

Within the University of Excellence Technische Universität Dresden, the Section of Systems Neuroscience is closely associated with the Department of Psychology and the Neuroimaging Centre, which offers excellent research collaborations and infrastructure, e.g. a 3 Tesla MRI scanner for full-time research, MRI-compatible EEG and eye tracking, and access to the PET centre at Dresden-Rossendorf.

Our international and multidisciplinary group conducts basic research in neuroscience at the interface to clinical applications. We investigate the function of neural systems that are involved in elementary cognitive processes such as emotion, motivation, learning, executive function, or decision making. In order to better understand neural mechanisms underlying mental disorders, we investigate how these processes contribute to the complex behavioural dysfunctions observed, for example, in addictive behaviour. Recently, the German Funding Agency DFG has approved a new collaborative research centre (CRC) titled “Volition and Cognitive Control: Mechanisms, Modulators, and Dysfunctions”.

Within this CRC, we invite applications for a project cluster on “Dopaminergic and Serotonergic Modulation of Meta-Control Parameters” as:

Postdoctoral Researcher (m/f)

The Position is limited till 30.06.2016 and paid according to the TV-L salary scale.

The project aims to investigate the effects of neuromodulatory pathways on elementary cognitive processes such as reward processing, different facets of learning and decision making. For this purpose functional and molecular neuroimaging (MRI and PET), neuropharmacological interventions and genetics will be combined.

The successful candidate will be involved in implementing experimental protocols, processing of behavioural and MRI data (e.g. by using computational modelling) and improving methods in the field of pharmacological MRI and model-based fMRI analysis. Furthermore, the successful candidate is expected to undertake project management duties including supervision of PhD students, data management, and publication of the results. Moreover, the position offers the possibility for further scientific qualification (i.e., Habilitation).

Requirements:

- Doctoral degree (Ph.D.) in any scientific field of study with a strong curriculum in cognitive neuroscience (i.e., psychology, neuroinformatics, medicine, mathematics)
- Substantial hands-on experience in the field of neuroimaging, including knowledge of common software packages (e.g. SPM or FSL, Freesurfer, Matlab, Python, Presentation, PsychToolbox)
- Expertise in computational modelling (e.g., Rescorla-Wagner, Hidden Markov, Bayesian inference methods) of imaging data

The ideal candidate would additionally be characterized by:

- Sharing our passion to push the limits in understanding the brain
- Keen interest in experimental approaches to study complex human behaviour
- Strong publication record

We offer you the possibility of:

- Working in an interdisciplinary team contributing to our understanding of the brain with the particular skills that you already have and will further develop
- Being part of the structured program of our CRC
- Arranging for flexible working hours to find a balance between work and family life

- Providing for the future in the form of a company pension plan

Women are explicitly invited to apply. Disabled persons will be preferred in case of equal qualification.

We kindly ask you to apply preferably via our online form to make the selection process faster and more effective. Of course, you can also submit a written application without being at a disadvantage.

[online application](#)

Interested applicants should send their online application with the reference number PSY0913329. Please submit a full CV, transcript of records, statement of research interest (max. 2 pages), and names and contact information for two or three referees. For more information about the position please contact: Prof. Michael Smolka, +49 351 46342201 or kerstin.schlese@tu-dresden.de.