LMU KLINIKUM

Postdoctoral Researchers in Vascular Biology, Neuroscience, or Computational Biology (m/f/d)

Institut für Schlaganfall- und Demenzforschung

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	01.04.2026
WORKING HOURS	Full time	APPLICATION DEADLINE	Swift
INSTITUTION	Institut für Schlaganfall- und Demenzforschung	REFERENCE NUMBER	2026-K-0002
DEPARTMENT	AG Dichgans		

Scope of duties

A postdoctoral researcher position is available in the Dichgans laboratory at the Institute for Stroke and Dementia Research, Munich. Our group investigates the molecular and cellular mechanisms underlying neurovascular disease and secondary neurodegeneration. Our goal is to uncover how genetic defects of brain endothelial cells and mural cells contribute to vascular dysfunction. We further wish to understand how molecular defects in distinct vascular segments (arterioles, capillaries, venules) affect vascular–glial crosstalk and cause neurodegeneration. This work builds on our recent genetic discoveries (e.g. Malik et al. Nat Genetics 2028; Mishra et al. Nature 2022) and subsequent findings from our lab showing that the stroke risk gene Foxf2 maintains brain endothelial cell function via Tie2 signaling (Todorov-Völgyi et al. Nat Neurosci 2025; González-Gallego et al. Nat Neurosci 2025). To expand this line of research, we are now recruiting Postdoctoral Researchers in Vascular Biology, Neuroscience, and Computational Biology to join our multidisciplinary team. The position is embedded into a newly funded Collaborative Research Center (CRC) on Neurovascular diseases (CRC 1744) and further supported by the Excellence Cluster for Systems Neurology (SyNergy) and a Leducq Network on Brain Endothelial Cells.

Our environment

As part of the DFG-funded Excellence Cluster SyNergy, member of large collaborative research networks including a new CRC on Neurovascular Diseases CRC 1744, Leducq Networks etc., and located in the New Center for Stroke and Dementia Research building, we provide a highly collaborative, interdisciplinary and internationally visible research environment with access to cutting-edge technologies and a unique community of internationally acclaimed researchers.

Our requirements

- Applicants should hold a PhD in Vascular Biology, Neuroscience, Molecular Biology, Computational Biology, or a related field
- Expertise in single-cell and spatial omics analysis (scRNA-seq, ATAC-seq, CUT&RUN, MERFISH, Visium), proteomics (LC-MS/MS), (epi)genomic data processing, multi-omics integration, machine learning approaches for high-dimensional data, confocal / two-photon imaging, tissue clearing and light-sheet microscopy, animal handling, experimental stroke models / behavioural testing, and programming skills in R or Python
- A strong publication record, high motivation to work at the interface of vascular biology and neuroscience
- The ability to work independently within a multidisciplinary team
- Excellent communication skills in English are required

Our offer

- A highly stimulating and internationally competitive research environment is centered around newly funded projects within CRC 1744.
- You will have access to state-of-the-art single-cell and spatial transcriptomic techniques, proteomics, computational, and imaging technologies, including full access to the technology Hubs by the SyNergy Cluster.
- These include advanced platforms for high-resolution imaging, multi-omics, and biobanks for human material.
- For computational analyses, the successful candidate will have access to the high-performance computing infrastructure of the Leibniz Supercomputing Centre (LRZ) and dedicated data management support.
- We offer close interaction with leading experts in neuroscience, vascular biology, computational biology, and translational research.
- Opportunities to co-supervise students are provided.
- The position offers a strong publication environment with high visibility.
- The position provides excellent career development opportunities within a dynamic, interdisciplinary, and highly collaborative research ecosystem spanning LMU, Technical University of Munich, and Helmholtz, united in the SyNergy Cluster and M1 Munich Medicine Alliance.
- Please send a single PDF including a cover letter, CV with publication list, and contact details of two to three referees.

- 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

Company pension scheme

Childcare services

Mobile work (if suitable)

Job ticket

Discounts

Staff accommodation (if available)

Herr Prof. Dr. Dichgans, Martin

089 4400 46019

Application format

Please use the Online-Form for your application

http://www.lmu-klinikum.de/179ea6d2dfc99834

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