LMU KLINIKUM

PhD Student (m/f/d)

Medizinische Klinik I (Kardiologie)

The Hospital of the University of Munich, Germany, is one of the largest and most competitive university hospitals in Germany and Europe. 48 specialized hospitals, departments and institutions harbouring excellent research and education provide patient care at the highest medical level with around 11.000 employees.

WORKPLACE	Campus Großhadern	DATE OF ENTRY	Next Possible Date
WORKING HOURS	Part time	APPLICATION DEADLINE	01.03.2026
INSTITUTION	Medizinische Klinik I (Kardiologie)	REFERENCE NUMBER	2025-K-0392
DEPARTMENT	Basic Science		

Scope of duties

Our group focuses on both basic experimental and translational approaches to investigate the crosstalk between innate immune cells, platelets and plasmatic factors in the context of cardiovascular and infectious diseases.

- You will use a broad range of in vitro and in vivo methods to dissect the interplay between neutrophils and platelets in the setting of both sterile and pathogen-driven inflammation.
- State-of-the-art methods include transgenic mouse models with cell type-specific knockout mice, a broad range of clinically relevant models of cardiovascular disease and inflammation, super-resolution in vivo microscopy, as well as multi-omics approaches including single-cell RNA sequencing, bulk RNA sequencing, multi-panel flow cytometry, and proteomics.
- You will be able to correlate and validate your experimental findings with clinical samples, comprising a broad biobank with hundreds of patients with cardiovascular diseases.
- You will contribute to the acquisition of multi-omics data from cryoconserved patient-derived samples, working in close collaboration with clinicians to assess patient outcomes.
- The Department of Cardiology is funded by and embedded into various collaborative research centers and graduate schools of the German Research Foundation (DFG), including the DFG CRC1123. Further funding is provided by the Else Kröner-Fresenius-Stiftung, the Corona Foundation, the Deutsche Forschungsgemeinschaft (DFG), and the European Research Council.
- You will present the results at project meetings and publish them in high-ranking scientific journals.

Our requirements

- We require the applicant to have a major interest in cardiovascular immunology and innate immunity.
- Previous experience with the handling of mice, especially surgical techniques, is favoured.
- Experience with the analysis of experimental data and high-throughput data (scRNA-seq, proteomics, etc.) is a plus.
- We expect strong communication and teamwork skills.

Our offer

- Your PhD will be embedded in the new graduate school program „PhD in Medical Research - Cardiovascular Science“, which is part of the Munich Medical Research School (MMRS). A structured curriculum with state-of-the-art lectures offers broad insights into vascular biology and cardiovascular medicine, ensuring a comprehensive understanding and a translational perspective.
- We provide an interdisciplinary team of medical doctors, biologists, and bioinformaticians, who jointly work on cardiovascular immunology and innate immunity using both classical immunological approaches and broad multiomic measures.
- We further provide a diverse range of mechanistic in vitro models and state-of-the-art murine disease models for the reverse translation of the key targets identified by multiomics.
- A PhD or a Dr. rer. nat., Dr. biol. hum., or Dr. med. are possible.
- Remuneration is based on the Collective Agreement for the Public Sector of the Länder (TV-L) including all allowances customary in the public sector.

Offers and services of the employer

Further education and training	Job ticket
Company pension scheme	Discounts
Childcare services	Staff accommodation (if available)
Mobile work (if suitable)	

Herr PD Dr.med. Kaiser, Rainer

089-4400-44195

Application format

Please use the Online-Form for your application

http://www.lmu-klinikum.de/595cf778b242989a

Disabled persons will be preferentially considered in case of equal qualification. Presentation costs cannot be refunded.

Please note that we cannot reimburse travel expenses incurred through interviews.

We ask you for your understanding that postal applications will not be returned, but will be destroyed in accordance with data protection regulations. The data usage information also applies to postal applications