

The Institute of Virology and Immunobiology – Julius Maximilians Universität Würzburg, Research group Prof. Dr. Thomas Herrmann (Immunogenetics) offers a

### **PhD student position in Immunology**

German salary scale TV-L E13 65%, 3 years as part of a DFG funded project

### **“Phylogeny and Function of V $\gamma$ 9V $\delta$ 2 T cells: Human vs. Camelids“**

#### **Description:**

V $\gamma$ 9V $\delta$ 2 T cells recognize and respond to host and microbial metabolites (phosphoantigens). These cells are massively expanded in infectious diseases such as malaria and exert anti-microbial and anti-tumor function. They were believed to exist only in higher primates until we recently identified them in a camelid species (alpaca). The project aims to compare the  $\gamma\delta$  T cells of both species and to investigate mechanisms of antigen recognition. To this end, we will compare the T-cell antigen receptor (TCR) repertoire of phosphoantigen-stimulated cells of both species. Furthermore, molecular mechanisms of antigen-recognition will be elucidated by generating and investigating wild-type, chimeric and mutated forms of TCRs as well as of molecules which play a key role in “phosphoantigen presentation”.

The project is part of the newly founded DFG research group "Receiving and Translating Signals via the gamma-delta T Cell Receptor" and a collaboration with the Vetmeduni Vienna. More information about our group can be found at <http://www.virologie.uni-wuerzburg.de/en/immunology/immunological-lab-groups/>.

#### **Your profile:**

- Master's Degree/Diploma in immunology, biology, biochemistry or a related field of the life sciences
- Strong English communication and presentation skills (written and spoken)
- Ability to work in an international team and a strong desire to do research with high self-motivation and enthusiasm
- Experience in molecular biology techniques, cell culture and flow cytometry are advantageous
- Willingness to actively contribute to the PhD student program “Immunomodulation” <http://www.gk-520.uni-wuerzburg.de/home/> within the Graduate School of Life Sciences <https://www.graduateschools.uni-wuerzburg.de/life-sciences/startseite/>

Equally well qualified disabled applicants will be given preference

**Please send your application** as single pdf-file to Prof. Herrmann ([herrmann-t@vim.uni-wuerzburg.de](mailto:herrmann-t@vim.uni-wuerzburg.de)) until October 15th. The application should include:

- Cover letter indicating current and future research interests and career goals
- A description of research experience and accomplishments including a summary of the master thesis (maximum 2 pages), and a list of publications if applicable
- CV including copies of degree certificates and transcript of grades and two letter of recommendation or two references including current supervisor

For additional information, please contact Prof. Herrmann ([herrmann-t@vim.uni-wuerzburg.de](mailto:herrmann-t@vim.uni-wuerzburg.de))