Scientist

The Department of Radiology and Imaging Sciences at Indiana University School of Medicine (IUSM) is seeking a highly motivated individual to join the Advanced Imaging Research Program (the AIR program) as a Scientist in medical imaging. The area of focus for this position is on developing advanced MRI and PET techniques, applications, and data analysis to support clinical and preclinical research.

Eligibility:

- **Educational Qualification:** Ph.D. or MD in Medical Physics, Bioengineering, Biomedical Engineering, Computer Science, or related disciplines.
- **Experience:** At least two years of post-doctoral training with a solid background in the principles of MRI and PET, a strong interest in diffusion MRI research and development, and good communication skills. A candidate should already have some experience on a whole-body MRI scanner and/or a preclinical Bruker MRI scanner.
- **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. The candidate’s interest in MRI neuroimaging, PET molecular imaging, neuroimaging data processing, and image processing skills with software tools are desirable.

About us:
The AIR program works closely with the In-Vivo 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 Vision PET-CT systems, and 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 2024. Our research group focuses on developing novel imaging 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. Other applications include substance abuse and addiction research, mood disorder research, and pediatric/neonate studies. Candidates also have opportunities to be involved in EEG, neurophysiological and psychophysical recording facilities. In 2023, IUSM ranks 14th among public medical schools and 27th in NIH funding nationally.
How to apply:
Please send a cover letter, CV, and contact information of three references and apply via here: [https://indiana.peopleadmin.com/postings/19991](https://indiana.peopleadmin.com/postings/19991) by **November 15, 2023**. If you have any questions, please feel free to contact Carla Ewing (carewing@iupui.edu), Mario Dzemidzic (mdzemidz@iupui.edu), or Yu-Chien Wu (yucwu@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.*