



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 2024**

Department/Institute: Institute of Food Safety and Food Hygiene
Center for Veterinary Public Health
School of Veterinary Medicine |

Subject area: Food Microbiology

Name of Supervisor: |Prof. Dr. Thomas Alter / Vanessa Szott, PhD |

Number of open PhD positions: 1

Type of the PhD Study: |Full-time |

Project title: |Dynamics of *Vibrio* spp. in Shellfish: Unraveling different environmental Factors Impacting Concentration and Gene Expression in an Infection Model |

PhD Project description:

Vibrio parahaemolyticus, a Gram-negative bacterium, is a foodborne pathogen that is naturally present in marine environments and frequently associated with seafood products. Certain seafood, notably shellfish, have the potential to accumulate elevated levels of this pathogen. Consuming seafood with high concentrations of pathogenic *V. parahaemolyticus* may lead to gastrointestinal infections. It is suggested, that climatological and environmental factors influence the prevalence and concentration of *Vibrio* spp. in shellfish. Consequently, these factors could be used to predict the onset and levels of *Vibrio* spp. This is important to evaluate or measure the risk of *Vibrio* spp. infection by eating contaminated shellfish.

This project aims to investigate different environmental factors and their impact on *Vibrio* spp. concentrations in shellfish. The experiments are carried out in an experimental shellfish infection model. To further assess survival strategies of *Vibrio* in shellfish, phenotypic and genetic analyses (e.g. PCR assays, gene expression studies and microbiome analyses) will be performed.

Language requirements:

PhD study in English: IELTS 6,5 or TOEFL 95 ibt.

Academic requirements:

Master in biological sciences, food sciences, molecular biotechnology or veterinary medicine

Information of the professor or research group leader (website, awards etc.):

<http://www.vetmed.fu-berlin.de/en/einrichtungen/institute/we08/index.html>

Please Note: In a first step, the complete application should be uploaded to the [online portal](https://fuberlin.moveon4.de/form/60acfece5d328710e40bdbd5/eng) (<https://fuberlin.moveon4.de/form/60acfece5d328710e40bdbd5/eng>) for evaluation by January 15th, 2024. 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.