



The Institute of Biochemistry I at the medical faculty of the Friedrich Schiller University Jena seeks

2 PhD candidates (m/f/d) in Cell biology / Neurobiology / Biochemistry

(build your career: subsequent postdoctorate in one of our groups in the institute possible, too)

Supervisor: Prof. Dr. rer. nat. Britta Qualmann
Salary: TV-L E13 (65%; ~36.000€/year)
Starting: at earliest convenience
Term of employment: 3 years (elongation possible)

We welcome applications from candidates fulfilling the following criteria:

- Master of Science or Diploma (in biochemistry, neuroscience, biology or similar)
- High level of motivation and enthusiasm for independent scientific research in an ambitious, international team
- Reliability, accuracy, responsibility
- Sound, basic knowledge in: Molecular biology, protein biochemistry, cell biology, imaging
- Previous, more specialized experience with e.g. membrane interaction studies, high-resolution or electron microscopy, signal transduction studies is an advantage but not required
- Software knowledge (e.g. Office; Excel; Prism; ImageJ)
- Knowledge of German language is not necessarily needed, as we are an international lab and our lab language mostly is English - but is of course appreciated
- Fluent English, however, is a must

The UKJ/FSU is an equal opportunity employer promoting the advance of women in science.

Using a wide range of molecular biological, protein biochemical and microscopic techniques as well as cell biological assays, our institute carries out ground-breaking basic research for the molecular implementation and control of the cellular processes underlying the development and plastic adaptations of cellular morphologies required for proper organ function.

Proper neuronal cell shape development and plasticity e.g. are essential prerequisites for the formation of neuronal networks, the information transfer in the brain as well as plastic adjustments representing an important basis for learning and memory processes.

All of these processes are largely brought about by actin cytoskeletal and membrane topology-modulating proteins. Identifying and molecularly understanding such components therefore is our top research focus.

The PhD projects:

The aim of the two projects offered is to molecularly characterize physiological and pathophysiological forms of different high-performance membrane topology-modulating proteins (e.g. see: Seemann et al. 2017 *eLIFE*; Koch et al. 2020 *Cereb. Cortex*; Wolf et al. 2019 *Nat. Cell Biol.*; Izadi et al. 2023 *J. Cell Biol.*) as well as to identify their interactions and means of regulation. Together, this will assign mechanistic and cell biological functions to these proteins and characterize their role in physiology and disease.

These studies are intended to provide essential new insights into cell differentiation and morphogenesis processes and thereby also reveal cellular principles of neuronal network formation as well as of information transfer and storage in the brain.

Please direct your complete application

- CV incl. Publ. & honors,
- certificates & transcripts of both Bachelor and Master,
- 2-3 ref. addresses, cover/motivation letter

to:

Michael.Kessels@med.uni-jena.de

We offer an outstanding interdisciplinary research environment with top quality education and state-of-the-art instrumentation:

- Excellent supervision and interaction in a young and motivated research team
- "Hot topic" in neuroscience and cell biology
- State-of-the-art instrumentation and modern workplaces
- Personal development opportunities through individual design of a research project
- Wide range of methods that are directly established in the lab
- Continuous technical and scientific support and guidance
- Embedding in graduate programs (IZKF, JSMM)
- Further training and education offers, coaching etc.
- Local, national and international network connections
- Flexible working hours
- Communicative atmosphere within a scientific network providing top-level research facilities
- Opportunities for participation at national and international meetings
- Company pension scheme (VBL)
- Jena is a young, lively and international university town (25% students) with dynamic businesses, successful scientific innovation centers and a vibrant cultural scene and was ranked 2nd in the German career atlas.

We are looking forward to your application!