TRON

COMPUTATIONAL SCIENTIST
SPATIAL OMICS (m/f/d)

Full time - Mainz

We are looking for support in our **Computational Medicine** unit to start as soon as possible. We are an interdisciplinary team of scientists, software developers, and PhD students with various background, including computer science, molecular biotechnology, bioinformatics, and mathematics. We strongly collaborate with other units in TRON and with external partners to develop software, predictive models, and data analysis pipelines to identify biomarkers and targets for innovative immunotherapies against cancer and other diseases.

The successful candidate will develop novel methods and analysis pipelines for spatial transcriptomics assays, support team members in building image analysis pipelines for multiplex/highplex immunohistochemistry (IHC), contribute to exciting ongoing and novel projects in translational cancer immunotherapies and cardiovascular disease, and collaborate with experts across multiple fields to push the boundaries of what is possible.

Your tasks and responsibilities:

- Implementation, optimization and application of robust and reproducible analysis pipelines for spatial omics data
- Development of novel multi-modal data integration methods for spatial multi-omics assays
- Integratation of in-house generated data with publicly available spatial and single-cell atlases
- Support and train scientists and PhD students in spatial omics data analysis
- Collaboration in multidisciplinary project teams with academic and industrial partners to identify novel biomarkers and therapeutic targets
- Reviewing literature for emerging methods, datasets, and discoveries in the field of spatial omics
- Presenting and discussing in internal meetings and international conferences, write R&D reports and scientific publications

What you bring:

- A Ph.D. degree in a relevant scientific discipline (e.g. Biology, Bioinformatics, Computer Science)
- Demonstrated scientific expertise in analysing spatial omics data
- Experience in leading research projects in a multidisciplinary environment
- Strong programming skills, particularly in Python and R, with experience in spatial data analysis and machine learning
- A hands-on expertise with version control systems (e.g. git), workflow managers (e.g. snakemake, nextflow) and high performance computing will be advantageous
- Experience in microscopy image analysis is a plus
- Flexibility to adapt to changing projects and organizational priorities
- Strong communication skills in English

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

We offer:

- A dynamic, innovative and creative research environment
- Access to our GPU-accelerated HPC cluster and labs with cutting-edge sequencing and imaging 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
- The opportunity 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 have the opportunity to be at the forefront of translational science with us.

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: *43101-25-01-WAPRO*.

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