PostDoc Position in Connectome Research at USC

A post-doctoral fellow position in brain connectome research is available at the Laboratory of Neuro Imaging (LONI, http://www.loni.usc.edu) at the Stevens Neuroimaging and Informatics Institute of USC (http://www.ini.usc.edu). The post-doc fellow will be responsible for developing innovative computational techniques to study vision-related brain connectome using multi-shell diffusion MRI data. The focus of the research will be developing novel algorithms for fiber orientation distribution (FOD) reconstruction, FOD-based tractography, and fiber bundle reconstruction to improve the state-of-the-art in modeling human visual pathway. Through the Laboratory of Neuro Imaging at the Stevens Neuroimaging and Informatics Institute at USC, the post-doctoral fellow will have access to the ideal environment for brain imaging research. 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 Big Data brain image analysis. The new institute will also house a state-of-the-the- art image acquisition center with both 3T (high performance gradient Prisma) and 7T MR (Siemens) scanners for human brain imaging. More information can be found at http://www.ini.usc.edu and http://www.loni.usc.edu.

The ideal candidate should have a PhD in engineering, computer science, or applied mathematics, and strong background in brain or medical image analysis. Prior research experience (publications) in diffusion MRI is encouraged and a definite plus. Solid programming skills in C++ and Matlab are desirable. Interested candidates should send their CVs to Dr. Yonggang Shi (yshi@loni.usc.edu).