Leibniz-Institut für Naturstoff-Forschung und Infektionsbiologie
Hans-Knöll-Institut

Job Advertisement HKI-08/2020

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 Department **Bio Pilot Plant** invites talented and highly gifted candidates to apply as

Postdoctoral Researcher (f/div/m) – Microbial physiology/electrochemistry

Research Area:

The research group of Prof. Miriam Rosenbaum at the Dept. Bio Pilot Plant of the Leibniz-HKI is focused on elucidating and utilizing microbial interactions with electrochemical systems to develop new strategies for microbial processes in biotechnology. As pioneers in the work with microbial redox mediators, the group is looking for and utilizing connections of microbial metabolism with electrochemistry. The group conducts innovative cutting-edge research by combining electrophysiology with strategies from synthetic biology to develop new biocatalysts. With the recently awarded ERC Consolidator Grant "eMICROBe" to Prof. Rosenbaum, the energetic link between extracellular electron exchange and cellular ATP production will be developed. We are looking for a talented and highly motivated postdoc to study and construct the energetic principles of using natural mediators for microbial respiration at the anode.

The successful candidate will employ advanced chemical, electrochemical and physiological analytics (omics) to derive physiological pathways and engage in metabolic engineering to advance the physiological performance of microorganisms. We offer working in a dynamic and highly motivated group with strong support based on lively collaboration and friendly interaction between the interdisciplinary scientists and with access to state-of-art equipment. In addition, the applicant will have all possibilities to realize own innovative ideas and develop new projects while contributing to the organization within the Bio Pilot Plant.

Main Requirements:

- A PhD in microbiology, biochemistry, microbial physiology, metabolic engineering or related disciplines
- Strong experience in microbial cultivations and metabolic engineering especially of bacteria
- Advanced knowledge in performing omics investigations including bioinformatics` data analysis
- The candidate should be willing and able to work in an international, interdisciplinary research team
- Ability for team-oriented as well as creative and independent work
- Very good written and oral communication skills in English
- At least one publication as first author in a peer-reviewed journal

Preferred Skills:

- Knowledge in microbial energy metabolism and/or microbial electrochemistry
- Experience in microbial electrochemistry, microsystems or biomedical engineering would be an advantage.
- Basic knowledge about microbial high throughput screening techniques and co-culture cultivations
- Experience in writing scientific reports, research papers and research proposals
- Experience in supervision of students

The research group 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- and technical science institutes and groups. We offer excellent technical facilities, working in a committed team, as well as strong scientific collaborations.

Salary is according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the Leibniz-HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply. We are interested in filling the positions as soon as possible.

Leibniz-Gemeinschaft

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Further information:

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Applications:

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

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