

The Stem Cell Unit at the University Medical Center Göttingen is seeking a:

## PhD student (m/f/d)

for the preclinical testing of a CRISPR/Cas9-based gene therapy

3-year doctoral program, part-time 65% | salary according to TV-L

### About us

The University Medical Center Göttingen is a tertiary care center and offers great development potential. Its 7,900 employees work in over 65 departments and facilities to provide top-quality patient care, excellent research and modern teaching. Göttingen, "City of Science", located near the center of Germany, the University Medical Center Göttingen is embedded in the city's attractive network of scientific research facilities.

The Stem Cell Unit focuses on the generation of patient-specific induced pluripotent stem cells (iPSCs) and their applications in genome editing, cardiac differentiation, tissue engineering and disease modelling. By combining iPSC technology with CRISPR/Cas9 genome editing and further state-of-the-art approaches, we aim to deeply investigate the pathophysiology of cardiomyocytes on molecular, omics-based as well as on functional and pharmacological level in order to identify novel pathophysiological mechanisms in cardiomyopathy/heart failure and to develop preventive and/or curative therapies.

In her/his project, the PhD candidate will work on the preclinical testing of a CRISPR/Cas9-based gene therapy in iPSC-cardiomyocytes and engineered tissues

to cure inherited cardiovascular diseases. The PhD student will be trained in iPSC culture and differentiation, genome editing, tissue engineering, live cell/confocal imaging and molecular biology techniques.

**Your tasks:**

- designing, planning and executing experiments independently in the specific research project
- establishing novel technologies and optimizing workflows for genome editing, drug screening and automatization
- supporting our team in service-based projects for our collaboration partners

**Your profile:**

- university degree (MSc or equivalent) in disciplines or fields related to biology, pharmacology or biochemistry
- substantial background in stem cell research, genome editing, cardiovascular and regenerative medicine
- hands-on experiences in human iPSC culture, CRISPR/Cas technology, AAV production and general molecular biology is not a prerequisite but an advantage for the position
- fluent English in spoken and written, German knowledge

The University Medical Center Göttingen takes flexible account of the individual design of working hours at the workplace. It is interested in implementing the wishes of its employees as far as possible.

If you are interested in this job and have specific questions about working hours, please contact us.

Women are especially encouraged to apply. Applicants with disabilities and equal qualifications will be given preferential treatment.

We look forward to receiving your application by September 15th, 2020:

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

Travel and application fees cannot be refunded or transferred.