

The Neuronetwork “CBBScircuitS – A Neuronetwork for functional analysis of the engram connectome” offers for a skilled and highly motivated student a PhD position for three years (TV-L E13 65%) in the Research Group Neuroplasticity (NPlast) at the Leibniz Institute for Neurobiology.

In the thesis project you will employ state-of-the-art engram labeling and tracing technologies, in order to unravel the role of hippocampal circuits, oscillatory activity and synaptic connections in pattern separation and pattern completion. You will perform behavioral experiments with transgenic mice lines, coupled with optogenetics and viral injections of engram markers. The overall aim is to reveal the neuronal ensemble that encodes the memory engram with the resolution of synaptic connections.

The successful student will have a master degree in Neuroscience or related field, hands-on experience with behavioral experiments and a background in Molecular Biology are a plus. Knowledge in programming (MATLAB/ R) would be an additional plus but is no requisite. You will be part of NPlast (www.kreutzlab.com), a research group whose main expertise is in synapse biology and that is devoted to understand how activity-dependent gene expression feeds back to synaptic function and how this is related to molecular memory consolidation.

We offer an excellent supervision, state-of-the-art infrastructure and a stimulating international environment (www.kreutzlab.com). Research in NPlast is embedded in a network of national and international collaborations.

Applicants should submit a CV, a motivation letter and the contact details of two referees to Dr. Guilherme Monteiro Gomes (ggomes@lin-magdeburg.de).