

The German Primate Center (DPZ) - Leibniz Institute for Primate Research is one of 96 research and infrastructure establishments of the Leibniz Association. It conducts basic biological and biomedical research in all fields in which non-human primates play essential roles: in particular, in infection research, the neurosciences and organismic primate biology.

The Functional Imaging Laboratory offers a

Ph.D. Position (TV-L E13, 65%) in cardiac MRI and MRS

Topic: Quantitative cardiac MR imaging and spectroscopy in animal models
Start: 1st March 2021 or as soon as possible
Funded by: German Center for Cardiovascular Research (DZHK)
Duration: 3 years

The aim of this translational, interdisciplinary project is to develop and establish novel MR techniques for quantitative cardiac imaging in animal models of heart failure and other age related cardiac diseases. This will include (¹H and ³¹P) MR imaging and spectroscopy methods for the detection and quantification of myocardial remodelling processes after induced myocardial infarction. Two promising biomarkers will be of particular interest: the extracellular volume as an indicator of collagen content of the heart muscle and the ATP synthesis as the primary pathway of energy supplement. Using novel multi-compartment approaches and integrating structural, functional and metabolic data this project aims to provide suitable tools for monitoring disease progression and therapy responses in animal models and henceforth in humans.

Applicants must hold a Master's degree or diploma in physics or related fields and should have a keen interest in MRI method development and cardiovascular sciences; ideally, with prior experience in MRI sequence programming.

The Functional Imaging Laboratory is a multi-disciplinary research group with focus on the development of novel imaging techniques for preclinical and translational research. Resources include state-of-the-art magnetic resonance spectroscopy and imaging systems (clinical 3T whole-body MR system and preclinical small animal 9.4T MR system).

The appointment at DPZ follows the regulations of civil service. Applicants with disabilities and equal qualifications will be given preferential consideration. We kindly ask you to indicate in your application if you are disabled. Please send your motivation letter, CV (including all certificates) under key word "Functional Imaging Laboratory" until the 12th March via mail to bewerbung@dpz.eu. For further information, please contact Dr. A. Moussavi (+49 (0)551-3851-392, amoussavi@dpz.eu). For more information about the Laboratory please see <https://www.dpz.eu/en/unit/functional-imaging-laboratory/about-us.html>.

For more information about the Leibniz Association see <http://www.leibniz-gemeinschaft.de>.