



The Department in **Department Functional Architecture of Memory** at the **Leibniz Institute for Neurobiology** in Magdeburg (Germany) headed by Professor Sauvage (<https://www.lin-magdeburg.org/research/research-units/department-functional-architecture-of-memory>) is looking for a highly motivated

**PhD Student with Knowledge in Molecular Neurosciences** (3-year fixed-term position).

The position is available immediately (optimally starting before March 31st 2021). The project will focus on investigating the neural correlates for memory improvement or memory reconsolidation. Application deadline: March 1st. Applications will be reviewed as they are received.

The Dpt focuses on dissociating the contribution of the medial temporal lobe subareas (CA1, CA3, DG, MEC, LEC, PrC, POR) to memory function. Recent and very remote memory, memory for time/space/episodes and memory encoding/retrieval/reconsolidation are studied. The Dpt recently identified new spatial and non-spatial subnetworks segregated along the proximodistal axis of the hippocampus (Nakamura et al, J. Neurosc., 2013; Beer and Vavra et al, Plos Biol., 2018), hypothesized a network shift between the Trisynaptic loop and the Temporoammonic pathway for memory retrieval over time (Lux et al, Elife, 2016) and depicted memory networks supporting memory reconsolidation (Lux et al, Cer. Cort., 2017). Techniques include high-order standard or translational human to rat memory tasks combined to lesions, optogenetics, high-resolution molecular imaging (based on immediate-early genes' detection) and in-vivo electrophysiology, fMRI studies in awake rats (9.4T) and human behavioral studies are also conducted to a lesser extent (Sauvage et al, Nat.Neurosc., 2008; Sauvage et al, J.Neurosc., 2010; Sauvage et al, J.Neurosc. Methods, 2019). The project will focus on either memory improvement or reconsolidation.

Qualification: The candidate has optimally a good knowledge in molecular neurosciences (in-situ hybridization techniques, optogenetic virus construction etc...) and behavioral techniques and is highly motivated by interdisciplinary studies.

The employment, salary and employee benefits comply with the collective pay agreement (German TV-L). Equal opportunities as well as compatibility of family and work are part of our HR policy. Severely disabled applicants with equivalent occupational aptitude will be considered preferentially.

The group is international. Please send a cover letter, a CV, the name of 3 references and a statement of motivation and research interests to [jessica.levin@lin-magdeburg.de](mailto:jessica.levin@lin-magdeburg.de)

The application deadline ends March 1st. Applications will be reviewed as they come.

Please note the information for storage of personal data:  
[https://www.lin-magdeburg.de/fileadmin/user\\_upload/04\\_Karriere/Datenschutzhinweise\\_Bewerber\\_LIN.pdf](https://www.lin-magdeburg.de/fileadmin/user_upload/04_Karriere/Datenschutzhinweise_Bewerber_LIN.pdf)