

## Research Scientist

in Translational Immunometabolism, Microbiome Research and Epithelial Biology

We are seeking an enthusiastic and highly driven Research Scientist to contribute to HARMONY, a consortium project within the "Translationale Medizin an Grenzflächen" (TMG) network.

HARMONY aims to develop microbiome-derived metabolites into effective preventive and therapeutic strategies for allergic diseases by strengthening epithelial barriers and modulating inflammation.

The successful candidate will be based at the Swiss Institute of Allergy and Asthma Research (SIAF), University of Zurich, in the group of PD Dr. Milena Sokolowska, and will work closely with Prof. Christoph Messner of the Precision Proteomics Center Davos, SIAF. Employment will be through TMG.

You will investigate how microbial metabolites shape epithelial barriers, integrating mechanistic work with multi-omics to link metabolism to inflammation control and barrier resilience, enabling clinical translation.

### Role and Responsibilities

- Conduct translational research at the interface of immunology, microbiology, and metabolism
- Run primary human epithelial models of allergic diseases
- Assess microbiome-metabolite effects on epithelial metabolism, immune signaling, and barrier integrity
- Use advanced methods (flow/mass cytometry, confocal/IMC, gene/protein assays, microbial cultures)
- Integrate functional readouts with multi-omics data
- Contribute to in vivo preclinical work and translation across models and cohorts
- Collaborate closely with consortium partners across disciplines and institutions
- Manage stakeholders and support patent applications

### Your Profile

- PhD or several years of relevant research experience in immunology, molecular biology, cell biology, systems biology, bioengineering, or related disciplines
- Hands-on experience in several of the following areas:
  - Primary cell culture and advanced in vitro models
  - Flow cytometry, cell sorting, and immune functional assays
  - Imaging (immunofluorescence/confocal) and molecular biology techniques
  - Metabolic assays, metabolomics, and multi-omics approaches
  - Microbial culture work and in vivo preclinical models
- Comfortable working with big data and statistics; computational analysis and programming is a strong asset
- Independent, structured, and reliable working style, with a collaborative and entrepreneurial mindset
- Strong interest in immunology, microbiology, and metabolism
- Interest in translational science and technology transfer
- Professional English; German is an advantage

### We Offer

- Internationally recognized Davos-based institute with state-of-the-art infrastructure and close collaboration with leading experts
- Interdisciplinary, translational project with direct clinical relevance and strong professional development opportunities

### How to Apply

Please send a brief motivation letter, curriculum vitae, and contact details of two references to [info@tmg.swiss](mailto:info@tmg.swiss). Applications will be reviewed on a rolling basis. For any questions, please contact PD Dr. Milena Sokolowska ([milena.sokolowska@siaf.uzh.ch](mailto:milena.sokolowska@siaf.uzh.ch)).

### Short Profile

#### Workload

100 % on site

#### Location

Davos, Switzerland

#### Area

Translational Immunometabolism, Microbiome Research & Epithelial Biology

#### Start Date

Upon agreement

#### Apply now:

[info@tmg.swiss](mailto:info@tmg.swiss)

### About TMG

The association "Translational Medicine at Interfaces" (TMG) is a research network based in Davos and mandated by the Canton of Graubünden. It brings together internationally renowned partners from research and clinical care in the Canton of Graubünden and beyond. Its aim is to consistently translate scientific findings into practice, with a focus on diseases of biological interface organs and on the interplay between environment and health.