

Postdoctoral Scholar in Neurovascular MR Imaging

One or two Postdoctoral Scholar - Research Associate positions are immediately available at the USC Mark and Mary Stevens Neuroimaging and Informatics Institute at Keck School of Medicine of University of Southern California (USC). The candidate will be mentored by Dr. Lirong Yan whose research focuses on the development of advanced neurovascular MRI techniques including cerebrovascular imaging and arterial spin labeling (ASL) perfusion imaging and clinical translations in cerebrovascular diseases, such as stroke, and Alzheimer's disease. The successful candidate will participate in MRI pulse sequence programming, fast image acquisition and image reconstruction, and image-processing in neurovascular imaging.

Research Environment:

The USC Mark and Mary Stevens Neuroimaging and Informatics Institute (INI, www.ini.usc.edu) and Laboratory of Neuro Imaging (LONI) are world leaders in the development of advanced computational and scientific approaches for the comprehensive mapping of brain structure and function. The Center of Image Acquisition (CIA) as part of the INI houses two state-of-the-art MRI systems (one Siemens Prisma 3T scanner and one Siemens Terra 7T scanner with pTX) with dedicated supercomputing systems. Both scanners are designed for research and clinical studies. The LONI image data archive (IDA) is one of the largest brain image collections that hosts various imaging repositories such as ADNI. The datacenter of LONI boasts 3,328 cores and 26 terabytes of aggregate memory space for AI based brain image analysis and cloud computing for image reconstruction. This position will provide a valuable opportunity to work and collaborate with a multi-disciplinary group of researchers from MR physics, computer science, neuroscience, radiology, and neurology.

Preferred Qualifications:

- PhD in bioengineering, physics, electrical engineering, or related disciplines
- Proficient in programming, such as C++ and Matlab.
- Research experience in MR physics, pulse sequence design and/or image reconstruction algorithms. (Pulse sequence programming on Siemens platform will be a plus)
- High self-motivation, ability of solving research problems independently, and good communication and written skills.

To apply:

Please email your current curriculum vitae, a brief statement of research experience and interests, and a list of three references with contact information to Dr. Lirong Yan, Lirong.Yan@ini.usc.edu