Project Title: Investigating functional and neurovascular abnormalities in neurodegenerative diseases using magnetic resonance imaging (MRI)

Project Description: We are working on the development and application of novel MRI technologies in brain diseases. In this particular project we are seeking to optimize and apply our recently developed MRI methodology to improve the early diagnosis of neurodegenerative diseases such as Huntington’s Disease (HD), Alzheimer’s Disease (AD) and schizophrenia. We will measure brain activities with functional MRI (fMRI), and neurovascular changes with physiological MRI techniques in patients and healthy controls.

The ideal candidate is a highly motivated student with data analysis skills and a sincere interest in medical imaging. If interested, you could become a long-term important member of the team while developing expertise in neuroimaging. Specific goals are discussed at the beginning of and throughout the project.

Responsibilities include:
- Analyze data using specialized software packages and programs developed in my laboratory.
- Statistical analysis.
- Aid in clinical diagnosis, evaluation and management of patients (optional).
- Contribute to writing research papers (optional).

Key qualifications:
- Experience in programming languages, especially Matlab.
- Experience with Microsoft Office – Word, Excel and Power Point.
- Knowledge of basic brain science, image analysis and statistics is desirable.
- Good communication skills.
- Highly motivated and genuine interest in medical imaging.

Contact: Jun Hua (jhua@mri.jhu.edu) with (optional) your CV, why you are interested, and a brief description of your relevant experience.