Multiple Post-Doctoral Positions in MRI Engineering and Pulse Sequence Development

Multiple newly funded post-doctoral positions are available at the Department of Radiology, Feinberg School of Medicine of Northwestern University, located at the heart of Chicago downtown. We are a dynamic team of physicists, engineers, and clinicians conducting cutting-edge imaging research in a 9,000 square foot center that houses state-of-the-art research-dedicated Prisma 3.0 Tesla, two Tim Trio 3.0 Tesla and 1.5 Tesla Siemens Medical MR scanners and a 7.0 Tesla Bruker scanner. There is also a Siemens C-ARM angiographic system, a Nexstim Transcranial Magnetic Stimulation (TMS) machine and an MR simulator system that can be used to train subjects to the magnet environment.

Successful applicants will work on multidisciplinary NIH-funded projects with a close collaboration with Siemens, several medical device manufacturers, and the US Food and Drug Administration (FDA).

We invite all motivated enthusiastic applicants with a related background to apply.

Position 1: The candidate will join a multidisciplinary team of engineers to help developing novel MRI methodologies for imaging of adult and pediatric patients with conductive implants.

Qualifications: The ideal candidate holds a PhD in Electrical Engineering, Biomedical Engineering, Physics, or a related field. Background in electromagnetic modeling and simulation, RF engineering, or microwave devices and antenna theory is a plus, however, we strongly encourage all candidates with proven track record of capacity to drive first author publications in any research area related to MRI to apply.

Position 2: Candidate will develop and test novel pulse sequences for thermometry application around metal objects.

Qualifications: The ideal candidate holds a PhD in Physics or Engineering. Firsthand experience with MRI pulse sequence development is highly desired. Background in MRI thermometry or quantitative MRI is a plus.

In all cases, the successful candidates must be capable of integrating with highly collaborative research teams and have a demonstrated track record of success in independent scientific research. Strong applicants will exhibit significant engineering skills, motivation, and an ability to originate, carry out, and publish original research in collaboration with their mentor. Strong written and verbal English language skills are required.

Priority is given to applications received by December 15, 2023.

Interested candidates should send their CV to Dr. Laleh Golestani Rad at laleh.rad1@northwestern.edu

For related projects visit https://sites.northwestern.edu/lalehgradlab/