

## Description

We are seeking a full-time postdoctoral candidate in the Advanced Imaging Research Center (AIRC) at the University of Texas Southwestern Medical Center (UTSW) in Dallas, Texas, USA. The postdoctoral fellow will have the opportunity to develop advanced MRI techniques and new computation methods in a multidisciplinary team of excellent biomedical and clinical experts.



Potential topics include novel MRI acquisition and reconstruction, machine learning, ultrahigh-field MRI ( $\geq 7$  T), MRI contrast for myelin and iron, cortical laminar structural and functional MRI and electrical properties tomography, and application in diseases such as multiple sclerosis, Alzheimer's disease and brain tumor.

## Qualification

A successful candidate is required to have a PhD degree in Biomedical Engineering, Physics, Applied Mathematics, Electrical Engineering or other related fields. Familiarity with computer programming languages such as MATLAB, Python or C/C++ is required as well. It is desirable to have experience in MRI sequence programming (Philips or Siemens), acquisition, reconstruction and analysis using MRI data. The candidate should be self-motivated, enthusiastic and able to work independently in a collaborative team.

## Application

Application should be sent to Dr. Jiaen Liu via email [jiaen.liu@utsouthwestern.edu](mailto:jiaen.liu@utsouthwestern.edu), including a cover letter describing the candidate's research interest, CV, three reference letters and two representative journal articles. The search is open immediately until the position is filled.

## Research Environment

UTSW, one of the premier academic medical centers in the U.S., integrates pioneering biomedical research with exceptional clinical care and education. The institution's faculty includes many distinguished members, including six who have been awarded Nobel Prizes since 1985. The faculty of more than 2,700 is responsible for groundbreaking medical advances and is committed to translating science-driven research quickly to new clinical treatments.

AIRC hosts a wide range of basic and translational biomedical imaging research on campus. The Center is world renowned in metabolism imaging and is undergoing rapid growth and expansion in neuroimaging research. AIRC is equipped with one human 7 T MR scanner (Philips), three human research-only 3T MR scanners (Philips Ingenia, Siemens Prisma, GE 750w), three small animal MR scanners (4.7T, 7T, 9.4T), an RF engineering lab, hyperpolarization setups and NMR spectrometers.

*UT Southwestern Medical Center is committed to an educational and working environment that provides equal opportunity to all members of the University community. In accordance with federal and state law, the University prohibits unlawful discrimination, including harassment, on the basis of: race; color; religion; national origin; sex; including sexual harassment; age; disability; genetic information; citizenship status; and protected veteran status. In addition, it is UT Southwestern policy to prohibit discrimination on the basis of sexual orientation, gender identity, or gender expression.*

*Deirdre L. Burk*