

The Cluster of Excellence “*Balance of the Microverse*” of the Friedrich Schiller University Jena, Germany, combines expertise in life, material, optical and computational sciences to elevate microbiome studies from descriptive to hypothesis-driven and functional analyses. Our core mission is to elucidate fundamental principles of the interactions and functions in microbial communities in diverse habitats ranging from oceans and groundwater to plant and human hosts. We aim to identify the shared characteristics of disturbed or polluted ecosystems as well as infectious diseases on the microbiome level, and develop strategies for their remediation by targeted interventions. Our full spectrum of expertise in the physical and life sciences will be leveraged to address these important issues in natural habitats as well as synthetic arenas in a collaborative manner. The affiliated early career program of the *Jena School for Microbial Communication (JSMC)* offers an ambitious, structured and interdisciplinary post-graduate training based on top-level fundamental research.

The Cluster of Excellence *Balance of the Microverse* invites applications for
6 Doctoral and 2 Postdoctoral Researcher Positions

We are recruiting engaging and motivated individuals to join our research cluster. Important for all candidates will be the willingness to collaborate widely and to look beyond traditional disciplines to further our mission. What are the similarities and differences in the recruitment and maintenance of plant and animal microbiomes? What imaging technologies can best be adapted to study microbes in their natural environment with minimal artificial manipulation? What can we learn about the resilience and stability of microbial communities in diverse environments such as soil, the oceans and ground water? How can we translate our understanding of microbiomes to positive societal impact? Answering these questions requires that we come together as a scientific community to which we contribute expertise as well as a curiosity about unfamiliar subjects.

We expect:

- A degree (MSc, PhD or equivalent) in natural sciences (Biology, Microbiology, Molecular Biology, Biochemistry, Bioinformatics, Physics or closely related fields). Candidates in the final stages of obtaining their degree are eligible to apply
- Desirable methodological skills: excellent background in molecular biology, biochemistry, cell biology, immunology and/or microbiology, hands-on knowledge of analytical methods
- Highly motivated individuals with an interest in joining one of the interdisciplinary research areas of the Microverse Cluster
- The ability to work creatively and independently towards developing your own research project
- A collaborative personality with enthusiasm for actively participating in the dynamic Microverse community
- Excellent English communication skills, both written and spoken

We offer:

- A highly communicative atmosphere within a scientific network providing top-level research facilities
- A comprehensive mentoring program and soft skill courses for early career researchers
- *Jena – City of Science*: a young and lively town with a vibrant local cultural agenda

The positions will be funded through the Excellence Strategy of the German federal and state governments, the Carl Zeiss Foundation or the German Academic Exchange Service. The Friedrich Schiller University Jena is an equal opportunity employer and part-time contracts can be discussed. Disabled persons with comparable qualifications will receive preferential status.

Applications are exclusively accepted via the JSMC Online Application Portal:

<https://apply.jsmc.uni-jena.de/>

Please familiarize yourself with the currently available doctoral projects (www.microverse-cluster.de) and the application process as described in the Online Application Portal. Selected applicants will be invited to a recruitment meeting taking place in August. Awarding decisions will be announced shortly thereafter, and candidates are expected to be available to start their projects in autumn 2020.

Application deadline: 25th June 2020