

Department of Radiology and Imaging Sciences

Magnetic Resonance Research Center

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 and application of novel MRI techniques focusing on neuroimaging. The position provides excellent opportunity to work in an interdisciplinary environment and have close interactions with MR physicists, radiologists, neurologist and neuroscientists. Accesses are available to three dedicated research MR 3T Siemens scanners (two PRISMA, one to be installed soon), one 9.4T animal scanner, and a powerful computer-cluster. Close collaboration with the Emory Healthcare, which houses two clinical 3T Siemens scanners and more than ten 1.5T MR scanners, allows easy translation of technical developments to clinical settings.

The candidate should have a PhD degree in Engineering, Physics, or a related field, with a strong background and experience in quantitative analysis. The candidate should also demonstrate independent research capabilities, and have good organizational and inter-personal skills. Excellent proficiency with Matlab and/or C/C++ programming language is required. Previous experience with medical image processing is desirable; experiences with MRI scanner operation and pulse sequence programming are a plus but not necessary.

Responsibilities include conducting research in one or more of the following areas (1) development of advanced **quantitative MRI imaging** acquisition techniques for applications in stroke and ageing (Alzheimer's disease), including oxygenation measurement, arterial spin labeling, dynamic susceptibility contrast, CEST or quantitative susceptibility imaging, and (2) development of post-processing methods for extracting quantitative features from medical (MRI) images and **machine learning methods** for the diagnosis, prognosis, and treatment monitoring of neurological diseases.

Emory University provides competitive salaries commensurate with experience. Postdoctoral fellows at Emory also receive an additional fund for professional development activities.

To apply, please send your CV to the following contact: Deqiang Qiu, PhD
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