The Department of Biostatistics at the Johns Hopkins Bloomberg School of Public Health has an opening for a post-doctoral fellow in quantitative neuroimaging. The fellow will work as part of a multidisciplinary team led by Martin Lindquist (Johns Hopkins University) and Tor Wager (Dartmouth College). The fellow should have a background in high performance computing, neuroinformatics, and processing/analysis of neuroimaging data (i.e., anatomical, functional, and diffusion MRI). The fellow will work on two NIH funded projects. The first is related to inter-subject functional alignment (e.g., 'hyperalignment') of fMRI data. The second is the Acute to Chronic Pain Signatures (A2CPS) project, a multi-center, large-scale study of the transition from acute to chronic pain. A2CPS will collect longitudinal data from 3,600 surgical patients, including pre- and post-surgery neuroimaging and multi-omics data. The goal is to develop prognostic biomarkers that can forecast whether a person will transition to chronic pain or be resilient. The fellowship involves two broad activities: (1) the creation of robust, reproducible, and scalable pipelines for the analysis of structural and functional imaging data; and (2) leading novel analyses of study data, potentially combined with other large-scale datasets including the UK Biobank, and publication of papers.

The minimum qualifications for a successful candidate include:

- Completed PhD in biostatistics, engineering, quantitative neuroimaging, or related field
- Expertise with high performance computing, virtualization and containers, and programming
- Expertise in neuroimaging software (e.g., FSL, AFNI, FreeSurfer)
- Expertise in shell scripting, containers (e.g., Docker/Singularity), and NiPype
- Programming experience in Matlab or Python

If interested, please contact Martin Lindquist (mlindqui@jhsph.edu).