Job Opportunity: Postdoctoral Fellow or (Senior) Research Scientist

Location: University of Kansas Medical Center, Kansas City, KS, USA

Department of Radiology at the University of Kansas Medical Center is seeking an individual dedicated in the area of MR signal processing and technology for a position of Postdoctoral Fellow, Research Scientist or Senior Research Scientist, depending on their qualification and career goals. We are a multidisciplinary team that focuses on the development of cutting-edge technology in the areas of magnetic resonance imaging (MRI) and magnetic resonance spectroscopy (MRS). Ideal candidate should have a strong background in programming, signal processing and machine learning.

The specific areas of research for this position include developing advanced MR signal processing and quantification strategies for non-Fourier based MRS localization and removal of unwanted signals for metabolic imaging of aging, neurodegeneration and other clinical applications. Ongoing projects include investigating the effect of interventions (e.g., diet and exercise) on brain metabolism to enhance brain health of older adults and people with various neurological disorders.

The University of Kansas has an MR imaging center for research, the Hoglund Brain Imaging Center (HBIC). The HBIC is equipped with a research dedicated 3 T Siemens Skyra MR scanner, a cortical magnetoencephalography biomagnetometer, and a fetal magnetoencephalography (MEG) biomagnetometer, plus High-Density electroencephalography (EEG) capability for clinical studies and 9.4T Agilent/Bruker MR scanner for preclinical studies. HBIC provides cutting-edge research imaging capabilities for studies to understand disease, injury, and normal function in humans and animals within the university and the region.

As the region’s premier academic radiology department, the department is committed to advancing health care through innovation in clinical care, education and research. The department consists of 47 clinical and research faculty (MD and PhD), 24 residents, 4 fellows. Enhancing our position as a recognized leader in research is a major priority and the department has invested in personnel, space and infrastructure to foster an environment that promotes innovation and discovery.

Responsibilities:

- Developing advanced MR data processing techniques
- Analysis and interpretation of MR data
- Writing papers and assisting grant applications

Requirements:

- Doctoral degree in Electrical Engineering, Computer Science/engineering, MR Physics, or equivalent fields
- Proficiency in scientific programming using Matlab, Python and C++

Preferred Qualifications:

- Experience in MR data processing packages including FSL, SPM and FreeSurfer
- Experience in machine learning
- Experience in MRS data acquisition and processing
- Experience in scientific writing and publications
- Excellent communication (verbal and written) and interpersonal skills

The appointment will be for a 2 or 3 year period with potential renewals. Please send a letter of application, CV and three names of references to:

Phil Lee, Ph.D.
Professor, Department of Radiology
University of Kansas Medical Center
Kansas City, KS 66160
Email: plee2@kumc.edu
Phone: 913-588-0454