Postdoctoral Position: Vascular Physiology in Aging & Cerebrovascular Diseases

The Cerebrovascular Aging and Spin Labeling (CASL) Lab at Massachusetts General Hospital seeks a postdoctoral fellow interested in applying magnetic resonance imaging (MRI) approaches for investigating vascular physiology in aging, cognitive decline, and cerebrovascular or neurodegenerative diseases. The appointment would be as a Research Fellow in the Martinos Center for Biomedical Imaging at Massachusetts General Hospital and Harvard Medical School.

The Research Fellow position provides training opportunities ranging from clinical/physiological applications of MRI to technical development. The successful candidate will contribute to one or more of the following topics:

1. Multi-modal imaging-based markers for characterizing microvascular physiology in aging, age-related white matter lesions, and cognitive decline.
2. Noninvasive MRI approaches for investigating vascular impairment in clinical pathologies, including steno-occlusive disease, sickle cell disease, and Alzheimer’s disease.
3. Arterial spin labeling (ASL) and blood oxygenation level-dependent (BOLD) techniques to study white matter perfusion at high field.
4. Dynamic shimming to improve the robustness of perfusion imaging methods.

Qualifications

- Ph.D. (or equivalent) in engineering, physics, neuroscience, or related discipline.
- Demonstrated interest in medical imaging research, particularly MRI.
- Strong written and oral communication skills.
- Experience with conducting human subject research preferred, but not required.

Environment

The Martinos Center for Biomedical Imaging houses a state-of-the-art imaging facility with eight research-dedicated human MRI scanners, including four 3 Tesla, two 7 Tesla, and two hybrid PET/MRI scanners. A wide range of research infrastructure and training resources are also available, alongside a rich selection of seminar series and grassroots initiatives on topics such as inclusion and commercialization.

Application

Informal inquiries are welcome, either via email or in-person at ISMRM. Candidates interested in submitting a formal application should email their curriculum vitae (including names and contact info for three references) and a brief statement describing research experience and interests to Meher R. Juttukonda, Ph.D. (mjuttukonda@mgh.harvard.edu).

Massachusetts General Hospital is an equal opportunity employer, and all qualified applicants will receive consideration without regard to race, color, religion, sex, national origin, disability status, protected veteran status, or any other characteristic protected by law. Underrepresented groups in science are encouraged to apply.