

The [Cluster of Excellence “Balance of the Microverse”](#) studies the fundamental principles underlying microbial community interactions and functions in diverse habitats, ranging from oceans and groundwater to plants and human hosts. We integrate insights across ecological and medical fields to enhance our understanding of microbial balance from the molecular to the ecosystem level. We develop tools and detection technologies to shape microbiome dynamics for environmental and human health benefits. The affiliated early career program of the Jena School for Microbial Communication offers an ambitious, structured and interdisciplinary post-graduate training based on top-level fundamental research.

The junior research group of Dr. Luzia Gyr at the Cluster of Excellence “Balance of the Microverse” invites applications for a

## Postdoctoral Researcher in Antifungal Natural Product Discovery

commencing on 01.07.2026 or upon agreement. We offer a full-time position (100%, 40 hours per week) at the Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute –, offered as a fixed-term position for 2 years.

Natural products play crucial roles in microbial interactions and form the basis of most antibacterial and antifungal compounds, but traditional screening methods often miss sub-inhibitory effects or compounds inducing changes in virulence. This project uses a microbiome-inspired co-cultivation approach to study interactions between natural product-producing bacteria and the pathogenic fungus *Candida albicans*. The robotic platform JenXplor will be used to analyze changes in growth and morphology of *C. albicans* through microscopy. Promising interactions will be further characterized to identify underlying mechanisms and bioactive compounds with potential therapeutic applications.

### Your responsibilities:

- Perform high-throughput experiments and computational analysis and work independently towards your postdoctoral research project
- Analyse project results, generate figures for publications, and write scientific manuscripts for publication
- Present your results at local, national, and international meetings and conferences
- Work closely together with other experimental and computational researchers in the research group and within the Cluster
- Assist with training and supervising other researchers (e.g. doctoral candidates, MSc students)
- Contribute to the friendly, welcoming, and collaborative environment in our team

### Your profile:

- A PhD in biological science, microbiology, biochemistry or closely related disciplines. Candidates in the final stages of obtaining their PhD are encouraged to apply
- Experience with fungal and/or bacterial co-cultivation and microscopy is desired
- A strong background in natural product discovery, including techniques such as genome mining, metabolomics, and compound isolation
- Interest in laboratory automation and high-throughput experiments
- A high level of curiosity, self-motivation, enthusiasm and attention to detail

- A cooperative personality actively seeking to contribute to our interdisciplinary and inclusive Microverse community
- Very good written and spoken English communication skills

Are you hesitating because you don't meet one or some of our requirements? Please do not hesitate to apply and give us a chance to get to know you.

**We offer:**

- A highly communicative atmosphere within an energetic and interdisciplinary scientific network
- The Jena School for Microbial Communication offers a structured and interdisciplinary training program based on top-level fundamental research and provides comprehensive mentoring programs and soft skills courses for doctoral and postdoctoral researchers
- Jena – City of Science, a young and lively city with a vibrant local cultural agenda
- A dedicated management team, providing support and information on non-scientific subjects, such as onboarding and family life, and organizing individualized career development programs, and events on topics like diversity and collaboration
- Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) at salary scale E13 — depending on the candidate's personal qualifications—, including a special annual payment in accordance with the collective agreement

The full-time 2-year postdoctoral researcher position (TV-L E13, 100%) is funded through the Excellence Strategy of the German federal and state governments. The employment contract will be with the Leibniz Institute for Natural Product Research and Infection Biology – Hans Knöll Institute. Part-time employment can be discussed.

To promote gender equality in science, applications by women are particularly welcome. Candidates with severe disabilities will be given preference in the case of equal qualifications and suitability.

Are you eager to join us? Then apply by **25.05.2026** using our online portal.

[Online application](#)



For further information on your application and the collection of personal data, please refer to our [Privacy Statement for Applicants](#)