



The Institut für Herz- und Kreislaufphysiologie of the University Medical Center Göttingen is looking for a new position to 01.10.2025

PhD Student (f/m/d)

part time, limited for 3 years

We are looking for an excellent and highly motivated PhD student with an interest in the study of integration and compartmentation of β -adrenergic signaling in cardiomyocytes by nanodomain specific optogenetic stimulation and cAMP imaging. The successful applicant will be part of the newly funded FOR5807 consortium to study "Dynamic integration of GPCR signaling to control organ function and animal behavior". He/she/they will benefit from the collaboration among eight FOR5807 projects around Germany and have a close collaboration with our project partner Prof. Viacheslav Nikolaev (University Medical Center Hamburg-Eppendorf).

Your tasks

- Study intracellular localization of β -adrenergic receptors and identify receptor targeting sequences
- Design, cloning and testing receptor chimeras and optogenetic constructs in HEK cells and hiPSC-derived cardiomyocytes
- Functional readout of hiPSC-derived cardiomyocytes and isometric force measurements of ventricular slices from mice and humans
- Explore combination of optogenetic actuators and cAMP sensors for all-optical experiments
- Work within the working group vegetative optogenetics in the Institute of Cardiovascular Physiology and participate at the FOR5870 events

Your qualifications

- Completed Master of Sciences or equivalent in a Life Sciences subject (molecular medicine, biology, chemistry, physics, ...)
- Labwork experience
- Independent, responsible, flexible working style and ability to work in an international team
- Interested in basic cardiovascular research, electrophysiology and optogenetics

We offer

- Structured PhD training within GAUSS/GGNB with additional and optional training in the Hertha Spörer College and EKfZ academy for translation
- A stimulating intellectual environment with innovative translational research-projects within the interdisciplinary research areas
- Excellent scientific and technical infrastructure
- Mentoring by renowned scientists of the Göttingen Campus and the FOR5807
- A wide range of interesting benefits as an UMG employee (including in-house daycare center, child vacation care, attractive infrastructure; health and sports promoted by excellent company health management)
- Location in a beautiful and historic German university town steeped in tradition, with a campus that includes the University of Göttingen, Max Planck Institutes, German Primate Centre and other local research institutions

We look forward to receiving your application!

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.

[Apply Now](#)

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