



Postdoctoral position in human neuroimaging of sleep-dependent plasticity

The **Brain States for Plasticity** group (PI Svenja Brodt) is looking for a postdoctoral fellow (m/f/d) to join our team at the [Max Planck Institute for Biological Cybernetics](https://www.mpg.de/1185516) in Tübingen, Germany.

Our lab aims to understand **how information is encoded and stored in the human brain on a network level**. Which brain networks contribute to information storage across the entire lifecycle of a memory and how is information distributed within these networks? How do different brain states like **sleep, wake and transitional states** shape the architecture of memory? What is the potential of different neuromodulatory, physiological and cognitive factors for influencing memory formation and neuroplasticity? To answer these questions, we combine behavioral paradigms with **multimodal neuroimaging methods (fMRI, dwMRI, sMRI, EEG) and multivariate analysis techniques**. You can find out more about our work at plasticbrain.org.

The project will explore the role of different sleep stages for functional and microstructural reorganization and memory consolidation with the help of multimodal MRI and simultaneous EEG-MRI in humans.

As part of the Max Planck Institute for Biological Cybernetics and the Tübingen Neuro Campus the group is situated within an ideal environment to investigate information processing in the human brain. In addition to our two state of the art sleep labs we have access to the institute's MR scanners at high and ultra high-field strength.

We are looking for a candidate with a recent doctoral degree (PhD) in cognitive/systems neuroscience or data science. Experience in collection and analysis of human sleep EEG data or simultaneous EEG-MRI data are required. Advanced signal processing, statistical and programming skills are strong assets. Fluency in English and good command of German is mandatory.

The salary is paid in accordance with the collective agreement for the public sector (TVöeD Bund), according to your qualifications. The initial contract will be for two years with a possibility for renewal.

The Max Planck Society endeavors to employ more severely handicapped people. Applications of severely disabled persons are expressly desired. The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds.

The position is available from August 2024 and will remain open until filled. Please send your CV including publication list and contact details for 2-3 references to Dr. Svenja Brodt (svenja.brodt@tuebingen.mpg.de).