

Research Position

In vivo optogenetics & electrophysiology for sleep and memory research

A research position (B.Sc./M.Sc. thesis or internship) is available from September 2015 in the “Cognition & Neuronal Plasticity” laboratory (Prof. Dr. Anton Sirota).

The project is focused on the investigation of neural activity patterns in the hippocampus during sleep and their causal role in the process of memory consolidation.

Techniques:

- *in vivo* electrophysiology (extracellular recordings)
- *in vivo* closed-loop optogenetics
- neural data analysis (single units and local field potentials)



In the context of this project, the student will learn how to perform mouse surgeries, behavioral experimentation and histology, how to build and implant electrodes and optical fibers and how to record, analyze and interpret extracellular neural signals.

For more information:
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