

The **Christine Kühne – Center for Allergy Research and Education (CK-CARE)**, a research consortium located at the Medicine Campus Davos, Switzerland, founded by the Kühne Foundation, is hiring a highly motivated

Biostatistician/Bioinformatician

CK-CARE comprises five clinical and basic research facilities based at the departments of dermatology and allergology in a network of partner hospitals (Davos, Zurich, St.Gallen, Bonn and Augsburg).

The Medicine Campus Davos integrates medical care (Hochgebirgsklinik Davos), translational and basic research in one place. **Allergology and cardiology** patients profit from individually adapted rehabilitative care, acute diagnostics, prevention and treatment of chronic inflammatory diseases. The three pillars of the Medicine Campus Davos are **healthcare, research and education**. This structure is flanked by a unique and growing biobank and data repository.

Top-level basic and translational research in the fields of allergy, asthma and cardiology is conducted by our research teams with a vast expertise to analyse large-scale genetic data and biological samples using cutting-edge methods from machine learning and statistics. Davos Biosciences, also located on the campus, is managing interactions with external partners and pharmaceutical companies worldwide.

Qualification and Experience (minimum requirements):

- solid background in (bio)informatics/(bio)statistics/computational biology/machine learning or a similar technical background
- expert-level programming & debugging skills in Python (numpy, scipy, pandas, sklearn, logging, re, seaborn) or / and R (data.table, caret, dplyr, mlr3, R6, regular expressions, markdown, ggplot2)
 - firm knowledge of OOP and clean code best practices
 - proficient with git, pull requests, code reviews
 - basic Bash/Linux knowledge
 - good working knowledge of relational databases
 - good documentation skills (code, databases, workflows, models)
 - motivation to produce well-structured, scalable, tested and reproducible code
- strong work ethic
 - a mindset of delivering concrete results under time constraints, with attention to details
 - an open-minded team player, open to feedback
 - willingness to continuously learn and self-improvement
 - a clear and direct communicator with a maximum signal-to-noise ratio
- fluency in English and knowledge of German is an asset

Bonus points (but not hard requirements) if you have any of the following:

- a data science/code repository/portfolio to showcase (e.g., on Github)
- successful projects with biological/medical data, omics, next-generation sequencing
- participation/awards in Kaggle competitions/hackathons
- contributions to open-source software projects or authoring your own libraries
- experience with pytorch/tensorflow/keras/pyspark/dask
- experience with bioconductor R packages
- experience with NoSQL databases
- experience with Docker containers/data version control/document version control (e.g., Atlassian Confluence)/MLOps

What you will work on

- processing, model development and statistical analysis of large-scale (up to multiple TB) clinical and biological datasets:
 - Omics data (microbiome, immunomics, genomics, transcriptomics, proteomics (Olink))
 - NGS data (16S, RNASeq, Ig-Seq)
 - novel Imaging Mass Cytometry and CyTOF data
 - noisy data from patient questionnaires
- automating quality control and data validation of the biobank and patient databases, data management and data validation
- statistical and methodological support of the collaborating teams at other CK-CARE centers
- statistical and bioinformatics supervision and support will be provided on campus by Cardio-CARE AG (Prof. Dr. Andreas Ziegler) and the project leaders from the study centres, as well as Davos Biosciences AG for commercial aspects.

Why join us?

- be part of the growing medical campus dedicated to front translational and basic research
- a unique opportunity to work on diverse datasets
- freedom in model exploration to find optimal solutions
- co-authorships in publications according to international rules
- access to the cutting-edge hardware in the wet and dry lab
- working in a small, open-minded, friendly and international team with diverse backgrounds
- a competitive salary and social benefits
- quiet offices with panoramic views of the Alps, overlooking lake Davos
- we support you with a work permit and relocation procedures

What is special about Davos?

Davos is the largest resort in the Alps for holidays, work and sports. It is at 1560 m the highest town in the Alps and is one of Switzerland's biggest ski resorts with an international flair. In winter you can enjoy more than 300 km of slopes and in summer explore 700 km of hiking trails. Furthermore, Davos offers a variety of cultural events, all school levels up to high-school and hosts numerous international research institutes with a total number of over 400 employees in research and administration.

Interested?

We look forward to receiving your application with a brief explanation why you are the ideal candidate for this position, your detailed curriculum vitae and the contact details of two to three references. Please submit your complete application as a single pdf file to info@ck-care.ch.

Questions regarding this position should be directed to Dr. Claudio Rhyner, CEO CK-CARE AG | phone: +41 81 410 13 00. Initial application deadline is April 30, 2022, but the call will remain open until the position is filled. Candidates will be contacted by us on a rolling basis.