



The Cluster of Excellence **ImmunoSensation²**

is offering a position for a

Spatial Computational Biologist (100%)

The position is initially limited until Dec. 31st, 2025 due the project with the possibility of extension. ImmunoSensation² is a Cluster of Excellence funded by Germany's Excellence Strategy at the University of Bonn. Its scientists are dedicated to investigating innate immunity beyond the boundaries of classical immunology. In a joint effort, immunologists, neurobiologists, systems biologists and mathematicians from the University of Bonn and the German Center for Neurodegenerative Diseases (DZNE) of the Helmholtz Association investigate how the status of the immune system, the metabolism and the nervous system connect in health and disease. ImmunoSensation² is embedded in the outstanding research environment of the University of Bonn, the University Hospital and the DZNE. Furthermore, ImmunoSensation² is internationally connected and maintains research partnerships with Australia (Melbourne University), Japan (Osaka University, Waseda University, Kyoto University) and the Netherlands (Radboud University, Nijmegen).

The announced position is integrated into the Meissner and Schlitzer Laboratories which run multiple cutting edge spatial technologies, including spatial tissue proteomics and deep visual proteomics (DVP), ultra-high plex imaging approaches (CODEX) and single cell resolution spatial transcriptomics (Xenium). The successful applicant will be positioned at the interface of these groups and develop novel integrated approaches to analyze stromal immune cell crosstalk in tissue immunity and homeostasis. The position will act in synergy with existing computational biology groups, such as the West German Genome Center, to form a seed nucleus for spatial computational biology within the Cluster of Excellence Immunosensation².

Your tasks

- Design, implementation and application of tailored spatial analysis workflows
- Statistical analysis and visualization of spatial biology data
- Interaction and collaboration with researcher within the Cluster of Excellence Immunosensation²
 - Consultation regarding the planning and design of experiments
 - Presentation and reporting of results
 - Recommendation of publicly available resources and tools
- Working in a team with bioinformatic and computational colleagues
- Training courses and education

Your profile

- Master or PhD in biology, bioinformatics, computational biology, computer science, statistics, mathematics or any other related field
- Expertise in the analysis of spatial biology data, hands-on experience with the aforementioned techniques is an asset
- Expertise in the analysis of next generation sequencing data (NGS), such as single cell genomics; experience with proteomics data is of advantage
- Profound knowledge of statistics, data analysis and visualisation techniques
- Proficiency in programming, e. g. with R/Bioconductor and Python
- Experience in deep learning, e. g. CNNs, Tensor Flow
- Background in molecular biology concepts and an interest in immunology
- Good communication and presentation skills and fluency in written and spoken English



ImmunoSensation²
the immune sensory system **Bonn cluster of excellence**



ukb universitäts
klinikum**bonn**

- Team player capable of adapting to a rapidly evolving and interdisciplinary research environment

We offer

- Outstanding research opportunities, with access to cutting edge technologies
- Collaborative work environment
- Salary according to the German salary scale TV-L (EG 13)
- Supplementary benefits (e. g. pension plan according to VBL)
- A “Jobticket” (subsidized public transport)

The University of Bonn is an equal opportunity employer.

Applicants should send their application in a single pdf file (max. 5 MB), including a motivation letter, CV, scanned academic degrees, a list of publications and the contact details of two references. More information on the scientific projects and project leaders can be found at www.immunosensation.de.

Further details will also be provided during the recruitment process. Applications will be accepted on rolling basis and successful candidates can begin March, 2024 or later.

Please send your application by email using the reference number ST-24 to

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www.immunosensation.de