

Institut für Auditorische Neurowissenschaften

The Institute for Auditory Neuroscience, University Medical Center Göttingen, invites applications for a

PhD student position

in synaptic mechanisms of noise-induced hearing loss

limited for 3.5 years, 65% | salary according to TV-L

Sound is encoded at the ribbon synapses of the cochlear inner hair cells. These cells, together with the postsynaptic auditory terminals, are very fragile and can be injured and/or lost following exposure to noise, ototoxic drugs, and also in the process of aging. Such injury usually results in permanent hearing loss and affects millions of people around the world. The project will aim at identifying the processes that underlie the noise-induced damage to the hair cells of the inner ear. The successful candidate will investigate synaptic mechanisms of noise-induced hearing loss and potential novel therapeutic approaches for the treatment of such hearing loss. Work will use optogenetic tools and include state of the art electrophysiology (presynaptic patch-clamp recordings), optical methods (confocal/STED imaging of fluorescent probes in fixed and live tissue, calcium imaging), systems physiology tests and immunohistochemistry.

We are looking for excellent and highly motivated applicants with a strong background (first degree) in physics or biology, preferably with prior experience in biophysics or electrophysiology. The ability to work in an interdisciplinary and international team of researchers is required.

The funding of the candidate's PhD research will be supported by the collaborative sensory research center SFB889 (www.sfb889.uni-goettingen.de/). Göttingen is world renowned for its research in neuroscience. It is a stimulating and highly collaborative scientific environment hosting numerous prestigious and internationally renowned neuroscience research institutions, such as Georg-August-University, three relevant Max Planck Institutes, University Medical Center Göttingen (UMG), German Primate Center (DPZ) and European Neuroscience Institute (ENI).

We look forward to receiving your application by **January 31st, 2019**:

University Medical Center Göttingen

Institut für Auditorische Neurowissenschaften

Tina Pangrsic Vilfan

Group Leader Synaptic physiology of mammalian vestibular hair cells

37099 Göttingen

Tel.: 0551/39-61945

Fax: 0551/39-61957

E-Mail: tpangrs@gwdg.de

Web: <http://www.auditory-neuroscience.uni-goettingen.de>

Please send your application only via e-mail as a PDF-file.

Travel and application fees cannot be refunded or transferred.

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