



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

Open PhD position at FUB for CSC scholarship candidates 2018

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

<u>Department/Institute:</u>	Department of Veterinary Medicine / Institute of Microbiology and Epizootics
<u>Subject area:</u>	Microbiology
<u>Name of Supervisor:</u>	Prof. Dr. Marcus Fulde
<u>Number of open PhD positions:</u>	1
<u>Type of the PhD Study:</u>	Full-time
<u>Project title:</u>	Mechanisms of Salmonella persister cell formation in <i>vitro</i> and in <i>vivo</i>

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 or TOEFL 95 ibt.

Academic requirements:

Microbiology, Infection and Immunity, Molecular Microbiology, Microbial Pathogenesis

Information of the professor or research group leader:

Prof. Marcus Fulde, Head of the research group Infection Biology, Institute of Microbiology and Epizootics, Centre for Infection Medicine, Freie Universität Berlin
<http://www.vetmed.fu-berlin.de/einrichtungen/institute/we07/index.html>

Please note: In a first step, the complete application must be submitted to the Beijing Office for evaluation by January 4th, 2018. 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.