



LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

BIOZENTRUM DER LMU
DEPARTMENT BIOLOGIE II
ORGANISMISCHE NEUROBIOLOGIE



2 Postdoc positions available, Department of Biology, LMU Munich

2 Postdoctoral positions are available in Laura Busse's group at the Department of Biology II at the LMU Munich. We study the neural circuits of visual perception in awake, behaving mice, where we combine electrophysiological recordings using silicon probes with genetic tools for circuit manipulation. Our aim is to contribute to the understanding of sensory mechanisms of visual information processing and their dependence on visually guided behavior. The Department of Biology at the LMU Munich offers an outstanding environment for a successful postdoctoral career in systems neuroscience, with ample opportunities for collaboration with both experimentalists and computational neuroscientists, both within the department as well as with the neighboring Max-Planck-Institute for Neurobiology. The LMU Munich ranks among the top 10 universities in Europe. Munich, located in the south of Germany, is regularly ranked among the world's top cities for quality of living.

(1) The first position is funded by the German Research Foundation (DFG) for a period of 3 years, prolonged on a yearly basis. The successful candidate will work on the role of cortico-thalamic feedback in processing of visual information in the dorsolateral geniculate nucleus (dLGN) of the mouse. The project will combine optogenetics / pharmacogenetics with extracellular recordings in the mouse dLGN and thalamic reticular nucleus (TRN). The candidate must have a PhD in neuroscience, or a related field, and a strong research record including publications. The ideal candidate will have experience in electrophysiology / imaging in awake mice and in genetic tools for circuit manipulation. Proficiency in programming (e.g. Matlab, Python, C) and experience in signal processing are necessary.

(2) The second position is for a senior postdoc ("*Akademischer Rat auf Zeit*") for a period of 3 years, with the possibility for extension. The successful candidate will initially collaborate on state-dependent response modulations within the thalamo-cortico-thalamic loop in the mouse visual system. The project will combine genetic circuit manipulations with extracellular recordings in mouse V1 and dLGN. In addition, the successful candidate will take a leading role in the supervision of the other ongoing projects in the lab. It is expected that over time the successful candidate will attract third party funding to develop, within the lab infrastructure, his independent research. The successful candidate will be expected to contribute to the teaching and research training at the undergraduate and graduate level within the Department of Biology and the Graduate School of Systemic Neuroscience (GSN LMU). The candidate must have a PhD in neuroscience, or a related field, and relevant postdoctoral experience in circuit-level visual neuroscience. This position can be used to obtain a "*Habilitation*" as part of the qualifications towards a professorship.

There is some flexibility in the starting date, with a preference for the first half of 2016.

Informal inquiry is welcome via email to laura.busse@cin.uni-tuebingen.de. Applications should include a CV, a brief statement of research interests, a cover letter with the expected date of availability, and names and contact information of at least three references.