LMU KLINIKUM

Computational Scientist (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	01.02.2026
WORKING HOURS	Full time	APPLICATION DEADLINE	Swift
INSTITUTION	Institut für Schlaganfall- und Demenzforschung	REFERENCE NUMBER	2025-K-0431
DEPARTMENT	ISD Forschung		

The Institute for Stroke and Dementia Research (ISD) at LMU, Munich is mostly financed by foundation funds. Its activities range from basic research to the conduct of clinical trials. The ISD employs around 150 staff, doctoral students, scholarship holders and visiting scientists from abroad.

Scope of duties

This is a computer scientist role at the **Mesoscale Hub** of the DFG-funded Excellence cluster for Systems Neurology (SyNergy). It is an AI scientist role with a strong science-enabler and project-driver focus.

- Design and train generative AI models that transform unlabeled or 3D tissue images into realistic virtual stains
- Support and coordinate collaborations across SyNergy
- Translate complex datasets into robust, quantitative insights
- Contribute to data analysis and data visualization
- Develop new computational methods and analysis pipelines
- (Optional) Support the preparation of application of new grants
- Oversee data center infrastructure: storage, high-speed networks and backups
- Curate and annotate large imaging datasets; build pipelines to deliver AI-ready data
- Troubleshoot data acquisition and integration with LIMS, cloud and on-prem systems

Our requirements

- Strong background in tissue clearing and or fluorescence microscopy
- Hands-on experience with light-sheet systems and 3D imaging workflows
- Proficiency with 3D visualization tools such as Imaris and or arivis Vision4D; experience with BigStitcher or similar for large volumes
- Practical knowledge of atlas registration and quantitative analysis in cleared tissues
- Working knowledge of image analysis and automation is welcome
  - examples: Fiji ImageJ, Python for batch processing, napari, basic ML or deep learning toolchains
- Advantageous but not required
  - FELASA B and experience coordinating animal experiments
  - Experience with VR-based annotation tools and 3D proofreading
- MSc or PhD in life sciences, biomedical engineering, optical physics, or a related field
- Excellent communication skills in scientific English
- Service mindset, strong organization, and the ability to keep multiple collaborations moving

Our offer

- We are a highly collaborative team at the interface between LMU and Helmholtz Munich.
- Our mission is to understand complex biology in 3D by combining tissue clearing, light-sheet and advanced microscopy, high-throughput analysis, and AI. The Mesoscale Hub serves SyNergy investigators with end-to-end support: experimental design, clearing and staining, 3D imaging, atlas registration, quantitative analysis, secure data handling, and training.
- Our culture is team-driven, international, and interdisciplinary, with biologists, engineers, physicists, and computer scientists working side by side on ambitious projects.
- Our pioneering work has been recognized by high-profile scientific journals including Nature Neuroscience, Cai…Ertürk 2018, Cell, Pan…Ertürk 2019, Cell, Zhao…Ertürk 2020, Cell, Bhatia…Ertürk 2022, Cell, Kolabas…Ertürk (2023), Nature Biotechnology, Mai…Ertürk (2024), Nature Biotechnology, Luo…Ertürk (2025), and has been featured in prominent media outlets like the New York Times, Wall Street Journal, BBC, and Süddeutsche Zeitung.
- To learn more about our ground-breaking work, visit our website at www.erturk-lab.com.
- Remuneration is based on the Collective Agreement for the Public Sector of the Länder (TV-L) including all allowances customary in the public sector.
- How to apply
  - Primary contact: Prof. Ali Maximilian Ertürk
  - Please send a single PDF including your short cover letter, CV, two to three referees, and earliest start date

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. Ertürk, Ali

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Application format

Please use the Online-Form for your application

http://www.lmu-klinikum.de/c2a691ea95e4ee77

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