

The German Cancer Research Center (DKFZ) is seeking for the partner site Dresden of the National Center for Tumor Diseases (NCT) a

## PhD Student

(Ref.-No. 2020-0094)

*The German Cancer Research Center is committed to increase the percentage of female scientists and encourages female applicants to apply.*

*Among candidates of equal aptitude and qualifications, a person with disabilities will be given preference.*

*To apply for a position please use our online application portal (<https://www.dkfz.de/en/stellenangebote/index.php>).*

*We ask for your understanding that we cannot return application documents that are sent to us by post (Deutsches Krebsforschungszentrum, Personalabteilung, Im Neuenheimer Feld 280, 69120 Heidelberg) and that we do not accept applications submitted via email. We apologize for any inconvenience this may cause.*

The Department „Translational Medical Oncology“ of the German Cancer Research Center (DKFZ) at the National Center for Tumor Diseases (NCT) Dresden and the “Translational Functional Cancer Genomics” group of the DKFZ at the NCT Heidelberg, headed by Prof. Hanno Glimm, focus on the functional and molecular characterization of malignant cell regulation and metastasis formation. Therefore, biobanks of patient-derived in vivo and in vitro cancer models have been established and extensively characterized. These models are utilized to assess clonal dynamics and regulation of tumor-initiating cell (TIC) activity in gastrointestinal cancers (e.g. Cell Stem cell 2011; Cancer Letters 2016; EMBO MolMed 2017; IJC 2017 and 2020; JEM 2017; Nature Genetics 2017, Cells 2019, Cancer Discovery 2018). Our goal is to mechanistically understand the regulation of tumor-initiating cell (TIC) activity as a prerequisite to eradicate cells with TIC activity in human cancer and to develop safe and efficient therapeutic strategies.

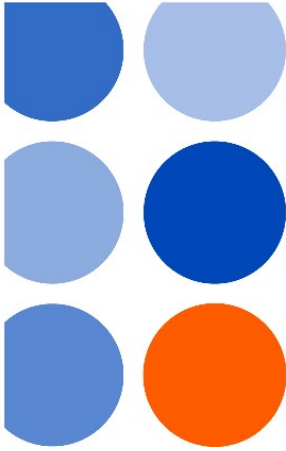
For specific targeting of TIC activity, we have evaluated the impact of novel therapeutic approaches on primary patient derived tumor models. Global insertional mutagenesis gene activation and pooled shRNA knock down screens allowed identification of candidate genes potentially critical for proliferation, tumor 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.

### Your tasks:

We are looking for a highly motivated PhD student with relevant education in biological sciences, ideally in the field of cancer research. Based on our previous research and in cooperation with the Max Planck Institute of Molecular Cell Biology and Genetics (MPI-CBG) Dresden, successful PhD candidates will utilize state-of-the-art technologies to further understand the mechanisms, which allow TIC to proliferate limitless, leave the primary site and form metastases. Based on this, the candidate will develop and validate molecular strategies specifically targeting TIC activity in human cancers.

### Your profile:

Applicants should hold a master’s degree or equivalent in biology/life sciences with an excellent background and experience in cellular and molecular biology as well as cancer biology. The successful applicant should be highly self-motivated and be able to pursue and drive research projects independently as well as in collaborations.



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An excellent written and oral command of English is essential. Applications should include a CV, cover letter, certificates, expected availability date, a complete list of publications and 2-3 references.

**Contract period:**

The position is limited to 3 years.

**Contact:**

Julia Dorok, phone 0351-4585527

Please note that we do not accept applications submitted via email.

**Application deadline:**

23.04.2020

