



Bioinformatics Scientist – Computational Genomics and Cancer Antigen Discovery (m/f/d)

We are seeking a motivated **Bioinformatics Scientist (m/f/d) for Computational Genomics and Cancer Antigen Discovery** to join the **Computational Genomics** unit in our Bioinformatics department. Our interdisciplinary team of scientists, PhD students, and software engineers develops bioinformatics methods to identify biomarkers and therapeutic targets for personalized cancer immunotherapies.

Working closely with other TRON teams and partners in academia, clinics, and industry, we develop and use computational methods to discover tumor-specific biomarkers, with the final aim of translating them into clinical practice. In this role, you will identify and prioritize novel classes of tumor-specific antigens for personalized mRNA vaccines and other immunotherapies. You will analyze diverse types of molecular profiling datasets using innovative computational models. Findings will be validated in collaboration with specialized teams through molecular and immunological assays.

Your tasks and responsibilities:

- Analyse large-scale genomic, epigenomic, full-length transcriptomics, and proteomic datasets to identify and prioritize tumor-specific antigen candidates.
- Lead the development and implementation of computational pipelines and models to detect antigen targets for both personalised therapies and broadly applicable, off-the-shelf immunotherapies.
- Drive research projects from hypothesis generation and computational analysis through interpretation and experimental validation, in close collaboration with interdisciplinary teams and external partners.
- Present and discuss scientific findings in internal meetings, with academic and industry partners, and at international conferences.
- Lead and contribute to scientific publications, grant proposals, and R&D reports.

What you bring:

- PhD in Computational Biology, Immuno-Oncology, or a related data-driven field, plus at least two years of post-PhD research experience in academia or industry.
- Proven expertise in cancer genomics, tumor immunology, target discovery, or neoantigen research.
- Strong programming skills in Python or R for bioinformatics workflows and reproducible data analysis.
- Hands-on experience with Git, workflow managers, databases, and high-performance computing (HPC) environments.
- Experience in analyzing next-generation sequencing (NGS) raw data, in particular long-read RNA sequencing data and transcript variants, is a plus.
- Experience leading research projects in multidisciplinary teams, strong motivation and attention to detail.
- Enthusiasm, curiosity for the diverse activities of our research institute.

We offer:

- Access to our GPU-accelerated HPC cluster and laboratories with cutting-edge sequencing technologies and molecular assays
- A dynamic, innovative and creative research environment
- 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 personalized further training
- Job ticket (Deutschlandticket) incl. employer allowance
- Bike leasing (Businessbike)
- The opportunity for hybrid working

TRON is an internationally recognized 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 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: **43104-26-01-WAPRO**

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