

Postdoc and Ph.D. positions in Computational Immunology at Hamburg Center for Translational Immunology



At the Hamburg Center for Translational Immunology (HCT) within the University Medical Center Hamburg-Eppendorf (UKE), **we are actively seeking highly motivated Ph.D. and postdoctoral fellows with a robust background in computational immunology** for positions in the laboratory of Nicola Gagliani (<https://www.uke.de/landingpage/ag-gagliani/index.html>).

Our research focus centers on investigating the fundamental molecular and cellular mechanisms of T cell biology. Specifically, we explore how T cells adapt to environmental changes and ultimately contribute to either mediating physiological responses to pathogens or engaging in pathological tissue-damaging processes (Vesely et al., Cell (2019), Zhao Yu et al., Science Immunology (2021), Tintelnot J. et al., Nature (2023), Siracusa F. et al., Nature Immunology (2023), and Siracusa F. et al., Trends in Immunology (2023), Liebold I. et al Science (2024)).

In the upcoming years, we are dedicated to use systems immunology to decode the intricate interplay between environmental triggers and the immune system, with a specific emphasis on T cells resident in the different organs. Our research aims to elucidate how these organ-resident T cells adapt to various tissues and consequently influence the development of both physiological and pathological immune responses, including tumor development. A key aspect of this project is to use and develop new computational tools to transform big data into knowledge.

The laboratory of Nicola Gagliani is funded by DFG and ERC, providing a unique opportunity for fellows to access a combination of state-of-the-art techniques and multiomics data to answer key biological questions.

Candidates applying for these positions should hold a bachelor's degree in bioinformatics, computational science, biology or similar, and a PhD or MD, or an equivalent degree when applying for the postdoc position. We are looking for candidates who have expertise and commitment to computational biology. Experience in analyzing high-throughput sequencing data, single-cell or spatial data sets, in statistical data analysis, integration, and visualization, along with fluency in at least one data science language (R, Python, Matlab), is required for postdoc candidates and strongly recommended for Ph.D. candidates.

What we can offer

- Salary grade 13 TVÖD/VKA (internal); externally linked to the collective wage agreement.
- International and multidisciplinary environment at the University Medical Center Hamburg-Eppendorf, a leading institution in Europe (Germany).
- Possibility to collaborate and being co-supervised with Prof. Jan Baumbach, Computational Systems Biology Lab, (UHH, Hamburg) to further improve the computational expertise.
- Access to the institution's soft skills program, including training in presenting skills and scientific writing, as well as career-oriented courses.
- Mentoring focused on building the best possible career within and outside academia.
- Weekly scientific exchange through lab meetings and journal clubs.
- Opportunity to collaborate with research groups at the University of Yale (USA) and the Karolinska Institute (Sweden).

How to apply: Send a CV and short motivational letter to Ms Dana Klatt, e-mail: d.klatt@uke.de. For further info please contact Phone: (040) 7410-20982. The call is open from September 2024.

We look forward to receiving your completed application.