PhD position in the Schneggenburger lab / Amygdala-hypothalamic networks in social behavior

Our lab is searching for a highly motivated PhD student to join a project on amygdala-hypothalamic network involved in control of social behavior. In this project, our lab investigates the circuit mechanisms underlying aggressive behavior in mice. In particular, we are interested in regulation of territorial aggression by the medial and extended amygdalae and by their interaction with hypothalamic circuits that underly aggression control. We want to understand how sensory information about a conspecific, which is processed inside the amygdala networks, can determine the behavioral outcome of a social interaction. Using in-vivo optogenetics and imaging, as well as patch-clamp electrophysiology, we study how the connections between the medial amygdala, bed nucleus of stria terminalis and hypothalamic nuclei induce or inhibit aggressive behavior in mice.

The ideal candidate will have a Master's degree in Biology, Medicine, Physics or Engineering. Prior expertise in optogenetics, mouse behaviour or synaptic physiology would be advantageous. He/she should be keen to learn and apply state-of-the-art experimental techniques, to develop novel analysis methods, as well as to work in a team. The PhD candidate will enrol in the EPFL PhD program Neuroscience (next application deadline, April 15th 2022; see the following link for details). For more information on this PhD position and project, please contact Dr. Olexiy Kochubey (olexiy.kochubey@epfl.ch) and Prof. Ralf Schneggenburger (ralf.schneggenburger@epfl.ch).

Group: Prof. Ralf Schneggenburger, Dr. Olexiy Kochubey
Laboratory of Synaptic Mechanisms, Brain Mind Institute
Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland