Klinikum rechts der Isar
Technische Universität München

Hospital rechts der Isar (MRI) of Munich Technical University (TUM)


37 specializations

founded 1834


6600 employees


160 professions


In the heart of Munich

PhD (m/f/d) – Quantitative PET/MRI

Full-time | temporary contract (36 months) | Klinik und Poliklinik für Nuklearmedizin

The **Department of Nuclear Medicine** is seeking applications from highly motivated candidates for a PhD position in multimodal molecular imaging within the multi-disciplinary DFG project "Individualized radioligand therapy planning based on quantitative PET/MRI and PBPK/PD modelling: proof of concept in a preclinical setting". The main task of the position is the development and implementation of SPECT/CT and PET/MR imaging protocols as well as data analysis. The PhD position is embedded within the Research Group "Biomedical Magnetic Resonance" led by Prof. Dr. Franz Schilling (www.schillinglab.com). The imaging infrastructure located at the Department of Nuclear Medicine (www.nuk.mri.tum.de) and the Center for Translational Cancer Research (TranslaTUM, www.translatum.tum.de) provides a unique and multi-faceted research environment.

Your research project:

- Implementation of PET/MRI and SPECT/CT imaging protocols
- Imaging protocol optimization
- Image analysis and processing
- Motion-correction, Image coregistration, Image analysis framework (software development)
- Curation of data for integration into PBPK/PD modelling
- Conduct animal experiments together with second PhD student

Your profile:

- M.Sc. or equivalent degree in physics, computer science, bioengineering, electrical engineering or other related subjects
- Previous experience in biomedical imaging is beneficial
- Team spirit, capability of independent self-motivated work
- Very good English and communication skills are a prerequisite
- Excellent programming skills (e.g. MATLAB, Python) and experience in data analysis are required

We offer:

- Well-equipped, cutting edge research environment within the Klinikum rechts der Isar including a 3T PET-MRI, a preclinical imaging facility with a 7T preclinical animal MRI, a 3T PET-MRI, a tabletop NMR spectrometer, a SPECT-CT and a HyperSense dissolution DNP polarizer.

- An opportunity to work in the city centre of Munich on Max-Weber-Platz with good access to public transport systems and benefits in the form of specially discounted public transport tickets (Job ticket).
- You will become a member of the TUM Graduate School, which offers excellent opportunities for career development, continued education, and life-long learning (https://www.gs.tum.de/en/gs/doctorate-at-tum/).
- Situated next to the Alps, Munich is consistently ranked as one of the most enjoyable cities in the world
- The doctoral candidate will be employed by Klinikum rechts der Isar (MRI) for a total duration of three years with a possibility for extension. The employment is in accordance with TV-L (German Salary Grade 75% TV-L E13).

We are looking forward to your application.

Applications should include a curriculum vitae, certificates and transcripts of academic degrees, a letter of motivation detailing the applicant's research interests, and contact information for at least 2 references. The position can be filled starting earliest in January 2023. The position will remain open until filled.

Please submit your complete application documents by e-mail including

- **reference number 09_050,**
- **your preferred starting date.**

Prof. Dr. Franz Schilling

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If the candidates' suitability for the position in question is equal, severely disabled applicants shall be given preference.

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