



Open PhD Position in Neuroscience

3-year PhD student position available in the research group NPlast at the Leibniz Institute for Neurobiology in Magdeburg

Synaptic function relies on gene transcription and at the genomic level DNA-hypomethylation is a hallmark of neuronal aging, it disrupts gene expression profiles of synaptic genes and this is correlated with declining protein levels of DNA-methyltransferases over the life span. We could recently identify a novel synapse-to-nucleus signaling pathway that couple activation of NMDAR to the degradation of DNMT3A.1 in the nucleus (Bayraktar et al., 2020). In the thesis project we want to investigate how one can control nuclear DNMT3A.1 level. In parallel work we will try to re-methylate promoters of selected synaptic genes with the aim to restore synaptic plasticity in aging and disease.

We are seeking for a highly motivated PhD student to address how synaptic control of the DNA-methylome feeds back to synaptic function in mechanistic terms. NPlast has its research focus on Molecular & Cellular Neuroscience and employs a broad spectrum of advanced techniques. For more information see www.kreutzlab.com. The suitable candidate should have a general background in Cell Biology. We offer a stimulating and challenging scientific environment in an international and dynamic team with state-of-the-art facilities. Moreover, the PHD student will be part of the DFG-funded research training group RTG 2413 SynAGE, see www.synage.de, ensuring high-quality education of the candidate. Equal opportunities for women and men are ensured.

Applications should include a cover letter stating research interests and previous experience, a CV and contact information of two referees. Applications should be sent to Michael R. Kreutz (michael.kreutz@lin-magdeburg.de).

Gefördert durch

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