

Ph.D. Positions Saarland University, Homburg, Germany

We seek Ph.D. candidates to join a highly interactive and innovative team developing a comprehensive picture on the sense of smell and the detection of pheromones in the mammalian periphery and brain.

Our earlier work established state-of-the-art methods for confocal Ca²⁺ imaging, optical activation of ion channel, phenotyping of chemosensory cells, and the use of genetic methods to analyze social behavior in freely behaving mice. We are now positioned to combine these powerful techniques to define cellular and molecular networks in the hypothalamus and other brain regions to address long-standing questions regarding coding and how social behavior is controlled by these neurons. A particular focus will be on the function of TRP channels. There will be many opportunities for collaboration and expanding your own repertoires of technologies using our network of international collaborators. Ideally, we seek applicants with a strong background in Neuroscience, Physiology, Biophysics, or a related field. Funding is available immediately, so prompt applications are encouraged.

Apply by sending your curriculum vitae and a brief statement of research interest to Dr. Frank Zufall (frank.zufall@uks.eu) or Dr. Trese Leinders-Zufall (trese.leinders@uks.eu), Professor of Physiology, Center of Integrated Physiology and Molecular Medicine, Saarland University, 66421 Homburg, Building 48, Germany.

Examples of recent publications:

Trouillet A-C et al. (2019) Central role of G protein G α i2 and G α i2⁺ vomeronasal neurons in balancing territorial and infant-directed aggression of male mice. Proc Natl Acad Sci USA, in press.

Leinders-Zufall T et al. (2018) PhoDAGs enable optical control of diacylglycerol-sensitive transient receptor potential channels. Cell Chem Biol 25, 215-223.

Bleymehl K et al. (2016) A sensor for low environmental oxygen in the mouse main olfactory epithelium. Neuron 92, 1196-1203.

Pérez-Gómez A et al. (2015) Innate predator odor aversion driven by parallel olfactory subsystems that converge in the ventromedial hypothalamus. Curr Biol 25, 1340-1346.