

We combine excellence in research, teaching and patient care. The University Hospital Bonn is a maximum care hospital with more than 1,300 beds. With around 38 clinics and 31 institutes as well as more than 8,000 employees (over 5,000 full-time staff), the UKB is one of the largest employers in Bonn. Every year, the UKB treats around 50,000 inpatients and around 35,000 emergencies, as well as providing over 350,000 outpatient treatments.

We are currently inviting applications for a

Postdoc (m/f/d) in Biomathematics – Systems Biology of Inflammation

at the **Interdisciplinary Research Unit Mathematics in the Life Sciences**. The full-time position will start in April 2023 or as early as possible thereafter, for a period of three years due a project with the possibility of extension.

The mammalian immune response depends on the interaction and collaboration of many highly individual cells. The group of Prof. Dr. Kevin Thurley uses mathematical modeling and data analysis tools to quantify and rationalize immune cell dynamics in the context of clinical manifestations such as chronic inflammation and cancer. The group is integrated into both the ImmunoSensation and the Hausdorff Mathematics Clusters of Excellence, an exceptional environment for our interdisciplinary research program.

In the available project, we will design and analyze data-driven spatio-temporal models of cell-cell communication networks in the tumor micro-environment. The project will be carried out in tight collaboration with wet-lab immunologists and will include first-hand data analysis as well as mathematical model development. The project will comprise data-driven spatial modelling techniques and deep-learning methods that will partly be developed and adapted within the project, thus offering ample opportunity for expert training in state-of-the-art systems immunology.

We are looking for highly motivated, independent and committed scientists eager to make significant contributions to both fundamental and clinic-oriented research. Applicants should hold a PhD degree in (bio-)physics, computational biology, mathematics, computer science, or a related discipline, and should have documented experience in spatio-temporal modelling techniques. Very good computer programming skills are required, training in immunology or cell biology is an advantage. The position requires good communication and interpersonal skills, and fluent English. For more information, visit <https://www.thurleyleab.org>.

We offer:

- A stimulating, multidisciplinary research environment at the interface of immunology and biomathematics
- A salary according to the German salary scale TV-L E13
- A "Jobticket" (subsidized public transport) is available
- There is also a possibility to use the day care center
- Supplementary benefits in the public sector (pension plan according to VBL)

The University of Bonn is committed to diversity and equal opportunity. It is certified as a family-friendly university. It aims to increase the proportion of women in areas where women are under-represented and to promote their careers in particular. It therefore urges women with relevant qualifications to apply. Applications will be handled in accordance with the *Landesgleichstellungsgesetz* (State Equality Act). Applications from suitable individuals with a certified serious disability and those of equal status are particularly welcome.

Contact information

Applications should include a brief statement on research interests, a CV, and contact information for three referees, compiled into a single pdf file. Please send in applications until 01.03.2023 by email, quoting the reference number [38_2023].

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