



## 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 *in-vivo* optogenetic methods, *in-vivo* electrophysiology and  $\text{Ca}^{2+}$  imaging of neuronal activity, as well as anatomical- and *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 <https://www.epfl.ch/education/phd/edne-neuroscience/>). For more information, please contact Prof. Ralf Schneggenburger ([ralf.schneggenburger@epfl.ch](mailto:ralf.schneggenburger@epfl.ch)).

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