TRON

Master's Thesis - Systems Immunology & Medicine

Mainz

TRON's **Systems Immunology & Medicine unit** is offering a **Master's Thesis**, aimed at providing hands-on experience in cutting-edge research and data analysis within the field **of computational medicine**. We are an interdisciplinary team of scientists, software developers, and PhD students, with diverse backgrounds, including computer science, molecular biotechnology, and bioinformatics. We strongly collaborate with other units in TRON and with external partners to develop software, predictive models, and data analysis to identify biomarkers and targets for innovative immunotherapies against cancer and other diseases.

As part of our research group, you will have the chance to work on challenging bioinformatics projects related to improving cancer immunotherapy. In your Master thesis, you will computationally address translational research questions and develop models for the effectiveness of cancer immunotherapies.

Your tasks and responsibilities:

- Train and test predictive models for the effectiveness of immunotherapies
- Support the development of a reproducible snakemake workflow for the analysis of available patient sequencing data

What you bring:

- Currently enrolled in a Master's program in (Bio)informatics, Computer Sciences, Data Sciences, Biology or a related field
- Solid programming experience, preferentially in Python or R
- Keen interest in project work with focus on translation research questions in cancer immunotherapy in a team
- Hands-on experience with snakemake, git and linux-based compute clusters is a plus
- High proficiency in spoken and written English

We offer:

- Hands-on research experience in bioinformatics
- Supervision and mentorship by experts in the field
- Opportunity to contribute to high-impact research and publications
- A collaborative and stimulating academic environment

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 medicinal need for development.

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: 43103-25-01-MSC.

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