



The Link Lab at the Cluster of Excellence "Controlling Microbes to Fight Infections" (CMFI) at the University of Tübingen advertises a

## PhD Position in Genome Engineering and Host-Pathogen Interactions

to be filled as soon as possible. The position is initially limited to three years.

The research group headed by Prof. Dr. Hannes Link at the University of Tübingen invites applications for a PhD position. The project aims to systematically identify bacterial genes that control immune evasion in ESKAPE pathogens. Using CRISPR interference (CRISPRi) libraries in *E. coli* and *S. aureus*, combined with high-throughput immune assays and metabolomic profiling, you will discover novel targets to enhance immune visibility of pathogenic bacteria. This is a collaborative project with the Mager Lab (immunology). You can find more information about our group at <https://www.link-metabolism.com>.

### Your tasks:

- Construction and screening of CRISPR interference (CRISPRi) libraries in ESKAPE pathogens to identify genes involved in immune evasion.
- Metabolomic and chemical characterization of bacterial mutants using LC-MS/MS, including analysis of surface structures such as LPS and wall teichoic acids.
- Collaboration with the Mager Lab to screen bacterial mutants using high-throughput dendritic cell reporter assays for immune activation.
- Preparation of manuscripts for peer-reviewed journals and presentations at conferences.
- Active collaboration with an interdisciplinary team in microbiology and immunology within the Cluster of Excellence CMFI.

### Our requirements:

- Masters degree in biotechnology, microbiology, molecular biology, or a related field.
- Background in microbial genetics, molecular biology or infection biology.
- Experience with CRISPR-based methods, molecular cloning or bacterial genetics is a plus.
- Experience with metabolomics, mass spectrometry or data analysis (e.g. Python, R) is a plus.
- Excellent communication skills in English, both written and spoken
- Strong motivation to work at the interface of microbiology and immunology.

Send your application as one pdf file by email to [hannes.link@uni-tuebingen.de](mailto:hannes.link@uni-tuebingen.de). The pdf file should contain: a cover letter, your CV and relevant certificates.

The review of applications will begin **April 1<sup>st</sup> 2026** and will continue until the position is filled.

Equally qualified applicants with disabilities will be given preference. The university is committed to equal opportunity and diversity. The university aims to increase the proportion of women in research and teaching and therefore encourages qualified female scientists to apply.

The hiring process is carried out by the central administration of the university.