



Arbeit



PhD Student (m/f/d) Life Sciences / Biotechnology

Universitätsklinikum der Technischen Universität München AöR

 **Arbeitsort**
München

 **Anstellungsart**
Teilzeit (Vormittag, Nachmittag, Abend)

 **Befristung**
befristet für 27 Monate

 **Beginn**
ab sofort

 **Berufsbezeichnung**
Biologe/Biologin

 Heute veröffentlicht

TUM Klinikum / Rechts der Isar

PhD Student (m/f/d) - Life Sciences / Biotechnology

part-time | temporary (27 months) | Klinik und Poliklinik für Nuklearmedizin

In the Department of Nuclear Medicine, we are interested in the development and clinical translation of molecular imaging tools for various applications, such as oncology, regenerative medicine, immunotherapies, as well as cell and gene therapies. Our interdisciplinary environment brings together a broad range of expertise, including biomarker discovery and evaluation, chemical synthesis and radiolabeling, protein biochemistry, radiochemistry, and preclinical imaging using PET, SPECT, and fluorescence techniques. We also work on animal model development, histopathological validation, tumor biology, and molecular biology. Our research aims to develop creative and innovative strategies to characterize new classes of molecular imaging agents and advance those with translational potential. This environment allows PhD students to experience the full drug development pathway—from initial molecular design tailored to a medical need to the creation and evaluation of clinically applicable radiopharmaceuticals.

The project will build on the PET reporter gene technology that we have recently developed and apply it for the in vivo tracking of gene vectors and their genetic payload. The different vectors will be provided by collaboration partners.

The position is a part of the project “Biotechnologie-Innovationen für High-End Immuntherapien und Theranostik” (BIOFIT; 2025-28) funded by the EFRE (European Regional Development Fund).

Your scientific project:

In your PhD project “Tracking various gene transfer and gene therapy vectors by Positron Emission Tomography”, your work will involve:

- Designing, manufacturing and optimizing gene vectors
- Characterization of vector transduction in vitro and in vivo
- Radiolabeling of gene vectors for PET/CT imaging
- Animal studies in collaboration with other researchers and technicians
- Image analysis using AI-segmentation algorithms
- Histological correlation of PET results and immunohistochemistry for tissues transduced by the vector
- Experimental design, realization, and analysis of scientific data, writing of manuscripts, presentation of data at conferences

Your profile:

- Excellent university degree (Master or equivalent) in biology, biochemistry, biotechnology, or a related field
- Strong motivation, curiosity, and commitment to scientific excellence
- Proactive, independent, and critical work style as well as good organizational and time-management abilities
- Ability to analyze data, troubleshoot experiments, and interpret results independently
- Practical experience in half of the following fields is expected: molecular biology & biochemistry, mammalian cell culture, virology, histopathology
- Willingness to perform in vivo experiments with mice
- Strong team spirit and enthusiasm for working in a multidisciplinary, collaborative environment
- Very good command of English

We offer you:

- You will work in an interdisciplinary group of scientists and clinicians (Postdocs and PhD students with a background in chemistry, biology, physics, veterinarians, physicians, and technical assistants) with excellent infrastructure and a strong focus on translational research
- You will be a member of the graduate program at TUM, which will give you the opportunity to participate in various workshops (scientific and soft skills), seminars and career-building programs
- EGYM well pass, corporate benefits and discounts (e.g. Käfer), cafeteria, sports and cultural offers
- Free use of the library through a branch of the Munich City Library located in the building
- Working in the heart of Munich at Max-Weber-Platz with very good accessibility by public transport such as the subway, S-Bahn or tram
- Company pension plan through the Federal and State Pension Institute (VBL)

We look forward to your application!

Contact: Prof. Dr. Wolfgang Weber | 089 / 4140 –2972 | Klinik und Poliklinik für Nuklearmedizin

Please submit your complete application documents by e-mail quoting:

- **“BIOFIT PhD” by 28th February 2026**
- **and the reference number 25_12_025**

Klinik und Poliklinik für Nuklearmedizin

TUM Klinikum
Rechts der Isar
Ismaninger Straße 22
81675 München

****E-Mail:** bewerbung.nuklearmedizin@mri.tum.de

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.

Arbeitsorte

 Ismaninger Str. 22, 81675 München

Universitätsklinikum der Technischen Universität München AöR

 **Hauptsitz**
Ismaninger Str. 22, 81675 München

 **Gründung**
1834

 **Betriebsgröße**
6.600

Krankenhaus

Gesundheitswesen

Das TUM Klinikum Rechts der Isar widmet sich mit rund 6.600 Mitarbeitenden der Krankenversorgung, Forschung und Lehre. Jährlich profitieren knapp 55.000 Patientinnen und Patienten von der stationären und mehr als 265.000 Patientinnen und Patienten von der ambulanten Betreuung auf höchstem medizinischen Niveau. Als Haus der Maximalversorgung mit knapp 30 Kliniken, Sektionen und Abteilungen, rund 20 interdisziplinären Zentren und 20 Instituten deckt das TUM Klinikum Rechts der Isar das gesamte Spektrum moderner Medizin ab. Durch die enge Kooperation von Krankenversorgung und Forschung kommen neue Erkenntnisse aus wissenschaftlichen Studien früh Patientinnen und Patienten zugute. Werden auch Sie Teil von uns und gestalten Sie mit uns die Medizin von morgen.

Vorteile für Mitarbeitende

 Kinderbetreuung

€ Vermögenswirksame Leistungen

 Flexible Arbeitszeiten

 Firmenevents

- | | |
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|  Rabatte für Mitarbeitende |  ÖPNV-Ticket / Job-Ticket |
|  Sport- und Gesundheitsangebote |  Kantine |
|  Sonderzahlungen |  Gute Verkehrsanbindung |
|  Weiterbildungen |  Moderne technische Ausstattung |
|  Betriebliche Altersvorsorge | |

Die abgebildeten Vorteile für Mitarbeitende können je nach Abteilung und Position variieren.

[Alle Stellen anzeigen](#)[In neuem Tab öffnen](#)[Homepage](#)

Informationen zur Bewerbung

Universitätsklinikum der Technischen Universität München AöR

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81675 München

Telefon: +49 89 41402972

E-Mail: bewerbung.nuklearmedizin@mri.tum.de

Bewerben Sie sich:

Per E-Mail

Kontaktaufnahme

[Nachricht schreiben](#)

Sonstige Angaben zur Bewerbung: Anschreiben, Zeugnisse, Lebenslauf
Bitte bewerben Sie sich unter Angabe unserer internen Stellennummer: 25_12_025

Stelle betreut durch Arbeitgeber

Referenz-Nr.: 10001-1002341960-S