

The German Center for Neurodegenerative Diseases (DZNE) is a unique non-university research center which is dedicated to the subject dementia and all its areas, as well as other neurodegenerative diseases. The center compasses the full spectrum of fundamental research through population sciences to health care research. The DZNE stands for excellence in research and science management, translation of scientific results into practice, interdisciplinarity and internationalization. It is a research center within the Helmholtz Organization of German research centers. With over 1,000 employees from 55 nations, spread over 10 sites, the DZNE is one of the national and international leading research centers in its research field.

### **PhD Student (f/m/d) – Subcellular Optogenetics – Code 10018/2019/11**

To strengthen our research on "Subcellular Optogenetics" we are looking for a PhD student with an interest in Neurobiology and Biophysics at the earliest opportunity. The project aims at elucidating the potential of various protein trafficking motifs on the localization of optogenetic actuators on the neuronal plasma membrane as well as on organelle specific localization.

Optogenetics allows manipulation of cellular activity by light. A variety of optogenetic actuators are now available, which allow experimental control over a variety of cellular parameters. Importantly, the intracellular location of the actuators defines their effect on cellular physiology, and may lead to location-dependent effects.

Overall, the project provides a highly interdisciplinary approach to biophysics, cell-biology and neurobiology.

#### **Your tasks**

- The candidate is expected to perform experimental bench work, oral presentation of the results, as well as the preparation of manuscripts for publication in international scientific journals.
- Experimental work includes molecular biology, cell culture of cell lines and primary neuronal cells, live-cell imaging, and whole cell patch-clamp electrophysiology.
- Active participation in local, national, and international conferences is expected.

#### **Requirements**

- We are looking for an open-minded, enthusiastic, and highly-talented junior researcher with good social skills
- Demonstrable interest in basic biological research, strong analytical skills, ability for independent and critical thinking, organizational talent, and excellent communication and writing skills in the English language are a prerequisite.
- Experience in molecular biology or electrophysiology advantageous
- Successful candidates have a masters degree in life sciences

## We offer

- A doctoral position in an international, highly interactive environment at the DZNE Berlin embedded in the strong Berlin neuroscience research community.
- An exciting and challenging position in a research center that works on state-of-the art health research topics.
- The project provides a highly interdisciplinary approach to biophysics, cell-biology and neurobiology.
- Excellent career development opportunities for our employees. The successful candidate will be supervised by Dr. Benjamin Rost, and support and mentoring will be available at every step along the way. Training in general scientific methods, more specialized methods employed by the research unit, and scientific writing will be provided.
- The opportunity to utilize state-of-the-art equipment and facilities
- Funding is provided by the German Research Foundation priority program “Next Generation Optogenetics”(DFG SPP1926).
- The PhD candidate can be registered as such in an external University, or can be registered as a PhD student in the Charite Berlin, Freie University Berlin, or the Humboldt University Berlin
- Employment, payment, and social benefits are consistent with those at other research institutions

You will obtain special skills and knowledge for your scientific qualification at DZNE. The DZNE is an equal opportunity employer. It especially welcomes and encourages disabled individuals to apply.

Applications should contain the following documents (in English):

- A detailed Curriculum Vitae
- A cover letter with research interest
- One reference

We are looking forward to your application!

Please apply via the following link: <https://jobs.dzne.de/de/jobs/30442/form>

Application deadline: November 29th, 2019

