



Icahn School of Medicine at Mount Sinai  
*Translational and Molecular Imaging Institute*

**The Translational and Molecular Imaging Institute (TMII) at the Icahn School of Medicine at Mount Sinai in New York is seeking** a PET-MR Physicist for a Post-doctoral fellow or Research Scientist position to work

on our Siemens Biograph mMR (PET/MR) and mCT (PET/CT) systems. Research projects will involve PET-MR applications in oncology, cardiovascular and neurological diseases. A strong emphasis is on motion correction, partial volume correction and attenuation corrections. The applicant will work within a stimulating multidisciplinary team including MR Physicists and Scientists, Nuclear Medicine Physicians, Radiologists, Cardiologists, Chemists and pre-doctoral and post-doctoral graduate students.

**Job description:**

Implement, optimize, and validate MRI and PET image acquisition, reconstruction methods and post-processing methods

Develop new methods and algorithms for motion correction, attenuation correction, and reconstruction for a combined MR/PET imaging scanner and apply developed methods in clinical research studies.

Perform validation and verification analysis on the PET/MRI scanner using commercial software and other user-developed software tools

Co-supervise other PhD students

Write scientific publications and research grants

Assist in the acquisition of data for research grants

**We are looking for an applicant who:**

Holds a PhD in a field related to MR, PET, and/or PET-MRI

Experience with the Siemens mMR and/or mCT is preferred

Has experience with pulse-programming and/or other programming languages such as C/C++, Matlab

Has a track-record of published peer-reviewed journal articles in the field

Is able to work as an independent researcher in a multidisciplinary environment

Shows interest in clinical translation

Experience with clinical research studies is a plus

**Infrastructure at TMII:**

The Translational and Molecular Imaging Institute (TMII) is a 30,000 sq. ft. state-of-the-art imaging institute housed in the new Hess Center for Science and Medicine. The institute supports cutting-edge imaging instrumentation, including multiple research-dedicated human systems (7T, 3T, 1.5T, integrated PET-MR, PET/CT, MDCTs) and animal systems (9.4T, 7T, CT, SPECT/CT, US, and a variety of in vivo optical systems).

**About Icahn School of Medicine at Mount Sinai:**

Icahn School of Medicine at Mount Sinai is proud to stand as a leader in medical and scientific training, biomedical research and patient care. It attracts outstanding scientists, clinicians and students, all of whom share a deep commitment to expanding biomedical knowledge, providing expert clinical care and serving the community. Working in close partnership with The Mount Sinai Hospital, the Icahn School of Medicine serves one of the most diverse and complex patient populations in the world. Our passion for patient-focused research and education has inspired generations of physicians and researchers to learn, teach and practice breakthrough translational medicine on our campus.

We offer a competitive remunerative package commensurate with the scope of this position, along with the opportunity to be part of our world class organization. **For immediate consideration, please email your resume to: [zahi.fayad@mssm.edu](mailto:zahi.fayad@mssm.edu)**

*The Mount Sinai Medical Center is an equal opportunity/affirmative action employer. We recognize the power and importance of a diverse employee population and strongly encourage applicants with various experiences and backgrounds. Mount Sinai Medical Center- An EEO/AA Employer M/F/D/V.*