

Cognitive Neurophysiology

Magdeburg, Germany

Two PhD student positions on spatial navigation and grid cell activity

Two PhD student positions are available in the groups of Motoharu Yoshida at Leibniz Institute for Neurobiology / German Center for Neurodegenerative Diseases Magdeburg, Germany. These positions are supported by DFG and the starting date is flexible and the duration is 3 years.

We are looking for highly motivated students interested in cellular mechanisms and neural computation supporting spatial navigation. Previous lab experience in **patch-clamp recordings, in vivo electrophysiology, computer programming and animal behavior tasks** will be an advantage.

Project 1: This project focuses on cellular mechanisms for spatial navigation and path integration in the medial entorhinal cortex. Main technique required is in vitro patch clamp recordings combined with genetic and optogenetical manipulations.

Project 2: This project focuses on the cellular mechanism supporting path integration and grid cell firing in the medial entorhinal cortex. Main technique required will be in vivo electrophysiological recordings combined with behavioral tasks.

The group is multinational and candidates of all nationalities are encouraged to apply. A master's degree or equivalent is required, and candidates must be fluent in English.

Please send (1) a letter **describing your lab experiences and techniques**, scientific interests, and earliest possible starting date, (2) a CV and (3) names of three references to Dr. Motoharu Yoshida: motoharu.yoshida@lin-magdeburg.de.

Web: <https://www.dzne.de/yoshida>, <https://yoshida-lab.weebly.com/>

