



The research group "Bacterial Metabolomics" at the University of Tübingen searches for a

Postdoc in Systems Biology of Bacterial Metabolism (m/f/d, TV-L E13 100%)

The research group "Bacterial Metabolomics" headed by Dr. Hannes Link is looking for a postdoctoral researcher to start end of 2020. We are a research group in the "Controlling Microbes to Fight Infections" excellence cluster at the University of Tübingen, Germany. Our group tries to understand how bacteria achieve optimal function of their metabolic network, and then use this knowledge to construct improved strains for industrial biotechnology. Please see <https://www.linkmetabolism.com> for more information about our research.

Project

Currently we are looking for a highly motivated and ambitious individual to join the ERC project "MapMe", which is funded by the European Research Council (ERC). The project aims at developing novel metabolic engineering concepts, and to investigate basic problems in life sciences. Current metabolic engineering approaches modify genes with known roles in the production pathway of interest. In the project we will identify genes that are unrelated to the production pathway but substantially impact productivity. To date there are no methods to predict such distal genes and their effects on a rational basis. The problem is that effects of distal genes are indirect, and mediated through interactions between metabolites and proteins, most of which are currently unknown even in the well-studied microbe *Escherichia coli*. In the computational part of the project we will integrate high-throughput metabolomics and gene expression data to map metabolite-gene relationships, and apply this information to create superior strains for industrial biotechnology.

Requirements

Requirements are a completed PhD in molecular biology, biotechnology or a related field and a strong scientific commitment. We are particularly interested in applicants with experience in metabolomics, CRISPR interference, CRISPR gene editing or/and analysis of larger "omics" data sets.

Application

Applications should be sent by e-mail to link-lab.jobs@mpi-marburg.mpg.de. Please send as one pdf file: a cover letter, your CV and the names and e-mail addresses of academic referees. Applications should be submitted **no later than July 31th, 2020**. Earliest start date is November 2020. The University of Tübingen is an equal opportunity employer. Their goal is to enhance the percentage of women where they are underrepresented. Women, therefore, are especially encouraged to apply. The university is committed to employing more handicapped people. Applications of handicapped people are particularly welcome.