MAX-PLANCK-INSTITUT
FÜR KOGNITIONS- UND NEUROWISSENSCHAFTEN

Call for applications

Master's students (m,f,d)

Master Thesis on respiration, temporal expectancy and somatosensory perception

BACKGROUND

Recent accounts propose that respiration plays a pivotal role in adapting neural excitability to contextual demands, thereby aiding sensory information sampling. This research project investigates how respiration influences neural processes, particularly in relation to temporal expectation, somatosensory detection and metacognition. This research is conducted by the Somatosensory Group and the Heart-Brain-Interactions Group. Relevant literature: Grund et al. (J Neurosci 2022); Kluger et al. (eLife 2021); Nobre & van Ede (Nat Rev Neurosci 2018); Schroeder et al (Curr Opin Neurobiol 2010).

WE ARE LOOKING FOR

- Highly motivated Master's students who would like to carry out their final Master's thesis work (written in English) at the MPI CBS in Leipzig
- Analysis of behavioural, respiratory, ECG, and EEG data
- Familiarization with psychophysical methods, somatosensory processing, and cardiorespiratory dynamics aiding brain and cognitive function

WHAT WE OFFER

- As an active member of our international research team, you will be involved in all stages of the research process
- Work closely with experienced researchers
- Chance to gain hands-on experience in stimulus presentation, physiology (ECG, respiration) and EEG recording
- Opportunity to develop valuable research skills to prepare for PhD applications

WHAT WE EXPECT FROM YOU

- Enrolled in a Master's program in Cognitive Neuroscience/Cognitive Science/Psychology (or related field)
- Strong interest in brain-body-interactions and the neural basis of attention and sensory processing
- Prior experience in basic programming (e.g., Matlab, Python, R)
- High intrinsic motivation for interdisciplinary teamwork
- Excellent command of English; knowledge of German is beneficial

HOW TO APPLY

Send your application including a CV (max. 2 pages) and a motivational statement (max. 2000 characters) or any questions to Lioba Enk: **enk@cbs.mpg.de**

Max Planck Institute for Human Cognitive and Brain Sciences , Department of Neurology, Stephanstraße 1A, 04103 Leipzig
Responsible Scientist: Professor Dr. Arno Villringer