

# Postdoctoral Scientist in Human Immunology (100%)

The **Christine Kühne – Center for Allergy Research and Education (CK-CARE**) research consortium located at the Medicine Campus Davos, Switzerland, is seeking a highly motivated Postdoctoral Scientist in the research group of Dr. Ganesh E. Phad to study the immune response in chronic inflammatory skin disease such as atopic dermatitis (AD). The research project is focused on understanding the mechanisms driving remission and relapse in AD. The successful candidate will investigate the epigenetic and transcriptional dynamics, as well as dysregulation within key skin-resident cells and blood immune cells among patients at different stages of atopic dermatitis and throughout the course of immunotherapy. The candidate will utilize serial samples, a variety of cellular, epigenomic, single-cell, and spatial multi-omic approaches, and integrate clinical data to advance the understanding of atopic dermatitis and drive the development of new treatments. We are seeking a scientifically curious team player with strong intrinsic motivation and a proactive mindset, as well as the ability to work both independently and collaboratively within a team to propel the research project forward.

## Main responsibilities

- Independently design and execute in vitro experiments using human skin-resident cells and blood immune cells
- Generate multi-omics (epigenetic, single cell, spatial) data sets on cells from human skin tissue and blood samples
- Analyze multi-omics data sets and continuously develop analysis skills
- Conduct innovative research with a strong translational aspect and publish the findings in leading journals
- Train/assist with mentoring PhD students and undergraduate students
- Desire to apply for external fundings is a plus

## **Minimum Requirements**

- PhD in immunology or a related field (PhD students in the final year are eligible to apply)
- Publication(s) in a peer-reviewed journal or as a bioRxiv preprint, in the field of immunology or focused on skin-resident cells
- Experience and knowledge in the field of immunology and/or epigenetics (a focus on skin-resident cells is a plus)
- Collaborative with excellent analytical, communication, presentation, and organizational skills
- Candidates must be able to work independently as well as with interdisciplinary teams within CK-CARE consortium

#### Skills

- Expertise in flow cytometry, human immune cell isolation and manipulation (culture, stimulation, analysis)
- Experience in molecular biology techniques and functional assays (ELISA)
- Experience in single cell and spatial experiments is desired but not mandatory
- Bioinformatics experience/skills to analyze datasets from multiomics experiments (skills in epigenetic analyses is a plus)
- Experience with human skin biology and/or skin model studies is a plus
- Interest to explore new technologies and integrate into lab's workflow

#### We offer you

- A competitive salary according to <u>Swiss National Science Foundation (SNSF) scale</u>
- A highly collaborative, international, and interactive research environment
- Access to cutting-edge equipment (Orbitrap MS, CyTOF / IMC, slide scanner, Chromium X and Visium CytAssist)
- Access to patient samples and data from the CK-CARE biobank, containing over 2000 AD patients (children to old adults)
- To work as part of a highly qualified and well-connected research network (https://ck-care.ch/en/locations/)
- The opportunity to work at a growing medicine campus dedicated to basic and translational research
- The opportunity to work and live in a famous Swiss ski and mountain resort

**Application and contact**: The position is available starting April 2025 (or on agreement). Please send your application including a short letter of interest and your research activities (1-2 pages), CV (including contact information for 2-3 references), and list of publications as a single pdf file to <a href="mailto:info@ck-care.ch">info@ck-care.ch</a>. The call will remain open until the position is filled. Candidates will be contacted by us on a rolling basis. We look forward to receiving your application. For questions or a discussion about the role, please contact: Dr. Ganesh E. Phad (<a href="mailto:ganesh.phad@ck-care.ch">ganesh.phad@ck-care.ch</a> / P: +41 81 417 37 27).

