

getragen von:
Deutsches Krebsforschungszentrum
Universitätsklinikum Carl Gustav Carus Dresden
Medizinische Fakultät Carl Gustav Carus, TU Dresden
Helmholtz-Zentrum Dresden-Rossendorf

Master thesis (dry lab) for students of biology/medicine/life sciences/(bio)informatics

The German Cancer Research Center is the largest biomedical research institution in Germany. With more than 3,000 employees, we operate an extensive scientific program in the field of cancer research. The National Center of Tumor Diseases (NCT) Dresden is a joint institution of the German Cancer Research Center, the University Hospital Carl Gustav Carus Dresden, the Faculty of Medicine at TU Dresden, and the Helmholtz-Zentrum Dresden-Rossendorf (HZDR). The NCT with sites in Heidelberg and Dresden is the leading oncological center in Germany and is being further expanded to an international center of excellence regarding point-of-care and individualized cancer medicine.

The department "Translational Medical Oncology" of the German Cancer Research Center (DKFZ) at the National Center for Tumor Diseases Dresden (NCT/UCC), headed by Prof. Hanno Glimm, focus on the functional and molecular characterization of malignant cell regulation and metastasis formation. In addition, the department drives a precision oncology program for genomic analysis of patient cancers as a basis for interventional clinical trials (NCT MASTER). This program has demonstrated that whole-exome/genome and RNA sequencing in a clinical setting provides relevant diagnostic information and creates opportunities for pharmacologic intervention (Cancer Discovery 2021). To further inform clinical decision making within MASTER, the research group Experimental Translational Oncology, headed by Dr. Claudia Ball, established a functional stratification by drug sensitivity testing of patient derived tumor models (MASTER-FuSion). Results are discussed in the molecular tumor board and contribute to therapeutic decision making.

A bioinformatics-oriented Master's thesis is available within the framework of these activities. The aim of the work is to develop substance-specific drug sensitivity scores to support the interpretation of functional data in precision oncology by creating an automatized R pipeline for results report production.

As such, we are seeking for a highly motivated candidate with profound background in biology, medicine, life sciences and/or (bio)informatics. Ideally, the candidate has first experience on data analyses and R programming, has a good biological understanding. A team-oriented workstyle, high self-motivation and excellent written and oral command of English are desired.

If you enjoy working in a dynamic, interdisciplinary team in a translational research laboratory, like interacting with colleagues on projects and working closely, and have already completed your bachelor's degree, then we look forward to hearing from you.

Please send your complete application documents including cover letter, CV and certificates by e-mail to:

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