



The Institute of Clinical Microbiology, Immunology and Hygiene

(<http://www.mikrobiologie.uk-erlangen.de>)

at the University Hospital Erlangen, Germany,

offers a

PhD position (m/f/x)

in the doctoral research program **RTG 2740 ImmunoMicroTope** (speaker: Prof. Dr. Christian Bogdan) that is to be filled in the MOLECULAR MYCOLOGY research group, starting January 2025 and being initially available for 36 months at the TVL E13 (65%) pay grade according to qualification and personal requirements.

We are looking for a highly motivated PhD student to join the tandem project B3 on **Immuno-Metabolism of Aspergillosis**, which seeks to explore pathogen and immune cell physiology in the context of fungal infection, which poses a prevalent threat for susceptible individuals, especially immunocompromised patients. Among the WHO-declared group of critical fungal pathogens, the environmental mould *Aspergillus fumigatus* is of special interest and scrutinized within the RTG 2740 framework with emphasis put on its versatile physiology. The research project is based on the hypothesis that the nutritional status of *A. fumigatus* translates into aspects of pathogen recognition and elimination by host immune effector cells. Research activities shall be focused on the glucose storage and energy reserve molecule glycogen and its role in fitness, virulence, cell wall composition, and immune cell recognition.

The Research Training Group (RTG, Graduiertenkolleg) 2740 is a DFG-funded consortium of 15 research groups that focus on the analysis of micro-milieu factors and metabolites in the context of microbial infections (<https://www.immunomicrotope.de>). Candidates are trained in the characterization of host- or microbe-derived factors that shape the microenvironment in the infected tissue and thereby regulate the function of immune cells and/or the pathogenicity and survival of non-viral infectious agents. The structured program will also convey the necessary theoretical knowledge, specific technical capabilities and general research skills to the doctoral candidates. The RTG 2740 offers a thorough mentoring strategy and a high degree of internationality, including the possibility of an international laboratory exchange and the organization of a biennial international symposium in Erlangen.

Your Profile

M.Sc. degree in Microbiology, Cell & Molecular Biology, Biochemistry, or Molecular Medicine; enthusiasm for experimental research, self-reliance, ability to work in a team, excellent skills of the English language and an intrinsic motivation for the specific training program of the RTG 2740.

Experience and qualifications in glycobiology or molecular biology of fungi will be considered a plus.

Contact

Please submit your application documents comprising a cover letter, your CV, a motivational statement, references, copies of exams, concise summary of Bachelor and Master theses, and other credentials and information relevant to the RTG 2740 program and this job offer *via* the respective web form at

<https://recruitingapp-5531.de.umantis.com/Vacancies/8567/Application/New/1>

or compressed in one .pdf file by email to the project's principal investigator Sven Krappmann sven.krappmann@uk-erlangen.de, who can be contacted under +49 (0)9131 85-32580 for any inquiries.

Further information might also be provided by the RTG's coordinator Dr. Ilka Knippertz ilka.knippertz@uk-erlangen.de and +49 (0)9131 85-32571.