portfolios analysis and management, Patent and technology financial and qualitative valuation, Research results' patentability evaluation, Patent licensing in all industry areas (marketing, negotiation and drafting of contracts)</i>
Publication, direct outcome of PhD project:	<p><i>Andrea Marcello, Oliver Wirths, Thomas Schneider-Axmann, Malin Degerman-Gunnarsson, Lars Lannfelt, Thomas A. Bayer; Reduced levels of IgM autoantibodies against N-truncated pyroglutamate Aβ in plasma of patients with Alzheimer's disease ;Neurobiol. Aging (2009), doi: 10.1016/j.neurobiolaging. 2009.08.011</i></p> <p><i>Andrea Marcello, Oliver Wirths, Thomas Schneider-Axmann, Malin Degerman-Gunnarsson, Lars Lannfelt, Thomas A. Bayer; Circulating immune complexes of Aβ and IgM in plasma of patients with Alzheimer's disease ;J Neural Transm. 2009 Jul;116(7):913-20</i></p>

Name:	Jörg Scheffel
PhD supervisor:	<i>Prof. Uwe-Karsten Hanisch</i>
Date of Disputation:	21.06.2010
Professions and Tasks after graduation:	<i>postdocotrual fellow, National Institute of Arthritis and Musculoskeletal and Skin Diseases Bethesda, USA</i>
Publication, direct outcome of PhD project:	<p><i>Regen T, van Rossum D, Scheffel J, Kastriti ME, Revelo NH, Prinz M, Brück W, Hanisch UK (2011) CD14 and TRIF govern distinct responsiveness and responses in mouse microglial TLR4 challenges by structural variants of LPS. <i>Brain Behav Immun</i> 25: 957-970.</i></p> <p>Scheffel J, Regen T, van Rossum D, Seifert S, Ribes S, Nau R, Parsa R, Harris RA, Boddeke HWGM, Chuang HN, Pukrop T, Wessels JT, Jürgens T, Merkler D, Brück W, Schnaars M, Simons M, Kettenmann H, Hanisch UK (2012) Toll-like receptor activation reveals developmental reorganization and responder subsets of microglia. <i>Glia</i> 60: 1930-1943.</p> <p>Goos M, Lange P, Hanisch UK, Prinz M, Scheffel J, Bergmann R, Ebert S, Nau R (2007) Fibronectin is elevated in the cerebrospinal fluid of patients suffering from bacterial meningitis and enhances inflammation caused by bacterial products in primary mouse microglial cell cultures. <i>J Neurochem</i> 102: 2049-2060.</p> <p>Chuang HN, van Rossum D, Sieger D, Siam L, Klemm F, Bleckmann A, Bayerlová M, Farhat K, Scheffel J, Schulz M, Dehghani F, Stadelmann C, Hanisch UK, Binder C, Pukrop T, Ineffective glial defense fosters malignant invasion into brain (submitted)</p> <p>Dibaj P, Zschüntzsch J, Steffens H, Scheffel J, Göricke B, Kirchhoff F, Hanisch UK, Schomburg ED, Neusch C (2012) Influence of methylene blue on microglia-induced inflammation and motor neuron degeneration in the SOD1G93A model for ALS. <i>PLoS One</i> 7: e43963.</p>

Name:	Joanna Gawinecka
PhD supervisor:	<i>Prof. Dr. M. Bähr (Prof. Dr. Inga Zerr)</i>
Date of Disputation:	08.11.2010
Professions and Tasks after graduation:	<p><i>From July 2012 – PostDoc – Institute of Clinical Chemistry, University Hospital Zurich, Zurich, Switzerland</i></p> <p><i>January 2010 – June 2012 - PostDoc - Neurology Department at the UMG</i></p> <p><i>January – February 2012 – Project Management and Practice Transfer course, Berlin University for Professional Studies, Berlin, Germany</i></p>
Publication, direct outcome of PhD project:	<p>Gawinecka J, Ciesielczyk B, Sanchez-Juan P, Schmitz M, Heinemann U, Zerr I. <i>Desmoplakin as a potential candidate for CSF marker to rule out 14-3-3 false positive rates in sCJD differential diagnosis. Neurodegener Dis 2012; 9(3):139-44</i></p> <p>Gawinecka J, Dieks J, Asif AR, Carimalo J, Heinemann U, Streich JH, Dihazi H, Schulz-Schaeffer W, Zerr I. <i>Codon 129 polymorphism specific CSF proteome pattern in sporadic Creutzfeldt-Jakob disease – the implication of glycolytic enzymes in prion-induced pathology. J Proteome Res 2010 Nov; 9(11):5646-57</i></p>

Name:	Schnaars, Mareike
PhD supervisor:	<i>Prof. M. Simons</i>
Date of Disputation:	24.01.2011
Professions and Tasks after graduation:	<p><i>2012 PostDoc, Research Center Caesar, Bonn</i></p> <p><i>2011 PostDoc, Klinik für Psychiatrie und Psychotherapie, AG Demenzforschung, UMG</i></p>
Publication, direct outcome of PhD project:	<p><i>Scheffel J, Regen T, Van Rossum D, Seifert S, Ribes S, Nau R, Parsa R, Harris RA, Boddeke HW, Chuang HN, Pukrop T, Wessels JT, Jürgens T, Merkler D, Brück W, Schnaars M, Simons M, Kettenmann H, Hanisch UK. Toll-like receptor activation reveals developmental reorganization and unmasks responder subsets of microglia. Glia. 2012 Dec;60(12):1930-43.</i></p> <p><i>Fitzner D, Schnaars M, van Rossum D, Krishnamoorthy G, Dibaj P, Bakhti M, Regen T, Hanisch UK, Simons M. Selective transfer of exosomes from oligodendrocytes to microglia by macropinocytosis. J Cell Sci. 2011 Feb 1;124(Pt 3):447-58.</i></p>

Name:	Strauss, Katrin
PhD supervisor:	<i>Prof. Thomas Bayer</i>
Date of Disputation:	07.02.2011
Professions and Tasks after graduation:	<i>Postdoc bei Evotec, Goettingen</i>
Publication, direct outcome of PhD project:	Strauss K, Goebel C, Runz H, Möbius W, Weiss S, Feussner I, Simons M, Schneider A. Exosome secretion ameliorates lysosomal storage of cholesterol in Niemann-Pick type C disease. J Biol Chem. 2010; 285(34):26279-88.

Name:	Malte Butzlaff
PhD supervisor:	<i>Prof. Dr. Jörg B Schulz</i>
Date of Disputation:	20.05.2011
Professions and Tasks after graduation:	<i>Post doctoral scientist at the department of cellular neurophysiology at the Medical School Hannover (MHH), working on quantitative imaging techniques like fluorescence fluctuation spectroscopy. As a part of this work I also have to take part in teaching physics for medical students.</i>
Publication, direct outcome of PhD project:	Butzlaff, Ng, Karsten, Prüßing, Voßfedt, Lankes, Hamm, Pflanz, Schulz, Rasse, Voigt. Impaired Retrograde Transport Contributes to Tau-induced Toxicity. (Manuscript)

Name:	Marion Lösing
PhD supervisor:	<i>Prof. Jürgen Wienands</i>
Date of Disputation:	08.06.2011
Professions and Tasks after graduation:	<i>Vivo Science, Gronau. Responsible for immunotoxicity studies.</i>
Publication, direct outcome of PhD project:	Lösing et al. "The Dok-3/Grb2 signal module attenuates Lyn-dependent activation of Syk in B cell antigen receptor microclusters" Journal of biological Chemistry, in revision

Name:	Eugenia Han- Ning Chuang
PhD supervisor:	<i>Prof. Uwe-Karsten Hanisch/PD Dr. T. Pukrop</i>
Date of Disputation:	04.07.2011
Professions and Tasks after graduation:	<i>Postdoct in the Hematology and Oncology, University Göttingen. Research project to investigate the mechanism of breast cancer brain metastase.</i>
Publication, direct outcome of PhD project:	<i>Pukrop T., Dehghani F., and Chuang HN. etal., Microglia promote colonization brain tissue by breast cancer cells in a Wnt-dependent way. Glia (2010). Chuang HN., Sieger D., Siam L., Klemm F., Bleckmann A., Schulz M., van Rossum D., Farhat K., Dehghani F., Stadelmann Chr., Hanisch U-K., Binder C., Pukrop T. Glial-danger response via CXCR4 assists carcinoma cell invasion (in preparation).</i>

Name:	<i>Franziska Hartung</i>
PhD supervisor:	<i>Prof. Walter Stühmer</i>
Date of Disputation:	<i>18.08.2011</i>
Professions and Tasks after graduation:	<i>postdoc position in the lab of Prof. Stühmer, MPI Exp. Medicine, Göttingen.</i>
Publication, direct outcome of PhD project:	<i>F.Hartung, W.Stühmer and L.A. Pardo: Tumor cell-selective apoptosis induction through targeting of KV10.1 via bifunctional TRAIL antibody. Molecular Cancer . 2011 Sep 7;10:109.</i>

Name:	<i>Alexandra Schrader</i>
PhD supervisor:	<i>Prof. Dieter Kube</i>
Date of Disputation:	<i>22.09.2011</i>
Professions and Tasks after graduation:	<i>Postdoc position (University Medicine Göttingen then University Medicine Cologne - since June 2012)</i>
Publication, direct outcome of PhD project:	<p><i>High myc activity is an independent negative prognostic factor for diffuse large B cell lymphomas. Schrader A, Bentink S, Spang R, Lenze D, Hummel M, Kuo M, Arrand JR, Murray PG, Trümper L, Kube D, Vockerodt M. Int J Cancer. 2012 Aug 15;131(4):E348-61. doi: 10.1002/ijc.26423. Epub 2011 Oct 23. PMID:21913186[PubMed - in process]</i></p> <p><i>Genomic data integration using guided clustering. Maneck M, Schrader A, Kube D, Spang R. Bioinformatics. 2011 Aug 15;27(16):2231-8. Epub 2011 Jun 17. PMID:21685050[PubMed - indexed for MEDLINE]</i></p> <p><i>Down-regulation of BLIMP1α by the EBV oncogene, LMP-1, disrupts the plasma cell differentiation program and prevents viral replication in B cells: implications for the pathogenesis of EBV-associated B-cell lymphomas. Vrzalikova K, Vockerodt M, Leonard S, Bell A, Wei W, Schrader A, Wright KL, Kube D, Rowe M, Woodman CB, Murray PG. Blood. 2011 Jun 2;117(22):5907-17. Epub 2011 Mar 16. PMID:21411757[PubMed - indexed for MEDLINE]</i></p>

Name:	<i>Ann-Christin Schmädicke</i>
PhD supervisor:	<i>Prof. Gerhard Hunsmann, Dr. Dirk Motzkus</i>
Date of Disputation:	<i>02.11.2011</i>
Professions and Tasks after graduation:	<i>Postdoc at Unit of Infection Models, DPZ, Göttingen</i>
Publication, direct outcome of PhD project:	<i>so far none</i>

Name:	Martina Podleschny
PhD supervisor:	<i>Dr. Annette Borchers</i>
Date of Disputation:	<i>09.11.2011</i>
Professions and Tasks after graduation:	<i>postdoc position</i>
Publication, direct outcome of PhD project:	<i>Peradziryi H, Kaplan NA, Podleschny M, Liu X, Wehner P, Borchers A, Tolwinski NS (2011). PTK7/Otk interacts with Wnts and inhibits canonical Wnt signalling. EMBO J. Jul 19;30(18):3729-40. first author paper Podleschny et al. still in preparation</i>

Name:	Julia Eva Mathejczyk
PhD supervisor:	<i>Prof. Dr. Frauke Alves</i>
Date of Disputation:	<i>15.12.2011</i>
Professions and Tasks after graduation:	<i>Postdoctoral Scientist, Max-Planck-Institut für Experimentelle Medizin, Abteilung Molecular Biology of Neuronal Signals</i>
Publication, direct outcome of PhD project:	<i>Mathejczyk JE, Pauli J, Dullin C, Resch-Genger U, Alves F, Napp J. High sensitivity detection of breast tumors in vivo by use of a pH-sensitive NIRF probe. J Biomed Opt. 2012;7:076028. Behnke T* and Mathejczyk JE* (*equally contributed), Brehm R, Würth C, Ramos Gomes F, Dullin C, Napp J, Alves F, Resch-Genger U, Target-specific nanoparticles containing a broad band emissive NIR dye for the sensitive detection and characterization of tumor development, Biomaterials, accepted Patentanmeldung: Resch-Genger U, Behnke T, Würth C, Hoffmann K, Mathejczyk JE, Alves F, Stühmer W. Breitbandig absorbierende und emittierende NIR-Fluorophore mit großem Stokes shift für den Einsatz als Farbstoffe in core-shell-Nanopartikeln und als optische Sonden und Sensoren für die Biomarkeranalytik und als Komponenten von FRETSystemen. Patentanmeldung 16717P-DE (nicht offengelegt), Oktober 2011</i>

Name:	Diana Marklein
PhD supervisor:	<i>Prof. Dr. Heidi Hahn</i>
Date of Disputation:	<i>27.03.2012</i>
Professions and Tasks after graduation:	<i>Postdoctoral Scientist, Institute of Human Genetics, UMG, Prof. H. Hahn</i>
Publication, direct outcome of PhD project:	<i>publication is still in revision.</i>

Name:	Hannes Voßfeldt
PhD supervisor:	<i>Prof. Jörg B. Schulz</i>
Date of Disputation:	<i>2 April 2012</i>
Professions and Tasks after graduation:	<i>Since May 2012 postdoctoral fellow at working group Neurodegeneration in Drosophila, Department of Neurology, University Hospital, RWTH Aachen University</i>
Publication, direct outcome of PhD project:	Voßfeldt et al. , "Large-scale screen for modifiers of Ataxin-3-derived polyglutamine-induced toxicity in Drosophila", <i>PLoS ONE</i> , in press

Name:	Lars König
PhD supervisor:	<i>Prof. Wienands</i>
Date of Disputation:	<i>11.04.2012</i>
Professions and Tasks after graduation:	<i>I became a business consultant.</i>
Publication, direct outcome of PhD project:	<i>Niklas Engels, Lars M. König, Christina Heemann, Johannes Lutz, Sebastian Griep, Takeshi Tsubata, Verena Schrader and Jürgen Wienands. The Immunglobulin Tail Tyrosine of surface IgG and IgE provides antigen receptor-intrinsic costimulation to class-switched B cells. Nature Immunology 10, 1018-1025 (2009).</i>

Name:	Christina Heemann
PhD supervisor:	<i>Prof. Dieter Kube</i>
Date of Disputation:	<i>27.04.2012</i>
Professions and Tasks after graduation:	<i>Baby Break will come back in May 2013 to teh Kube lab as Postdoc working within the eBIO Myc Sys consortium</i>
Publication, direct outcome of PhD project:	Heemann C , Kreuz M, Stoller I, Schoof N, von Bonin F, Ziepert M, Löffler M, Jung W, Pfreundschuh M, Trümper L, Kube D. Circulating levels of TNF-receptor II are prognostic for patients with peripheral T-cell Non-Hodgkin lymphoma. <i>Clin Cancer Res.</i> 2012 18(13):3637-3647. Epub 2012 May 9.

Name:	Vanessa Bremes
PhD supervisor:	<i>Prof. Jürgen Wienands</i>
Date of Disputation:	<i>21.06.2012</i>
Professions and Tasks after graduation:	<i>guest scientist in Sweden, now seeking a postdoctoral position in Germany</i>
Publication, direct outcome of PhD project:	<i>Oellerich T, Bremes V, Neumann K, Bohnenberger H, Dittmann K, Hsiao HH, Engelke M, Schnyder T, Batista FD, Urlaub H, Wienands J. (2011) The B cell antigen receptor signals through a preformed transducer module of SLP65 and CIN85. EMBO J. 30:3620-3634.</i>

Name:	<i>Aneela Javed</i>
PhD supervisor:	<i>PD Dr Sieghart Sopper</i>
Date of Disputation:	<i>22.06.2012</i>
Professions and Tasks after graduation:	<i>I have returned back to my country (pakistan) after completion of my PhD. I am applying (and most probably will get) for a position in university so that I can continue my research work as well as stay in touch with latest advancement in my field.</i>
Publication, direct outcome of PhD project:	<i>In process</i>

Name:	<i>Antje Hillmann</i>
PhD supervisor:	<i>Prof. Thomas Bayer</i>
Date of Disputation:	<i>04.07.2012</i>
Professions and Tasks after graduation:	<i>postdoc USA</i>
Publication, direct outcome of PhD project:	<i>Hillmann, A., Hahn, S., Schilling, S., Hoffmann, T., Demuth, H.-U., Bulic, B., Schneider-Axmann, T., Bayer, T.A., Weggen, S., Wirths, O., 2011. No improvement after chronic ibuprofen treatment in the 5XFAD mouse model of Alzheimer's disease. Neurobiol. Aging 33, 833.e839–833.e850.</i>

Anlage 46 - Bescheide vorangegangener Akkreditierungen



**36. Sitzung der Ständigen Akkreditierungskommission
(SAK) am 19. und 20. Mai 2008**

Protokollauszug

Bachelorstudiengang „Biologie“ (B.Sc.)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis, sieht jedoch hierdurch noch nicht alle Mängel als beseitigt an.

Die SAK beschließt, den Studiengang für die Dauer von fünf Jahren mit den folgenden Auflagen zu akkreditieren:

Die hohe Anzahl der Klausuren und multiple choice Prüfungen muss reduziert werden. Es sind stärker andere Prüfungsleistungen einzusetzen (z.B. Protokolle, Referate), die dem selbständigen wissenschaftlichen Arbeiten eher gerecht werden. Die Leitlinie ist, dass pro Modul nur eine Prüfung und pro Semester nicht mehr als insgesamt sechs Prüfungen stattfinden.

Das gewünschte Verhältnis von Präsenz- und Selbststudium ist klar zu definieren, wodurch auch die Zuordnung von Leistungspunkten zu SWS präzisiert wird. Der reale Arbeitsaufwand ist durch Evaluationen zu überprüfen und ggf. anzupassen.

Bachelorstudiengang „Psychologie“ (B.Sc.)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis und begrüßt die angekündigten Überarbeitungen, sieht jedoch hierdurch noch nicht alle Mängel als beseitigt an.

Die SAK beschließt, den Studiengang für die Dauer von fünf Jahren mit den folgenden Auflagen zu akkreditieren:

Das Spektrum der Prüfungsformen ist zu erweitern (z.B. Protokolle, Seminarvorträge, mündliche Prüfungen) und die Anzahl der Klausuren ist im Verhältnis hierzu zu verringern.

Ausgehend von der Stellungnahme sind die Modulbeschreibungen nachzubessern, präziser abzufassen und an den Strukturvorgaben der KMK auszurichten.

Konsekutiver, Binationaler Masterstudiengang „International Nature Conservation“ (M.Sc.) (Lincoln University, Canterbury Neuseeland)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis, sieht jedoch hierdurch noch nicht alle Mängel als beseitigt an.

Die SAK beschließt, den Studiengang für die Dauer von fünf Jahren mit den folgenden Auflagen zu akkreditieren:

Die weiteren besonderen Zugangsvoraussetzungen sind zu konkretisieren, um zu gewährleisten, dass nur Bewerber mit einem qualifizierten Bachelorabschluss zugelassen werden.

Die zugangsberechtigten Bachelorabschlüsse sind näher zu spezifizieren.

Die Modulverantwortlichen sind nachzutragen, sofern noch nicht geschehen. Hierbei sollen hauptamtlich Lehrende als verantwortlich benannt werden.

Teilstudiengang „Biologie“ im 2-Fächer-Bachelorstudiengang (B.A.)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis, sieht jedoch hierdurch noch nicht alle Mängel als beseitigt an.

Die SAK stimmt der Beilegung des Fachs am noch zu akkreditierenden Zwei-Fächer Bachelorstudiengang (Profil Lehramt) mit den folgenden Auflagen zu:

Für die Studierenden muss deutlich gemacht werden, wie sich dieser Zwei-Fächer-Bachelorstudiengang nicht nur vom Umfang, sondern auch inhaltlich (Lehrkompetenz) vom Ein-Fachstudiengang des Faches Biologie unterscheidet.

Die Ausbildung in Vermittlungskompetenzen muss als Pflichtveranstaltung bezeichnet werden.

Die Anzahl der Prüfungen ist zu reduzieren, ebenfalls sollte die Prüfungsorganisation verbessert werden. Es ist zu verhindern, dass sich zum Semesterende die Prüfungen auch in der Kombination der Fächer häufen. Leitlinie ist, dass pro Modul nur eine Prüfung und pro Semester insgesamt nicht mehr als sechs Prüfungen stattfinden. Der Anteil der Klausuren ist zu reduzieren und es sind stärker alternative Prüfungsformen vorzusehen.

Der Anteil der Präsenzzeiten im Verhältnis zum Selbststudium ist zu reduzieren. Laborpraktika sind der Präsenzzeit und nicht dem Selbststudium zuzurechnen. Der reale Arbeitsaufwand ist durch Evaluationen zu überprüfen und ggf. anzupassen.

Master-/Promotionsstudiengang „Neuroscience“ (M.Sc. / PhD) (Reakkreditierung)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis.

Die SAK beschließt, den Masterstudiengang **Neuroscience (M.Sc)** für die Dauer von fünf Jahren zu reakkreditieren. Der Workload übersteigt zwar mit 90 LP die vom Akkreditierungsrat gesetzte Grenze von 75 LP, dies wird jedoch aufgrund der exzellenten Leistungen der Studierenden für vertretbar gehalten. Ihre Immatrikulation beruht auf einer internationalen, mehrstufigen Bestenauswahl, sodass man für den Masterstudiengang nicht den durchschnittlichen Studierenden als Berechnungsmaßstab des Workloads heranziehen kann. Die Studierenden berichten, dass Einschränkungen der Studierbarkeit nicht bestehen. Die SAK folgt im Übrigen den Argumenten der Universität in ihrer Stellungnahme vom 17.04.2008.

Die SAK beschließt, den Promotionsstudiengang **Neuroscience (PhD)** für die Dauer von fünf Jahren zu reakkreditieren.

Master- Promotionsstudiengang Molecular Biology (M.Sc. / PhD) (Reakkreditierung)

Die SAK nimmt den Bewertungsbericht und die Stellungnahme der Universität Göttingen vom 17.04.2008 zur Kenntnis.

Die SAK beschließt, den Masterstudiengang **Molecular Biology (M.Sc)** für die Dauer von fünf Jahren zu reakkreditieren. Der Workload übersteigt zwar mit 90 LP die vom Akkreditierungsrat gesetzte Grenze von 75 LP, dies wird jedoch aufgrund der exzellenten Leistungen der Studierenden für vertretbar gehalten. Ihre Immatrikulation beruht auf einer internationalen, mehrstufigen Bestenauswahl, sodass man für den Masterstudiengang nicht den durchschnittlichen Studierenden als Berechnungsmaßstab des Workloads heranziehen kann. Die Studierenden berichten, dass Einschränkungen der Studierbarkeit nicht bestehen. Die SAK folgt im Übrigen den Argumenten der Universität in ihrer Stellungnahme vom 17.04.2008.

Die SAK beschließt, den Promotionsstudiengang **Molecular Biology (PhD)** für die Dauer von fünf Jahren zu reakkreditieren.

Beschluss für die Akkreditierung des 2-Fächer-Bachelorstudiengangs mit den Profilen "Fachwissenschaftlich", "Berufsfeldbezogen", "Lehramt" und "Studium Generale"

Die SAK beschließt, den 2-Fächer-Bachelorstudiengang mit der folgenden Auflage für die Dauer von 5 Jahren zu akkreditieren:

Es ist ein Konzept von in der Regelstudienzeit ohne größere Überschneidungen studierbaren Fächerkombinationen und damit verbunden das Organisationskonzept für ein überschneidungsarmes Lehrangebot insbesondere für häufig gewählte Fächerkombinationen vorzulegen und zu veröffentlichen sowie die praktische Umsetzung dieses Konzepts zu dokumentieren. Damit ist nicht die Beschränkung oder der Ausschluss von Fächerkombinationen verbunden, sondern es wird die - auch in den Ordnungen vorgesehene - Gewährleistung gegenüber den Studierenden umgesetzt, dass die Regelstudienzeit eingehalten werden kann, weil sich durch Überschneidungen keine ins Gewicht fallenden Verzögerungen ergeben. In der Studienberatung ist darauf hinzuweisen, dass seltene Kombinationen zu Studienzeitverlängerungen führen können.

Diese Entscheidung basiert auf § 1 in Verbindung mit §§ 4 und 5 des Beschlusses des Akkreditierungsrates „Entscheidungen der Akkreditierungsagenturen: Arten und Wirkungen“ vom

29.02.2008. Die Erfüllung der Auflagen ist drei Monate vor Ablauf der Frist nachzuweisen; der mangelnde Nachweis der Auflagenerfüllung kann zum Widerruf der Akkreditierung führen.

TOP 6 Reakkreditierungen

6.1 Universität Göttingen, „Molekulare Medizin“ (B.Sc., M.Sc.) Erstakkreditierung PhD (I/807-156-R)

(Referent: Florian Fischer)

Bachelorstudiengang „Molekulare Medizin“ (B.Sc.) (Reakkreditierung)

Die SAK fasst noch keinen Beschluß über die Reakkreditierung des Bachelorstudiengangs Molekulare Medizin (B.Sc.), sondern bittet die Universität Göttingen um eine grundlegende Überarbeitung der Dokumente aufgrund des Bewertungsberichtes. Die Überarbeitungen sind innerhalb von 12 Monaten erneut einzureichen.

Masterstudiengang „Molekulare Medizin“ (M.Sc.) (Reakkreditierung)

Die SAK fasst noch keinen Beschluß über die Reakkreditierung des Masterstudiengangs Molekulare Medizin (M.Sc.), sondern bittet die Universität Göttingen um eine grundlegende Überarbeitung der Dokumente aufgrund des Bewertungsberichtes. Die Überarbeitungen sind innerhalb von 12 Monaten erneut einzureichen. Aufgrund der erforderlichen Gleichbehandlung stellt die SAK die Akkreditierung mit dem Studienaufwand von 90 LP für ein Studienjahr analog zum Masterstudiengang „Molekulare Biologie“ in Aussicht, wenn die Voraussetzungen durch die Überarbeitungen dokumentiert sind.

Promotionsstudiengang Molekulare Medizin (Dr.rer.nat. / PhD)

Die SAK beschließt die Akkreditierung des Promotionsstudiengangs Molekulare Medizin ohne Auflagen (Dr.rer.nat, PhD).

■ Akkreditierungsrat | Adenauerallee 73 | 53113 Bonn

Frau Professorin
Dr. Ulrike Beisiegel
Präsidentin
Universität Göttingen
Wilhelmsplatz 1
37073 Göttingen

**Vorsitzender
des Akkreditierungsrates**

Adenauerallee 73
53113 Bonn

Telefon: 0228 - 338306-0
Telefax: 0228 - 338306-79
akr@akkreditierungsrat.de
www.akkreditierungsrat.de

AZ:177/12

Bonn, 03.07.2012


Intensivmasterstudiengänge an der Universität Göttingen

Sehr geehrte Frau Kollegin Beisiegel,

beigefügt finden Sie den Beschluss des Akkreditierungsrates vom 28.06.2012 zu den Intensivmasterstudiengängen M.Sc. „Molecular Medicine“, M.Sc. „Molecular Biology“ und M.Sc. „Neuroscience“ an der Universität Göttingen.

Ich möchte ausdrücklich darauf hinweisen, dass es sich bei dieser Ausnahmegenehmigung um eine Einzelfallentscheidung des Akkreditierungsrates ohne präjudizierende Wirkung auf weitere Verfahren handelt.

Mit freundlichen Grüßen



Professor Dr. Reinhold R. Grimm

- nachrichtlich: Staatssekretär Dr. Lange, Niedersächsisches Ministerium für Wissenschaft und Kultur

Anlage

Drs AR 53/2012

Einzelfallbezogene Ausnahmegenehmigung für die Intensivmasterstudiengänge M.Sc. „Molecular Medicine“, M.Sc. „Molecular Biology“ und M.Sc. „Neuroscience“ an der Universität Göttingen

Beschluss des Akkreditierungsrates vom 28.06.2012

Der Akkreditierungsrat stellt fest, dass die von der ZEvA akkreditierten Masterstudiengänge M.Sc. „Molecular Medicine“, M.Sc. „Molecular Biology“ und M.Sc. „Neuroscience“ an der Universität Göttingen im ersten Studienjahr die Belastungsgrenze von 75 ECTS-Punkten im Jahr gemäß Ziffer 1.4.1 des Beschlusses „Regeln für die Akkreditierung von Studiengängen und für die Systemakkreditierung“ i.d.F. vom 23.02.12012 deutlich überschreiten. Dabei zeigen die hohen Quoten von Absolventinnen und Absolventen in Regelstudienzeit, dass die Studiengänge offensichtlich studierbar sind. Aus diesem Grund erteilt der Akkreditierungsrat für die genannten drei Studiengänge für die gewählte Studienstruktur mit 90 ECTS-Punkten im ersten Studienjahr eine Ausnahmegenehmigung, die Belastungsgrenze von 75 ECTS-Punkten im Jahr gemäß Ziffer 1.4.1 des Beschlusses „Regeln für die Akkreditierung von Studiengängen und für die Systemakkreditierung“ i.d.F. vom 23.02.12012 nicht anzuwenden. Der Akkreditierungsrat verweist auf die anstehenden Reakkreditierungen der Studiengänge, in denen die Überprüfung der Berechnungen des studentischen Arbeitsaufwandes vorgenommen wird.