Postdoctoral Fellow

The Department of Radiology and Imaging Sciences at Indiana University School of Medicine (IUSM) is seeking a highly motivated individual to join as a Postdoctoral Fellow.

Eligibility:

- ***Educational Qualification:*** MD or PhD in Medical Physics, Bioengineering, Biomedical Engineering, Computer Science, Data Sciences, or related disciplines.
- ***Experience:*** At least four years of training (including graduate school) with a solid background in the principles of MRI data acquisition and neuroimage processing and a strong interest in diffusion MRI research and development.
- ***Software Skills***: Strong computational background with programming experience (e.g., MATLAB, Python, C/C++); experience with statistical software R or SPSS; image processing and visualization with software tools (e.g., FSL, SPM, FreeSurfer, ANTs, pMOD, etc.).
- ***Selection criteria:*** We are looking for self-motivated and open-minded candidates who are comfortable working in a collaborative environment. The successful candidate will participate in collaborative clinical and preclinical research programs and will work together with neuroradiologists, neurologists, psychiatrists, psychologists, neuroscientists, computational neuroscientists, statisticians, physicists, and research scientists. A candidate with good writing and communication skills is desirable.
- ***Preferred but not required:*** Knowledge of MRI physics, MRI sequence design and/or image reconstruction, and application of machine learning and deep learning in MR image processing.

About us:

Our laboratory (https://medicine.iu.edu/faculty-labs/wu) works closely with the Research Imaging Core (RIC, https://medicine.iu.edu/radiology/research/imaging-core), which houses high-end research-dedicated scanners. These scanners include a Siemens 3T Prisma scanner with 32CH and 64CH receiver head coils, Siemens 0.55T FreeMax scanner, Siemens Vision PET-CT systems, and a Bruker 9.4T PET-MRI preclinical scanner. The Prisma scanner is scheduled to be upgraded to Cima.X Fit with commercialized connectome gradients of 200mT/m in 2026. Our research group focuses on developing novel neuroimaging and analytical techniques in advanced diffusion-weighted imaging and other quantitative brain imaging (e.g., volumetric MRI, resting-state and task functional MRI, QSM, perfusion MRI, and PET). Our clinical focus is (but not limited to) in Alzheimer's disease, mild traumatic brain injury, sport-related concussion, and other neurodegenerative diseases. We also work closely with the Advanced Imaging Research program (https://medicine.iu.edu/research-centers/neurosciences/research/imaging), the Center for Neuroimaging (https://medicine.iu.edu/radiology/research/neuroimaging), and the Indiana Alzheimer's Disease Research Center (https://medicine.iu.edu/research-centers/alzheimers). Other applications include substance abuse and addiction research, mood disorder research, and pediatric/neonate studies. Candidates also have opportunities to be involved in neurophysiological and psychophysical data. In 2024, the IUSM Radiology department ranks 15th in NIH funding nationally.

How to apply: Please send (1) a cover letter, (2) a CV, and (3) contact information of *three* references to Mrs. Kirsten Adams (kbowden@iu.edu). The position and review process will be open until filled.

Indiana University is an Affirmative Action and Equal Employment Opportunity (AA/EEO) employer, M/F/D.