The new Cognitive Neuroscience in Developmental Psychiatry Lab at the Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, University of Würzburg and The Systems Neuroscience Lab at the Department of Psychiatry, Technische Universität Dresden invite applications for a

**PhD Student E13 TV-L 65% or Postdoctoral Fellow E13 TV-L 100% (f/m/d)**

The candidate will work in the project ‘Longitudinal monitoring of cognitive control as a modifying factor of drinking behavior’, which is an international collaborative project between the Cognitive Neuroscience in Developmental Psychiatry Lab (Prof. Lorenz Deserno) in Würzburg and the Systems Neuroscience Lab (Prof. Michael Smolka) in Dresden as well as the Max Planck UCL Centre for Computational Psychiatry and Ageing Research (Prof. Raymond J. Dolan) in London. The candidate will work in Würzburg under the direct supervision of Lorenz Deserno. The position offers the possibility to obtain further academic qualification (e.g. PhD) but can also be suitable for post-doctoral researchers.

The aim of the project is to identify cognitive trajectories related to losing and regaining control over everyday drinking behaviour, and to better understand how cognitive control modifies the impact of cues, stress, and subjective states on control over drinking behaviour. We will investigate these issues by using a smartphone application for longitudinal ambulatory assessment of cognitive control and decision-making over one year in a cohort of 900 individuals. The project involves application of already existing smartphone-based tasks from the Great Brain Experiment in this cohort as well transfer of lab-based learning and decision-making experiments to the smartphone. A goal is also to combine such tasks with physiological measures. The position is ideal for candidates with a strong interest in clinical applications of Cognitive and Computational Neuroscience and enthusiasm for interdisciplinary clinical research (“Computational Psychiatry”).

The project is funded by the German Research Foundation (DFG) as part of a Collaborative Research Centre (CRC) at TU Dresden, Charité Berlin and CIMH Mannheim. The CRC TRR 265 ‘Losing and Regaining Control over Drug Intake: From Trajectories to Mechanisms to Interventions’ aims at identifying the trajectories of losing and regaining control over drug consumption, to study the underlying cognitive and neurobiological mechanisms, and to provide mechanism-based interventions. The CRC provides an outstanding scientific infrastructure and an ideal environment for interdisciplinary collaboration. There are special training opportunities offered for researchers on the level of PhD students. The candidate will be based in Würzburg and cooperate with researchers from the consortium especially at the Dresden site. An Honorary contract at University College London is possible because parts of the project can be carried jointly with researchers the Max Planck UCL Centre.

The position is initially limited until June 30th, 2023.

**Your Tasks:**

- Preparing and conducting behavioural smartphone-based tasks
- Analysing longitudinal behavioural data of smartphone-based tasks
- Transfer of lab-based tasks to a smartphone-based application
• Learning to perform computational modelling of lab-based and smartphone-based behavioural data supported by an experienced modelling group (mainly in the context of Reinforcement Learning)
• Additional analyses of MRI data collected in the CRC (or pre-existing) is possible
• Preparing manuscripts and presenting results at conferences

Your profile:
• University Degree (MA, Diploma) or Doctoral degree in Psychology, Cognitive Neuroscience, Computer Science, Medicine, or related disciplines
• Some initial experience in conducting and analysing behavioural data
• Keen interest to learn or ideally some existing experience with regards to longitudinal data analysis (e.g. multilevel regression models or structural equation models)
• Keen interest to learn or some existing Programming skills in Matlab, R or Python
• Keen interest in experimental approaches to study complex human behaviour
• Keen interest to learn or some previous experience with MRI data is a plus

We offer you:
• Being part of the CRC and its scientific activities in particular for PhD students
• Working in a highly interdisciplinary team with leading scientists in addiction research, cognitive neuroscience and computational psychiatry
• Close scientific supervision by an enthusiastic and young project leader
• Arranging for flexible working hours to find a balance between work as well as private or family life
• The unique possibility for international exchange with the Max Planck UCL Centre, which can be planned individually and flexibly

Disabled people are explicitly encouraged to apply.

We kindly ask you to apply until March 15, 2020 preferably via email to make the selection process faster and more effective. Of course, we also consider your written application without any disadvantages. We look forward to receiving your complete application in one PDF-document including a cover letter with a brief summary of research interests and motivation, full CV, and two references (which can be submitted at a later stage as well). Starting date is as soon as possible. Please send applications to Prof Dr Lorenz Deserno (l.deserno@ucl.ac.uk) and do not hesitate to get in touch directly in case of any questions.