Postdoctoral Fellow & Scientist

MRI Pulse Sequence Development, Multi-parametric Quantitative MRI, and AI for Medical Imaging

Applications are invited for positions in the Intelligent Imaging Innovation and Translation (I^3T) lab at Athinoula A. Martinos Center for Biomedical Imaging, **Massachusetts General Hospital / Harvard Medical School**. I^3T lab is a multidisciplinary research laboratory dedicated to advancing next-generation MRI technologies and artificial intelligence for translational and clinical imaging applications.

Research Areas

We are seeking motivated candidates with strong expertise in MRI pulse sequence programming, acquisition methods, and quantitative MRI physics. The applicants are expected to work on projects involving:

- Development of novel MRI pulse sequences and acquisition strategies for rapid, quantitative, multi-parametric, and multi-dimensional imaging
- Quantitative MRI methods for tissue composition, microstructure, relaxation, susceptibility, and functional imaging
- AI/deep learning methods for MRI acquisition optimization, reconstruction, and image analysis
- Translation of advanced MRI methods into musculoskeletal, neurological, abdominal, and oncological imaging applications

The successful applicants will participate in multiple NIH-funded research projects (R01/R21) and collaborate closely with experts in MRI physics, radiology, orthopedic surgery, neuroscience, and AI. The positions offer outstanding opportunities for high-impact publications, conference presentations, and career development within one of the world's leading imaging research environments. The positions are immediately available and initially funded for one year, with renewal contingent upon performance.

Preferred Qualifications

- PhD in Biomedical Engineering, Electrical Engineering, Computer Science, Physics, or related fields
- Experience with Siemens IDEA, GE EPIC, or United Imaging programming environments
- Experience with advanced MRI acquisition techniques (e.g., parallel imaging, compressed sensing, quantitative MRI)
- Programming experience in C/C++, Python, MATLAB, or related languages
- Experience with AI/deep learning for medical imaging is a plus
- Strong written and verbal communication skills in English

To Apply: Please send interest and a full CV to lab PI **Dr. Fang Liu** [**fliu12@mgh.harvard.edu**]

The successful applicants will benefit enormously from the research environment, facilities, and career opportunities at the Athinoula A. Martinos Center. MGH/HMS is an Equal Opportunity Employer that welcomes and encourages all applicants to apply regardless of age, race, gender, color, nationality, sexual orientation, disability, veteran status, religion, or any other basis.

Lab website: https://liulab.mgh.harvard.edu/ Martions Center: https://www.martinos.org/
PI's LinkedIn: https://www.linkedin.com/in/fliu37/ Twitter: https://twitter.com/DrFangLiu