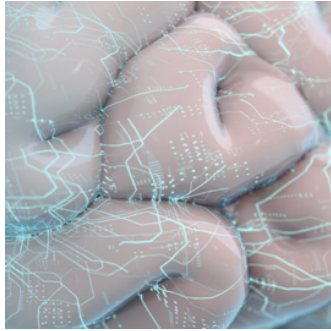


TUM NEUROTECH Innovation Network



The **Innovation Network “Neurotechnology in Mental Health”** (NEUROTECH) at the **Technical University of Munich (TUM)** is a pioneering transdisciplinary research collaboration with the aim of trailblazing novel instrument-based and algorithmic tools for disorders of cognition, perception and mood. The network will focus on advanced analysis and targeted modulation of human electrophysiological activity recorded both intracranially and non-invasively via electroencephalography.

The network will begin operating in 2022.

We offer up to **9 fully funded PhD and postdoc positions** for highly motivated and talented young scientists.

Projects are available in the following research areas:

- Cognitive brain-computer-interfaces with cellular resolution (Prof. Dr. Simon Jacob)
- Implantable neurosensors for large-scale multimodal intracranial recordings (Prof. Dr. Jens Gempt and Prof. Dr. Bernhard Wolfrum)
- Mechanistic modeling of neural circuit function in mental disease (Prof. Dr. Julijana Gjorgjieva)
- AI-driven stratification and differentiation of mental dysfunction (Prof. Dr. Daniel Rückert)
- Individualized brain stimulation for the treatment of mental dysfunction (Prof. Dr. Markus Ploner and Prof. Dr. Josef Priller)
- Embedded ethics and social science for responsible neurotechnology (Prof. Dr. Alena Buyx and Prof. Dr. Ruth Müller)

We offer

- The freedom to pursue groundbreaking research questions and explore high-potential innovation fields at the interfaces of the classical disciplines
- An outstanding international research environment at one of Europe's leading academic institutions with state-of-the-art facilities
- An interdisciplinary and structured PhD program in English

We are looking for

- Highly qualified and motivated students / postdoctoral researchers holding a MSc / PhD or equivalent degree in Neuroscience, Engineering, Computer Science, Biomedical Sciences, Social Sciences, Ethics or related fields
- Strong interest in transdisciplinary work, good communication skills, creative and independent thinking

Further information

- Details about the network can be found at <https://web.tum.de/en/inw/our-innovation-networks/neurotech/>
- To learn more about individual projects, contact the coordinator of NEUROTECH, Prof. Dr. Simon Jacob (simon.jacob@tum.de), or the respective research group leaders
- Applications will be considered until the positions are filled
- Applications (CV, motivation letter, two references) should be sent to the coordinator of NEUROTECH, Prof. Dr. Simon Jacob (simon.jacob@tum.de)