

POSTDOCTORAL RESEARCH FELLOW
— **ADVANCED FUNCTIONAL AND PHYSIOLOGICAL MRI IN THE BRAIN**

F.M. Kirby Research Center for Brain Imaging, Kennedy Krieger Institute
Department of Radiology, Johns Hopkins School of Medicine

Multiple post-doctoral research fellowship in advanced functional and physiological MRI acquisition, analysis, and application are available at the F.M. Kirby Research Center for Brain Imaging, Johns Hopkins School of Medicine. The successful candidate will be working to develop cutting-edge acquisition and analysis techniques for imaging of brain function and physiology. The candidate will also have the opportunities to work on multiple clinical projects using these advanced MRI techniques, which include studies on neurodegenerative diseases such as Huntington's disease (HD), Alzheimer's disease (AD), Parkinson's disease (PD) and mental disorders such as schizophrenia.

Affiliated with Johns Hopkins School of Medicine, the Kirby Center is a nationally recognized (NIH P41 funded) research resource for MR technology development. The Center features research dedicated 3.0 T & 7.0 T human MRI scanners, 11.7 T preclinical animal MRI facility, excellent auxiliary equipment, and computational resources.

Lab website: <https://pages.jh.edu/jhua1/HuaLab.htm>

Center website: <https://www.kennedykrieger.org/physiologic-metabolic-anatomic-biomarkers>

Key qualifications:

The successful candidate will be a highly motivated researcher with a desire to begin an independent career related to or involving advanced functional and physiological MRI.

- A Ph.D. degree in MR Physics, Biomedical Engineering, Neuroscience, or a related field; however, strong candidates with other scientific backgrounds will also be considered.
- A strong background in MR physics and/or analysis, and a high level of creativity.
- Strong programming skills for data analysis, especially Matlab and/or Python.
- Strong written and oral English communication skills.

Other desired skills:

- First-hand experience with conducting MRI experiments.
- Experience with neuroimaging software (AFNI, FSL, SPM, or other relevant programs).
- Skills in pulse sequence programming and training in signal processing.
- Knowledge of neuroscience, neurophysiology and neuropathology in brain diseases.

Application:

Interested applicants should send a cover letter describing research experience, interests, and future research and career goals, as well as an up-to-date curriculum vitae and contact information for three references, to

Jun Hua (jhua1@jhu.edu)

Applications will be considered on a rolling basis until the positions are filled.

All positions are full-time with benefits. A two-year commitment is required and fully funded extension will be considered upon completion. The Johns Hopkins University and Kennedy Krieger Institute are an equal opportunity employer, and all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability status, protected veteran status, gender identity, sexual orientation, pregnancy and pregnancy-related conditions or any other characteristic protected by law.