



PhD Positions in Fluorine MR Methods

The Experimental Ultra-High Field MR group at the Max Delbrück Center for Molecular Medicine in the Helmholtz Association is seeking PhD students with a background in physics, medical physics or biophysics with prior experience in MRI.

The candidate will be involved in the project:

“Simultaneous mapping of pathology and therapy in the central nervous system using fluorine-19 magnetic resonance imaging” between

the Max Delbrück Center for Molecular Medicine in the Helmholtz Association (MDC), the Leibniz Institute f. Molecular Pharmacology (FMP), both in Berlin and the Weizmann Institute of Science (WIS), in Rehovot, Israel

The candidate will be deeply involved with the application and development of fluorine MRI. A requirement is a strong incentive to drive preclinical and clinical fluorine MRI in neuroinflammatory disease and the interpretation of its data.

Application deadline: 31. March. 2023

Your tasks:

- Optimization of fluorine-19 (^{19}F) MRI data acquisition using novel MRI pulse sequencing methods
- MR data preparation including processing, analysis, quantification of low SNR ^{19}F MRI
- Collaborate with other project participants in Berlin and Rehovot to develop new tools that will aid in the mapping of pathology and therapy in the central nervous system

Your qualifications:

- University degree in physics or related (Master's degree)
- Experience with programming languages such as Python, Matlab
- Practical experience in acquiring and processing MRI data
- Basic knowledge of cardiovascular related topics
- Previous experience with small animals is advantageous

We offer

- Interdisciplinary research environment with interfaces between biomedicine, physics and data science
- Excellent supervision and full-time commitment
- National and international networks and outstanding research infrastructure

Please submit your application to sonia.waiczies@mdc-berlin.de with a letter of motivation, curriculum vitae and other relevant attachments