

The Friedrich Schiller University Jena is a dynamic and innovation-driven university centrally located in Germany. With a broad range of disciplines, it shapes the future through excellent research and teaching. Its scientific excellence is reflected in the profile areas **Light – Life – Liberty**, which provide pioneering insights and sustainable solutions for the society of tomorrow. Through close collaborations with leading research institutions, innovative companies, and renowned cultural organizations, it advances interdisciplinary developments. With around 17,000 students and approximately 10,000 employees, it defines Jena as a vibrant, internationally connected city of science and innovation.

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 research group of Prof. Kirsten Küsel at the Cluster of Excellence “Balance of the Microverse” invites applications for a

Postdoctoral Researcher Position in the Field of Parasitic Interactions among Bacteria

at the earliest possible date. We offer a full-time position (100%, 40 hours per week) at the University of Jena, offered as a fixed-term position for 2 years.

Background

Bacteria of the Candidate Phyla Radiation (CPR) represent more than 25% of the total bacterial diversity on Earth. However, knowledge about their life styles and metabolic properties is still scarce due to lack of cultured representatives. Limited de novo biosynthesis capabilities point to a host-dependent life style of CPR. This project aims to characterize physiological, metabolic and molecular features of a recently cultivated parasitic member of the CPR with its host, obtained from groundwater. We will use multi omics approaches and cryo-TEM to study mechanisms of cell-cell recognition, attachment, and the parasite’s strategies to exploit the host cell’s cellular resources. We further aim to identify molecular traits underlying host specificity. As our new Postdoc in this field, you will support and advance ongoing cultivation efforts with challenging CPR parasite-host systems and gain insight into the mechanisms of their interaction.

Your responsibilities:

- Maintenance of the host-parasite system and characterization of growth and infection dynamics in incubation experiments
- Close collaboration with working groups using metabolomics, Raman-based cell sorting, and microscopic imaging including cryo-TEM
- Metatranscriptomics and metaproteomics data analysis
- Work in an interdisciplinary team of microbial ecologists and integrate into the Cluster of Excellence consortium
- Contribute to the development of the project, as it evolves
- Analyse project results, generate figures for publications, and write scientific manuscripts for publication
- Present your results at local, national, and international meetings and conferences
- 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 (or equivalent) in microbiology or closely related disciplines. Candidates in the final stages of obtaining their PhD are encouraged to apply
- Excellent background in microbial ecology, documented by publications in peer-reviewed journals
- Desirable methodological skills: Experience in microbiological cultivation techniques, microscopic techniques, and general methods of molecular microbial ecology, NGS and multi omics analysis
- 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
- 30 days of vacation per calendar year plus two days off on December 24 and 31

The 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 University of Jena. 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](#)