

## PhD Positions in Projects on the Molecular Basis of Microbe-Microbe and Microbe-Virus Interactions

The Independent Research Group for “Molecular Basis of Microbial Community Interactions” within the Cluster of Excellence “Controlling Microbes to Fight Infections (CMFI)” is looking for several excellent **PhD students**. The group is led by Dr. Bastian Molitor and is hosted in the Environmental Biotechnology Group as part of the Center for Applied Geosciences at the University of Tübingen (<http://envbiotech.de/>) with an international, interdisciplinary, and dynamic team of environmental/biological engineers, microbiologists, biotechnologists, and molecular biologists.

We are looking to fill three PhD positions to work on different aspects of microbial community interactions. The projects aim at understanding interactions within the human microbiome on a molecular level: 1) between clostridial pathogens and commensal microbes; and 2) between methanogenic archaea and their viruses. The direction of the positions can be defined by the background and interests of the applicants to a certain extent.

- The first project includes genetic modification of clostridial pathogens and the operation of small-scale bioreactor systems, and will be performed in close collaboration with the Maier lab, which is located in the Interfaculty Institute of Microbiology and Infection Medicine in Tübingen.
- The second project will have a focus on isolation and characterization of vastly understudied methanogen-specific viruses and their impact on microbial communities.
- The third project will focus on the molecular interactions between a virus and the methanogen cell-envelope.

Qualified candidates have a Master’s degree in (micro)biology, biochemistry, biotechnology, or related fields. Successful candidates are expected to be involved in supervising bachelor and master students. Very good English language skills are necessary. German language skills are helpful but not a requirement. Other requirements include the ability to do work independently and in a team, excellent management and communication skills, and a high motivation. Candidates will have the opportunity to present their results in international journals and conferences.

Positions are intended to be filled until early 2021, and the starting date can be flexible depending on the availability of qualified candidates. The contracts are for 3 years and the employment will be arranged by the administration of the University of Tübingen (salary TVL E13, 65%). The University of Tübingen is seeking to increase the proportion of women in

science and teaching, and therefore is asking qualified women to apply. Disabled persons will be preferred in case of equal qualification.

Applications (in English), combined as one pdf document, including cover letter, CV, transcripts and diplomas, and contact address of two referees should be sent by email to [bastian.molitor@uni-tuebingen.de](mailto:bastian.molitor@uni-tuebingen.de). Applications will be accepted until the positions are filled.

**Dr. Bastian Molitor**

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