

The **Institute of Molecular Medicine and Experimental Immunology (IMMEI)** at the Medical Faculty of the **University of Bonn** invites applications for a

## **PhD position – Effects of sex hormones on nucleic acid immunity** (m/f/o)

available immediately for three years with the possibility of extension

in the Department of Cellular Immunology (Prof. Natalio Garbi) in the framework of the German Research Council-founded consortium SFB-TRR237 (<https://www.trr237.uni-muenchen.de/index.html>). The laboratory has a long-standing, internationally recognised track record on basic and applied aspects of cellular immunology and infection and is equipped with high-end instrumentation. The IMMEI has about 50 staff members across 7 independent research groups with over 30 scientists and PhD students ([www.immei.de](http://www.immei.de)).

The hosting laboratory focusses on diverse aspects of immune regulation including the role of nucleic acid recognition in the development of autoimmune disease, immune defense mechanisms, and basic aspects of naive T cell activation regulating cell fate. This PhD project extends on our previous findings identifying nucleic acid sensing and macrophages as main mediators of severe ANCA vasculitis, a severe and often-fatal autoimmune disease (Kessler et al, *J. Exp. Med.* 2022). As a follow up, we observed sex differences in nucleic acid recognition affecting disease outcome. The aim of this project is to disentangle how sex hormones regulate nucleic acid immunity using our vasculitis model as well as preclinical in vivo and in vitro models of viral infection. The student will gain expertise in state-of-the-art technologies such as spectral flow cytometry and confocal microscopy, single-cell mRNAseq, metabolomics, proteomics, lipidomics and standard cellular immunology techniques.

### **We offer:**

- Dynamic, multidisciplinary and international environment with a strong focus on immunology.
- International Immunology Training Program (IITB), giving access to state-of-the-art training and workshops covering different scientific aspects.
- Weekly seminars on immunology and other biomedical topics by national and international speakers.
- Possibility to present results at national and international conferences.
- Modern university sport facilities.
- Salary according to the German scale TV-L 13 65% with additional benefits in the public sector such as pension plan and UKB corporate benefits.
- Living in an active university city with access to internationally known museums, music and theatre venues and many other cultural possibilities in the Bonn-Cologne area.

### **Your profile:**

- Highly motivated and talented with strong interest in immunology.
- Strong work commitment and discipline.
- Diploma or master thesis in immunology, biology, biochemistry, biomedicine or similar.
- Ability to work independently and as part of a team.
- Excellent English communication skills.

The University of Bonn is a German University of Excellence since 2019 that is committed to affirmative action for diversity and equal opportunities for all. Applications will be handled in accordance with the Landesgleichstellungsgesetz (State Equality Act).

Please send a motivation letter, C.V., two reference letters (or referee's names and contacts) and degree certificates with grades in *one single pdf file* using reference "NAI23" to Natalio Garbi ([ngarbi@uni-bonn.de](mailto:ngarbi@uni-bonn.de)) by **May 2<sup>nd</sup>, 2023**.