



The joint research group composed by the *Institute of Anatomy and Cell Biology* and the DZNE group *Translational Protein Biochemistry* offers **2 PhD positions** with focus on the molecular and synaptic pathomechanisms affecting neurons in neurological conditions such as traumatic brain injury and neurodegenerative diseases (e.g., amyotrophic lateral sclerosis and frontotemporal dementia).

What we offer:

Our international research team is embedded in two Collaborative Research Centres at the University of Ulm (SFB1149; SFB1506) and receives fundings from prestigious national and international organizations (DFG, BMBF, Else Kröner-Fresenius-Stiftung). By working in close collaboration with the Neurology Clinic and the DZNE research center, we prioritize investigations aimed at a better understanding of pathological conditions, as well as the development of novel therapeutic strategies that might be transferred to patients. Our lab has long experience in the investigation of the physiological and pathologic mechanisms characterizing the neuron, and especially the synapse, by using a collection of murine models (Shanks-deficient) and a unique library of human iPSC lines (from PMDS, ALS, SMA and Alzheimer's disease patients) that we differentiate into neuronal and glial cells, as well as cerebral and spinal organoids. The lab is equipped with a state-of-the-art setup including confocal, light sheet and STED microscopes, MEA devices and dedicated cell culture rooms for hiPSC-based models.

Successful applicants can obtain their doctoral degree by joining the *International Graduate School in Molecular Medicine*. The PhD positions will be supported for at least 3 years (65% according to German pay scale TV-L E13).

As start-date, summer/fall term 2023 is envisioned.

What we expect:

- A Master degree in Neurobiology, Biology or equivalent
- Preliminary experience with *in vitro* neuronal cultures, hiPSC expertise will be considered as a plus
- Basic knowledge of confocal microscopy, biochemistry assays and of statistical methods for omics data analysis
- Excellent communication and team-working skills
- Enthusiasm and great commitment to research

Highly motivated candidates should send their application by email including CV, motivation letter, MSc certificate (or equivalent) and the contact of at least 2 senior scientists as references to Prof. Dr. Tobias Böckers (tobias.boeckers@uni-ulm.de) and Dr. Alberto Catanese (alberto.catanese@uni-ulm.de). Application deadline: 15th June 2023.

Employment takes place through the administration department of the University Medical Center Ulm, which acts in the name and on behalf of the federal state of Baden-Württemberg. Handicapped people with equal qualifications will be employed preferentially. The Ulm-University strives for an increased proportion of women in research and teaching and therefore strongly encourages qualified female scientists to apply for the position.