Berlin Ultrahigh Field Facility (B.U.F.F.)

Max Delbrück Center for Molecular Medicine Berlin, Campus Buch, Germany

The **Berlin Ultrahigh Field Facility (B.U.F.F.)** at the Max-Delbrück-Center for Molecular Medicine (MDC), Berlin, Germany is seeking an enterprising scientist interested in the development of x-nuclei RF coil technology and methodology tailored for ultrahigh field magnetic resonance (UHF-MR) as a

Post-Doc Position in Ultrahigh Field Potassium (^{39}K) MR

The position involves research on developing potassium MRI including every stage from RF coil development, to pulse sequence programming, image reconstruction/post-processing and data analysis. These efforts are designed to spatially resolve and characterize (patho)physiological processes and mechanisms on the organ, tissue and cellular level while being transferable from basic research to proof-of-principle clinical studies. The ultimate goal is non-invasive imaging of the potassium content of the heart and liver in humans.

The position would be well suited for individuals with a strong hardware background, open minded interest in medical imaging, strong initiative and excellent communication skills. Candidates must have a graduate degree (Ph.D., MD or related degrees) in **electrical engineering, physics, computer science or, a related discipline**. RF engineering expertise, signal/image processing experience and hardware development skills beyond are beneficial.

The project is funded by the Helmholtz initiative on personalized medicine iMED and will be undertaken in collaboration with Prof. Armin Nagel (DKFZ Heidelberg and University of Erlangen Germany). Opportunities will exist to collaborate with scientists at the Charité - University Medicine Berlin and with other academic institutions in Berlin. State-of-the-art MR instruments dedicated to research are available including a family of Siemens **7.0 Tesla, a 3.0 Tesla** systems and a Bruker 9.4 T small animal scanner.

The Max-Delbrück-Center for Molecular Medicine is an equal opportunity employer. For further information please see: www.mdc-berlin.de/BUFF. Interested candidates should please contact: Prof. Thoralf Niendorf (thoralf.niendorf@mdc-berlin.de, Tel. +49 30 9406 4505).