Max-Planck-Institut für terrestrische Mikrobiologie
Max Planck Institute for Terrestrial Microbiology

synmikro

MPI für terrestrische Mikrobiologie • Karl-von-Frisch-Straße 10 • D-35043 Marburg/Germany

Postdoc Positions in Synthetic Biology and Metabolic Engineering

The research group "Dynamic Control of Metabolic Networks" is looking for postdocs, to start in the beginning of 2017. We are a research group at the Max Planck Institute for Terrestrial Microbiology and at the LOEWE center for synthetic microbiology (SYNMIKRO) in Marburg, 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 http://www.mpi-marburg.mpg.de/link for more information about our research.

Currently we are looking for a highly motivated and ambitious individual the 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*. We will use frontline metabolomics methods to systematically map regulatory metabolite-protein interactions, and apply this information to create superior strains for industrial biotechnology.

The successful candidate should have a PhD in Molecular Biology, Biotechnology or a related field and have a strong commitment to science. We are particularly interested in applicants with experience in metabolomics, systems genetics or analysis of larger "omics" data sets.

The Max Planck Institute for Terrestrial Microbiology and the neighboring Philipps University of Marburg form one of the largest clusters of microbiology research in Europe and offer an interdisciplinary research environment. Within the LOEWE center for synthetic microbiology (SYNMIKRO), more than 100 scientists from the Max Planck Institute and Philipps University explore the foundations of synthetic microbiology.

As an equal opportunity employer, the Max Planck Society is committed to employing more individuals with disabilities. We therefore actively encourage individuals with disabilities to apply. We also seek to increase the percentage of female employees in areas where they are under-represented. Qualified women are therefore strongly encouraged to apply.

Applications should be sent by e-mail to link-lab.jobs@mpi-marburg.mpg.de. Please send as one pdf file: your CV, a cover letter describing your research interests and motivation, a list of publications with a brief description, and the names and e-mail addresses of academic referees.

Applications will be accepted until the position is filled but those received by October 30, 2016, will receive priority consideration.