Postdoctoral Positions in Magnetic Resonance Imaging

The Division of MR Research of the Beth Israel Deaconess Medical Center Department of Radiology seeks two highly motivated postdoctoral researchers for collaborations on MRI studies.

One researcher will collaborate with Dr. David Alsop on technical advancement and applications of arterial spin labeling and related techniques for functional characterization of the brain. Improvements to reliability of perfusion imaging, extension of ASL methods to provide additional measures, optimization for and application to measuring drug and electrical modulation of brain activity, and study of the relationship between average blood flow and resting state fluctuations of blood flow and oxygenation are particular emphases.

The second researcher will collaborate with Drs. Gopal Varma and David Alsop on studies of microstructure in the brain and other tissues. We are particularly interested in advancing the technique of inhomogeneous magnetization transfer (ihMT) and understanding how pathophysiology modulates the unique sensitivity to macromolecules and their motion.

Applicants should have a Ph.D. in biomedical engineering, medical imaging physics, or related disciplines. Successful applicants will possess strong written and oral communication skills, and experience with experiments using magnetic resonance. Background in pulse sequence development, neuroimaging analysis, and clinical studies of treatment and disease is highly desirable.

Facilities within the Division include a GE 3 Tesla MR750 scanner dedicated to research, a 9.4 Tesla horizontal bore Bruker preclinical MRI, a HyperSense DNP hyperpolarizer, a preclinical PET/CT, and fluorescence and bioluminescence imagers.

Beth Israel Deaconess Medical Center is a major teaching hospital of Harvard Medical School located in the dynamic research environment of the Longwood Medical Area. Strong collaborations with world-renowned clinicians, clinical scientists and basic scientists throughout the institution and the broader Longwood environment represent a unique and compelling feature of our program.

To apply for this position, please submit your CV, a letter describing your interests, and estimated date of availability to MRIResearchAdmin@bidmc.harvard.edu.