

Opportunity for Master thesis

We are looking for a motivated MSc student to work on an exciting project in the NPlast research group (kreutzlab.com; Leibniz Institute of Neurobiology [LIN]) in collaboration with Dr. Eike Budinger (LIN) and Dr. Janelle Pakan (pakanlab.com; OvGU, Medical Faculty), in relation to the Collaborative Research Center (SFB1436) *Neural Resources of Cognition*. You will work with an international team with excellent training opportunities and a stimulating scientific environment.

The project centers around cloning novel viral tools to provide state-of-the-art resources to directly identify and investigate specific ensembles of neurons that are responsible for the encoding of experiences. Identifying these ensembles is key to ultimately deciphering how the brain represents experiences and stores them in memory. This project will provide you with valuable knowledge of hands-on cloning techniques, viral systems for temporal control of gene expression, and experience with testing and functional optimization of genetically modified viral tools; ultimately, resulting in a tangible output that will then be used for two-photon *in vivo* imaging experiments with behaving animals and subsequent *ex vivo* imaging such as lightsheet microscopy.

The suitable candidate should have a strong background in Biochemistry and/or Molecular and Cell Biology and an interest in Neuroscience. Previous lab experience will be advantageous. Funding is available for the position and completion of a Master thesis project expected.

Please send any questions or an application including short motivation statement, transcripts, and CV to Janelle Pakan (janelle.pakan@med.ovgu.de) and Guilherme M. Gomes (ggomes@lin-magdeburg.de).

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