PhD position in the Laboratory of Synaptic Mechanisms / Project on fear learning

The Schneggenburger lab investigates the synaptic- and circuit mechanisms of fear learning in mice, with a focus on how auditory stimuli acquire negative emotional valence, and ultimately instruct defensive behaviors. For this, we use state-of-the art \textit{in-vivo} optogenetic methods, \textit{in-vivo} electrophysiology and \textit{Ca}^{2+} imaging of neuronal activity, as well as anatomical- and \textit{ex-vivo} functional investigations of synaptic plasticity (patch-clamp).

We have a PhD opening, in a project investigating auditory processing in the amygdala, and the plasticity mechanisms at defined synaptic inputs to the amygdala. The ideal candidate will have a Master’s degree in Biology, Medicine, Physics or Engineering. Prior expertise in techniques like electrophysiology, optogenetics and mouse behavior would be advantageous. He/she should be self-motivated and keen on learning and developing novel techniques, as well as on working in a team. The PhD candidate will enrol in the EPFL PhD program Neuroscience (next deadline, November 1st 2023; see \url{https://www.epfl.ch/education/phd/edne-neuroscience/}). For more information, please contact Prof. Ralf Schneggenburger (ralf.schneggenburger@epfl.ch).

Prof. Ralf Schneggenburger  
Laboratory of Synaptic Mechanisms, Brain Mind Institute, School of Life Science  
Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland