



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

### Open PhD position at FUB for CSC scholarship candidates 2016

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

<b><u>Department/Institute:</u></b>	Chemistry & Biochemistry
<b><u>Subject area:</u></b>	Biochemistry, Molecular Immunology
<b><u>Name of Supervisor:</u></b>	Prof. Dr. Christian FREUND (Mr.)
<b><u>Number of open PhD positions:</u></b>	1
<b><u>Type of the PhD Study:</u></b>	Full-time
<b><u>Project title:</u></b>	Understanding proline-rich sequence recognition in the spliceosome

#### **PhD Project description:**

In this project, we aim to understand the role of proline-rich sequence (PRS) recognition in the spliceosome. These sequences serve as hubs for the assembly of dynamic protein complexes that are essential for constitutive and alternative splicing. Using the proteins CD2BP2 and FBP21 as an example the project aims to delineate the role of PRS recognition events in the splice-site decisions of cells. A focus will be on understanding the role of these proteins in T cells, especially with regard to adhesion, cytokine production and T cell receptor signaling. Ultimately, approaches to inhibit these proteins by small molecules or engineered proteins will be exploited to probe their relevance for cellular behavior.

#### **Language requirements:**

English: IELTS 6,5 or TOEFL 95 ibt  
or  
German: Test DaF 16 or DSH 2

#### **Academic requirements:**

Applications of highly motivated candidates from the areas of structural, molecular or cellular biology are welcome. Experience in the areas of protein biochemistry or cellular immunology is highly desirable and qualifications and references should be excellent.

**Information of the professor or research group leader:**

Our group is interested in the understanding and manipulation of molecular interactions that govern the assembly of protein complexes. The focus is on proteins important for immune cell function, such as MHC class II molecule, integrin regulating scaffolds or alternatively spliced proteins. By using molecular and cellular biology techniques we want to decipher regulatory pathways that can subsequently be manipulated by protein engineering approaches. Small molecule and biologics are utilized as tools for understanding and interfering with the molecular switches that govern the behavior of immune cells. Further information is available at:

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

**Please note:**

In a first step the complete application should submit to the Beijing Office for evaluation by January 4<sup>th</sup>, 2016. Please don't contact the professor before. He/She will get in contact with you after having received the complete application in January.