Postdoc Position: Non-Cartesian MR Imaging
New York City, USA

About Our Center

Mission of the Center for Advanced Imaging Innovation and Research (CAI²R) at New York University School of Medicine is to develop solutions to the existing limitations in today’s medical imaging practice and to deploy them for routine patient care. The center is embedded into the Department of Radiology and brings together over 80 full-time researchers, including basic MR scientists, clinical researchers, and research technicians. It is located centrally in Manhattan, adjacent to the UN headquarters.

Our scientists have access to more than 18 MRI systems, including clinical MRI scanners, a PET-MRI, and a 7T MRI scanner. We are supported by a team of onsite industry scientists. A dedicated RF lab can be used for custom coil and phantom building. Extensive computational resources are available for numerical simulations and development of computationally-demanding processing algorithms.

For more information about our center, please visit http://cai2r.net.

Available Position

One major goal of our research is to improve the reliability and robustness of abdominal MR imaging, aiming to make these examinations accessible for patients in which conventional MRI techniques fail. Among these patients are children who, instead, are often imaged with CT or using sedation, which both is associated with health risks. Our group is developing innovative solutions to overcome these limitations using non-Cartesian acquisition schemes and iterative reconstruction techniques.

To extend our work for pediatric patients, we are looking for a highly motivated postdoctoral researcher who will take lead in the continued development of a volumetric non-Cartesian multi-contrast MRI method with motion-compensated iterative reconstruction. Responsibilities will also include evaluation of our motion-robust MRI techniques in patient studies together with our clinical collaborators.

Requirements for this position include:

- PhD in physics, mathematics, computer science, or electrical engineering
- Prior research experience with MRI, preferably with focus on non-Cartesian MRI and iterative reconstruction methods, such as compressed sensing and model-based reconstruction
- Advanced programming skills, with experience in both Matlab and C++ development
- Experience with the Siemens IDEA sequence development environment
- Self-driven work attitude and ability to conduct independent research

We offer a highly competitive salary and benefits package. Subsidized postdoc housing in close distance to the center can be provided depending on availability.

Contact

Please send your application (CV with publication list) to kaitobias.block@nyumc.org.