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

Open PhD position at FUB for CSC scholarship candidates 2017

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

Department/Institute:	Department of Biology, Chemistry, Pharmacy/Institute for Chemistry and Biochemistry – RNA Biochemistry
Subject area:	RAN Biochemistry, alternative splicing
Name of Supervisor:	Prof. Dr. Florian HEYD (Mr.)
Number of open PhD positions:	1
Type of the PhD Study:	Both possible
Project title:	Alternative splicing and the mammalian circadian clock

PhD Project description:

In the past years, it has become evident that the circadian clock in mammals is not just controlled by the well-studied transcription-translation feedback loop, but that posttranscriptional mechanisms play a crucial role for the molecular clockwork. For example, we could show that alternative splicing of the mouse U2AF26 gene is controlled in a circadian and light-inducible manner and that it controls the behavioral adaptation under jetlag conditions (Preussner et al., 2014, Mol Cell).
In more recent work, we have established a cell culture system that mimics circadian alterative splicing. We now use this system to elucidate the molecular mechanisms, i.e. the required RNA-elements, trans-acting factors and signaling cascades, leading to rhythmic splicing regulation. In the current project, we will further analyze the mechanistic basis for circadian alternative splicing and more general circadian gene expression and will also analyze the functionality of circadian splicing events in more detail. A broad range of methods, ranging from in vitro splicing to cell culture systems and mice will be applied to address these questions.

Language requirements:

English: IELTS 6.5 or TOEFL 95 ibt. (German is not required)

Academic requirements:

Biochemistry, Cell Biology, Molecular Biology and related disciplines.

Information of the professor or research group leader:

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

Please note:
In a first step the complete application should be submitted to the Beijing Office for evaluation by January 4th, 2017. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.