



Postdoctoral Fellowship: “Imaging Microvascular Hemodynamics in the Aging Brain”

The Cerebrovascular Aging and Spin Labeling (CASL) Lab is soliciting applications for a postdoctoral position in our group. The appointment would be as a Research Fellow at the Martinos Center for Biomedical Imaging in the Department of Radiology at Massachusetts General Hospital and Harvard Medical School. The successful candidate will contribute to NIH-funded projects and have access to training opportunities ranging from the development of methods for imaging hemodynamics and neurofluids to novel applications of existing techniques for better understanding physiological changes with aging and in individuals with risk factors for vascular disease and dementia. Potential projects will involve one or more of the following topics based on interest:

Learn more about
the Lab here:



1. Advancement of arterial spin labeling methods using high-field and high-performance MRI systems through collaboration with experts in hardware and pulse sequence development.
2. Application of noninvasive MRI methods for characterizing cerebral hemodynamics and neurofluid dynamics in aging and dementia.
3. Development of multi-modal imaging markers for better characterizing pathophysiology underlying white matter lesions.

Qualifications:

- Ph.D. (or equivalent) in physics, engineering, neuroscience, or related discipline
- Strong written and oral communication skills in English
- Prior experience with perfusion MRI or MRI-related research (*preferred*)
- Experience with conducting human subject research (*preferred*)

Environment:

The Martinos Center houses a state-of-the-art imaging facility with eight research-dedicated human MRI systems. This stable includes four 3 Tesla MRI scanners (including the high-performance “Connectome 2.0” system), two 7 Tesla MRI scanners, and two 3 Tesla PET/MRI scanners. Additional training opportunities include a rich selection of seminar series and grassroots initiatives on topics such as research productivity and commercialization, and career development resources at MGH and Harvard Medical School will be made available as needed.

Application:

Candidates interested in submitting a formal application should email a **Curriculum Vitae** (with names and contact information for three references) and a brief (<1 page) **Research Statement** (describing the candidate’s prior experiences and research interests) to Meher R. Juttukonda, Ph.D. (mjuttukonda@mgh.harvard.edu). Informal inquiries over email are welcome.