

The **Jena School for Microbial Communication (JSMC)** is an ambitious Graduate School with over 130 doctoral and postdoctoral scientists. We offer structured, interdisciplinary PhD and career training programs based on top-level fundamental research. They conceptually combine different research areas to a comprehensive picture of microbial communication. 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.

The research group of Microbiome Dynamics at the JSMC and the 'Cluster of Excellence "Balance of the Microverse"' invites applications for a

## **Doctoral Researcher (TV-L E13, 65%) in Metagenomics**

commencing on 01 September 2026 or upon agreement. We offer a part-time position (65%) at the Leibniz Institute for Natural Product Research and Infection Biology-Hans Knöll Institute (Leibniz-HKI), offered as a fixed-term position for 3 years.

This computational project explores how the gut microbiome contributes to human health by moving beyond simple disease classifications. The student will work with large-scale multi-omics data to link microbial functions to host biology. By integrating different data types, the project aims to uncover how factors such as age and diet shape microbiome–host interactions. The ultimate goal is to identify targets for more personalized health interventions.

### **Your responsibilities:**

- Perform computational integration of multi-omics datasets from both microbial communities and the host and work independently towards your doctoral 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. student assistants, BSc students)
- Contribute to the friendly, welcoming, and collaborative environment in our team

### **Your profile:**

- A MSc in Computational Biology, Bioinformatics, Systems Biology, Bioengineering, Chemical Engineering, or closely related disciplines. Candidates in the final stages of obtaining their MSc are encouraged to apply
- Knowledge and experience in the analysis of metagenomics, untargeted metabolomics or other biological high-throughput datasets
- Knowledge of statistical methods in the context of biological systems
- Experience with programming (Python, Perl, C++, R)
- 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
- Excellent written and spoken English communication skills

### **We offer:**

- A highly communicative atmosphere within an energetic and interdisciplinary scientific network
- The Jena School for Microbial Communication offers a structured and interdisciplinary doctoral training program based on top-level fundamental research and provides comprehensive mentoring programs and soft skills courses
- 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 organising individualised career development programs, and events on topics like mental health and communication
- 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 3-year doctoral researcher position (TV-L E13, 65%) will be funded through the JSMC through the Thuringian State government (2026-2028) and subsequently through the Excellence Strategy of the German Federal and State governments (2029). The University of Jena and the participating research institutes are equal opportunity employers. Part-time contracts can be discussed. Candidates with severe disabilities will be given preference in the case of equal qualifications and suitability. The employment contract will be with the Leibniz-HKI.

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 **April 26, 2026**, using our online portal.

**[Online application](#)**