

The Central Institute of Mental Health (State Foundation) is an internationally renowned research institute in the field of psychiatry and neuroscience, home of the Department of Psychiatry of the Medical Faculty Mannheim of the University of Heidelberg as well as psychiatric hospital with 255 inpatient and 52 day-hospital beds.

Within several new projects funded by the European Union and the Federal Ministry of Education and Research we offer

2 Positions for PostDocs and PhD-Students

in the area of rodent *magnetic resonance functional-, perfusion- and diffusion tensor (DTI) imaging at 9.4 Tesla.*

The Central Institute of Mental Health is equipped with a latest generation 210 mm horizontal bore Bruker BioSpec animal system and additional cryogenic MR coils for ^1H and ^{13}C detection in the mouse brain as well as two 3 Tesla human whole body MR-scanners.

The positions are for two years initially and located in the research group *Translational Imaging*. Potential applicants should have a diploma or master in physics, physical chemistry or in biology, neuroscience, or an equivalent field. The ideal candidate from the quantitative sciences has a solid background in NMR physics, signal detection and processing theory, and is familiar with the Bruker Paravision programming environment. Experience in other computer languages, Matlab or IDL, is desirable. Biologists and neuroscientists should have excellent skills in rodent experimentation including electrophysiology experience.

We have openings in these primary fields of research:

- Establishment of manganese enhanced magnetic resonance imaging (MEMRI) for a the longitudinal assessment of connectivity and neuronal activity in experimental animals.
- Development of methods for the acquisition and post processing of functional BOLD imaging data with optogenetics for the identification and investigation of brain networks.
- Diffusion Tensor Imaging for the investigation of structural integrity in different psychiatric mouse-models.

The candidate would also collaborate on several ongoing animal studies of schizophrenia, depression, substance abuse and other psychiatric disorders in mouse and rat models. The assistance in the general supervision of the animal scanner would also be part of the position. More information can be found at http://www.zi-mannheim.de/transl_imaging.html.

We offer an interesting job in a leading research hospital with a strong emphasis on MR-Imaging, salary is according to the German TV-L pay scale, including the social benefits of the public service sector.

For further information please contact Dr. Wolfgang Weber-Fahr, Tel. +49 621 1703-2961, E-Mail: w.weber-fahr@zi-mannheim.de

Please submit your applications no later than **28.02.2011** citing **reference number 354** to the Central Institute of Mental Health, Personnel, J 5, 68159 Mannheim or zi-personalverwaltung@zi-mannheim.de

Homepage: www.zi-mannheim.de/start_en.html