

The Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP) belongs to the Forschungsverbund Berlin e. V. (FVB). The FVB supports eight research institutes in Berlin, which are members of the Leibniz Association and financed by the Federal Republic of Germany and the federal states.

In the Junior Research Group "Membrane Traffic and Cell Motility" headed by PD Dr. Tanja Maritzen a

PhD position in Cell Biology / Neurobiology (f/m/d)

(Ref.27/2019)

is to be filled as soon as possible. This position will be associated with the Collaborative Research Center 958 (CRC958). Funding for the first year is supplied by a Collaborative Research Center Scholarship, funding for two additional years is available.

Project description

Movement, memory, learning – they all depend on efficient communication between the neurons in our brain. This communication takes place at synapses, specialized structures where pre- and postsynaptic neuron come into close contact. The presynapse is optimized for the release of neurotransmitters from synaptic vesicles, while the postsynapse is equipped with specific receptors for these neurotransmitters. On both sides intricate protein assemblies and highly selective membrane and protein transport processes are necessary to make sure that all the crucial components are in place for efficient neurotransmission.

Within our CRC958 funded project we study the role of large multi-domain proteins that are involved in endocytosis, a pathway for the transport of membrane and proteins into the cell, and in the scaffolding of important protein complexes. For our research we employ knockout mouse models which revealed already that these multi-domain proteins are in fact necessary for normal behavior and to reach a normal life span. Using primary neuron cultures derived from knockout mice, functional microscopy assays, super resolution imaging, CRISPR/Cas9-based genomic tagging for live cell microscopy, and biochemical protein interaction assays, we want to unravel the exact contribution of endocytic scaffold proteins to synaptic function.

In addition to a challenging PhD project, we offer a collaborative research environment within CRC958 with English as working language and state-of-the art equipment.

Requirements

We are looking for an ambitious, highly motivated graduate student with a passion for cell biology. The applicant should be meticulous in her/his work, fluent in English, communicative, a team player and have the wish to excel in science. A master degree in Cell Biology, Molecular Biology, Biochemistry or a related subject with excellent grades is required. Previous experience with neurons, cell culture techniques, microscopy and image processing is advantageous. Since Tanja Maritzen is currently applying for professorships at German universities, the applicant should be willing to move with her within Germany.

For more information, please contact:

Dr. Tanja Maritzen (email: maritzen@fmp-berlin.de), Homepage: https://www.leibniz-fmp.de,

YouTube: https://www.youtube.com/watch?v=G1D-lq5REvY

Salaries will be based on TVöD Bund (65 % position). In 2013 the institute has been awarded the certificate of the audit Beruf und Familie as family-friendly employer. We offer equal opportunities regardless of gender and welcome applications of disabled candidates. We welcome applications from all backgrounds. They will be preferred in case of equal qualification.

How to apply:

Please upload complete application documents only as a single pdf-file including CV, grade reports from high school diploma, copies of relevant degrees, statement of research interests and preferably two reference letters as soon as possible but not later than **December 29th 2019** via the <u>FMP's online job application facility</u> (button "Apply online"). Failing to submit the materials as a single PDF results in immediate exclusion from the competition.

We are looking forward to your application!