

The Institute for Hygiene and Microbiology of the 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 pathogenesis and management of invasive fungal infections. Our research focusses on the epidemiology, diagnosis and infection biology of invasive fungal pathogens. To strengthen our team, we invite talented and motivated candidates to apply for a position as

Doctoral Researcher (PhD, f/m/d)

(TV-L, 65%)

The position is available immediately and initially limited to 3 years. Salary is paid according to German TV-L (salary agreement for public service employees). The successful candidate will work in the area of human fungal infections, using microbiology and immunology techniques. Work will be performed in an internationally visible research group in medical mycology, aided by experienced postdoctoral researchers in the lab and work together with fellow PhD and MD students.

Your research tasks may include

Investigating the role of human platelets during systemic fungal infections, including methods like:

- *Ex vivo* human whole-blood infection assay and primary human immune cell assays
- Analysis of host-pathogen interactions between fungal pathogens and immune cells (e.g. by flow cytometry, secretome analysis, fungal survival assay)
- Gene expression analyses for correlation with immune cell functions
- Live cell imaging of host-pathogen interactions
- Experimental time-resolved data will be used for biomathematical modeling with various computational methods by the group Applied Systems Biology, Leibniz-HKI, Jena to quantify innate immune effector mechanisms and to predict treatment strategies against microbial infections in virtual patients

Your profile

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

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

Complete applications in English or German should include a letter of interest, curriculum vitae, a brief statement of research experiences, a list of two potential references, and a full academic record (copies of degree certificates) and be submitted as a single pdf file by email by March 31st 2022 to Karriere@hygiene.uni-wuerzburg.de.