Brain Language Laboratory, Department of Philosophy and Humanities, Freie Universität Berlin

The ERC Advanced Grant "Material Constraints Enabling Human Cognition (MatCo)" at the Freie Universität Berlin aims to build network models of the human brain that mimic neurocognitive processes involved in language, communication and cognition. A main strategy is to use neural network models constrained by neuroanatomical and neurophysiological features of the human brain in order to explain aspects of human cognition. To this end, neural network simulations are performed and evaluated in neurophysiological and neurometabolic experiments. This neurocomputational and experimental research targets novel explanations of human language and cognition on the basis of neurobiological principles.

In the MatCo project, 3 positions are currently available:

2 part time positions (65%) for Scientific Researchers at the predoctoral level
Fixed-term (36 months), Salary Scale 13 TV-L FU
ID: WiMi_MatCo65_02-2022

Work will be dedicated to the following topics:

1. Further elaboration of a biologically constrained neural network models using tractography data with a focus on explaining speech disorders,
2. Model testing using ERP and fMRI experiments.

Job tasks and responsibilities:

- Simulation studies with neural network models of language and cognition
- Tractography analyses and use of their results for optimizing of the models
- Preparation, implementation and evaluation of neurocognitive experiments on language and cognition.

Requirements:

- Completed university degree (MA, MSc or equivalent) in a relevant field (e.g., linguistics, psychology, cognitive neuroscience, medicine)

Desirable:

- Research experience with network simulations of cognitive processes
- Experience in empirical-experimental language research
- Research experience in the fields of syntax, semantics or pragmatics

- Very good programming skills
- Very good English skills (min C1) and knowledge of German

More information and formal job advertisements can be found at: www.brainlang.fu-berlin.de/jobs; in case of further questions, please contact friedemann.pulvermuller@fu-berlin.de

The application deadline is 28.03.2022 or until the position is filled. All applications should be sent by e-mail, as one attached pdf file, to

verena.arndt@fu-berlin.de

By submitting an online application, you as an applicant agree that your data will be electronically processed and stored. Please note that in the case of unprotected electronic transmission of your application, the Freie Universität Berlin can give no guarantee for the security of transmitted personal data.