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 Institute of Microbiology at the Faculty of Biological Sciences seeks to fill the position of a

Doctoral Researcher Pathogenic Fungi (m/f/d)

commencing on 15th of September, 2021 or at the earliest possible date. The position is initially limited for 3 years. This is a part-time position with 65% of the working hours of a full-time employee (26 hour per week)

to work on the role of Toll-like receptors (TLRs) and their binding to fungal spore surface proteins during the manifestation of mucormycoses caused by *Lichtheimia* and other Mucorales. The project represents a joint venture between the Jena Microbial Resource Collection and the department of Molecular and Applied Microbiology at the Leibniz Institute for Natural Product Research and Infection Biology, the Hans Knoell Institute Jena and is part of the Collaborative Research Centre/Transregio 124 – FungiNet 'Pathogenic Fungi and their Human Host: Networks of Interaction'.

You are responsible for the elucidation of the interaction of spore surface proteins with TLRs and your will play a vital role in ensuring the success of an antigen-based diagnostics for mucormycosis.

Your responsibilities:

- RNAi-mediated generation of TLR knock-down mutants in human primary macrophages, THP1 cell lines and subsequent phagocytosis assays, optional: generation of knock-out mutants in Mucorales
- Detection of fungal surface proteins in patient sera by both gel-free and gel-based proteomic approaches
- support faculty teaching in the area of microbiology
- work on an own scientific qualification project, your doctorate (PhD)

Your profile:

- Master’s degree (or equivalent) in Natural Sciences (Biology, Biochemistry, Pharmacy, Veterinary or Human Medicine). Candidates about to earn their degree are welcome to apply.
- Knowledge in standard techniques of molecular biology and microbiology / Specialist knowledge in genetic engineering of fungi and human immune cells, ideally RNAi or Crispr Cas9-mediated
- Hands-on experience in fluorescence microscopy, cell cultivation ideally with preparation of macrophages from human buffy coats are advantageous.
- Ideally, you have a record of prior publications, preferably in the generation of genetically modified organisms (microorganisms/cell lines) or any proteomics (SDS/2D PAGE), diagnostic applications are beneficial
Highly motivated individuals with an interest in joining the interdisciplinary research areas of the CRC FungiNet and the Jena School of Microbial Communication

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 research community

Excellent English communication skills, both written and spoken

We offer

Remuneration based on the provisions of the Collective Agreement for the Public Sector of the Federal States (TV-L) at salary scale E13 65% — depending on the candidate’s personal qualifications —, including a special annual payment in accordance with the collective agreement.

A highly communicative atmosphere within an energetic scientific network providing top-level research facilities with creative freedom at one of the largest employers in Thuringia

A comprehensive mentoring program and soft skill courses for early career researchers as well as a comprehensive further and continuing education programme within the Graduate Academy of the FSU Jena and the Jena School of Microbial Communication

Participation in diverse experimental research projects with a strong interdisciplinary research background at the interface between medical mycology and immune biology

Excellent equipment and infrastructure

Participation in national and international conferences

A family-friendly working environment with flexible working hours, a variety of offers for families: University Family Office ‘JUniFamilie’ and flexible childcare (‘JUniKinder);

Jena – City of Science: a young and lively town and a vibrant local cultural agenda

Candidates with severe disabilities will enjoy preference in the case of equal qualification and suitability.

Are you eager to work for us? Then submit your detailed written application, exclusively via the JSMC Online Application Portal stating the vacancy ID 233/2021 by 3rd August, 2021 to: 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/Job portal (in German).

Please also note the information on the collection of personal data at https://www4.uni-jena.de/en/jobs_information_collecting_personal_data-path-18,27.html.