Postdoctoral Fellow

MR and PET Neuroimaging analysis

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

The Biomedical Engineering and Imaging Institute (BMEII) at The Icahn School of Medicine at Mount Sinai is seeking a **Postdoctoral Fellow** to perform **quantitative image analysis on structural, diffusion and functional (task and resting state) brain MRI as well as PET FDG brain imaging**. The project is focused on the study the effect of human chronic stress exposure and its interactions with the immune and the cardiovascular system (NHLBI P01HL131478 shorturl.at/QR267; doi: 10.1001/jamacardio.2021.2530; doi: 10.1161/CIRCIMAGING.120.010931; doi: 10.1016/S0140-6736(16)31714-7). This is an excellent opportunity to conduct innovative imaging research as a member of a team of technical and clinical experts with access to state-of-the-art imaging equipment housed in the Hess Center for Science and Medicine.

The individual will be mentored by Dr. Zahi Fayad, Director of BMEII, his team and his collaborators. The individual will have the opportunity to interact with and be mentored by a diverse team of well-established investigators with complementary expertise in neuroimaging, cardiovascular imaging, cardiology, psychiatry, psychology, immunology, engineering, imaging science, and neuroscience.

BMEII is a 30,000 sq ft state-of-the-art Imaging Institute with over 15 faculty members and 50 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 candidate should have a PhD in one of the following: Computer Science, Engineering, Neuroscience, Physics, Mathematics, or a related field, with focus on medical image analysis and acquisition of MR and PET neuroimaging. Specific tasks will include:

- Development of image analysis protocols and methods for brain MRI (anatomical imaging, diffusion MRI, and functional MRI). Analysis of PET images acquired on the Siemens Biograph mMR PET/MRI may also be involved.
- Data analysis, interpretation and presentation using already existing image analysis software packages or new using methods
- Extraction of quantitative imaging biomarkers for disease
- Writing of manuscripts, conference presentations, contribution to grant applications, and mentorship of students.
- Opportunities for teaching also exist

Mount Sinai is located on the Upper East Side in New York City. Salary will be commensurate with the cost of living in the area. Subsidized housing close to the Mount Sinai campus is available for postdocs.

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