

## **Doctoral candidates (m/w/d): Spatio-temporal Patterns of Pollen and Fungal Spores and its Impact on Health and Disease (Entg.-Gr. TV-L)**

We are seeking a PhD Student (research assistant) (at 65% E13 TV-L at the University of Augsburg within the framework of a research training group funded by the German Research Foundation (DFG). The position should start as soon as possible and is limited to three years.

The Research Training Group "Urban Green Infrastructure - Training Next Generation Professionals for Integrated Urban Planning Research" aims to conduct inter- and transdisciplinary research on innovative approaches for liveable, sustainable and climate resilient cities through green infrastructure. For more information on the graduate program and research topics, please visit <https://www.gs.tum.de/grk/ugi/>.

The successful candidate will be a part of cross-functional working group together with experts in Biology, Aerobiology and Data Science. In this role, **the tasks** associated with this position will involve but are not limited to:

- Analyse the pollen spectrum of Augsburg using data obtained from aerobiological sampling at different points in the city.
- Create regional geographic pollen gradients and plot the characteristics of the main pollination period such as start dates, peak date, end date and duration.
- Develop an aerobiological index to create risk maps in the city of Augsburg and relate different aerobiological parameters (abundance of pollen sources and degree of maturity of the specimens) using kriging and LiDAR data.
- Develop healthy urban itineraries in order to avoid areas of greatest aerobiological risk.
- Correlation between microscale urban climate on pollen and spores concentration
- Scientific analysis and synthesis, drafting of technical and activity reports.
- Active scientific exchange with internal and external scientific communities, participation in conferences, generation of high-quality peer-reviewed publications.

### **Your profile:**

- full university degree (Diploma/M.Sc.) in Geography, Forest Science, Landscape Ecology, Biology or related disciplines
- Knowledge of data analysis, statistical methods and GIS in the context of biological and/or climate data
- laboratory skills are of additional advantage
- Ability to perform team-oriented as well as independent work
- Very good communication skills in English are necessary
- Highly motivated to apply your own skills and expand your knowledge to develop innovative approaches for clinically relevant research questions
- Flexibility and perseverance (you will learn on the job)

**We offer:** The successful candidate will be hosted by the Institute of Environmental Medicine (Universitätsklinikum Augsburg, Augsburg University) under the direction of Prof. Claudia Traidl-Hoffmann, integrate in the junior research group Climate Change and Health of Dr. Maria Plaza and be enrolled in the graduate program of the DFG doctoral school for Urban Green Infrastructure. Moreover:

- International, attractive working environment
- Support by knowledgeable colleagues, also in IT
- Possibilities of internal and external further education

### **We are looking forward to your application!**

If you would like any further information, please contact:

Dr. Maria P. Plaza [maria.plaza@tum.de](mailto:maria.plaza@tum.de)

Link to the call: <https://uk-augsburg.softgarden.io/job/29461771/Wissenschaftlicher-Doktorand-m-w-d-f%C3%BCr-den-Lehrstuhl-und-Institut-f%C3%BCr-Umweltmedizin?jobDbPVID=73682710&l=de>