

## Postdoctoral Researcher or a PhD candidate for a fully founded EU project (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	Next Possible Date
Working hours	Full time/Part time	Application deadline	Swift
Institution	Institut für Schlaganfall- und Demenzforschung	Reference Number	2024-K-0599
Department	AG Wahl		

### Scope of duties

- We are looking for motivated candidates for a postdoc or PhD position of a EU funded project unveiling fundamental principles of neuronal repair after stroke to develop novel treatment approaches preventing cognitive decline.
- The project aims at understanding cellular mechanisms of neuronal rewiring and reorganization as intrinsic repair strategies of the brain. Using chronic in-vivo Calcium imaging in the behaving animal combined with optogenetics and deep learning algorithms, we would like to reveal how individual neurons react to brain injury, how new circuits are formed, how surviving neurons reconnect and how this is related to the recovery of impaired sensorimotor and cognitive functions after stroke.
- For this, you will leverage and build up strong collaborations with experimental partners at the ISD and with members of the excellence cluster SyNergy in Munich.

## Our requirements

Expectations for a future PhD student:

- A very good Master or Diploma degree in physics, biomedicine, biology or bioinformatics or related topics
- Experience in programming (ideally Matlab or Python)
- Ideally some neuroscience background with experience in animal experiments and calcium imaging
- Scientific creativity and ability to work in a team

Expectations for a future Postdoc:

- A very good PhD thesis in neuroscience and experience with in-vivo work with mice
- Ideally, you already have some experience with imaging technologies and optics and a solid knowledge in data analysis including significant programming skills (Matlab or Python)
- Independent thinking, creativity and the ability to work in a team are crucial
- We also require fluency in spoken and written English and ideally some knowledge in German

## Our offer

- We provide a highly collaborative and inspiring research environment. The lab is located in the brand-new Center for Stroke and Dementia Research building (CSD) with access to cutting-edge technologies in genomics, proteomics, metabolomics, immunology, molecular biology, imaging (from nano- to macroscale), and neuroscience in general.
- We are embedded within the vibrant biomedical and data science research landscape in Munich: You will be integrated in the vital research environment at LMU, the Center of Stroke and Dementia Research (CSD - <https://www.isd-research.de/isd-research>) as well as of the Excellence Cluster SyNergy (<https://www.synergy-munich.de>) participating in lectures, seminars and retreats.
- You will learn state-of-the-art methods in neuroscience such as multiphoton calcium imaging in vivo, optogenetics, chemogenetics, micro-surgeries, histology and application of deep learning methods.
- The positions are available for spring 2025.
- We look forward to receiving your application consisting of a cover letter and a CV, transcripts of records, and at least two references or reference letters.
- 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)

Frau Prof. Dr. Dr. Wahl-Ommer, Anna-Sophia



+49 89 2180 72621

## Application format

Please use the Online-Form for your application

<http://www.lmu-klinikum.de/095d75e8e8e311c8>

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