

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.

The Cluster of Excellence "Balance of the Microverse" at the Friedrich Schiller University Jena 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 means of 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 a fascinating, ambitious, structured and interdisciplinary post-graduate training based on top-level fundamental research.

The research group of Humboldt Prof. Dr. Bas Dutilh

at the Cluster of Excellence Balance of the Microverse invites applications for a

# **Postdoctoral Fellow**

to conduct research on the project

# **Metabolomics Data Mining**

commencing on 1 August 2022. A later start may be possible if desired. The position is initially limited to 2 years.

Recent work from our group has identified generalist and specialist microbes by re-analysing tens of thousands of public metagenomic datasets from diverse biomes. We now aim to link these organisms to metabolites by combining our expertise in microbial genomics with your expertise in metabolomics. We are looking for a postdoctoral fellow with hands-on experience in (un-) targeted metabolomics data analysis, including data mining from public repositories. In close collaboration with metabolic modelling experts within our team, you will assess the nutrient dependencies and inter-dependencies of generalists and specialists and link those to metabolomic data. This project contributes to our ongoing efforts in predictive modelling of microbiome dynamics based on meta'omics data.

### Your responsibilities:

- Apply data mining approaches to extract information from metabolomics databases.
- · Collaborate pro-actively with other team members to develop the project.
- Produce manuscripts, present your results at conferences.
- · Assist with training other researchers, including Masters' and undergraduate students.
- Contribute to maintaining the friendly, welcoming and collaborative environment within the group.

## Your profile:

- A PhD in bioinformatics or chemoinformatics with a strong focus on metabolomics data. Candidates in the final stages of obtaining their degree are also eligible to apply.
- Desired methodological skills: computational analysis of metabolomics data from untargeted mass spectrometry experiments; experience with high-performance computing
- · You are highly motivated and have a strong interest in microbiology.
- You work creatively and independently towards developing your own research project.
- An inclusive and cooperative personality with enthusiasm for collaboration will fit will into our team of cheerful scientists and microbiome-fanciers.
- You have excellent English communication skills, both written and spoken.

### We offer:

- A highly communicative atmosphere within an energetic scientific network
- 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
- 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 two-year full-time postdoctoral researcher position (100% TV-L E13) will be funded through the Excellence Strategy of the German federal and state governments. 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 and copies of academic certificates. Please familiarize yourself with the currently available postdoctoral projects (<u>www.microverse-cluster.de</u>) 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 **191/2022** by **20 June 2022**:

#### https://apply.jsmc.uni-jena.de/

For further information for applicants, please also refer to <a href="https://www.uni-jena.de/stellenmarkt">https://www.uni-jena.de/stellenmarkt</a> (in German)
Please also note the information on the collection of personal data at <a href="https://www.uni-jena.de/en/job-market#dataprotection">https://www.uni-jena.de/stellenmarkt</a> (in German)
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