PhD Program between the Freie Universität Berlin (FUB) and the China Scholarship Council (CSC)

Open PhD Position at Freie Universität Berlin, offered only to Chinese CSC scholarship candidates 2019

Please Note: this PhD position is only offered to Chinese PhD candidates for the application in the framework of the FUB-CSC PhD Program.

Department/Institute:	Institute of Chemistry and Biochemistry
Subject Area:	Cell Biology, Biophysics, Biochemistry
Name of Supervisor:	PD Dr. Tobias Stauber (Mr.)
Number of Open PhD Positions:	2
Type of the PhD Study:	Sandwich
Project Title:	Ion Transport in Cell Biology

PhD Project Description:

The general interest of our group is the regulation and the cell physiological role of ion transporters and channels of the plasma membrane and intracellular organelles. In our investigations, we mainly use live-cell fluorescence microscopy (ion imaging, subcellular traffic, protein states) and biochemical assays (protein interaction, posttranslational modification), but also a range of methodologies including molecular biology, further biophysical approaches, mathematical modelling and histology of mouse models.
One possible focus of the project is the function of vesicular ion homeostasis in the endosomal/lysosomal pathway - how the many ion transporters and channels maintain luminal ion concentrations (e.g. pH, calcium and chloride) and investigate how they control vesicular trafficking and signalling (for Cl, see [3]). Another possible focus is the cell biology of plasma membrane ion channels like the volume-regulated ion channel (VRAC), which we recently identified [1, 2]. We investigate their physiological roles in cellular dynamics and plasticity.

Relevant publications: [1] Stauber, Biol Chem 2015; [2] Voss et al., Science 2014; [3] Stauber and Jentsch, Annu Rev Physiol 2013; [4] Leisle et al., EMBO J 2011; [5] Weinert et al., Science 2010

Language Requirements:

IELTS: 6,5 / TOEFL: 95 ibt
Working language in the lab is English. German is not required.

Academic Requirements:

Master's degree in biology, biochemistry, biophysics or a related subject. Ideally experience with fluorescence imaging, and basic knowledge of molecular biological and biochemical lab work. Very good theoretical knowledge of cell biology and/or biophysics.

Information of the Professor or Research Group Leader:

For further information, please visit our website: www.chemie.fu-berlin.de/stauber

Please Note: In a first step, the complete application should be submitted to the Beijing Office for evaluation by January 4th, 2019. Please do not contact the professor before. He/she will get in contact with you after having received the complete application via the Beijing Office in January.