

## GGNB: Short Methods Courses & Method Seminars; Extended Methods Courses

**Program April - September 2019 (summer semester 2019)**

- Registration possible two months before the course month -

### Laboratory Animal Science:

Courses are offered by the UMG. To register, please contact Dr. Monique Silter (monique.silter@med.uni-goettingen.de). The fees for the course have to be covered by the department of the participant.

**Theoretical part:** online course. The passing of a written exam is prerequisite for participation in the practical part.

**Practical part** (Modules 1-6):

11-15 Feb 2019	24-28 Jun 2019
4-8 Mar 2019	2-6 Sep 2019
18-22 Mar 2019	23-27 Sep 2019
6-10 May 2019	21-25 Oct 2019
3-7 Jun 2019	25-29 Nov 2019

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date
<b>Biochemistry</b>						
Tittmann, Kai	Viktor Sautner, Fabian Rabe von Pappenheim	340018	A 064	Principles and methods of protein purification by chromatography	1.0	8-9 Apr 2019
Rehling, Peter	Magnus Hartmann	340074	A 053	Blue-native PAGE analysis of membrane protein complexes	1.0	25-26 Apr 2019
Tittmann, Kai	Sören Rindfleisch, Viktor Sautner	340077	A 071	Thermodynamic characterization of biomolecular interactions by isothermal titration calorimetry	1.0	15-16 Apr 2019
Rehling, Peter	Bettina Homberg, Sabine Poerschke	340211	A 163	Native membrane protein complex isolation	0.5	30 Apr 2019
Rehling, Peter	Ridhima Gomkale, Roya Yousefi	340212	A 164	<i>In vitro</i> import into purified mitochondria	1.0	25-26 Apr 2019
Jahn, Reinhard	Angel Perez-Lara, Sonja Pribicevic	340255	A 210	Study of membrane binding proteins involved in exocytosis	1.0	25-26 Apr 2019
<b>Molecular Biology &amp; Genetics</b>						
Fischer, André	Stefan Irniger, Daniel Riester, Cemil Kerimoglu	340218	A 084	Chromatin-immunoprecipitation and epigenomic gene-profiling in the adult brain	1.0	Aug 2019 (tba)
Jakobs, Stefan	Jensen, Nickels	340233	A 173	Strategies to design photoswitchable fluorescent proteins and their application in nanoscopy	1.0	14-15 May 2019
Cramer Patrick	-	340316	A 214	Genome Science Lecture Series	1.0	Fridays: Apr to Jun 2019
Outeiro, Tiago	Daniel Kaganovich, Triana Amen	340417	A 247	Generation of CRISPR/Cas9 knockout cell lines	1.0	15-16 May 2019

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<b>Cell Biology &amp; Microbiology, Imaging</b>						
Mitkovski, Mišo	Mišo Mitkovski, Georg Wieser	340066	A 098	Introduction to image processing in biology with ImageJ and FIJI	1.0	11-12 Apr 2019
Großhans, Jörg	Deqing Kong	340163	A 124	Use of a UV laser for ablation and uncaging in living tissue	1.0	12-14 Aug 2019
Frahm, Jens	Jost Kollmeier, Jakob Klosowski	340210	A 162	Basic principles of MRI and Real-Time MRI	1.0	15-16 Apr 2019
Pöhlmann, Stefan	Michael Winkler, Markus Hoffmann, Heike Hofmann-Winkler	340221	A 171	Viral transduction systems	1,0	14-16 May 2019
Roos, Christian	Angela Noll	340322	A 221	NGS-based identification of gastrointestinal parasites	1.0	13-14 May 2019
Roos, Christian	Angela Noll	340323	A 222	Assessing biodiversity: Investigating the blood meal of leeches	1.0	20-21 May 2019
Roos, Christian	Angela Noll	340324	A 223	NGS-based identification of the gut microbiome	1.0	27-28 May 2019
Luther, Stefan	Raúl Quiñonez, Vineesh Kappadan	340326	A 226	Optical Mapping for Cardiomyocyte Cultures and Isolated Hearts	1.0	4-5 Jun 2019
Zimmermann, Wolfram-Hubertus	Norman Liaw, Tiburcy	340342	A 236	Construction and Phenotyping of Engineered Heart Muscle	1.5	July 2019
Lorenz, Verena	Andrea Braun	340362	A 240	Immunofluorescence of skin cells	1.0	7-8 May 2019
Braun, Andrea	-	340363	A 241	Mouse models in experimental dermatology: contact dermatitis	1.5	8-9 Apr 2019
Enderlein, Jörg, Tsukanov, Roman	Nazar Oleksiievets	340406	A244	Super-resolution microscopy with DNA-PAINT	0.5	5 Jun 2019
Richter-Dennerlein, Ricarda	Lavdovskaia, Elena	340415	A 246	Investigating macromolecular complexes by density gradient centrifugation	1.0	4-5 Apr 2019
Pöhlmann, Stefan	Pöhlmann, Stefan	350052	A 160	Molecular Biology of HIV replication and pathogenesis	1.0	Thursdays
Weber, Martin	Ochs, Jasmin	340440	A 252	Introduction in FlowJo	0.0	5 Aug 2019
<b>Developmental Biology, Anatomy &amp; Histology</b>						
Stadelmann, Christine	Katja Schulz	340033	A 060	Non-radioactive <i>in situ</i> hybridization	1.0	Aug 2019 (tba)
Bucher, Gregor	-	340083	A 145	Orthologs and Paralogs – how they evolve and how to distinguish them	0.5	7 Jun 2019
Wilting, Jörg	Ch. Zelent	340341	A 235	Transmission electron microscopy	3.0	May 2019
Streckfuß-Bömeke, Katrin	-	340375	A 239	Patient-specific induced pluripotent stem cells (Ps-iPSCs)	1.0	25-26 Jun 2019

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<b>Developmental Biology, Anatomy &amp; Histology (continued)</b>						
Stadelmann, Christine	-	340422	A 249	Pathology of multiple sclerosis and related disorders and of human neurodegenerative diseases, e.g. Alzheimer's disease, Parkinson's disease, ALS	0.5	Aug 2019 (tba)
<b>Vertebrate Animal Models</b>						
Bähr, Mathias	Lingor, Paul	340219	A 139	<i>In vitro</i> and <i>in vivo</i> models for Parkinson's disease research	0.5	10 Apr 2019
<b>Molecular &amp; Cellular Neuroscience, Electrophysiology</b>						
Rhee, JeongSeop	-	340038	A 096	Nerve cell culture and patch-clamp recordings from nerve cells	1.0	9-10 Apr 2019
Pardo, Luis	-	340040	A 063	Patch clamp	1.0	8-10 May 2019
Brose, Nils	Erinn Gideons	340236	A 153	Isolation of synaptic compartments for quantitative biochemical analysis	0.5	10 May 2019
Fiala, André	Annekathrin Widmann	340319	A 216	Neuronal circuit dissection in <i>Drosophila</i>	1.0	3-5 Jun 2019
Nave, Klaus-Armin	Möbius, Wiebke	340328	A 228	A practical introduction into electron microscopy	1.0	6-7 May 2019
Moser, Tobias	Lina Maria Jaime Tobon, Theocharis Alvanos	340412	A 232_1	Electrophysiological approaches to understand hearing	1.0	20-21 May 2019
<b>Theoretical, Systems &amp; Behavioral Neuroscience</b>						
Gail, Alexander	Glaser, Beatrix	340043	A 073	Introduction to Matlab in Systems Neuroscience	1.0	Wed/Fri 17 Apr - 12 Jun 2019
Treue, Stefan / Gail, Alexander	Treue, Stefan / Gail, Alexander / Clodhna Quigley	340231	A 168	Visual psychophysics - From theory to experiment	1.0	May/June 2019 (tba)
Geisel, Theo / Timme, Marc / Marc / Wolf, Fred	Geisel, Theo / Timme, Marc / Wolf, Fred	350036	A 022	Theoretical and Computational Neuroscience: Collective Dynamics of Biological Neural Networks II	2.0	Fridays
<b>Structural Biology</b>						
Bennati, Marina	Tomas Orlando, Markus Hiller	340055	A 003	EPR-Spectroscopy	1.5	22-24 May 2019
Ficner, Ralf	Neumann, Piotr	340130	A 103	X-ray crystallography	2.5	1-5 Apr 2019

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<b>Biophysics, Bioinformatics and Statistics</b>						
Friede, Tim	Röver, Christian	340061	A 100	Basic statistics for graduate students in the life sciences	1.0	1+2+9+16+23 Apr 2019
Steinem, Claudia	Stefan Krüger, Kristina Kramer, Ingo Mey	340067	A 133	Using biosensors to study analyte-ligand interactions: basic principles and applications	0.5	9 May 2019
Grubmüller, Helmut / Schmidt, Christoph F.	Grubmüller, Helmut / Schmidt, Christoph F.	340166	A 025	Current Topics in Biophysics – Lecture Series	1.0	Fridays
Grubmüller, Helmut / de Groot, Bert	Grubmüller, Helmut / de Groot, Bert	340204	A 170	Biomolecular Physics and Simulations	2.0	Mondays
Steinem, Claudia	Andreas Janshoff / Ingo Mey/ Florian Mann	340235	A 169	Atomic Force Microscopy versatile tools to study surfaces and surface properties	1.0	20 Jun 2019
Nietert, Manuel	-	340317	A 215_1	An introduction to reproducible handling of scientific data and concordant analysis using KNIME workflows	0.5	8-9 Apr 2019
Söding, Johannes	Roth, Christian Seidel, Annika	340327	A 227	Writing good scientific code	1.0	3-4 Jun 2019
Nietert, Manuel	-	340389	A 215_2	An introduction to reproducible handling of scientific data and concordant analysis using KNIME workflows	0.5	1-5 Apr 2019
Beißbarth, Tim	Hryhorii Chereda, Maren Sitte	440727	A 176	Introduction to R and RNA-Seq analysis	1.0	10-12 Apr 2019
Gollisch, Tim	Dimokratis Karamanlis, Yunus Can Erol, Juan Diego Prieto	340413	A245	Introduction to spike-train analysis with Python	1.5	20-22 May 2019
Strenzke, Nicola	Hanafi-Metwalli, Alek	340419	A 248	Introduction to Structured Query Language (SQL)	0.5	7 May 2019
Stephens, Dwayne	Robert Mettin	340439	A 251	Introduction to COMSOL	1.0	1 July 2019
<b>Extended Methods Courses</b>						
Tittmann, Kai	-	340238	E 002	Bioanalytics	4.0	Sep 2019
Ferber, Michael	-	340095	E 003	ENI Electrophysiology Training (ENI-ELECTRAIN)	4.0	13-24 May 2019