The Institute for Auditory Neuroscience of the University Medical Center Göttingen (Germany) and Auditory Neuroscience Group, Max-Planck-Institute of Experimental Medicine, invite applications for a

Postdoctoral Position in Synaptic Nanophysiology

The successful candidate will conduct biophysical experiments and modeling on the synaptic nanoanatomy and nanophysiology of experimentally well accessible synapses of the auditory pathway. Our work aims at elucidating the presynaptic molecular structure and mechanisms of the active zones of inner hair cell ribbon synapses using state of the art electrophysiology (pre- and/or postsynaptic patch-clamp, capacitance measurements) and optical methods (uncaging, confocal, 2-photon, and super-resolution STED and MINFLUX imaging, optogenetics) to study normal and genetically manipulated synapses and combine the experiments with biophysical modelling to target fundamental research questions such as:

What is the molecular machinery underlying exocytosis at the hair cell synapse?

What is the role of the synapses' heterogeneity in coding sound over a wide range of intensities?

We are looking for excellent and highly motivated applicants with a strong background in neuroscience, physiology or physics, proven experience in biophysical techniques, and a passion for neuroscience. Competence in electrophysiology and state of the art microscopical imaging will be useful. Good computational skills and the ability to work in an interdisciplinary (combining molecular, structural, physiological, and theoretical approaches) and international team of researchers are required.

The Göttingen Campus is a leading Neuroscience Center hosting numerous prestigious and internationally renowned research institutions. This includes the University and its Medical Center, three life science Max Planck Institutes, the European Neuroscience Institute, and the German Primate Center. The Institute for Auditory Neuroscience & InnerEarLab is tightly integrated in the Campus with research groups hosted also at non-university Institutions and runs numerous stimulating collaborations on Campus such as within the collaborative sensory research center SFB889 (www.sfb889.uni-goettingen.de/) and the Multiscale Bioimaging Cluster of Excellence (www.mbexc.de).

Please submit your application preferably in one single PDF-document, including cover letter, CV, list of publications, names of possible referees, and relevant certificates to: ianoff@gwdg.de until November 15th 2021

Dr. Tobias Moser, Professor of Auditory Neuroscience
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