# UNIVERSITY HOSPITAL WÜRZBURG

Department of Translational Pediatrics



The Department of Translational Pediatrics at the Children's Hospital, led by Frau Prof. Dr. Dorothee Viemann, is offering the position of a

# PhD Position (m/f/d)

The Julius-Maximilians-University of Würzburg (JMU) is one of the oldest universities in Germany with a strong focus on human life sciences. The University Hospital of Würzburg (UKW) harbors 34 specialized clinics, departments and institutes which enable interprofessional and interdisciplinary patient care and research at the highest level. It is the Medical Faculty's mission to create a vivid and favorable research environment for Clinical Research and Medical Translation. To this end, the Department of Translational Pediatrics has been recently appointed and commits itself in tight collaboration with the Children's Hospital, the Department for Obstetrics and Gynecology, the ZINF Research Center for Infectious Diseases and the Interdisciplinary Center for Clinical Sciences (IZKF) of the JMU Würzburg. In concert, they have created a Pediatric Research Unit that operates local, national and international networks of active collaborations with scientists across the world.

Our research focuses on the development of the immune system in neonates: We are interested in identifying individual and environmental factors which are beneficial for the adaptation of the immune response and develop strategies to better combat infectious diseases and prevent sepsis, a life-threatening disease, in the early life of children.

# **Project description:**

The research activities of the Viemann lab spans the entire pipeline from basic research with a focus on the development of innate immunity, inflammation and host-pathogen interactions including colonizing microbiota after birth to randomized controlled clinical studies in children. The applicant will work on a DFG-funded project investigating the transition from intrauterine to extrauterine life focusing on the changes in the airway epithelium. To this end, methods of cultivating airway epithelial cells from adults and neonates have been established and the candidate will use infection models to study the reprogramming and the barrier function of the airway epithelium against viral and bacterial infections. Different kind of omics technologies are used to further analyse cell composition and gene expression of the cultured cells to identify potential factors priming pulmonary immunity.

### **Requirement:**

For this position, we are looking for a highly motivated, creative and enthusiastic individual, who wants to work in an international and an interdisciplinary team:

- Master of Science in life sciences (biology, biomedicine, biochemistry etc.), desirably with a theoretical and practical background in cellular and molecular immunology or virology
- Experience in cell culture techniques
- Excellent communication skills and proficiency in English

Prior experience in the following scientific fields are of advantage:

• Experience in infection immunology



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• Knowledge of high-throughput sequencing methods and bioinformatics analyses

Beyond that, we expect the successful candidate to bring along:

- Enthusiasm for science and openness to new technologies
- Ability to work independently and good team spirit

#### Our offer:

We provide an international, interdisciplinary, exciting and stimulating scientific environment at the Research Center for Infectious Diseases of the University of Würzburg (ZINF) and the University Hospital Campus Würzburg with strong connections to the WüSI (Max-Planck Würzburg Institute of Systems Immunology), the HIRI (Helmholtz Institute for RNA-based Infection Research), and the Biocenter of the University of Würzburg. Specifically, we offer

- Well-funded projects at the leading edge of early-life immunology, within the emerging field of innate immune memory
- Well-structured PhD program of the graduate school for life sciences at the university of Würzburg
- Excellent scientific infrastructure and state-of-the-art methodologies
- Access to cutting-edge technologies on campus
- Great networking opportunities with our collaborators in Germany and abroad
- A welcoming and enthusiastic team
- Active participation in international conferences
- An independent and creative position with space for your own ideas
- A good work-life balance and childcare opportunities on campus

The University Hospital of Würzburg strives for professional equality between women and men. Severely disabled applicants will be favored if they are equally qualified.

**Starting date:** as soon as possible. The contract will initially run for one years

**Salary:** E13 (65%), TV-öD

Please send your application by referencing to the job offer containing CV, motivation letter, and two references to:

University Hospital of Würzburg, Department of Translational Pediatrics, Prof. Dr. Dorothee Viemann, ZEMM, Zinklesweg 10, 97078 Würzburg, Germany or by e-mail: Viemann\_D@ukw.de

For further information related to the position, please contact Prof. Dr. Dorothee Viemann, Head of Translational Pediatrics, Telephone: +49 931 201 45848 or by e-mail: Viemann\_D@ukw.de

