Neural circuits for vision in the natural world

Cristopher Niell
Institute of Neuroscience
University of Oregon

Natural visual processing entails a complex interplay between sensory input, behavioral context, and on-going brain dynamics. Our lab seeks to understand how these processes give rise to goal-directed visual behaviors, using the mouse as a model system. As a complement to studying visual processing in trained tasks, we are exploring the neural circuits underlying ethologically relevant behaviors that laboratory mice perform. In particular, our studies of prey capture have provided insight into the neural circuits for detection and localization of salient stimuli within a complex and dynamic sensory environment. Finally, I will present our ongoing studies of a completely different and largely unexplored visual system, the octopus.

Virtual Seminar
due to Covid-19 restrictions
Access information will be provided timely

Tuesday
December 1, 2020
16:00

Host: Dept. Systems Neuroscience