TRON

Bioinformatician Single-cell Omics analysis (m/f/d)

Full time - Mainz

We are looking for support for our **Single-cell Omics** unit to start as soon as possible. We are an interdisciplinary group of scientists, bioinformaticians, and PhD students with diverse backgrounds, who work closely together and maintain strong collaborations with other units at TRON and external partners. Our team contributes to the development of immunotherapeutic treatments against cancer and other severe diseases by analysing immune and cancer cells to better understand disease mechanisms, therapeutic resistance, and immunomodulatory processes.

The successful candidate will support the analysis of single-cell multi-omics data, contribute to the discovery of antigen-specific T-cell receptors (TCRs), and help drive the development of innovative data analysis solutions, automated pipelines, and databases. You will have access to GPU-accelerated HPC compute resources, stay up to date with state-of-the-art single-cell omics tools and methods, and contribute to exciting ongoing and novel research projects in a highly collaborative translational research environment.

Your tasks and responsibilities:

- Supporting the team with analyzing single-cell multi-omics data with a focus on immune and cancer cell interactions and TCR characterization.
- Developing and implementing innovative and advance data analysis solutions, including automated analysis pipelines and databases
- Utilizing a Linux-based high-performance computing (HPC) cluster with job scheduling systems to process and analyze single-cell omics data
- Conducting literature research and exploring leading-edge analysis software for single-cell omics data

What you bring:

- Ph.D. or Master's degree in a relevant scientific discipline (e.g. Biology, Bioinformatics, Computer Science)
- At least two years of hands-on experience in computational biology or bioinformatics
- Strong programming experience, preferably in Python and R
- Experience in working with NGS data, preferably single-cell RNA-seq data (e.g., 10x Genomics platform)
- Experience in pipeline automation is required and familiarity with database development is a plus
- Proficiency working in a Linux HPC environment, including the use of job schedulers
- Strong motivation and interest in the field of immunology, cancer immunotherapy, and cancer biology
- Any experience with robust pipeline development (e.g., version control, dependency management, workflow languages) will be advantageous
- Experience in analysis of single-cell ATAC-seq, spatial transcriptomics and the integration of different types of omics data would be of advantage

Enthusiasm and curiosity for the diverse activities of our research institute as well as the ability to work in a team, complete your profile.

We offer:

- A dynamic, innovative and creative research environment
- Access to GPU-accelerated HPC cluster and labs with cutting-edge sequencing technologies
- An open, collegial and cordial working atmosphere in a respectful corporate culture
- A high degree of diversity in the workforce
- Performance-related remuneration and other benefits
- Opportunities for personalised further training
- Good transport connections by public transport and car, as well as bicycle parking spaces
- The opportunity for hybrid working

TRON is an internationally recognised institute for application-oriented research. We combine the strengths of academic research with the requirements of quality-controlled industrial developments. At TRON, we share a common mission to develop innovative solutions for the immunotherapeutic treatment of cancer, infectious diseases and other serious diseases with high medical need.

TRON was founded in Mainz in 2010 and works in close cooperation with universities and hospitals as well as with regional, national and international research institutions and pharmaceutical companies.

As part of our team, you will have the opportunity to work at the cutting edge of translational science.

If all this appeals to you, we look forward to getting to know you.

Please send us your complete and informative application documents (cover letter, CV, references) in a single document of max. 5 MB by e-mail to Human Resources at **jobs (at) tron-mainz.de**, Job-ID: **43302-25-01-WAPRO**.

For more information, visit our homepage at www.tron-mainz.de