Postdoctoral Fellow
(Icahn School of Medicine at Mount Sinai, New York, NY)

The Translational and Molecular Imaging Institute (TMII) at The Icahn School of Medicine at Mount Sinai (http://tmii.mssm.edu) is seeking a Postdoctoral Fellow to work on a highly innovative NIH/NHLBI funded Program Project Grant P01HL131478, entitled “Stress and Atherosclerotic Plaque Macrophages – a Systems Biology Approach”, PI: Zahi A. Fayad. The goals of this 5-year project are (i) to provide mechanistic insights on how stress biologically affects macrophage dynamics, using mouse models of atherosclerosis; (ii) to develop translational imaging technologies that allow monitoring macrophage dynamics non-invasively in animal models and humans; and (iii) to employ the developed neuroimaging and cardiovascular technologies (MR/PET) to study how post-traumatic stress disorder (PTSD) leads to atherosclerosis in humans.

TMII is a 30,000 sq ft state-of-the-art Imaging Institute with over 12 faculty members and 100 members with cutting-edge instrumentation, including multiple research-dedicated systems including the Siemens: 7T, 3T, 1.5T, MR/PET, PET/CT, MDCT, among other instruments.

The position will be in Dr. Zahi Fayad group, Director of TMII, and will require interaction with a diverse team of multi-institutional investigators with complementary expertise in neuroimaging; cardiovascular imaging; vascular biology; cardiovascular immunology; cardiovascular disease; brain disease; and neuroscience.

The candidate should have a PhD in either Engineering, Computer Science, Physics, Mathematics or a related field, with focus on medical image analysis and acquisition (MRI and PET) related to neuroimaging. Cognitive scientists with strong statistical and image analysis skills are also welcome to apply. Specific tasks will include:

• Development of image analysis protocols and methods for brain and vascular MRI (anatomical imaging, diffusion tensor imaging (DTI), and functional MRI) and PET acquired on the Siemens Biograph mMR PET/MRI scanner (including programming of needed image analysis software)
• Data analysis, interpretation and presentation using already existing image analysis software packages or new using methods
• Writing of manuscripts and grant proposals
• Working together with research coordinators to screen potential research participants for protocol eligibility, recruit study subjects, obtain informed consent, and collect data and laboratory specimen as needed for all clinical studies
• Working together with research administrators on organizing study protocols, and ensure compliance
• Perform other related duties as required

Salary will be commensurate with the cost of living in New York. Subsidized housing close to the Mount Sinai campus is available for postdocs.

Please send CV and brief statement of research interests and experience to Dr. Zahi Fayad at zahi.fayad@mssm.edu