

Open PhD student position for Experimental MRI to be filled at the Experimental Magnetic Resonance Group (associated to the University Clinic of Radiology at the University Hospital Münster) at the Westfälische Wilhelms-Universität **Münster**, Germany.

**PhD student position (65% E13)  
quantitative MRI and relaxation modelling (physics, engineering, imaging)  
for the period January 2021 – December 2024**

In the **Collaborative Research Centre 1450 “insight - Multiscale imaging of organ-specific inflammation”** we are looking for a candidate to work on experimental MRI combined with mass spectrometric imaging to model MR relaxation times. The project includes computer simulations of NMR relaxation, MR measurements of contrast agents and labelled cells, and coregistration with mass spectrometric imaging data. In vivo MRI cell tracking will be performed to investigate the immune response in different experimental models.

Applicants are expected to have completed a MSc in physics, engineering, computational science, or biomedical imaging. Interest in small animal MRI, sequence programming, computer simulations, and data analysis is mandatory. Experience with experimental MRI, and profound programming skills are a plus. The successful candidate will be devoted to science and integrate in a dynamic interdisciplinary team.

The experimental MR group has a focus on cell tracking by MRI, multimodal imaging, neuroimaging, and imaging of infections. Collaboration partners represent all major disciplines of biomedical research. Established links exist into several collaborative research centers (SFBs) and into the Cells in Motion Interfaculty Center.

Available instrumentation:

9.4 T MRI system (Biospec with cryoprobe), PET/MR scanner, RF laboratory, mouse facility, microbiology and biochemical lab, compute server for data analysis and simulations.

Access to instrumentation in other groups: mass spectrometers (with laser ablation), fluorescence imaging systems (with X-ray), bioluminescence, ultrasound, photoacoustic, small animal PET and small animal Micro-CT.

Applications and further information:

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See also

<http://campus.uni-muenster.de/nmr.html>