PhD or PostDoc position in Brainstem and Spinal Cord MRI at 3T and 9.4T

The High-Field MR Center (MRC) at the Max Planck Institute for Biological Cybernetics (Dr. Anke Henning, Prof. Klaus Scheffler) and the Autonomous Motion Department at the Max Planck Institute for Intelligent Systems (Prof. Dr. Stefan Schaal) in Tübingen / Germany, in collaboration with Dr. Dagmar Sternad, Northeastern University, Boston, US, invite applications for a PhD or postdoc position in methods development for brainstem and spinal cord structural and functional MRI at 3T and 9.4T.

The research goal is the development and optimization of advanced MRI technology to enable high-resolution structural and functional MRI in the brain stem and spinal cord. To that methods such as reduced field of view excitation by parallel transmit RF pulses, advanced B0 shimming, real-time field stabilization and motion correction methods shall be combined and applied to neuroscientific questions with regard to motion control.

The MRC Department is equipped with two human whole body Siemens MRI systems (3 T and 9.4 T) and one Bruker 14.1 T rodent MRI scanner, an RF lab and a biochemistry lab for MR contrast agent development. The autonomous motion department is equipped with state-of-the-art motion analysis equipment, including MR-compatible motion recording hardware and software.

Applicants for this position should have an electrical or biomedical engineering, physics or computational science background and for post doc candidates obtained their PhD in MRI or NMR methods development. They should be able to work independently, get acquainted with new methods and knowledge quickly, be able to work in a team with other postdoctoral fellows and PhD students and be willing to work with experimental hardware and perform validation studies in volunteers. An interest in neuroscientific questions in the area of motor control is also expected.

The position is available immediately and intended for 4 years as a PhD position and 2 years with prolongation options for the PostDoc position. Payment is according to the guidelines of the MPG and depends on experience. The Max Planck Society is an equal opportunity employer: women, people from minority groups and handicapped individuals are strongly encouraged to apply.

Applications should include a letter of motivation, a curriculum vitae, a list of publications (peer-reviewed original articles; review articles; book chapters; conference contributions; other), PhD and Master certificates (including a list of classes taken during Bachelor and Master studies); three references (contact details only) and a short summary of past research experience and future research interests.

All materials should be sent electronically to anke.henning@tuebingen.mpg.de or d.sternad@neu.edu

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Further information on the Max Planck Institutes for Biological Cybernetics and Intelligent Systems can be obtained at http://www.kyb.tuebingen.mpg.de and http://www-amd.is.tuebingen.mpg.de.