## Max-Planck-Institut für biologische Kybernetik

Max Planck Institute for Biological Cybernetics



The Max Planck Institute for Biological Cybernetics in Tübingen (Germany) invites applications from outstanding scientists for the position of

## Max Planck Research Group Leader (W2) (m/f/d) in high-field NMR animal imaging

The Max Planck Institute for Biological Cybernetics (www.kyb.tuebingen.mpg.de) investigates information processing in the brain. The Institute uses experimental, theoretical and computational methods to study perception, memory, decision-making, motor performance and more, and to develop appropriate recording and imaging techniques. The Institute is multidisciplinary, has excellent facilities and close links to sister Max Planck Institutes and the University of Tübingen.

The Institute invites applications to lead a research group with a focus on neuroscientific applications of ultra-high field magnetic resonance imaging and spectroscopy in rodents.

Applicants must possess a Ph.D. and have established an excellent track record in application of in-vivo high-field MR methods in animal research. We invite applications from outstanding scientists who have demonstrated high impact research creativity and have the ability to recruit the best trainees to build a strong research group. The successful candidate will be expected to develop a research program that complements and interacts with the already established research groups at the High Field Magnetic Resonance department (www.kyb.tuebingen.mpg.de/hochfeldmagnetresonanz). Preference will be given to candidates with an excellent background in chemistry, biochemistry, neurochemistry or neurophysiology, and the understanding of the exceptional possibilities of ultra-high field magnetic resonance in neuroscientific research, as well as experience in animal models and animal handling. Possible research areas include metabolic investigations of the healthy and diseased brain using multinuclear (eventually hyperpolarized) MR imaging and spectroscopy, functional MR to assess neuronal activity (perfusion, oxygenation, diffusion, energy metabolism), white/grey matter lesion characterization and neurodegeneration. The research group will have in-house support in advanced MR-physics (sequence design, pulse design) and RF-physics (transmit and receive coil design). The High Field Magnetic Resonance department (Prof. K. Scheffler) is equipped with two whole body Siemens Systems (3 T and 9.4T) and one Bruker animal system operating at 14.1 T, an ultra-low field animal system including hyperpolarization instrumentation, animal facilities, RF lab and a biochemical lab for MR contrast agent development, as well as possibilities for electrophysiological and optical recordings.

The successful candidate will develop an independent research program using their own budget, which will fund research positions, consumables, and equipment. The initial appointment of the group leader is for 5 years with the possibility of extension (2+2 years) after international review.

Applications should contain a full CV including a complete list of publications, a brief summary of research accomplishments, a description of future goals and names of three referees. Please send them in one PDF-file to: <a href="mailto:research-group@tuebingen.mpg.de">research-group@tuebingen.mpg.de</a>. Application deadline is December 5, 2021.

The Max Planck Society strives for gender and diversity equality and welcomes applications from all backgrounds. We actively encourage applications from persons with disabilities.

