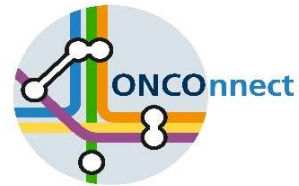


Klinik und Poliklinik für Strahlentherapie und Radioonkologie

ONConnect Call 2023



The Faculty of Medicine at the Technische Universität Dresden, one of the 11 German Universities of Excellence, is further strengthening translational research and career perspectives for Medical Scientists with its newly established ONConnect program funded by the Else-Kröner Fresenius Foundation. The program offers PhD positions at the cutting edge between bench, bedside and industry including clinical as well as industrial rotations. Together with the Department of Radiotherapy and Radiation Oncology and OncoRay – National Center for Radiation Research in Oncology, the Faculty of Medicine invites applications for

PhD position (TV-L E13 / 65%) in real-time MR-guided proton therapy

The Project

In recent years, the technological development of image-guided radiation therapy integrating magnetic resonance imaging (MRI) has gained great attention, particularly in MRI-guided photon therapy. Since 2022, OncoRay has been hosting a hybrid MR-linear accelerator (MR-LINAC) for clinical studies that will be enabled for real-time beam gating and target tracking. Moreover, OncoRay is pioneering the integration of MRI into proton therapy (MRiPT). Within the ONConnect project, the PhD candidate will take up the challenge to develop gating and tracking solutions for real-time MRiPT. To achieve this goal, the candidate will be trained with a clinical internship at the MR-LINAC and an internship at the industry, before setting up and conducting *in silico* patient treatment planning and phantom validation studies. This PhD position will be flanked by a clinician scientist within the *Carus PromotionsKolleg Dresden*. This interdisciplinary project is built on a lively network under the roof of the **Dresden School of Clinical Science** and offers mentoring of two tandem leaders from clinics and basic science in the framework of new translational training formats and cross-disciplinary networking.

Your profile

We are looking for an enthusiastic and self-motivated early-career researcher to join our team. The candidate should have obtained an MSc degree in (medical) physics, biomedical engineering, or a related technical discipline. Due to the multidisciplinary nature of this project, you are an excellent collaborator and communicator. The ability to work comfortably with industrial partners is a strong plus. You have hands-on experience in radiation treatment planning, MR image processing, computer programming skills, and experimental work. Proficiency in English is mandatory.

Our offer

The position is open immediately and must be filled before October 1st 2023. We offer:

- A position in a highly international and stimulating interdisciplinary clinical research environment.
- A temporary appointment for a maximum of 3.5 years.
- Gross salary and working hours are according to standard levels for PhD candidates (TV-L E13 / 65%).

Your application

Please apply online via www.uniklinikum-dresden.de/de/jobs-und-karriere/stellenangebote/wissenschaft and submit a motivation letter, an updated CV, course list and grade report, and contact information for up to three references. The motivation letter should briefly describe your research interests, relevant experience and career goals. All applications received before May 19th will receive full consideration, however, the position will remain open until filled.

Person to contact

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