

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. 2018-0259)

Your tasks:

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; JEM 2017; Nature Genetics 2017). Understanding the regulation of tumor-initiating cell (TIC) activity is therefore pivotally important 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.

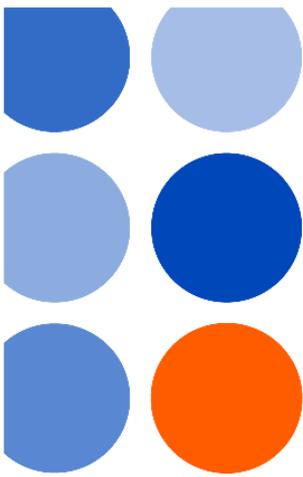
Based on our previous research, successful PhD candidates will utilize state-of-the-art technologies to develop and validate molecular strategies specifically targeting tumor-initiating cell activity in human gastrointestinal and rare cancers. Patient derived tumor models will be generated from patient tumors, molecularly characterized, and the identification of targetable mutations will trigger the testing of appropriate single-agent or combination therapies in vitro and in vivo. Genomics-guided treatment will be recommended for the respective patient within the MASTER program whenever feasible. In addition, candidate structures potentially regulating transcriptional regulation in TIC will be chosen for the development and validation of molecular strategies targeting TIC activity in cancer.

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 (www.dkfz.de/jobs).

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.



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We are looking for a highly motivated fellow with strong background in cancer cell and molecular biology. Within the project, the successful candidate will drive the development and implementation of highly innovative translational approaches for personalized oncology.

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 applicant should be highly self-motivated and be able to pursue and drive research projects independently as well as in collaborations. 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:

Ms Claudia Ball, phone +49 6221 56 37146

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

Application deadline:

30.11.2018

