



POST DOCTORAL RESEARCH POSITION MULTIMODAL NEUROIMAGING and AFFECT REGULATION in DEPRESSION (FULL TIME)

**CLINICAL AFFECTIVE NEUROIMAGING LABORATORY (CANLAB),
LEIBNIZ-INSTITUTE FOR NEUROBIOLOGY, MAGDEBURG GERMANY
(CENTER FOR BEHAVIORAL BRAIN SCIENCES)**

RESEARCH ON HUMAN EMOTIONS AND PSYCHOPATHOLOGY IN A STATE-OF-THE-ART
MULTIMODAL IMAGING CENTER

NEURAL BASIS OF EMOTIONAL PROCESSING AND MOTIVATIONAL LEARNING IN HEALTH
AND AFFECTIVE PSYCHOPATHOLOGY USING MULTI-MODAL NEUROIMAGING
APPROACHES
(FMRI, MRS, EEG)

Applications are invited for full-time employment in the Clinical Affective Neuroimaging Laboratory (CANLAB) of Martin Walter MD PhD, embedded in the Center for Behavioral Brain Sciences, the Leibniz Institute for Neurobiology and the department of psychiatry of the Otto-von-Guericke University. The position requires experience with functional MRI, computational modeling or task designs triggering complex emotional and cognitive interactions. The candidate should have a PhD or equivalent preferably in psychology, psychiatry, biology or neuroscience and should be able to supervise experiments and data analyses in programming platforms. The candidate should be able to perform and coordinate a designated research project within a highly collaborative and interdisciplinary framework and should have experiences in the field of affective neuroimaging. Moreover, a genuine interest in the clinical relevance of current neuroimaging developments is highly appreciated.

The **Clinical Affective Neuroimaging Laboratory** (Head: M. Walter) focuses on high-field imaging of emotional processing. Our main aim is to understand the susceptibility for (ongoing) psychiatric illnesses and our focus is on cognitive-emotional integration, resting state functional MRI and Magnetic Resonance Spectroscopy in both unipolar and bipolar depression and our work includes analyses of other physiological dimensions. Experience of MRI data analysis is therefore necessary and experience in state of the art functional connectivity analysis of non-invasive imaging data is highly desirable. Furthermore, knowledge of modeling approaches to understand abnormal cost- and benefit balance of motivated behavior in affective disorders is would be considered beneficial.

The position is on the TV-L scale for public employees, with scales depending on age and experience.

The position runs *at least* for **2 years**.

www.canlab.de



RESEARCH ENVIRONMENT

The Department of Psychiatry and the Leibniz Institute of Neurobiology are located on the new medical campus of the University of Magdeburg, the federal state of Saxony-Anhalt's main university hospital (<http://www.med.uni-magdeburg.de/>). Our research dedicated facilities include a 7T and several 3T MRI scanners, a 248-channel 4D-Neuroimaging Magnes MEG (employing magnetometers) with simultaneous 96-channel EEG, and an intracranial recording facility that is used with informed consent in patients receiving deep-brain-stimulation therapy in neuropsychiatric disorders. MRI-compatible and stand-alone EEG facilities are also available, as well as a facility for transcranial brain stimulation. Multimodal research opportunities further include a research PET-MR facility.

Our campus offers superb opportunities for neuroimaging research on neurological and psychiatric disorders, including regular interactions with practicing neurologists, neuroradiologists, and psychiatrists. The CANLAB is also embedded in the Center for Behavioral Brain Sciences (<http://www.med.uni-magdeburg.de/neuromd/>), a multidisciplinary center dedicated to the research of brain functioning in both health and disease, and the Center for Advanced Imaging (<http://www.med.uni-magdeburg.de/cai/>) and a multi-disciplinary European Center of Excellence for multimodal brain-imaging in both animals and humans.

Our department is structurally integrated with the Leibniz Institute for Neurobiology, Germany's premier institute for the neuroscience of learning and memory (<http://www.lin-magdeburg.de/en/index.jsp>). The Institute for Neurobiology is also located on the campus (<http://www.uni-magdeburg.de/bio/loB.htm>), and the Institute for Psychology is 20 minutes away (http://www.ipsy.ovgu.de/en/institute_of_psychology.html). There are well-developed collaborative links with both. Locally we enjoy a strong team of physicists and engineers, including a high-field MRI research group (<http://www.bmmr.uni-magdeburg.de/en/homepage.html>). All in all, we offer an exciting and extremely interdisciplinary research environment that is characterized by friendly, relaxed, and helpful relationships between coworkers in all disciplines including medicine.

The CANLAB has active international collaborations with research groups at the Charité Hospital (<http://mindandbrain.charite.de/en/news>) in Berlin, the State Key Laboratory of Management and Control for Complex Systems, Institute of Automation, Chinese Academy of Sciences, in Beijing, China (<http://english.ia.cas.cn/>), the systems neuroscience group of the Queensland Institute of Medical Research in Brisbane, Australia (<https://sites.google.com/site/systemsneurosciencegroup/home>), the advanced MRI section, NINDS, NIH, USA (<http://www.amri.ninds.nih.gov/>), the institute of biomedical engineering, the *Eidgenössische Technische Hochschule* Zurich (<http://www.biomed.ee.ethz.ch>) and the Central Institute of Mental Health, in Mannheim, Germany (http://www.zi-mannheim.de/start_en.html).

THE CITY

Magdeburg is the state capital of the federal state of Sachsen-Anhalt, with about 230,000 inhabitants (<http://www.magdeburg.de/>) and is located 160 km (100 miles) southwest of Germany's capital Berlin.

CONTACT

Applications with a cover letter and CV including publication list, or preliminary informal enquiries, may be sent to martin.walter@med.ovgu.de

Please provide a telephone number and times to contact you if you wish an informal discussion.

!!! Meet us also personally at the 19th Annual Meeting of the Organization for Human Brain Mapping (OHBM), June 16-20, 2013 in Seattle, USA !!!

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