2 Cognitive Neuroscience PhD positions within RTG 2413 SynAGE available

start: Jan 1, 2019   **duration: up to 4 years**

The new Research Training Group 2413 "SynAGE" at the Otto-von-Guericke University (OvGU), the Leibniz Institute for Neurobiology (LIN) and the German Center for Neurodegenerative Diseases (DZNE), Magdeburg, Germany offers two PhD positions for talented, skilled, and highly motivated students of Cognitive Neurosciences starting from January 1st, 2019. RTG 2413 is funded by the DFG (Deutsche Forschungsgemeinschaft) with funds from the federal republic of Germany. The innovative research program of RTG2413 SynAGE deals with the idea that cognitive decline in normal aging results from subtle synaptic alterations that impart an imbalance between stability and plastic properties of spine synapses and that is qualitatively different from neurodegeneration. Please, see also http://gp.cbbs.eu/synage-rtg-2413/.

We are searching for PhD candidates for two projects of SynAGE addressing age-related changes neuronal activity and cognition in humans using neuroimaging and pharmacological challenges:

- TP12: Effects of L-DOPA on memory consolidation in high- and low-performing amyloid negative older adults (headed by Prof. Emrah Düzel, DZNE) – cf. http://gp.cbbs.eu/synage-tp12/

- TP13: Learning from mistakes: Cholinergic modulation of interactions between performance monitoring and long-term memory (headed by Prof. Markus Ullsperger, OvGU) – cf. http://gp.cbbs.eu/synage-tp13/

Requirements:

- an excellent Diploma/Master degree; major disciplines psychology, medicine, neuroscience, neurobiology or related subjects
- experience with neuroimaging, EEG, psychopharmacology and/or analysis of behavioral data concerning cognitive processes is advantageous
- interest in/experience with cognitive neuroscience of aging, performance monitoring, cognitive control, decision making, learning and memory in humans.

The teams are multidisciplinary and combine a broad variety of cognitive neuroscience methods. Magdeburg offers cognitive neuroscientists a unique, multidisciplinary working and learning environment with opportunities for developing expertise in a diversity of research areas and techniques. Four MRI scanners (7T, 3T), several (MR-compatible) EEG systems, an MEG system, TMS and high-performance computational facilities are available.

Our qualification program is designed to provide PhD candidates with a cross-disciplinary understanding of nervous system function and aging-related changes in their dynamics at the level of protein synthesis, of synaptic signals, and the neural network. Our students will receive state-of-the-art training in a fascinating area of neuroscience that currently has a high demand of well-trained young researchers given the demographic changes of our society. We will employ cutting-edge technologies and emergent techniques, promote international visibility at an early stage and chances for intensive networking to promote career track development in- and outside of academia. Enhancing the career perspectives and employability of researchers and contribution to their skills development is a core principle of our structured and individualized supervision and training PhD program. Collaborations within the CBBS (Center for Behavioral Brain Sciences) and the local GC-I3 and CDS as well as with international groups offer a competitive and instructive environment. For more details on the research topics, the qualification program and the recruitment process, please, check our website http://gp.cbbs.eu/synage-rtg-2413/.

The positions are funded initially for 1 year with the option of extension for up to 4 years.

Applicants should submit a detailed CV including any publications, a motivation statement, two references, as well as their project preference(s) concatenated into one pdf via email to: Prof. Dr. Markus Ullsperger, Institute of Psychology, Otto-von-Guericke University, Magdeburg, Germany (markus.ullsperger@ovgu.de) until October 14, 2018.

Note: By submitting the application, applicants agree that this information is shared among the SynAGE labs and the coordinator according to EU-DSGVO regulations.