3 year Postdoctoral position, Vision circuits lab (Laura Busse), Faculty of Biology, LMU Munich

A postdoctoral position is available in Laura Busse's group at the Faculty of Biology, LMU Munich. We study the neural circuits of visual perception in awake, behaving mice, where we combine state-of the-art electrophysiological recordings using neuropixels with genetic tools for circuit mapping and manipulation. Our aim is to contribute to the understanding of sensory mechanisms of visual information processing and their dependence on visually guided behavior. More information about the lab can be found at: https://visioncircuitslab.org

The Faculty of Biology at the LMU Munich offers an outstanding environment for a successful postdoctoral career in systems neuroscience. There are ample opportunities for collaboration with both experimentalists and computational neuroscientists, within the faculty and the wider Munich neuroscience community. LMU Munich ranks among the top 10 universities in Europe. The city of Munich, located in the south of Germany, is regularly ranked among the world's top cities for its quality of living.

The 3-year fully-funded postdoc position is for a joint project between Laura Busse and Steffen Katzner, and part of the DFG-funded Priority Program *Sensing LOOPS: cortico-subcortical interactions for adaptive sensing*. In tight interactions with other members of the lab, we will explore the role of the visual sector of the thalamic reticular nucleus (visTRN) and its recruitment by cortico-thalamic feedback in shaping thalamic visual processing and behavior. The project builds on our previous work on visTRN published in Born et al. (2021), and will combine *in vivo* extracellular recordings of genetically identified visTRN neurons, circuit mapping and optogenetic manipulations of corticothalamic feedback. The project involves advanced data analysis methods and computational modelling, for which we fruitfully interact with national and international collaborators in computational neuroscience.

Due to the multi-faceted nature of this project, we encourage individuals from various backgrounds to apply. It is required to have prior experience in experimental techniques (e.g., behavior studies, viral/transgenic methods, *in vivo* two-photon imaging or electrophysiology) and in data analysis, ideally using Python. We provide comprehensive training within our laboratory on scientific and technical aspects, foster a collaborative, diverse and inclusive work environment, and as part of the Priority Program, offer access to the German-wide "LOOPs" network. Furthermore, we are enthusiastic about mentoring postdoctoral researchers in their academic career.

There is some flexibility in the starting date, with a preference for the first quarter of 2024. We will start reviewing applications from Nov 1st and continue until we will have identified a suitable candidate.

Informal inquiry is welcome via email to busse@bio.lmu.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.