Postdoctoral research fellow/associate in quantitative MRI/Deep Learning

The Cohen lab at Memorial Sloan Kettering Cancer Center (MSK) is offering a postdoctoral research fellow position in quantitative MRI and deep learning. The successful candidates will work under the supervision of Dr. Ouri Cohen.

The main goal of the position is to develop quantitative MRI methods broadly applied to cancer diagnosis and response assessment. This may include a combination of pulse sequence programming, optimization, and new deep learning approaches as well as application of developed technology to clinical cancer cases, in collaboration with MSK radiologists. More information can be obtained at http://cohen-lab.org.

The selected candidate will have the opportunity to work in a multidisciplinary group including physicists, engineers, computer scientists and clinicians in the departments of Medical Physics and Radiology at one of the world leader institutions in clinical cancer care and research.

Salary: $72,071 - $ 93,730

Salary will be commensurate with experience and the cost of living in New York City. Subsidized housing close to the MSK campus is available.
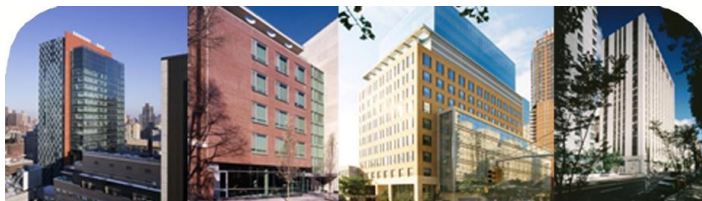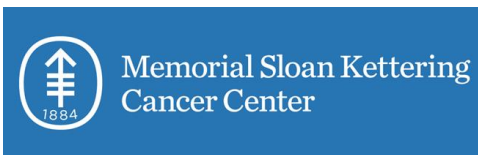
Physician compensation is based on multiple variables. This range represents annual salary only and does not include supplemental performance-based pay or any one-time payments that eligible candidates may be offered at the time of hire.

Facilities: The Cohen lab has substantial research time at clinical MRI scanners in the Department of Radiology, including state-of-the art 1.5T and 3T GE scanners and a 3T PET-MR GE scanner. The group also has access to high performance computer servers with multiple GPUs for image reconstruction and analysis tasks.

Requirements: Candidates should have a PhD in Physics, Engineering or Computer Science. Background in MRI physics, pulse sequence programming in GE EPIC, optimization methods and deep learning is a plus. Strong programming skills (Python, C/C++, Matlab etc.) and excellent verbal and written communication skills are required.

To apply: Please submit a CV and brief research statement to:

Ouri Cohen, PhD
coheno1@mskcc.org

Memorial Sloan Kettering Cancer Center (MSK) is one of the world's premier cancer centers, committed to exceptional patient care, leading-edge research, and superb educational programs. The blending of research with patient care is at the heart of everything we do. The institution is a comprehensive cancer center whose purposes are the treatment and control of cancer, the advancement of biomedical knowledge through laboratory and clinical research, and the training of scientists, physicians, and other health care workers.

The Department of Medical Physics consists of over eighty faculty physicists and computer scientists plus support staff working on various physical problems related to diagnosis and therapy for cancer, in partnership with radiologists, radiation oncologists, and other medical professionals. Medical Physicists in the diagnostic imaging physics track are actively engaged in several research programs that include molecular, MR and CT imaging as well as the new radionuclide therapies called theranostics. Examples include advanced MR acquisition techniques, motion correction, MR fingerprinting, artificial intelligence, and deep learning for image reconstruction in all imaging modalities. MSK is a World leader in imaging and theranostic research and supports one of the largest pre-clinical small animal core facilities in the United States that includes MR, PET, SPECT, CT, ultrasound imaging equipment that provides a conduit for the translation of experimental techniques into clinical trials. Additional highlights include grant-funded research in quantitative MRI, hypoxia imaging, imaging drug delivery, and radionuclide dosimetry. Research and development in radiotherapy physics include the use of artificial intelligence for improved imaging and target localization, real-time tumor tracking, tissue segmentation, treatment planning, and adaptive radiotherapy. Diagnostic, Nuclear and MRI Medical Physicists play a key role in supporting all imaging devices throughout the MSK enterprise, maintaining and harmonizing acquisition protocols, troubleshooting image artifacts, and maintaining equipment accreditation and regulatory compliance. We support well over 500 imaging instruments that include 40 CT scanners, 21 MR scanners, and 17 PET scanners and work with radiologists in the selection of new imaging equipment and the implementation of new imaging techniques.   Since diagnostic images are at the core of cancer diagnosis and response assessment, we have a strong philosophy to ensure that all imaging equipment throughout the network is operating at the optimum performance, per the overall mission of MSKCC to advance the state of cancer care.