Postdoctoral Position in 7T Brain MRI of Healthy Aging

A postdoctoral position is available to work on acquisition and analysis of structural and diffusion 7T brain MRI methods applied to a healthy aging population. This position is part of Stanford Radiology’s Precision Health and Integrated Diagnostics program. The postdoctoral fellow would join a dynamic team of MRI physicists, neurologists and cognitive neuroscientists focused identifying early disease processes in a putatively cognitively normal aging population through the acquisition of cutting-edge structural and diffusion 7T brain MRI, Tau PET imaging, CSF and genetic markers and cognitive assessments. Specifically, the fellow would be developing and updating automated and/or novel methods for the volumetric assessments of subcortical and brainstem nuclei as well as novel diffusion MRI measures of tissue microstructure and tractography.

Applicants are expected to have a PhD in engineering, physics, biomedical engineering, biophysics, or related discipline. This position requires programming skills and experience working on MRI acquisition and analysis. A background in neuroscience and/or a desire to learn about the neuroscience of aging is also essential.

The post-doctoral fellow would report jointly to Drs. Brian Rutt, Jennifer McNab and Carolyn Fredericks. Imaging research would be carried out at the Richard M. Lucas Center for Imaging on Stanford University’s main campus. The Lucas Center was established in 1992 as a centralized resource dedicated to biomedical imaging research. The close proximity of the Lucas Center to the Schools of Medicine and Engineering fosters a truly transdisciplinary approach to research.

Major MR imaging devices available for research studies within the Radiology Department include one 7T GE Discovery MR950 (with 8ch pTx), one 3T GE Discovery MR750, one 3T GE Premier (G_max=80mT/m) and one 3T GE PET/MRI (all 100% available for research), as well as multiple animal MR scanners. Hardware design and fabrication facilities exist and are being actively grown as part of a new high field and hardware research effort.

Stanford University is an equal opportunity employer.

Interested candidates should forward your CV, a statement of your research experience and interests, and the contact information for 3 references to Drs. Rutt, McNab and Fredericks at the email addresses listed below:

Brian Rutt, Ph.D., brutt@stanford.edu
Jennifer McNab, Ph.D., mcnabj@stanford.edu
Carolyn Fredericks, M.D., cfrederi@stanford.edu