

RESEARCH POSITION IN MRI GUIDED RADIOTHERAPY WITH OPTION FOR RESIDENCY TRAINING Department of Medical Physics

Department of Medical Physics Memorial Sloan Kettering Cancer Center

We have an opening for a postdoctoral research position in the Department of Medical Physics with a flexible start date. For interested and eligible candidates, this position may be offered as a hybrid residency program position, in which the two-year research project is followed by a two-year clinical residency in either therapeutic or diagnostic medical physics.

Research will be conducted under Eric Aliotta, Ph.D. to develop novel Diffusion MRI techniques for MRI-guided radiotherapy. The project will focus on improving acquisition and reconstruction to enable Diffusion MRI-guided treatment planning and robust treatment response monitoring in the body.

Responsibilities:

- Developing novel acquisition techniques and reconstruction algorithms for highfideltiy and motion robust Diffusion MRI for radiotherapy treatment planning and response assessment
- Developing Al-reconstruction algorithms to accelerate Diffusion MRI acquisitions
- Leading imaging studies, conducting data analysis, and presenting findings in publications and at scientific conferences
- Translating techniques to our active clinical programs in MRI-simulation and MRIguided radiotherapy on our 1.5 Tesla MR-LINAC

Qualifications:

- Doctorate in medical physics, mathematics, computer science, engineering, or similar fields
- Expertise in MRI acquisition and reconstruction
 - Accelerated reconstruction and/or non-cartesian MRI is a plus
- Programming expertise (e.g., Python, Matlab)
 - Deep learning / Al experience is a plus
- Track record of peer-reviewed publications
- Interest in and commitment to high quality patient care
- Additional requirements may be necessary for admission into clinical training (if desired)

Please use this <u>LINK</u> or the QR code to apply.

If you have any questions about this opportunity, please reach out to:

Eric Aliotta, PhD

Assistant Attending
Department of Medical Physics
aliottae@mskcc.org

Scan to apply!

