

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN



Fully funded PhD position at the Ludwig-Maximilians-Universität München (LMU Munich)

Within the framework of the current PhD program "Infection Research on Human Pathogens, the research group of Dr. Tobias Geiger at the Max von Pettenkofer-Institute is looking for a **PhD student** (m/f/x) at the earliest possible date.

Activities and responsibilities

We are looking for an outstanding graduate from all over the world, with a master's degree in biology or biochemistry and a passion for working at the interface of microbiology, immunology, and biochemistry.

Using bacterial pathogens such as typhoidal *Salmonella* serovars, the cause of typhoid fever in humans, the project aims to investigate the molecular mechanisms of a novel secretion system that is responsible for the secretion of typhoid toxin. This toxin can only be found in typhoidal *Salmonella* serovars and strongly contributes to the pathogens' life-threatening, systemic infections in humans. This study will help to explore novel perspectives on how *Salmonella* Typhi and Paratyphi exert this important virulence factor to establish infection within the human host. It will reveal potential targets for preventive and therapeutic antimicrobial strategies to fight the emerging threat of antibiotic-resistant typhoidal infections.

We offer

We are offering state of the art working conditions in a young and highly motivated team

- cutting-edge research in a variety of areas in microbiology and infection biology
- 3 years' DFG funding to work on your PhD (65% E13, TVÖD)
- a degree from the Ludwig Maximilians Universität München, LMU Munich
- excellent supervision through a thesis advisory committee
- a flexible and challenging curriculum of scientific and transferable skills

Qualification profile

Successful candidates should be interested in aspects of molecular and cellular microbiology, bacterial toxins, infection biology, and host-bacterial interactions. Skills in culturing bacteria, bacterial genetics, protein science, and biochemistry are needed. Additional basic knowledge in immunology would be favorable. We expect openness towards teamwork, the development of new techniques, and the ability to conduct experiments independently.

- a master's or comparable degree in a relevant subject
- good written and spoken English

Send application to

LMU Munich promotes an environment of gender equality and diversity. If you are interested, please send your CV (including scientific background and technical skills), a short motivation letter, and the names of two references as a combined PDF file via Email (max. 10 MB) to geiger@mvp.lmu.de_until **31**st of October, 2023.

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