

## ERC- and DFG-funded postdoc and graduate student positions in neuro- and cell biology/physiology

in the laboratory of Thomas Jentsch, FMP/MDC Berlin

The laboratory of Thomas Jentsch, at the Leibniz-Forschungsinstitut für Molekulare Pharmakologie (FMP) and Max-Delbrück-Centrum für Molekulare Medizin (MDC), Berlin, has several openings for motivated postdocs and graduate students on highly interdisciplinary projects addressing membrane transport processes in the broadest sense. Our laboratory focuses mainly on **anion channels**, some of which also transport neurotransmitters and drugs, and uses a judicious **combination of cell biology, biochemistry, electrophysiology, advanced microscopy, genetically modified mice and human genetics to understand their physiological function and role in disease**. Given the broad expression patterns of these channels, which are not only found at the plasma membrane, but also along the endolysosomal pathway, our research leads us into various organ systems, which prominently, but not exclusively, include the nervous system. We have discovered and characterized various ion transport-related diseases ('channelopathies') and actively continue research in this area.

Several projects on the volume-regulated anion channel VRAC and the acid-activated anion channel ASOR, which were recently molecularly identified by our lab, are available. For instance, using slice electrophysiology together with our mouse models, we aim to characterize their roles in CNS signal transduction. ASOR may also be present on intracellular membranes where it may functionally interact with vesicular Cl<sup>-</sup>/H<sup>+</sup> exchangers, which have crucial roles in the endolysosomal system and are mutated in various neurological diseases. Another project addresses the role of ClC-2 in brain – loss of this widely expressed Cl channel lead to leukodystrophy, whereas activating mutations cause hyperaldosteronism.

Applicants should either have a strong interest in **electrophysiology**, ideally with experience in brain slice patch-clamp analysis (for the postdoc position), or in **cell biology / physiology**, with previous experience in standard molecular/cell biological techniques and/or morphology. Enthusiasm for science, curiosity, flexibility in learning new techniques, and interest in working together in a highly interdisciplinary, international team are prerequisites. Our lab is excellently equipped and embedded in the outstanding scientific environment of the FMP, MDC and NeuroCure.

For more information, please visit our website <http://www.fmp-berlin.de/jentsch.html>.

Please direct your applications, which should include a statement of interest, CV, and references to Dr. Thomas J. Jentsch ([jentsch@fmp-berlin.de](mailto:jentsch@fmp-berlin.de)), who is also available for answering specific questions.