The Department of Otolaryngology, Department of Clinical and Experimental Otology, Neurobiological Research Laboratory, Dr. Nicole Rosskothen-Kuhl, is seeking for

Two Neuroscientific PhDs

Research focus: Plasticity of the auditory system of unilateral and bilateral cochlear implant users with different hearing experience.

Activities and responsibilities
In the Neurobiological Research Laboratory, we investigate the plasticity of the auditory system due to electrical stimulation of the auditory nerve using a cochlear implant animal model. We are especially interested in the influence of hearing experience on the molecular and physiological adaptability of the auditory system.

In a recent project, we investigate the causes for poor spatial hearing of early deafened, cochlear implant users. The central question aims to analyze the causes of poor binaural auditory perception and should put special emphasize on a lack of experience and inappropriate stimulation of these patients. To answer this question, we combine multi-level research approaches. These include behavioral studies as well as electrophysiological and molecular techniques. In detail, we use 2-alternative forced choice behavioral trainings, multichannel in-vivo measurements of the central auditory system of rats, bioinformatic analysis tools for the evaluation of electrophysiology and behavioral data, immunohistochemical staining of brain slices, and modern microscopy methods.

Qualification profile
The ideal candidate should have:

- a master's degree in neuroscience, biology, bioengineering or similar disciplines
- extensive training in (in-vivo) electrophysiology and behavioral training of animal models
- a course on laboratory animal science (FELASA, Category B)
- experience in programming (Python, MathLab)
- a keen interest in translational hearing research, immunohistochemistry, and working with animals
- interest in learning new methods (e.g. surgical techniques)
- enthusiasm and great commitment to independent and goal-oriented research
- very good written and spoken proficiency in English and German
- excellent communication and team-working skills
- exceedingly high motivation and personal initiative
- willingness in research stays abroad

We offer

- participation in a young and highly motivated research group with good infrastructure
- scientific work on an innovative and cutting-edge topic
- a translational project between basic auditory neuroscience and clinical research
- close and direct supervision and intensive training
- a close cooperation with leading international research groups, e.g. with Prof. J. Schnupp (Hong Kong)
- research cooperation with industry partners
- continuous support for the development of your scientific profile

Send application to
To apply, please submit a CV, motivation letter, copies of certificates as well as two names of referees via our application platform (https://www.uniklinik-freiburg.de/karriere/stellenangebote/ausseinsicht/job/586.html) or send an pdf document via e-mail (nicole.rosskothen-kuhl@uniklinik-freiburg.de). The application deadline is the 30.04.2020.

For further information please contact Dr. N. Rosskothen-Kuhl
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