

The Institute for Hygiene and Microbiology of the Julius Maximilian University of Würzburg combines clinical diagnostics and state of the art research in infectious diseases with services in patient care. The Chair for Medical Microbiology and Mycology is among the internationally leading centers for the diagnosis of invasive fungal infections. Our sister laboratory (Research Group Fungal Septomics) at the Leibniz Institute for Natural Product Research and Infection Biology - Hans Knöll Institute (Leibniz-HKI, www.leibniz-hki.de) in Jena investigates the pathobiology of human-pathogenic fungi and identifies targets for the development of novel natural product-based antibiotics. Together, our research focuses on the epidemiology, diagnosis and infection biology of invasive fungal pathogens.

To strengthen our team, talented and highly qualified candidates are invited to apply for two positions as:

Doctoral Researchers (PhD, f/m/d)

(TVL-E13, 65%).

The two positions are available immediately, and the successful candidates will perform cutting-edge basic and applied research in the area of fungal infections, using immunology and microbiology techniques. Work will be performed in an experienced team of basic and physician scientists in an internationally visible research group in medical mycology. The successful candidates will be aided by experienced postdoctoral researchers in the lab and will be embedded in the DFG-funded Collaborative Research Center/Transregio (CRC/TR) "FungiNet" (<https://www.funginet.de>).

Position 1 is located at the Institute for Hygiene and Microbiology in Würzburg.

Your research tasks may include:

- Mouse models of fungal and bacterial infection
- Analysis of host-pathogen interactions between fungal pathogens and immune cells
- Characterization of immune responses using live imaging and flow cytometry

Position 2 is located primarily in the Research Group Fungal Septomics at the Leibniz Institute for Natural Product Research and Infection Biology in Jena, but the candidate will be expected to have lab exchanges with the Institute for Hygiene and Microbiology in Würzburg.

Your research tasks may include:

- *Ex vivo* human whole-blood infection assays and primary immune cell assays
- Analysis of host-pathogen interactions between fungal pathogens and immune cells
- Mimicking patient relevant settings in *ex vivo* whole blood and modulation of whole-blood responses by antifungal treatment

Your profile

- Interest in infection biology, microbiology, immunology and/or cell biology
- MSc (or equivalent) in life sciences - candidates in the final stages of obtaining their degree are eligible to apply
- Background in immunology, microbiology, cell biology or related fields
- Experience with immune cell isolation, flow cytometry, cell culture and molecular biology is advantageous

- Willingness to work with mice is required for position 1, and experience in handling mice is advantageous

The Julius-Maximilians-University of Würzburg is an equal opportunities employer and place emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply. The Julius-Maximilians-University of Würzburg intends to raise the number of disabled persons in its employment. In the case of equally qualified applicants, disabled persons will be preferentially considered.

Applications should be submitted in English or German and should include a letter of interest, curriculum vitae, a complete list of publications, copies of certificates, names of up to three academic references. Closing date for applications: 30th June 2021. Applications should be submitted as a single pdf file by e-mail (subject line: PhD_2021) to:

sekretariat-kurzai@hygiene.uni-wuerzburg.de