Multiple NIH-Funded Post-Doctoral Positions in Novel Acquisition and MR Engineering

Multiple NIH-funded post-doctoral positions are available at the Department of Radiology, Feinberg School of Medicine of Northwestern University, located in the heart of downtown Chicago.

We are a dynamic team of physicists, engineers, and clinicians conducting cutting-edge imaging research in a 9,000-square-foot center that houses four state-of-the-art research-dedicated Prisma 3.0 Tesla and 1.5 Tesla Siemens Medical MR scanners, as well as a 7.0 Tesla Bruker scanner. Additionally, we have 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 for the magnet environment.

Successful applicants will work on multidisciplinary NIH-funded projects with close collaboration with Siemens, several medical device manufacturers, and the US Food and Drug Administration (FDA). We invite all motivated and enthusiastic applicants with a related background to apply.

**Position 1:** The candidate will work with a multidisciplinary team of pediatric cardiac surgeons and electrophysiologists, MR engineers, and FDA regulatory experts to develop novel MRI methodologies for imaging children with conductive implants.

**Qualifications:** The ideal candidate holds a PhD in Electrical Engineering, Biomedical Engineering, Physics, or a related field. A background in electromagnetic modeling and simulation software (e.g., ANSYS, Sim4Life, etc.), RF engineering, or microwave devices and antenna theory is a significant plus. However, we strongly encourage all candidates with proven track record of the capacity to drive first author publications in any research area related to MRI to apply.

**Position 2:** The candidate will work with a renowned team of MRI safety and machine learning experts, as well as FDA regulatory scientists, to develop, test, and commercialize a novel medical decision-making software to for real-time risk assessment of RF heating in patients with medical implants.

**Qualifications:** The ideal candidate holds a PhD in Physics or Engineering with firsthand experience with MRI image acquisition and image processing. Experience in MR thermometry, quantitative MRI, or pulse sequence development is a plus.

**Priority is given to applications received by December 31, 2023; however, the positions remain open until filled.**

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/