



Master's Thesis – Spatial Biology

Mainz

Are you fascinated by how tumors interact with their surroundings? Join us in our Spatial Biology unit at TRON for your Master Thesis and become a part of cutting-edge cancer research!

In this project, the candidate will explore the Tumor Microenvironment (TME) across diverse mouse tumor models using spatial proteomics. By creating detailed maps of protein expression and interactions within tumors, the candidate will evaluate how accurately these models represent human tumor biology. This understanding is essential for improving the validity of preclinical models and enhancing the translational impact of cancer research.

The Master's Thesis project combines state-of-the-art spatial proteomics with standard imaging techniques, offering a comprehensive toolkit to analyse tumors from multiple perspectives. Through this integrative approach, the candidate will gain valuable insights into tumor immunobiology that could guide the development of more effective therapies.

Your tasks and responsibilities:

- Train Conduct experiments independently
- Report progress to supervisors regularly
- Keep detailed lab notes or research logs
- Analyze and interpret data
- Read and stay updated on relevant literature
- Prepare presentations and/or posters
- Help with lab maintenance or shared tasks

What you bring:

- Currently enrolled in a Master's program in Biology or a related field
- Independent, self-motivated working style and ability to work in interdisciplinary teams
- Hands-on experience with IHC techniques, microtome, and sample preparation
- Strong organizational skills and attention to detail
- Basic data analysis skills
- Willingness to learn new techniques and adapt quickly
- Good communication skills for reporting and presenting results
- Reliable and responsible with lab safety and protocols
- High proficiency in spoken and written English; German is a plus

We offer:

- Hands-on research experience experience in spatial biology and state-of-the-art techniques

- Supervision and mentorship by experts in the field
- Opportunity to contribute to high-impact research and publications
- Possibility of interdisciplinary collaborations
- Supportive team culture focused on innovation and learning

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: 42101-25-01-MS.

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