

Job advertisement

Vacancy ID: 10/2022

Closing date: 7 February 2023



FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA

The Cluster of Excellence “*Balance of the Microverse*” at 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 a

Postdoctoral Researcher Position in Correlative Image Data Analysis (m/f/d)

commencing as soon as possible. As the new member in the theoretical research group Applied Systems Biology, you will play a central role in the development of software tools for the quantitative analysis of data combining different imaging modalities.

This project addresses the urgent need for advanced software tools to perform image analysis of big volume data that are generated in the Microverse Imaging Center (MIC) using microscopy and spectroscopy modalities in combination. The main goals of this project include the development of algorithms that are capable of performing correlative analyses as well as an environment, which enable application of these algorithms by any user not experienced in programming. To realize these goals, the software tools will be developed within the recently created visual programming language termed Java Image Processing Pipeline (JIPipe: www.JIPipe.org).

Your opportunities:

- Contribute to the development of the project direction, as the project evolves.
- Produce high-quality written reports and draft papers. Present your results at local meetings and national and international conferences.
- Assist with training other researchers at the Microverse Imaging Center, including PhD candidates, Masters’ and undergraduate project students, to perform image analysis with JIPipe
- Contribute to maintaining the friendly, welcoming and collaborative environment within the group.



Your profile

- A PhD (or equivalent) in computer science, software engineering, (bio-)informatics, physics or other programming-affine fields. Candidates in the final stages of obtaining their doctorate are also eligible to apply.
- Excellent background in programming in Java, Python and/or C++
- Prior knowledge in the life sciences as well as teaching experience are an advantage
- Highly motivated individual 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
- An integrative and cooperative personality with enthusiasm for actively participating in the dynamic Microverse community
- 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)
- Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) up to salary scale E 13 (depending on the candidate’s personal qualifications) including a special annual payment in accordance with the collective agreement

The two-year full-time positions will be funded through the Excellence Strategy of the German federal and state governments. A part-time contract can be discussed. To promote gender equality in science, applications by women 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 (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 10/2022** by 21 February 2023:

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

For further information for applicants and the information on the collection of personal data, please refer to <https://www.uni-jena.de/stellenmarkt?info=1>