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 Microbiology and Epizootics
Subject area: Infection biology
Name of Supervisor: Prof. Marcus Fulde, Ph.D.
Number of open PhD positions: 1
Type of the PhD Study: Full Time
Project title: Mechanisms of persister cell formation in Salmonella Typhimurium

PhD Project description:
Bacterial infections remain a major health hazard in human and veterinary medicine. While antibiotic treatment remains the method of choice to heal bacterial infections, the emergence of bacterial resistance against antibiotics has led to a critical need for a better understanding of underlying resistance mechanisms. Bacterial persister cells constitute a genotype-independent phenomenon of therapeutic resistance. These cells exhibit a viable, but non-growing phenotype, which enables them to overcome even high antibiotic concentrations and lead to post-therapeutic relapse infections. This PhD projects aims at identifying molecular mechanisms of persister cell formation in zoonotic Salmonella Typhimurium under in vitro as well as under in vivo conditions.

Language requirements:
IELTS: 6,5 oder TOEFL: 95 ibt

Academic requirements:
Degree in Microbiology, Immunology, Biochemistry, (Veterinary) Medicine
A master’s degree is required. (First) experiences in techniques from molecular microbiology and immunology, such as cloning and mutagenesis, RT-PCR and FACS would likewise be advantageous.
**Information of the professor or research group leader (website, awards etc.):**

| Prof. Marcus Fulde,  
| Head of the research group Infection Biology  
| Institute of Microbiology and Epizootics,  
| Centre for Infection Medicine  
| Freie Universität Berlin  

**Please Note:** In a first step, the complete application should be submitted to [csc@international.fu-berlin.de](mailto: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.