Postdoctoral Research Associate in high-resolution fMRI (2 positions)

Beckman Institute for Advanced Science & Technology
University of Illinois Urbana Champaign

We are looking to recruit two full-time Postdoctoral Research Associates with interest in cortical layer specific fMRI at ultra-high field in humans and animals. Our research is focused on the development of laminar fMRI using a variety of methods (e.g., CBV, CBF, electrophysiology) and its application in sensory- and cognitive neuroscience. Projects can focus on humans, animals, or both. The positions provide the opportunity for interdisciplinary work combining MR-physics with applications in cognitive and clinical neuroscience.

The positions will be based at the Beckman Institute, which houses two Siemens Prisma 3T scanners and a 9.4T Bruker animal scanner. A Siemens Magnetom Terra 7T is operated in collaboration with the Carle Illinois Advanced Imaging Center (CIAIC) and located at the hospital. For preclinical work in animals, we aim to combine fMRI with multichannel electrophysiological recording, optogenetics, or other imaging techniques (e.g., functional ultrasound, two-photon microscopy, Ca$^{2+}$ imaging, spatial omics) to study neural circuitry and neurovascular coupling. The Beckman Institute provides a highly collaborative environment and UHF MRI, biomedical imaging and neural engineering are designated as growth areas at the university, as evidenced by the recent acquisition of the 9.4T and 7T scanners and the establishment of the new medical school with a focus on biomedical engineering.

Applicants should have a PhD Degree (or expect soon to obtain) in Neuroscience, Biomedical Engineering, Physics or a related field. Ideally, candidates will have research experience with fMRI, sequence optimization and/or fMRI data analysis. Funding is available for two years, and three years if awarded a Beckman fellowship. The positions are open until filled, but to be eligible for the Beckman fellowship ([https://beckman.illinois.edu/research/fellowships-and-awards/postdoctoral-fellows-program](https://beckman.illinois.edu/research/fellowships-and-awards/postdoctoral-fellows-program)) your application needs to be received by Nov 20, 2023. To apply, please send a cover letter, CV, and the names and contact information of three references to Jozien Goense (goense@illinois.edu). For fellowship application, please contact JG to discuss a project.

The University of Illinois System is an equal opportunity employer, including but not limited to disability and/or veteran status, and complies with all applicable state and federal employment mandates. Please visit Required Employment Notices and Posters to view our non-discrimination statement and find additional information about required background checks, sexual harassment/misconduct disclosures, COVID-19 vaccination requirement, and employment eligibility review through E-Verify.

Applicants with disabilities are encouraged to apply and may request a reasonable accommodation under the Americans with Disabilities Act (2008) to complete the application and/or interview process. Requests may be submitted through the reasonable accommodations portal, or by contacting the Accessibility & Accommodations Division of the Office for Access and Equity at 217-333-0885, or by emailing accessibility@illinois.edu.