



PhD position in Immunology (TVL13/65%)

Project: "Dissecting the role of STING signalling in anti-viral T cell responses"

Institute: Institute of Molecular Medicine and Experimental Immunology (IMMEI) at the

Medical Faculty Campus, University Hospital Bonn **Principle Investigator:** Prof. Dr. Zeinab Abdullah

Project description:

The project focuses on investigating the molecular crosstalk between nucleic acid sensors in T cells and TCR downstream signalling. Our research aims to identify the roles of the DNA sensor STING in the differentiation and function of CD8 T cells during viral infections. Utilising both experimental mouse models and human patient cohorts, we will investigate disease mechanisms, identify biomarkers, and explore potential therapeutic targets.

Research Environment:

IMMEI, located at the Medical Faculty Campus of Bonn University Clinic, provides an exceptional environment for cutting-edge research. Our state-of-the-art facilities offer a platform for collaboration and innovation. The working group is led by Prof. Dr. Zeinab Abdullah (https://www.immei.de/research/zeinab-abdullah-laboratory), who has substantial experience and expertise in the field. Her position within the local and global scientific community and her expertise provides a valuable opportunity to make significant contributions to the scientific literature. The project will be co-supervised by Dr. Dillon Corvino a senior post-doctoral researcher, with expertise in *in vitro* and *in vivo* techniques and bioinformatics analysis. The project is funded through the collaborative research center TRR 237 program (https://www.trr237.uni-muenchen.de/projects/b15/index.html).

Responsibilities:

- Design and execute experiments
- Stay current with relevant literature and contribute ideas to research project
- Analyse data and generate publication-quality figures
- Present results in lab meetings and national/international conferences
- Contribute to manuscript preparation

Required Qualifications:

- Master's degree in Biology, Immunology, Virology, Molecular Biology, or related fields
- Background in immunological techniques and methodologies
- Excellent written and spoken English communication skills
- Passionate about research with strong analytical and problem-solving skills
- Ability to work independently and within a research team

Desired Qualifications (not mandatory but preferred):

- FELASA B certification (or equivalent) qualification for animal work
- Murine (*in vivo*) experience
- Experience with processing and handling of human samples
- Proficiency in flow cytometry (conventional and/or spectral)
- Experience with molecular biology techniques
- Tissue culture experience
- Familiarity with T cell biology
- Familiarity with innate signalling pathways (TLRs, PRRs, STING)

We Offer:

- Competitive salary according to the German salary scale TV-L E13 65%.
- National and International collaboration
- Opportunity to contribute to cutting-edge research with real-world implications.
- Access to state-of-the-art facilities and resources.
- Extensive training opportunities

How to Apply:

Submit a single PDF labelled "TCR_STING_PhD_Application_[YourLastName]" containing:

- 1. Cover letter
- 2. Academic transcripts
- 3. CV (short 2-4 pages)
- 4. Contact information for two referees

Email this document to Dr. Dillon Corvino (dcorvino@uni-bonn.de) with the subject "TCR-

STING PhD Application [YourLastName]"

Deadline: 30th of October 2025

Start date: Negotiable, preference for earliest availability.

Shortlisted candidates will be invited for interviews approximately 2–4 weeks after application deadline. Interviews are expected to take place in late November to early December 2025. Envisioned start date around January 2026.

Diversity and Equal Opportunity:

The University of Bonn is committed to diversity and equal opportunity irrespective of gender, ethnicity, age, nationality, religion, disability, etc. As such, applications will be assessed in accordance with the Landesgleichstellungsgesetz (State Equality Act).