POSTDOCTORAL RESEARCH FELLOW — Multimodal fMRI and computational tools for advancing human neuroscience

Athinoula A. Martinos Center for Biomedical Imaging
Massachusetts General Hospital (MGH)
Harvard Medical School

We are seeking a Postdoctoral Research Fellow in advanced functional MRI at the Athinoula A. Martinos Center for Biomedical Imaging, Massachusetts General Hospital (MGH) and Harvard Medical School. Our research aims to enable new kinds of analyses of brain activity through advanced neuroimaging and signal processing approaches. Working with Drs. Jonathan Polimeni and Laura Lewis, the fellow will study the neural and vascular origins of fast fMRI signals and test the upper limits of the speed and sensitivity of fMRI. The postdoctoral fellow will use advanced accelerated fMRI methods and ultra-high field imaging (7T) to study and model the dynamics of neural activation at fast timescales and across cortical layers. Multimodal imaging (including ASL, CBV, and simultaneous EEG/fMRI) and computational models of physiological dynamics may also be used, to ultimately track fast and local neural dynamics using accelerated fMRI.

The Martinos Center is home to state-of-the-art imaging facilities and technological expertise in neuroimaging. The center houses over 200 faculty and postdoc members, conducting diverse neuroimaging research with great potential for collaborations and career development.

The successful candidate will be a highly motivated researcher with a desire to begin an independent career related to or involving advanced human functional MRI. A Ph.D. in engineering, physics, neuroscience, or related field, is required. A background in neuroimaging techniques and/or neurophysiology is an asset. Strong analysis skills and independent motivation and creativity are essential for this project.

ADDITIONAL SKILLS/ABILITIES/COMPETENCIES

Candidates should be enthusiastic about working in a fast-paced, interdisciplinary environment. The successful candidate will be able to work both independently and collaboratively in a large multi-institutional project. Strong written and oral English communication skills are required.

APPLICATION

Interested applicants should send a cover letter describing research experience, interests, and future research and career goals, as well as an up-to-date curriculum vitae and contact information for three references, to Laura Lewis, Ph.D., by email: ldlewis@nmr.mgh.harvard.edu. Questions regarding this position and informal inquiries are welcome.

This position is full-time with benefits and is available immediately. A two-year commitment is required. The Massachusetts General Hospital and Harvard Medical School are equal opportunity and affirmative action employers.