

## **Ph.D. Position Biology (m/f/d) – Environmental Toxicology, Trier University**

### **ABOUT ENVIRONMENTAL TOXICOLOGY AT TRIER UNIVERSITY**

We are investigating the influence of environmental substances on human health. An important objective of our work is the research on the molecular action mechanisms of environmental substances on the immune system.

We focus on compounds that induce allergies. The knowledge gained from the mechanistic investigations is applied to design new test strategies and establish *in vitro* assays aiming to identify the hazard potential of chemicals, nanomaterials and proteins. The complexity of these phenomena requires a wide interdisciplinary orientation of specific research projects, which are embedded in national and international co-operations.

- Investigation of molecular effects and identification of markers for risk assessment of environmental factors and substances,
- Interactions between environmental effects or agents and the innate/ adaptive immune system,
- Development of *in vitro* approaches as alternatives to tests on animals for the assessment of chemicals and environmental factors.

### **THE ROLE**

We are seeking a highly motivated and creative individual with a passion for cell biology, *in vitro* sensitization assessment of chemicals and a background in bioanalytical analysis who is interested in conducting a PhD thesis as part of a joint project between University of Trier (Environmental Toxicology) and industrial partners. Our joint project “Development of methods for assessing formulation influences on the activation of dendritic cells in coculture with keratinocytes (KOEXPOSENS)” is funded by the German Ministry of Food and Agriculture (BMEL) as part of its program to promote innovation in the field of prevention of allergies.

### **KEY TASKS**

- Further development and characterization of non-animal based methods,
- Provide a better understanding of co-exposure effects,
- Practice of existing bioanalytical methods and installation of new methods,
- Statistical and graphical elaboration of data, state of the art training and practice of scientific software,
- Close collaboration with team at University of Trier.

### **YOUR PROFILE**

- Master’s degree in biology, biochemistry or related sciences,
- Basic knowledge of cell biology,

- Experienced in the work with biological systems, especially cell banking and continuous cell culture,
- Theoretical knowledge and practical experience of bioanalytical methods e.g. flow cytometry,
- Practical experience in handling and physicochemical behaviour of chemicals,
- Theoretical background in LC-MS/MS and GC/MS instrumentation for the analysis of chemicals,
- Enthusiastic and collaborative team player with high level of initiative,
- Good communication skills - written and verbal, fluent in German and English.

#### **WHAT WE OFFER**

- Temporary contract equivalent to **E13 (65%)** for two years,
- Teacher experience and cooperation in the supervision of students,
- Possibility to obtain a Ph.D. (Dr. rer. nat.) from University of Trier, Environmental Toxicology,
- Work in interdisciplinary project team between academia and industry,
- Possibility to publish in international scientific journals as well as conferences.

If you have a strong interest, you may send an application including cover letter, CV and certificates to: [sekumwelttox@uni-trier.de](mailto:sekumwelttox@uni-trier.de)