



## Max Delbrück Center for Molecular Medicine in the Helmholtz Association, Berlin, Germany

The **Berlin Ultrahigh-Field Facility (B.U.F.F)** is seeking scientists interested in the development and clinical application of ultrahigh-field magnetic resonance imaging (UHF-MRI) as

### Diploma-, Master-, Bachelor-, Doctoral Thesis Projects in Ultrahigh-Field Magnetic Resonance Imaging

## Investigation of *in vivo* drug distribution by Magnetic Resonance Methods

### Background

One commonly neglected aspect of therapy is the distribution of medicinal compounds during pathology. Since drug distribution could be affected by pathology, a non-invasive method for following drugs *in vivo* would be a great achievement for advancing treatment strategies for specific disease. Our group has imaged topically-applied fluorinated drugs using Fluorine ( $^{19}\text{F}$ )-Magnetic Resonance (MR) technologies. Our main goal is to develop the method for systemically-applied fluorinated drugs and to quantify their distribution in parallel to their therapeutic efficacy in specific disease scenarios. To reach this goal the candidate will employ  $^{19}\text{F}$ -MR methods to quantify drug distribution in disease.

### Requirements

The positions would be well suited for resourceful individuals with a strong interest in biomedical imaging, resilient initiative and excellent communication skills. For different aspects of the research we are seeking candidates from different disciplines (such as physics, biomedical engineering, electrical engineering, computer science, pharmacology, molecular biology) who are intent to boldly go beyond their first university training.

The Max-Delbrück-Center for Molecular Medicine is an equal opportunity employer. For further information please see: [buffportal.mdc-berlin.de](http://buffportal.mdc-berlin.de)

Interested candidates should e-mail CV and cover letter to:

**Dr. Sonia Waiczies** ([sonia.waiczies@mdc-berlin.de](mailto:sonia.waiczies@mdc-berlin.de))