

The Leibniz Institute for Neurobiology (LIN) is an internationally recognized neuroscientific research institute and dedicated to the research on learning and memory. Our research comprises all organizational levels of the brain – from molecular and cellular processes to complex neuronal networks and behavior.

The Department Cellular Neuroscience of Prof. Dr. Stefan Remy in association with the Research Training Group 2413 SynAGE, supported by the German Research Foundation seek for a highly motivated

## PhD student position (f/m/d)

starting from **January 1st**, **2024** or as soon as possible for a 3-year fixed-term period (in accordance with the availability of funds) in part time 65% (26 hours per week) with a salary of TV-L E13.

**About the project:** The project will investigate patterns of hyperactivity using electrophysiological methods, which occur with aging and lead to altered long-range and local synaptic function and subsequent aberrant network excitability along with associated memory deficits. Specifically, the candidate will investigate the underlying contribution of cell-type specific projections within hippocampal-cortical circuits in mice and characterize the synaptic changes within long-range versus local cortical circuits across aging. The candidate will gain valuable experience not only with various electrophysiological techniques, such as patch clamp recording and multielectrode arrays (MEA), but also with molecular cell identification and single-/two-photon imaging techniques.

You will work at the Leibniz Institute for Neurobiology (LIN) with Prof. Stefan Remy and in close cooperation with Dr. Janelle Pakan (Otto von Guericke University, OVGU), as well as Dr. Anne Maass (DZNE Magdeburg), where the results of the project will also be directly related to comparable MRI-based experiments in humans. You will be part of a multidisciplinary, international, and dedicated project group that offers you a wide range of opportunities for personal and professional skill development. The LIN offers excellent opportunities for cognitive and systems neuroscientific research, including a vibrant in vivo two-photon imaging community, several MRI facilities, as well as an excellent, multidisciplinary scientific environment.

The candidate will be given the opportunity to develop a doctoral thesis with extensive support through the RTG2413 (<a href="https://www.synage.de">https://www.synage.de</a>) and the CBBS graduate program (<a href="https://gp.cbbs.eu">https://gp.cbbs.eu</a>).

## Your profile:

- Master's degree or equivalent in Neuroscience, Biology, Biomedical engineering, Life sciences, or a related field
- Experience with electrophysiological recording or neuroimaging would be beneficial
- Familiarity with statistics and programming experience in Python are advantageous
- Strong intention to be a part of international team with interdisciplinary questions

## We offer:

- An interesting and vibrant field of activity in an international working environment characterized by exciting research projects
- Employment, remuneration and social benefits according to the collective agreement for the public service of the federal states (TV-L)
- Equal opportunities and the compatibility of career and family as part of our personnel policy
- Access to cutting edge technologies and campus with modern state-of-the-art infrastructure

Inquiries about the research project and the open position should be directed to Dr. Liudmila Sosulina (<u>Liudmila.Sosulina@lin-magdeburg.de</u>) or Dr. Janelle Pakan (<u>Janelle.pakan@med.ovgu.de</u>).









We welcome all applications - regardless of gender, nationality, ethnic and social origin, religion, disability, age, and sexual orientation and identity.

Please send a *single PDF* file comprising (1) a *letter* describing your lab experiences and techniques you have and explaining why you are a good to fit the project, (2) a *CV* including a list of publications, (3) relevant certificates of *academic degrees* and (4) names of two references, stating the reference **LIN 2023/13** to <u>bewerbung@lin-magdeburg.de</u>. The application **deadline is November 15, 2023**.

If you have an international degree, please also enclose a certificate evaluation from the Central Office for Foreign Education (ZAB) with your application. If you do not yet have a certificate evaluation, you would have to apply for one upon successful application. For more information, please visit <a href="https://www.kmk.org/zab/zeugnisbewertung.html">https://www.kmk.org/zab/zeugnisbewertung.html</a>.

By submitting your application, you consent to the processing of your personal data for the purpose of the application process. Our detailed privacy policy for applicants (m/w/d) acc. Art. 13 DSGVO on data processing in the application process will be sent on request. Your attention is drawn to the fact that no application or interview expenses can be paid. Documents will be deleted after 6 months.



