

The **Chair of Molecular Infection Biology II (Prof. Dr. Cynthia Sharma)** at the **Institute of Molecular Infection Biology**, Julius-Maximilians-University of Würzburg is offering a

## **Postdoctoral Researcher Position (f/m/d)**

within the framework of the DFG Collaborative Research Centre (CRC) **SFB1583**

### **“DECisions in Infectious DisEases (DECIDE)”**

The recently established CRC DECIDE investigates key decisions that determine the outcome of infections. These decisions are defined by a complex interplay of the pathogen with the host and the microbiota as well as immune responses. We apply cutting-edge technologies (single-cell RNA-seq, complex human tissue and animal models) to investigate key decisions in a broad range of highly relevant infections with human pathogens (viruses, bacteria, fungi). For further information, see [www.crc-decide.de](http://www.crc-decide.de).

Successful applicants will work in an interdisciplinary and international team at the Department of Molecular Infection Biology II (Prof. Dr. Cynthia Sharma) in Würzburg, Germany. Research in our group focuses on mechanisms and functions of gene regulation in stress response and virulence control of the human pathogens *Helicobacter pylori* and *Campylobacter jejuni*. For further information on our research, please see also our recent publications: Jiao et al., 2021, *Science* (PMID: 33906967), Pernitzsch et al., 2021, *Nature Communications* (PMID: 34290242), Eisenbart et al., 2020, *Molecular Cell* (PMID: 33002424), or our website: [www.uni-wuerzburg.de/en/imib/research/sharma](http://www.uni-wuerzburg.de/en/imib/research/sharma). In our DECIDE project, we aim to elucidate age-dependent epithelial determinants influencing infections with the food-borne pathogen *C. jejuni*.

#### **Successful candidates will:**

- Establish adult and neonatal intestinal organoid models for infection studies with *C. jejuni* including the application of dual RNA-seq to identify host/pathogen disease-contributing factors
- Apply single-cell RNA-seq to determine an epithelial target cell / (sub)type for *C. jejuni*
- Investigate molecular mechanisms that define age-dependent infection of intestinal epithelia

#### **Applicants should have the following qualifications:**

- PhD/doctoral degree in either life sciences or natural sciences
- Background in infection / cell biology, microbiology, RNA / molecular biology, or tissue engineering
- Strong written and spoken English skills, high self-motivation, dedication to perform excellent research

#### **We offer:**

- A structured post-graduate program, including a state-of-the-art training program as member of the Integrated Research and Training Group of the CRC (IRTG DECIDE)
- An interdisciplinary and international research team
- An open-minded and collaborative work environment with a strong focus on RNA and infections
- Excellent infrastructure and cutting-edge technologies

We welcome applications from all sections of the community regardless of race, gender, or disability. The University aims to increase the proportion of female employees. Thus, applications from qualified women are particularly welcome. Preference will be given to severely handicapped persons in case of otherwise equal aptitude. The contract will be fixed term for 1 year with the option of extension. Remuneration will be based on the *Tarifvertrag für den öffentlichen Dienst der Länder (TV-L)*

Please send your application including a letter of motivation, CV, and publication list, copies of relevant documents, and contacts of two academic references preferably via email to [petra.thomas@uni-wuerzburg.de](mailto:petra.thomas@uni-wuerzburg.de) as a **single PDF-file** until **August 27<sup>th</sup>, 2023**. For informal inquiries contact Prof. Cynthia Sharma ([cynthia.sharma@uni-wuerzburg.de](mailto:cynthia.sharma@uni-wuerzburg.de)).