

The Tumor Immunometabolism research group led by **Jun. Prof. Laura Surace** at the **Institute of Clinical Chemistry and Clinical Pharmacology** (University Hospital Bonn Campus), Faculty of Medicine **Rheinische Friedrich Wilhelms-University Bonn**

invites applications for

1 PhD position – Metabolic regulation of tissue-resident immune cells during cancer development

We are seeking highly motivated candidates with a strong interest in immunology. Our lab is interested in better understanding the role of tissue-resident immune cells in tumor development and response to therapies. We aim to achieve this by defining their metabolic requirements, phenotype and function and by assessing their interplay with the other components of the tumor microenvironment. We specifically focus on innate lymphoid cells (ILC) and T cells (Karagiannis F*, Peukert K*, Surace L*, et al. *Nature* 2022; Surace et al. *Nature Immunology* 2021; Surace et al. *Blood Advances* 2021). For more information please refer to the website → <https://www.ukbonn.de/ikckp/forschung/ag-surace/>.

The project will investigate how changes in host metabolism and diet-derived small molecules in health and disease (e.g. obesity) shape the composition and metabolic features of the tumor microenvironment and the antitumor immunity during tumor onset and progression. Ultimately the goal is to identify novel therapeutic strategies, including dietary intervention, that would be applicable in the treatment of cancer.

Requirements:

- Master's degree in life science (biology, biomedicine, molecular medicine or comparable studies).
- Candidates with experience in immunology, molecular or cell biology and biochemistry are specifically encouraged to apply
- Experience in laboratory techniques and the use of experimental mouse models
- Ability to work independently and in a team
- English skills

The candidate will work with mouse models and human samples applying classical immunological methods alongside cutting-edge technologies, including imaging mass spectrometry, multiplex tissue imaging, metabolomics and extracellular flux analysis. The selected candidate will have access to scientific and soft skill training through courses provided by the University of Bonn and external institutions.

We offer:

- A contract for an initial period of three years, with the possibility of extension.
- The salary according to the German salary scale TV-L
- A "Jobticket" (subsidized public transport)
- The possibility to use the day care center
- Supplementary benefits in the public sector (pension plan according to VBL)

- Attractive conditions and benefits, an interdisciplinary research institution that fosters innovation and collaboration and are committed to mentoring and the career development of the next generation of scientists.
- The opportunity to work as part of a young and motivated team within a thriving research environment

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.

Applications should include:

- a CV
- a cover letter outlining why you are applying
- certificates
- the contact information of two referees

These information should be send by e-mail by the 31st of November 2024 to:

Jun. Prof. Laura Surace
W1-tenure track
Institute of Clinical Chemistry and Clinical Pharmacology
University Hospital Bonn
University of Bonn
Venusberg-Campus 1
53127 Bonn, Germany
E-Mail: lsurace@uni-bonn.de