

Job advertisement

Vacancy ID: 010/2022

Closing date: 21 February 2022



FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA

Friedrich Schiller University is a traditional university with a strong research profile rooted in the heart of Germany. As a university covering all disciplines, it offers a wide range of subjects. Its research is focused on the areas Light—Life—Liberty. It is closely networked with non-research institutions, research companies and renowned cultural institutions. With around 18,000 students and more than 8,600 employees, the university plays a major role in shaping Jena's character as a cosmopolitan and future-oriented city.

Over the past decade, viromics has revealed an unprecedented diversity of viruses in many biomes. Each virus specialises in infecting specific hosts. In response, micro-organisms have evolved a wide array of resistance mechanisms. The virus-host interface is a fascinating evolutionary hotspot that has led to a plethora of genetic and molecular innovations. Using model organisms and cutting-edge experimental and computational tools, you will characterize these mechanisms, investigate the evolutionary processes that led to their emergence, and measure their activity in diverse biomes. Do you want to contribute to the future of viral ecology research? Join our team as a:

Doctoral researcher (m/f/d) “Genomics of Virus-Host Interaction”

commencing on 01.05.2022. A later start may be possible if desired. The position is initially limited to 3 and a half years.

The Viral Ecology and Omics Group studies microbiome functioning and dynamics, in particular the role of viruses across biomes. We combine microbiological and eco/evolutionary experiments with molecular biology, microscopy, (meta-) genomics, bioinformatics, artificial intelligence, and computational modelling. Our level S1/S2 wet lab will feature a state-of-the-art laboratory automation system with high throughput plate reader, microscopy, microbiology, and molecular biology facilities. Our dry lab features 4Tb compute nodes and GPU processors, and is supported by the high-performance computing center of the Friedrich Schiller University. We are embedded in the Cluster of Excellence *Balance of the Microverse* (microverse-cluster.de) which combines expertise in life, material, optical and computational sciences to elucidate fundamental principles of the interactions and functions in microbial communities in diverse habitats. 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.

Your responsibilities:

- Perform microbiological and ecological experiments to study the interactions between microbes and viruses.
- Investigate the underlying mechanisms, with an emphasis on virus-host interactions.
- Use molecular biology experiments to test specific hypotheses, contribute experimental evidence to unravel the mechanisms shaping the Microverse.
- Communicate and discuss your predictions with computational group members.
- Report your findings in publications and presentation at international scientific platforms.
- Support Master students and undergraduate project students.
- Collaborate productively with experimental and computational researchers in the Microverse.

Your profile:

- A MSc or equivalent degree in microbiology, virology, microbial ecology, or related discipline.
- Hands-on experience in microbiological techniques including bacterial and bacteriophage cultivation, DNA extraction, amplification, and NGS library preparation is required.
- Experience with microcosms and/or experimental evolution is a plus.



- Experience with bioinformatics and/or genomics is a plus.
- Excellent communication skills, ability to work as a team and to interact with people from diverse nationalities and scientific backgrounds.
- Strong motivation, excellent organisation skills and ability to contribute to a friendly and collaborative working environment in a cross-disciplinary scientific research group and in the dynamic Microverse community.
- Fluency in English is required, both written and spoken. Fluency in German is advantageous. Fluency in other languages is a plus.

We offer:

- A highly communicative atmosphere within an energetic scientific network.
- Embedding in a leading research group in the field of viral ecology and metagenomics.
- A unique opportunity to integrate modelling, omics data, and wet lab experiments.
- A comprehensive continuing education programme and individual qualification and development measures.
- Jena – City of Science: a young and lively town with a vibrant local cultural agenda. Jena is among the most liveable cities in Germany. Situated on the Saale River and surrounded by the famous Thuringian Forest, this city is ideal for lovers of nature and hiking.
- A family-friendly working environment with a variety of offers for families: University Family Office 'JUniFamilie' and flexible childcare ('JUniKinder');
- University health promotion and a wide range of university sports activities;
- Attractive fringe benefits, e.g. capital formation benefits (VL), Job Ticket (benefits for public transport), and an occupational pension (VBL)

The full-time position (65% TV-L E13) is initially for 3.5 years. The Friedrich Schiller University Jena is an equal opportunity employer and part-time contracts can be discussed.

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

Applications in English should comprise a cover letter, a detailed curriculum vitae, copies of academic certificates and a list of publications. Please familiarize yourself with the currently available doctoral projects (www.microverse-cluster.de) and the application process as described in the Online Application Portal. Please submit your application via the JSMC Online Application Portal, under the vacancy **ID 010/2022** by 21 February 2022:

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

Since all application documents will be duly destroyed after the recruitment process, we ask you to submit only copies of your documents.

For further information for applicants, please also refer to www4.uni-jena.de/stellenmarkt_hinweis.html (in German)

Please also note the information on the collection of personal data at www4.uni-jena.de/en/jobs_information_collecting_personal_data.html