

Early Stage Researcher/Ph.D. position in “Neuroepidemiology”

Project Description

The Translational Stroke and Dementia Research Group (Prof. M. Dichgans) at the Institute for Stroke and Dementia Research at LMU, Munich, Germany invites applications for an Early Stage Researcher/Ph.D. position. The successful candidate will work on the epidemiology of post-stroke outcome, with a focus on cognitive impairment and dementia. The project is funded by the DFG-funded Excellence Cluster Munich Cluster for Systems Neurology (SyNergy). Successful applicants will be part of an international team of investigators and will participate in the study design, data collection, data processing, and project development of a number of multicenter large cohort studies of patients with stroke.

Job description

You will work on a research project with the following objectives:

- Identify predictors of post-stroke dementia (PSD) and mild cognitive impairment (PS-MCI). Your project will utilize available data from the Determinants of Dementia After Stroke (DEMDAS) study (<https://www.dzne.de/en/research/studies/studien/demdass/>), a multicenter study of 600 stroke cases with completed recruitment and ongoing follow-up assessments that is led by the Institute for Stroke and Dementia Research in Munich. All patients have undergone deep phenotyping with serial magnetic resonance imaging (MRI), blood sampling, clinical assessment, and detailed neuropsychological testing with QCs and quantitative image analysis already performed.
- Utilize data from DEMDAS along with other previously untapped cohorts of more than 1000 deeply phenotyped stroke patients recruited in Munich with mid- to long-term follow-up to identify clinical and biomarker predictors of the whole spectrum of stroke outcomes including disability, cognitive impairment, stroke recurrence, and mortality.
- In collaboration with other members of the group, utilize available genetic and other omics data from these cohorts to identify genetic factors and biomarkers predictive of stroke outcome (disability, cognition, stroke recurrence, and mortality). All subjects have been genotyped using genome-wide genotyping arrays with metabolomics / proteomics underway.
- Develop risk scores for the prediction of stroke outcomes for clinical use derived from the above cohorts and validate these scores in external cohorts.

You will be working in a multidisciplinary team with extensive expertise in stroke, epidemiology, imaging, genetics, and biomarker discovery, have full access to all facilities available at the Institute for Stroke and Dementia Research, engage in national and international collaborations and take part in the international training programme of the Center for Stroke and Dementia Research and SyNergy. In addition, there is the possibility to apply for enrollment in the Graduate School for Systemic Neuroscience (GSN), to which our Institute is affiliated.

Requirements

We are looking for a highly motivated self-driven student with a strong commitment to neuro-epidemiological research, who:

- is eligible for MSCA-ETN funding, see Funding Notes
- has a MSc degree in epidemiology, biostatistics, biomedical sciences, or related disciplines
- enjoys working with large datasets and performing statistical analyses
- is a team player with good communication skills

Previous experience with programming and usage of statistical packages including R, SAS, STATA, or Python is considered a requirement.