

Job Advertisement No. 10/2018

The **Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –** (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 group **Chemistry of Microbial Communication** invites talented and highly gifted candidates to apply for the following position starting as soon as possible

PhD position

for three years initially.

Research Area: We are interested in understanding the role of bacterially produced natural products (i.e. small molecular weight compounds such as antibiotics) in biological systems.^[1-3] While new antibiotics are urgently needed to combat life-threatening infectious diseases, not much is known why these compounds are produced in an ecological setting. We investigate scenarios in which bacteria use natural products to defend themselves against microbial predators (e.g. amoebae). In particular, we are interested in understanding cooperative defense mechanisms by which several bacteria jointly combat their predator. The PhD project will involve the isolation of bioactive natural products as well as studies towards the understanding of when and why these molecules are produced. This project combines research in the fields of biological chemistry, natural product biosynthesis, and chemical ecology.

Requirements:

- The candidate should embrace both working in an international research team and conducting research (team-oriented, as well as independent work) that covers multiple disciplines embedded in the infrastructure of the HKI
- A Master's degree (or equivalent) in chemistry or other natural and life sciences (e.g. chemical biology, biomedical sciences, biochemistry, etc.). Candidates about to obtain their degree are welcome to apply
- Experience in lab work, either chemistry-, microbiology-, or molecular biology-oriented and very good communication skills in English.

We offer: 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 groups. We offer excellent technical facilities, a place in a young, committed team, as well as strong scientific collaborations.

Salary is paid according to German TV-L (salary agreement for public service employees). As an equal opportunity employer the HKI is committed to increase the percentage of female scientists and therefore especially encourages them to apply. Applications for PhD scholarships will also be supported!

Further information: Dr. Pierre Stallforth | +49 3641 532 1527 | career@leibniz-hki.de

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 **June 30, 2018** via the [online application system](#) of the HKI.

[1] Klapper M *et al.*, *Synlett*, **2018**, 29, 537.

[2] Klapper M *et al.*, *Angew Chem Int Ed* **2016**, 55, 8944.

[3] Arp J *et al.*, *Proc Natl Acad Sci USA* **2018**, 115, 3758.
