We are looking for a student assistant (Werkstudent/in)

The olfactory bulb (OB) is the first site of odor information processing in mammals. Olfactory bulb granule cells (GC), axonless GABAergic interneurons, form reciprocal dendrodendritic synapses with mitral and tufted cells (MTC) the main projection neurons of the bulb. As this synapse is the most numerous one in the OB and mediates self and lateral inhibition of/between MTCs, it is most likely substantially involved in odor signal processing in the OB (Abraham et al., 2010). Three different modes of dendritic activation have been shown to exist in rat GCs: Local spine Na⁺ spikes, global Na⁺ spikes and global low-threshold Ca²⁺ spikes (Bywalez, 2015; Egger et al., 2003; Egger et al., 2005). We characterize the transition from local to global dendritic signaling using whole cell patch clamp, 2-photon Ca²⁺ imaging + glutamate uncaging.

- 10h/week
- Flexible working hours
- Prior knowledge is not mandatory

You should be interested in

- the olfactory system
- reconstructions of neurons (Fiji)
- analysis of electrophysiology and Ca²⁺-imaging traces (IGOR)

For questions and applications please contact
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