LMU KLINIKUM

Postdoctoral Researchers in Trained Immunity, Epigenetics or Computational Biology (ERC-funded) (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	2025-K-0451
DEPARTMENT	AG Liesz		

Scope of duties

A postdoctoral researcher position is available at the Liesz-Laboratory at the Institute for Stroke and Dementia Research, Munich. Our group investigates how sterile tissue injuries such as stroke or myocardial infarction shape systemic immunity, with a particular focus on maladaptive trained immunity and bone marrow epigenetic reprogramming. This work builds on our recent studies describing systemic immune activation after stroke (Immunity 2021), stroke-induced vascular inflammation and plaque destabilization (Nature 2024), and the newly identified phenomenon of central trained immunity as a driver of multimorbidity after sterile injury (Cell 2024). To expand this line of research, we are now recruiting Postdoctoral Researchers in Trained Immunity, Epigenetics or Computational Biology to join our multidisciplinary team. The position is embedded within a newly funded ERC Consolidator Grant, further supported by the SyNergy Cluster of Excellence and the newly established Collaborative Research Centre CRC 1744 "Compartmentalized Cellular Networks in Neurovascular Diseases."

We welcome applications from candidates with expertise in either of two complementary profile tracks:

Profile Track 1 – Computational Epigenomics / Multi-Omics Data Integration

Candidates with a strong background in bioinformatics, computational biology or epigenomics. Desirable experience includes single-cell and spatial omics analysis (scRNA-seq, ATAC-seq, CUT&RUN, MERFISH, Visium), epigenomic data processing (chromatin accessibility, histone marks, enhancer mapping), multi-omics integration using Seurat, Signac, Harmony, ArchR or Scanpy, machine learning approaches for high-dimensional data, and programming skills in R or Python.

Profile Track 2 – Experimental Immunology / Bone Marrow Biology / Trained Immunity

Candidates with an experimental background in immunology, inflammation biology or bone marrow niche biology. Desirable experience includes myeloid cell biology, trained immunity, macrophage and HSPC biology, experience with murine models of inflammatory or ischemic injury (stroke, myocardial infarction), flow cytometry, cell sorting, epigenetic assays (ATAC-seq preparation, ChIP or CUT&RUN), functional assays such as cytokine multiplexing, metabolic profiling or immunohistochemistry, and experience with in vivo inter-organ communication models.

Our environment

As part of the SyNergy Cluster of Excellence, member of large collaborative research networks (including CRC 1744, FOR2879 ImmunoStroke and Helmholtz collaborations), and located in the Center for Stroke and Dementia Research, we provide a highly collaborative, interdisciplinary and internationally visible research environment with access to cutting-edge technologies in immunology, (spatial) multi-omics, advanced imaging and computational biology.

Our requirements

- Applicants should hold a PhD in Immunology, Neuroscience, Computational Biology, Molecular Biology or a related field.
- A strong publication record, high motivation to work at the interface of immunology, epigenetics and systems biology, ability to work independently within a multidisciplinary team, and excellent communication skills in English are required.

Our offer

- A highly stimulating and internationally competitive research environment centered around a newly funded ERC Consolidator Grant. The project provides access to state-of-the-art immunological, epigenomic and computational technologies, including full access to the technology Hubs by the SyNergy Cluster of Excellence. These include advanced platforms for single-cell and spatial transcriptomics, high-resolution imaging, multi-omics, and neuropathology. 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 immunology, computational biology and clinical translational research; opportunities to co-supervise students; and 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 Klinikum, LMU, the SyNergy Cluster of Excellence, and the Helmholtz computational platforms.
- The remuneration is based on the Collective Agreement for the Public Sector of the Länder (TV-L) including all allowances customary in the public sector.
- The position is fixed-term with the possibility of extension.

Application

Please upload a single PDF including a cover letter, CV with publication list, and contact details of two to three referees.

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 Prof. Dr. Liesz, Arthur

+49 89 4400 46169

Application format

Please use the Online-Form for your application

http://www.lmu-klinikum.de/1ae123dbc90aa15d

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