Postdoctoral fellow or research associate in MRI research & development

The MR Imaging and Spectroscopy Physics group at Memorial Sloan Kettering Cancer Center (MSKCC), led by Ricardo Otazo, offers postdoctoral research fellow or research associate positions (according to previous experience) in the areas of rapid and quantitative MRI development.

We are looking for individuals with skills and interest in the following areas – this can include pulse sequence programming, image reconstruction and combinations:

- Development of real-time 3D MRI techniques using non-Cartesian k-space trajectories and deep learning for adaptive radiotherapy of moving organs on a MR-Linac
- Development of diffusion MRI techniques with reduced distortions using multi-shot acquisitions and model-based reconstruction
- Application of developed technology to clinical cancer studies in collaboration with clinicians

The selected candidates will work under the supervision of Ricardo Otazo and will have the opportunity to work closely with physicists, engineers and clinicians in the departments of Medical Physics, Radiology and Radiation Oncology.

Facilities: The MRI Physics team has access to research time at scanners in the Departments of Radiology (1.5T and 3T GE scanners) and Radiation Oncology (3T Philips scanners, 1.5T MR-Linac). The candidate will also have access to high performance computer servers for the development of deep learning applications. MSKCC is located on the Upper East Side of Manhattan and is recognized as a world leader in clinical cancer care and research.

Requirements: Candidates should have a PhD in physics, engineering or computer science. Background on MRI physics, pulse sequence programming in GE or Philips, compressed sensing, deep learning and/or image reconstruction is a plus. We also invite computer scientists interested in applications of deep learning and optimization algorithms.

To apply: Please submit a CV and brief research statement to Ricardo Otazo otazotoj@mskcc.org