



EBERHARD KARLS
UNIVERSITÄT
TÜBINGEN



CSC-Tübingen PhD Scholarship Program

2025 application round: prospective PhD positions at the University of Tübingen

Faculty:	Faculty of Science
Institute/Section/Subject:	Interfaculty Institute of Microbiology and Infection Medicine Tübingen/Bacterial Metabolomics/ Microbiology and Cell Biology
Supervising Professor:	Prof. Dr. Hannes Link
About the Supervisor:	Prof. Link's research aims to advance knowledge and innovation in bacterial metabolomics for microbiome research and health challenges like antibiotic resistance. More information at www.linkmetabolism.com
Specification:	Systematic Identification of Genotoxic Metabolites in the Nasal Microbiota
Topic Description:	Bacteria can produce metabolites that damage DNA, leading to mutations and potentially cancer. However, few of the genotoxic metabolites in the human microbiota are currently known (e.g. colibactin). This research aims to systematically identify genotoxic metabolites in co-cultures of human brain endothelial cells and nasal bacteria that model the microbiome–nose–brain axis. We will employ our existing synthetic community of 10 nasal bacteria and our cutting-edge metabolomics methods to find metabolites that promote brain cancer development.
Intended Degree:	PhD in Biology
Type of the PhD Study:	Full-time (complete doctoral studies at the University of Tübingen)
Required Degrees:	M.Sc. in Cell Biology, Microbiology or a related field
Language Requirements:	Fluent English, verbally and in writing (IELTS 6,5 or TOEFL equivalent);
Notes:	See our papers on www.linkmetabolism.com , e.g. Lempp et al. in Nature Communications (2019) for the systematic identification of metabolites that control gene expression in bacteria.