Postdoctoral Position

IMAGING AND GENOMIC BIOMARKERS IN OSTEOARTHRITIS

Applicants are invited to apply for a postdoctoral position at the Center for Biomedical Imaging (CBI) at New York University (NYU) Grossman School of Medicine, New York, US. The successful candidate will join a multidisciplinary team of researchers and physicians on two 5-year NIH-funded projects to develop and validate imaging, biomechanical, and genomic biomarkers in post-traumatic osteoarthritis (PTOA). The postdoctoral fellow will have the opportunity to work on 1) a clinical project using diffusion tensor imaging (DTI) at 3 T for assessing and predicting the evolution of joint damage leading to PTOA, in conjunction with synovial fluid biomarkers; and 2) a preclinical project using a multimodal molecular imaging approach to characterize early events after joint injury. The applicant will work on protocol development, imaging acquisition, processing, and analysis, as well as biological modeling for data interpretation. Salary is commensurate with experience, and the position includes a comprehensive health benefits package. Subsidized housing within walking distance to the CBI will be offered, depending on availability.

The position is open to candidates with a PhD degree in physics, biomedical engineering, or electrical engineering. Preference will be given to those with a strong background in MRI physics and data processing, as well as in musculoskeletal (MSK) imaging. A proven track record of publication in internationally recognized peer-reviewed journals is mandatory. Motivated individuals will have the opportunity to engage in independent research within the context of the study and to collaborate with other top-tier clinicians and imaging scientists at NYU Langone Health.

CBI is located in midtown Manhattan, New York City. It hosts the Center for Advanced Imaging Innovation and Research (CAI²R), and is embedded within the NYU Department of Radiology. This arrangement brings together a vast amount of human and technological resources in basic MR science (physics, engineering, mathematics) and clinical applications (radiology, medicine, neurology, oncology, etc.). Four Siemens MRI scanners are available on-site (two 3 T scanners, one 7 T scanner, and one 3 T PET/MR scanner), as well as a cyclotron and a wet lab. The center has over 30 world-class MRI full-time research faculty members and is one of the fastest growing imaging hubs for preclinical and clinical translational research in the US with more than 8 cutting-edge small animal imaging modalities spanning over 20 scanners for translational cross-validation and fully equipped RF coil laboratory. The project is a close collaboration between the Departments of Radiology and Orthopedic Surgery and will leverage in the use of an existing biobank of synovial fluid samples run by the Department of Orthopedic Surgery since 2017.

To apply, send your CV, statement of research interests, and contact information of three references in PDF format to Amparo Ruiz, PhD, at MariaAmparo.RuizGarzon@nyulangone.org with the subject line “Post-Doc DTI.”