Buchmann Institute
for Molecular Life Sciences

GOETHE
UNIVERSITÄT
FRANKFURT AM MAIN

PhD student position

in optogenetic control of cellular Ca^{2+} homeostasis in Frankfurt, Germany

At the **Buchmann Institute** (www.BMLS.de) of Goethe University (Frankfurt, Germany), we offer a **PhD student position** (E13 TV-G-U, 65%) for initially 3 years, with possible extension. The project, funded within the DFG priority programme SPP1926 (Next Generation Optogenetics, www.spp1926.de), aims at generation and use of optogenetic tools for manipulation of Ca^{2+} homeostasis in excitable cells, and to enable arrhythmia studies.

The Gottschalk lab (https://www.bmls.de/Cellular_and_Molecular_Neurobiology/projects.html) uses neuro- and molecular biology methods in C. elegans to generate new tools to trigger Ca^{2+} efflux from and re-uptake into the endoplasmic reticulum (‚opto-Ryanodine receptor'; ‚opto-SERCA'). We use genome-editing, behavioral and microscopy studies, and electrophysiology. There are active collaborations with the groups of P. Sasse (Bonn) and S. Lehnart (Göttingen). Modern equipment is available.

Prerequisites are: MSc degree in biochemistry, biophysics or biology, as well as extensive experience in molecular biology and with invertebrate-models, ideally C. elegans. Experience In video- and fluorescence microscopy and in programming is helpful. Please send letter, CV, MSc diploma and transcript of records, as well as references to Prof. A. Gottschalk (a.gottschalk@em.uni-frankfurt.de), until **August 31st, 2019**.