JOB DESCRIPTION: Helps design and conduct research within a specified field while receiving advanced training from a designated Principal Investigator to enhance professional skills and research independence needed for pursuit of a career. The specific area of research in which the trainee is mentored is determined by the department and laboratory of the Postdoc. Designs and evaluates experiments. Develops new ideas that promote current research. Prepares and publishes scientific manuscripts under the direction of the Principal Investigator. May be responsible for operation of specific equipment. May teach techniques to others, train, and supervise research staff. Positions are temporary appointments as a research trainee. The initial appointment is for one year, renewal expected if progress is satisfactory and funds are available. Appointments cannot exceed five years.

MINIMUM QUALIFICATIONS: A doctoral degree or equivalent (Ph.D., M.D., ScD., D.V.M., DDS etc) in an appropriate field. Excellent scientific writing ability and strong oral communication skills. The ability to work effectively and collegially with colleagues. Additional qualifications as specified by the Principal Investigator.

ADDITIONAL DETAILS

Postdoctoral Fellow of Neuroimaging at Emory University

The Department of Radiology and Imaging Sciences of Emory University is seeking a postdoctoral fellow to work on the development of advanced MRI techniques and their application in basic neuroscience and neurological diseases. The position provides an excellent opportunity to work in an interdisciplinary environment with close interactions with MR physicists, radiologists, neurologist, neuroscientists, and computer scientists. Accesses are available to three research-dedicated 3T MRI Siemens Prisma scanners, one 9.4T animal scanner, and a powerful computer-cluster. Established close collaborations with the Emory University Hospital, which houses a clinical 3T Siemens Tim-Trio and five 1.5T MR scanners, allows easy translation of technical developments to clinical settings. The successful applicant will also have access to great research platform provided by the Emory Brain Imaging Project (EBIP) (https://healthyaging.emory.edu/brain-imaging-project/)

The exact project depends on the mutual interests of the candidate and the PI as well as programmatic needs of the lab. The following are potential candidate projects available from the lab: 1) fast MR imaging techniques using sparse sampling and compressed sensing or machine learning based reconstruction. 2) Development of image segmentation algorithms for small deep brain nuclei. 3) Quantitative disease progression modeling in Alzheimer’s Disease. Current lab members and projects can be seen at http://randomprogram.net
The qualifications of a successful candidate should include:

- A PhD degree in Electrical Engineering, Biomedical Engineering, Physics, 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 plus but not necessary to have experiences with MRI scanner operation and pulse sequence programming on Siemens IDEA/ICE.

Postdoctoral fellows at Emory also receive an additional fund for professional development activities.

Should you have any questions regarding the position please contact Dr. Deqiang Qiu (dqiu3@emory.edu) and note in the subject line “Postdoctoral Fellow Position”.

**EMORY UNIVERSITY APPLICATION LINK:** [https://faculty-emory.icims.com/jobs/31929/postdoctoral-fellow-%e2%80%93-neuroimaging/job](https://faculty-emory.icims.com/jobs/31929/postdoctoral-fellow-%e2%80%93-neuroimaging/job)