
Job Advertisement HKI-09/2020

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute** (Leibniz-HKI, www.leibniz-hki.de) investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. The **Junior Research Group Synthetic Microbiology** invites talented and highly gifted candidates to apply as

Doctoral Researcher (f/div/m) Coenzyme research

starting as soon as possible for three years initially.

Topic: Novel redox-coenzymes involved in metabolic plasticity of pathogenic bacteria.

Our requirements: We expect a Master's degree (or comparable) in Life Sciences (e.g. Biochemistry, Chemistry, Microbiology) with a strong background in protein purification and enzyme biochemistry. Experience in microbiology and microbial physiology is advantageous. Applicants should have very good communication skills in English and a high motivation to perform team-oriented as well as independent work.

The field of work includes the characterization of novel enzymes and coenzymes from pathogenic and nonpathogenic bacteria that contribute to plasticity and diversity of microbial metabolism. Key methods include FPLC-based purification of proteins and redox-coenzymes from cell lysates, heterologous expression of in model organisms (e.g. *E. coli*, *Mycobacterium smegmatis*) and the biochemical characterization of enzymes and coenzymes (enzyme kinetics, mutagenesis experiments, spectroscopic studies, etc.). Together with others, physiological studies, metabolomics and proteomics experiments, as well as structural studies will be performed. Finally, the exploitation of enzymes as drug-targets will be investigated.

We offer: The successful candidate will be hosted in the independent Junior Research Group "Synthetic Microbiology" headed by Dr. Gerald Lackner. The Leibniz-HKI is embedded in the outstanding scientific environment of the Beutenberg Campus providing state-of-art research facilities and a highly integrative network of life science groups. We offer a multifaceted scientific project supported by excellent technical facilities a place in a young, committed team, as well as strong scientific collaborations. The PhD candidate will participate in the structured program of the **International Leibniz Research School** and become an associated member of the **Jena School of Microbial Communication**.

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer, the Leibniz-HKI is committed to increasing the percentage of female scientists and therefore especially encourages them to apply.

Further information:

Dr. Gerald Lackner | +49 3641 532 1104 | career@leibniz-hki.de

Applications:

Complete applications in English should include a CV, a complete list of publications, a brief statement of research experiences, the addresses of two possible referees, and should be submitted **by March 22, 2020** via the Leibniz-HKI **online application system**.