

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 VEO Group at the JSMC and the 'Cluster of Excellence "Balance of the Microverse"' invites applications for a

Doctoral Researcher (TV-L E13, 75%) to investigate Fungi-bacteria interactions in complex communities

commencing on 01 July 2026 or upon agreement. We offer a part-time position (75%) at the University of Jena, offered as a fixed-term position for 3 years, with the intention to extend for a 4th year depending on funding availability.

Although mostly studied in isolation, fungi-bacteria interactions impact the structure and functioning of the Microverse. We aim to comprehensively associate fungal genes to bacteria in complex communities derived from terrestrial, marine, and host-associated biomes under a range of environmental conditions by using fungal knockout libraries. We will analyze the resulting gene-microbiome associations in terms of fungal pathways and bacterial traits, including generalist or specialist lifestyle, and perform targeted validation experiments to confirm key interactions and support mechanistic interpretation. Together, this project will shine new light on cross-kingdom microbial interactions.

Your responsibilities:

- Perform high-throughput laboratory experiments and computational analyses, 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 VEO Group and within the Microverse Cluster.
- Assist with training and supervising other researchers (e.g. student assistants, BSc and MSc students).
- Contribute to the friendly, welcoming, and collaborative environment in our team.

Your profile:

- A MSc in microbiology, molecular biology, bioinformatics, biochemistry or a closely related discipline. Candidates in the final stages of obtaining their MSc are encouraged to apply.
- Experience with fungal and/or bacterial community cultivation, DNA sequencing, and high-throughput sequencing data analysis is desired.
- 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. Fluency in German and other languages is advantageous.



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 University of Jena.

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](#)