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 2020

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, Department of Biology, Chemistry and Pharmacy
Subject area: Cell biology, Metabolism, Epigenetics, Regenerative Medicine
Name of Supervisor: Prof. Sigmar Stricker
Number of open PhD positions: 1
Type of the PhD Study: Fulltime
Project title: Metabolic control of mesenchymal stem cells

PhD Project description:
Mesenchymal stem cells are an indispensable component of regeneration processes in manifold tissues. In skeletal muscle, mesenchymal stem cell-like cells assist muscle regeneration by fostering myoblast function, but also serve as progenitors for diverse muscle interstitial cell types. The molecular basis for these differentiation events are not well understood. Cellular metabolism has recently emerged as a pivotal determinant of cell fate. Here, we aim to dissect the post-injury microenvironment to identify metabolic mediators of mesenchymal stem cell differentiation. We aim to use sophisticated primary cell culture in a biomimetic ex-vivo environment to analyze the dynamics of cell fate change induction on a genome-wide basis (ATAC-Seq, ChIP-Seq, RNA-Seq...), including single cell analysis.

Language requirements:
IELTS: 6.5 or TOEFL: 95 ibt

Academic requirements:
Masters degree in Biochemistry / Cell Biology / Molecular Biology / Developmental Biology / Biology, or related areas.

Advantageous are: experience in cell culture, preferentially primary cells; experience with biomimetic scaffold materials for cell culture; experience with OMIC data analysis
Information of the professor or research group leader (website, awards etc.):

Prof. Sigmar Stricker

https://www.bcp.fu-berlin.de/en/chemie/biochemie/research-groups/stricker-group/index.html

Recent publications:


Please Note: In a first step, the complete application should be submitted to csc@international.fu-berlin.de for evaluation by January 4th, 2020. Please do not contact the professor before. He/she will get in contact with you after having received the complete application via the International Office of Freie Universität Berlin in January.