UT Southwestern
Medical Center

Description

We have openings for postdocs and graduate students in the Advanced Imaging Research Center (AIRC) at the University of Texas Southwestern Medical Center (UTSW) in Dallas, Texas, USA. The potential candidates will have the opportunity to develop advanced MRI techniques and new computation methods in a multidisciplinary team of excellent biomedical and clinical experts. Research topics include novel MRI acquisition and reconstruction, ultrahigh-field MRI (≥7 T), MRI contrast for myelin and iron, cortical laminar structural and functional MRI, machine learning-based MRI reconstruction, electrical properties tomography, and application in diseases such as multiple sclerosis, Alzheimer's disease and brain tumor.

Qualification

A successful postdoc candidate is required to have a PhD degree in Biomedical Engineering, Physics, Applied Mathematics, Electrical Engineering or other related fields. Experience in Philips MRI sequence programming is not required but highly desired. Familiarity with computer programming languages such as MATLAB, Python or C/C++ is required as well. The candidate should be self-motivated, enthusiastic and able to work independently in a collaborative team.

Graduate students will be recruited through the university graduate program at UTSW. But interested students are welcome to contact the PI directly.

Application

Application should be sent to Dr. Jiaen Liu (jiaen.liu@utsouthwestern.edu), including a cover letter describing the candidate's research interest and CV. The positions are open until filled.

Research Environment

AIRC is a world renowned imaging research center with cutting edge facilities and collaboration in basic and clinical research throughout the UTSW campus. AIRC is equipped with multiple research-dedicated MR scanners, including one human 7 T (Philips), three human 3 T (Philips, Siemens and GE) and three small animal MRI (4.7T, 7 T, 9.4T), an RF engineering lab, etc. UTSW is one of the premier academic medical centers in the U.S. among whose more than 2000 faculties are six Nobel Laureates.

About the PI

Dr. Jiaen Liu received his Ph.D. degree in Biomedical Engineering from the University of Minnesota and postdoc training in the Advanced MRI section at NIH. He graduated from Tsinghua University before coming to the U.S. He is currently an Assistant Professor in AIRC and Radiology. He has been honored with the ISMRM Junior Fellow Award, NIH Fellow Award for Research Excellence and IEEE EMBS Student Paper Competition Award. Dr. Liu is dedicated to providing an encouraging and stimulating environment to all lab members regardless of their personal background.