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/](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](mailto: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](mailto:simon.jacob@tum.de))