



CENTER FOR MAGNETIC RESONANCE RESEARCH

Postdoctoral Fellow Positions

Position Description: As the Center for Magnetic Resonance Research (CMRR) of University of Illinois at Chicago (UIC), we are seeking two highly motivated Postdoctoral Fellows to contribute to multiple research projects that are funded by the National Institutes of Health with the following research focus:

- First Position: Development of novel pulse sequences and advanced image reconstruction algorithms for imaging cancer or neurological disorders.
- Second Position: Breast cancer imaging using advanced diffusion MR techniques and exploring their applications in characterizing breast tissue properties.

Minimum Requirements:

- PhD in physics, medical physics, biophysics, electrical engineering, biomedical engineering, or a related field within the last 3-4 years
- Strong foundation in MR physics and/or applications
- Proven record of high-quality publications in major journals
- Demonstrated analytical, verbal, and scientific writing skills
- Proficiency in computer programming languages such as MATLAB, Python, and C++.

Highly Desired Qualifications:

- Experience in developing methods for MR image acquisition and reconstruction or MR image analysis
- Experience with pulse sequence development on human MRI scanners
- Background in diffusion imaging, fast imaging, or cancer imaging

About: The CMRR serves as a hub for leading and supporting MR research at the UIC as well as the Greater Chicago area. The Center is equipped with one research-dedicated and another identical 3T MRI scanner shared with the clinical service. Both scanners are equipped with advanced features, including fMRI, diffusion, perfusion, MRS, heteronuclear imaging, MRE, and a full collection of RF coils and other accessories. Excitingly, plans are underway for the installation of an additional state-of-the-art 3T GE SIGNA Premier MRI scanner dedicated solely to research, further enhancing our capabilities. Researchers at CMRR benefit from access to a total of five clinical MRI scanners operating at 1.5T or 3T, along with a high-field animal scanner at 9.4T. The UIC has a strong emphasis on MRI research with 25 faculty members working on a broad range of projects spanning from new technologies to clinical applications. The CMRR offers many research opportunities, particularly in diffusion imaging, cancer imaging, neuroimaging, metabolic imaging, and pulse sequence development.

Compensation: The UIC offers a competitive salary with an attractive fringe benefits package. The CMRR is dedicated to supporting postdoctoral fellows in their career development, whether in academia, industry, or government, as shown in our track record.

To Apply: Please send a full CV to Dr. X. Joe Zhou (xjzhou@uic.edu) or Dr. Muge Karaman (mkaraman@uic.edu).