

At the **Chair of „Model-based Environmental Exposure Science“** (MBEES, <http://mbees.med.uni-augsburg.de/>) at the **Faculty of Medicine** we focus on links and interactions between environmental factors and human health, and understanding its physical underpinnings. We detect links through a combination of environmental simulation and clinical evidence and use scenario modelling to assess future developments. We provide guidance on how to reduce detrimental and enhance positive effects of environmental exposure on health to various stakeholders. Exposure research is therefore at the nexus of medicine, computational and environmental science.

Our research includes the description of exposure on the urban scale, to determine total population exposure in unprecedented detail. Instrumental to this effort is the use and development of model systems to represent trace gases and airborne particles. For our research in the domain of urban-scale air quality modelling we are looking for a

postdoctoral fellow (m/f/d) or academic councilor (m/f/d)

in a **full-time, 3 years fixed-term position** (with the possibility of extension for a further 3 years) as civil servant or employee, to begin **as soon as possible**. Given the requirements are met an appointment as civil servant will be made at salary level A 13. For employees, the salary is based on personal and collectively agreed conditions up to E 13 TV-L. Part-time employment is possible if job sharing ensures the full-time performance of the tasks.

Your tasks:

- Urban-scale dynamical air quality simulations for the region of Augsburg using Eulerian and/or Lagrange models (e.g., PALM, GRAMM/GRALS or similar)
- Model developments geared towards improved usefulness in the domain of Environmental Health Sciences
- Coordination of modelling activities with internal and external partners (e.g., DLR, University Heidelberg, NCAR)
- Contributions to the development of the MBEES agent-based population model MAMS
- Supervision of doctoral students and assistants within the upcoming collaborative project TRANSCAPE funded by the Health Effects Institute
- Communication and presentation of scientific results to national and international audiences and stake holders
- Publication of scientific findings in international, peer-reviewed journals
- Contributions to application and management of research projects at national and international funding agencies
- Teaching at the undergraduate and graduate level at University Augsburg (Faculty of Medicine as well as Faculty of Applied Informatics) in your area of expertise

Your profile:

- University degree in physics, chemistry, geography, or a comparable, natural sciences course of study
- PhD degree, research experience after your PhD (Postdoc or similar) is an asset
- Proven experience in the development of scientific software in any language
- Experience with Geographical Information Systems (GIS) is an asset
- Strong interest in interdisciplinary work in the triangle of medicine, environmental and computer sciences
- Creativity and scientific curiosity, paired with the ability to work on a deadline
- Well-developed team and communication skills
- Highly proficient in spoken and written English
- Willingness to travel worldwide (conferences, workshops)

The required qualifications must already be proven in the application documents by appropriate certificates.

We offer:

- Self-guided and independent work in an innovative and interdisciplinary team of medical doctors, computer and environmental scientists

- Freedom of own scientific research with the possibility to create something new
- Flexible working hours and the possibility to work remotely for an agreed-upon fraction of your time
- Strong collaborations with multiple national and international partners
- Opportunity for further scientific qualification (Habilitation)

The University of Augsburg promotes gender equality at work. Women are expressly asked to apply. The University of Augsburg particularly supports the compatibility of family and work. For further information, please contact the women's representative of the university. Disabled candidates (m/f/d) with otherwise equal suitability, ability and subject-specific performance will be preferred.

Please compile your application composed of the usual documents (CV, transcripts of grades, description of scientific interests, etc.) into **a single pdf file** and send it via e-mail it to Prof. Christoph Knote at the Faculty of Medicine - e-Mail: **christoph.knote@med.uni-augsburg.de**. The **deadline for applications** is

March 8th 2024.

This job offer as well as further information about the Faculty can be found at **<http://www.med.uni-augsburg.de>**.

Please note that only the German version of the job advertisement is legally binding, which can be found on the website: <https://www.uni-augsburg.de/de/jobs-und-karriere/stellenangebote>. This English translation of the job advertisement is provided to help you understand the original German one.