

**Postdoctoral research associate investigating *in vivo* imaging of human brain
DNA methylation**

The Carl R. Woese Institute for Genomic Biology (IGB) at the University of Illinois Urbana-Champaign seeks a postdoctoral research associate to join an exciting interdisciplinary collaborative project on developing novel ^{13}C MR spectroscopic imaging (MRSI) methods at ultrahigh fields for *in vivo* imaging of human brain DNA methylation. The candidate will have the opportunity to work and interact closely with a group of scientists with diverse expertise, including Professors [Fan Lam](#), [Gene Robinson](#), [Zhi-Pei Liang](#), [King Li](#), [Ryan Dilger](#) and [Scott Silverman](#), and perform cutting-edge research at the intersection of genomic biology, neuroscience and biomedical imaging.

The successful candidate will be working on developing advanced multinuclear spectroscopy and spectroscopic imaging acquisitions as well as machine learning driven data processing and image reconstruction methods for multinuclear spectroscopic data, with a focus on ^{13}C MRS/I of the brain. The candidate will be primarily working on a state-of-the-art 7 T human MRI system (Siemens Terra) equipped with dual-tuned multinuclear coils. They will also have the opportunity to explore a broader field of multinuclear MRSI of the brain depending on their interests.

Applicants should have or should be completing their PhD. The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit <http://go.illinois.edu/EEO>.

Required qualifications:

- A Ph.D. in electrical/biomedical engineering, physics, chemistry or relevant disciplines
- Proficiency in MR physics
- Proficiency in MRS and/or MRSI data processing
- Experience in pulse sequence programming

Preferred qualifications:

- Experience in x-nuclei acquisition (e.g., ^{13}C)
- Experience in sequence programming in IDEA
- Experience in working with ultrahigh-field MRI scanners (7 T or above)

The position is a 12-month appointment, with annual renewal. Funding for this position is available for 2 years. Extension is possible depending on funding availability. Applications will be evaluated on a rolling basis until the position is filled. For more information and to apply, please contact or submit a cover letter, CV, and names and contact information for three references to: Prof. Fan Lam (fanlam1@illinois.edu).