

Klinikum rechts der Isar der Technischen Universität München (TUM)



37 Fachrichtungen



1834 gegründet



6600 Mitarbeitende



160 Berufe



Im Herzen Münchens

Metabolic Phenotyping of Cancer Using Hyperpolarized ¹³C MRI

Full-time | Temporary Contract, 2 years | Department of Diagnostic and Interventional Radiology

The Department of Diagnostic and Interventional Radiology at the Technical University of Munich (TUM) is seeking applications from highly motivated candidates for a PostDoc position. The candidate will be working on metabolic phenotyping of cancer using hyperpolarized ¹³C magnetic resonance imaging (MRI). The PostDoc position is embedded in the [Translational Oncologic Imaging group](#) led by Dr. Irina Heid and Prof. Dr. Rickmer Braren and is a part of a multicenter consortium funded by the German Federal Ministry of Education and Research (BMBF) entitled "Revolutionizing cancer imaging through quantum technologies" ([QuE-MRT](#)).

Your responsibilities:

- Generation and characterization of preclinical mouse- and patient-derived *in vivo* models of renal and pancreatic cancer
- Animal experimental work, biomedical magnetic resonance imaging (MRI) with hyperpolarized ¹³C-substances
- Integrated computational analysis of multimodal imaging data and corresponding histological samples
- *In vitro* and *in vivo* analysis of tumor cells and tissue samples, isotopic labeling flux analysis, mass spectrometry imaging
- Preparation and presentation of abstracts, manuscripts, lectures, posters
- Participation in internal and external symposia
- Project-related supervision of Master and PhD students and medical doctoral candidates

Your profile:

- PhD in Biochemistry, Chemistry, Biology, Medical Sciences, Oncology
- Previous **experience in biomedical imaging and/or animal experimental work is mandatory**
- High interest in working with preclinical animal and patient-derived *in vivo* models, molecular imaging, and MRI
- Team spirit, willingness to work in a highly interdisciplinary environment
- High self-motivation, independent work style, strong organizational skills
- Fluent in spoken and written English

We offer you:

- Highly interdisciplinary, well-equipped, state-of-the-art research environment within the Klinikum rechts der Isar
- Comprehensive additional training in MRI-based imaging technologies and animal experimental work techniques provided by experienced and qualified colleagues



- Outstanding research opportunities in basic and translational cancer research, support in grant writing, career development courses offered by the TUM ForTe center and TUM Talent Factory for PostDocs
- Work place in the city center of Munich on Max-Weber-Platz with good access to public transport systems
- Situated next to the Alps, Munich is consistently ranked as one of the most enjoyable cities in the world
- Employment by Klinikum rechts der Isar (TV-L E13) for two years with an opportunity to one-year extension

As an equal opportunity and affirmative action employer, TUM explicitly encourages applications from women as well as from all others who would bring additional diversity dimensions to the university's research and teaching strategies. Preference will be given to disabled candidates with essentially the same qualifications.

Interview-related costs can, unfortunately, not be reimbursed.

We look forward to your application!

Contact: PD Dr. Irina Heid | +49 89 4140 – 6007 | irina.heid@tum.de

Please submit your complete application as one PDF document by e-mail including

- **a letter of motivation detailing your research interests**
- **a curriculum vitae**
- **certificates and transcripts of academic degrees**
- **contact information for at least 2 references**

The position can be filled starting earliest in February 2024. Please send your application until March 30th, 2024