

Postdoctoral Researcher for the Integrative Analysis of Multimodal Biomedical Data (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	Fulltime	Application deadline	Swift
Institution	Institut für Schlaganfall- und Demenzforschung	Reference Number	2024-K-0162
Department	AG Tiedt		

Scope of duties

- We are looking for a postdoc to join the dynamic, and growing team of the molecular biomarker group at the Institute for Stroke and Dementia Research (ISD).
- A major focus of our multidisciplinary research is to identify novel clinically meaningful biomarkers for stroke and to unravel the mechanisms that underlie the development and progression of cerebrovascular disease by integrating findings from in vivo biomarkers, molecular omics datasets, neuroimaging, clinical and genetic data.
- The interdisciplinary position is intended to bridge the gap between bioinformatics and clinical research.
- A key element will be the analysis of already existing Proteomic and Metabolomic datasets in conjunction with neuroimaging data from clinically deeply phenotyped stroke cohorts using established computational pipelines.
- Our unique clinical cohort data will allow to identify clinically meaningful biomarker signatures that can support therapeutic decision-making in routine care.
- We further strive to continuously improve our pipelines and expand our computational toolbox and expect you to contribute to this.
- For the work, you will be able to leverage established collaborations to methodological partners at the ISD and beyond.








Our requirements

- The ideal candidate should hold a PhD degree in bioinformatics or related fields.
- The candidate should have extensive experience in programming (e.g. R, Python, Matlab), the analyses of omics data (with a particular focus on proteomics and metabolomics) and (ideally) of longitudinal data.
- Specifically, the candidate would benefit from experience in using MaxQuant and Perseus and in the application of machine learning methods, mixed models, clustering techniques, sinusoidal regression, and regression splines.
- Medical background and knowledge of biochemical processes is a plus.
- Suitable candidates should be highly motivated, have a high-degree of technical expertise, problem solving skills and scientific independence, with an interest in bioinformatics and methods development in a clinically oriented research setting.

Our offer

- We provide a highly collaborative and inspiring research environment.
- The position will be in the molecular biomarker group (PI: S. Tiedt, <http://tiedt-lab.isd-muc.de>) - a dynamic, and international group of the ISD.
- The applicant will have unrestricted access to the deeply phenotyped PROMISE and CIRCULAS datasets and multi-center national and international datasets on cerebrovascular disease.
- We offer unrestricted access to cutting-edge research tools and technologies in genomics, transcriptomics, proteomics, metabolomics, imaging (from nano- to macroscale) and computing including an in-house high-performance computing cluster.
- The applicant will be able to leverage existing collaborations such as with Jürgen Cox (MPI of Biochemistry) and work in an interdisciplinary and multinational group of experienced PhD students, Postdocs, physicians, and technicians.
- We are embedded within the vibrant biomedical and data science research landscape in Munich, with strong ties to the Max-Planck-Institutes and Helmholtz Munich, and with ample opportunities for local, national, and international collaborations.
- The position is limited to 2-3 years, extension is desired.
- We look forward to receiving your application consisting of a cover letter, a CV, publication list and names for three references.
- 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

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

Herr PD Dr. Dr. Tiedt, Steffen



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Application format

Please use the Online-Form for your application

<http://www.lmu-klinikum.de/25560e760510c9a2>

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