Cardiovascular MR Postdoctoral Position in Mallinckrodt Institute of Radiology

The Biomedical Magnetic Resonance Center of the Mallinckrodt Institute of Radiology at the Washington University School of Medicine invites applications for a postdoctoral research associate in cardiovascular magnetic resonance (MR) imaging. The expected start date will be in Fall or early winter of 2023.

The appointment will be made for a period of 2-3 years. The candidate will be expected to develop, implement, and optimize novel MR pulse sequences for cardiovascular imaging research, as well as process and analyze MRI data, with focus on deep learning assisted approaches. The experiments will be performed in both animal (large and small animals) models and human/patient subjects. The area of focus will be cardiac perfusion and oxygenation imaging with MRI and PET. The postdoctoral trainee will also involve in other active research areas: atherosclerotic plaque imaging using PET/MRI, aortic and flow imaging, myocardial metabolic and functional imaging, and/or peripheral perfusion and functional imaging in diabetes and peripheral arterial disease. The trainee will be mentored for future independent publication and grant writing.

The MR facilities available to the successful candidate are Siemens human systems dedicated to basic science and clinical research (3T Prisma x 5, 3T Vida x 1, and 3T PET/MRI x 1). The small animal imaging facility includes PET-CT x 2, PET/MRI (3T/7T) x 1, Agilent/Varian 4.7 T x 1 and 11.74 T x 1, and Bruker 9.4 T x 1. Additional research facilities include electronic and machine-shops, surgical suites, animal conditioning and monitoring equipment, and extensive computational infrastructure. Expert surgery, technical and medical personnel are also available to assist in the performance of the cardiovascular projects in both animals and humans. The Washington University School of Medicine provides rich environment of seminars, training courses, and honorary lectures for postdoctoral trainees to become a leader and expert in this field.

Candidates should be recently graduated and have a doctoral degree – PhD or MD/PhD (not exceed five years from graduation date), in physics or engineering (electric engineering, biomedical engineering, computer science, biophysics, etc) with a background in the in vivo MR imaging. Experience in image processing (languages in C/C++, Matlab, Python, etc), MR pulse sequence development, and machine learning will be a plus. Preference will be given to applicants who are familiar with Siemens MRI system and/or pulse sequence environment (IDEA).

The salary is commensurate with education and experience. The full-time benefits is available for this position (http://hr.wustl.edu).

We are a diverse group and wholly encourage diversity to reflect the rich community in which we live and serve and we are committed to promoting an environment that is inclusive and welcoming to all individuals. All qualified applicants will receive consideration for employment without regard to race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin, protected veteran status, disability or genetic information.

Applicants should send a curriculum vita and names and addresses of three references to:

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