



EMORY
UNIVERSITY
SCHOOL OF
MEDICINE

Department of Radiology and Imaging Sciences

Postdoctoral Fellow of Neuroimaging at Emory University

The Department of Radiology and Imaging Sciences of Emory University is seeking two postdoctoral fellow to work on **the development and/or application of advanced MRI techniques in Alzheimer's Disease**. The postdoctoral fellows will join a team of investigators in the large-scale NIH-funded Emory Healthy Brain Study, which is developing early predictive biomarkers for Alzheimer's Disease with a target enrollment of 3000 subjects (<https://healthyaging.emory.edu/brain-imaging-project>). The position provides an excellent opportunity to work in an interdisciplinary environment with close interactions with MR physicists, radiologists, neurologist, neuroscientists, and computer scientists. The Center for Systems Imaging at Emory University operates three research-dedicated 3T MRI Siemens Prisma scanners one of which is exclusively used for the Emory Healthy Brain Study, one human PET/MR scanner, and a powerful computer-cluster. A Siemens 7T Terra human scanner will be installed in early 2022 for research use.

The position holder is expected to assist with MR data acquisition, performing image analysis and writing manuscripts. Several advanced MR sequences are acquired in the Emory Healthy Brain Study, including resting state fMRI, diffusion MR, arterial spin labeling, quantitative susceptibility mapping, MR spectroscopy among others. The exact area of focus for the Postdoctoral Fellow will depend on their existing experience and programmatic needs of the lab. It is expected that Postdoctoral Fellow will engage in both application/disease driven research as well as technical development of new MR pulse sequences, reconstruction methods or image post-processing techniques.

The qualifications of a successful candidate should include

- A PhD degree in Electrical Engineering, Biomedical Engineering, Physics, Mathematics, Neuroscience or other related fields.
- Strong background in signal processing, image processing and quantitative analysis. Excellent proficiency with Matlab and/or Python programming. Skills in C/C++ programming language is a plus.
- Demonstrated independent research capabilities and good organizational and inter-personal skills.

Previous experience with medical image processing is desirable; it is a strong plus but not necessary to have existing experiences with MRI scanner operation and pulse sequence programming on any of Siemens, GE or Phillips platforms.

Postdoctoral fellows at Emory University Department of Radiology also receive an additional fund for professional development activities.

Please send your CV and arrange for two letters of recommendation be sent to Dr. Deqiang Qiu (deqiang.qiu@emory.edu) and note in the subject line "Postdoctoral Fellow Position".