UNIVERSITÄTSMEDIZIN GÖTTINGEN UMG



The Institut für Auditorische Neurowissenschaften of the University Medical Center Göttingen is looking for a new position for the earliest start date

PhD Student (f/m/d)

part time, with 25,025 hours per week, limited until 31.10.2028
Remuneration according to TV-L

Please submit a cover letter describing your motivation and relevant research experience, a CV, academic certificates/transcripts, and contact details of two referees via the UMG application portal. Please indicate relevant programming projects or publications where applicable.

Your tasks

- Design and perform multielectrode in vivo electrophysiological recordings from the inferior colliculus of the Mongolian gerbil
- Develop and validate computational and data-driven models of auditory information processing and optogenetically evoked neural responses
- Integrate experimental measurements into a digital-twin framework and assess model generalization, uncertainty and biological plausibility
- Design and optimize sound-processing algorithms that map acoustic signals to spatial and temporal optical stimulation patterns, and benchmark their performance in vivo and in silico

UNIVERSITÄTSMEDIZIN GÖTTINGEN UMG

The University Medical Center Göttingen (UMG) unites the Medical Faculty of the Georg-August University and the University Hospital in an integration model. With around 9,700 employees, the UMG and its subsidiaries are one of the largest employers in the region. Our clinics and institutes stand for high-quality patient care, excellent research, modern teaching and transfer of innovative technology.

Göttingen as a city of science is located in the center of Germany and the University Medical Center Göttingen is integrated into an attractive network of university and non-university scientific institutions.

Our goal as University Medical Center Göttingen is professional equality for all genders. We strive to equalize the gender ratio in areas where there is underrepresentation. The University Medical Center Göttingen is particularly committed to the professional participation of severely disabled people and therefore welcomes applications from severely disabled people. In the case of equal suitability, applications from severely disabled persons will be given preferential consideration in accordance with the relevant regulations. We kindly ask you to indicate a disability/equal status in your letter of application in order to safeguard your interests.

- Collaborate with experimental neuroscientists and engineers; present and publish scientific findings and contribute to interdisciplinary project meetings

Your qualifications

- Completed MSc or equivalent in neuroscience, biomedical/electrical engineering, biology, physics or a related field
- Enthusiasm for in vivo electrophysiology. No prior in vivo experience is required; full training in electrophysiological techniques will be provided
- Good programming skills (preferably MATLAB/Python) and experience in signal processing, scientific computing or machine learning
- Strong analytical skills, curiosity about biological systems and enthusiasm for developing experimental and computational research
- Ability to work both independently and collaboratively in an interdisciplinary, international team; very good written and spoken English
- Knowledge of auditory neuroscience, PyTorch/JAX or computational neuroprosthetics is an advantage but not a prerequisite

We offer

- A scientifically ambitious PhD project at the interface of in vivo electrophysiology, computational modeling and optogenetic neurotechnology for future hearing restoration
- Close interaction with teams at IAN and EKFZ-OT developing optical cochlear implants, with access to complementary experimental, computational and engineering expertise
- An internationally connected Göttingen Campus research environment, opportunities for doctoral training at the Göttingen Graduate Center for Neuroscience, Biophysics and Molecular Biosciences
- Support for scientific publications, professional development and participation in collaborative research networks and training academies
- Employment and social benefits in accordance with the applicable TV-L regulations; final contract conditions to be specified

We look forward to receiving your application!

Apply Now

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Institut für Auditorische Neurowissenschaften
Prof. Dr. Tobias Moser
Institutsdirektor
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http://www.auditory-neuroscience.uni-goettingen.de/

Zertifikat seit 2015 audit berufundfamilie

FAMILIE IN DER HOCHSCHULE

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Für Diversity in der Arbeitswelt
UNTERZEICHNET