

The **Sonderforschungsbereich 1089 (SFB 1089)** on **Synaptic Microcircuits in Health and Disease (www.sfb1089.de)** has recently been renewed for funding by the Deutsche Forschungsgemeinschaft (DFG) and is looking to recruit

PhD students (E13 65% TV-L) and postdoctoral scientists (E13 TV-L)

starting as soon as possible and is for a period of 3 years, with the possibility of an extension.

The SFB 1089 is a research network of groups from the **Medical Faculty and the Natural Sciences Faculty of the Rheinische Friedrich Wilhelms University Bonn, the Center for Neurodegenerative Diseases (DZNE), the Caesar Research Institute of the Max Planck Society, the University of Tübingen and the Weizmann Institute (Israel)**. Projects within the SFB are studying the fundamental rules that govern the dynamics of neuronal behavior at the network level, the translation of neuronal network dynamics to mammalian and human behavior and the link between neuronal network function and dysfunction to the pathophysiology of common CNS diseases. They cover the complete range from molecular mechanisms underlying the development and function of synaptic microcircuits to in vivo studies in animal models and to the analysis of network activity in the human brain. The SFB 1089 is well embedded in the excellent research infrastructure of the participating institutions and offers access to state-of-the-art technologies, well-equipped laboratories and a vibrant scientific community.

Positions are available in the following groups:

Heinz Beck, Director Institute of experimental Epileptology and Cognition Research (IEEER):

- Circuit mechanisms of altered excitability in experimental cortical malformations (A06)
- The role of the hippocampal CA3 network in integration of spatial and non-spatial information

(Heinz.Beck@ukbonn.de), 2 PhD student positions

Frank Bradke, DZNE,

- Synaptic Microcircuitry during Axon Regeneration: The Role of Rehabilitation in Modulating Neuronal Tracts and Behavioral Outcomes Following Microtubule Stabilisation Treatment

(frank.bradke@dzne.de), PhD student and postdoc position

Anne-Kathrin Gellner, Department of Psychiatry and Psychotherapy

- Modulation of Stress and Resilience

(gellner@uni-bonn.de), PhD student position

Jan Gruendemann, DZNE,

- Neural activity structures and dynamics in auditory thalamus in health and disease

(Jan.Gruendemann@dzne.de), PhD student position

Florian Mormann, Dept. of Epileptology, Univ. Bonn medical Center,

- Memory consolidation during sleep and waking state at the level of single neurons in the human medial temporal lobe

(florian.mormann@ukbonn.de), PhD student position

Martin Schwarz, Institute of experimental Epileptology and cognition research (IEECR)

- An inverse approach to the identification and manipulation of neuronal circuits underlying olfactory-mediated habituation/discrimination.

(Martin.Schwarz@ukbonn.de), PhD student position

Tatjana Tchumatchenko, Institute of Experimental Epileptology and Cognition Research (IEECR)

- Thalamocortical control of context invariant cortical output

(tat@tchumatchenko.de), PhD student position

Please find the detailed project descriptions [here](#).

The ideal candidate will be an ambitious, highly motivated, team-oriented graduate with a strong interest in neurobiology. Prior research experience with animal experimentation, microscopy, or electrophysiology techniques is advantageous. Candidates should hold a Master's degree or equivalent in Neuroscience, Biological Science, Biomedical Engineering, or a related field. Candidates should also demonstrate aptitude in written and spoken English.

The University of Bonn is an equal opportunities employer.

Applications should be directed to the PIs with available positions. Applicants should send a cover letter stating the relevant background, CV, copies of the last university degree (MA or equivalent for a PhD position, respectively the PhD certificate) and two reference contacts by email as a single PDF.

We offer supportive mentoring and a well-equipped laboratory. Successful candidates will be awarded a PhD.