Post-Doctoral position in Neurophysiology and Psychiatry
Psychosis Neurobiology Laboratory and Psychotic Disorders Division, McLean Hospital
Harvard Medical School, Belmont, MA, USA
https://www.mcleanhospital.org/research-programs/psychosis-neurobiology-laboratory

Psychosis Neurobiology Laboratory, Psychotic Disorders Division (McLean Hospital and Harvard Medical School) is seeking a research scientist to perform neurophysiological and computational modeling analyses of psychiatric diseases – acquiring and analyzing an array of biological and behavioral data to better understand the mechanisms and recovery trajectories for severe mental illness, particularly bipolar disorder and schizophrenia.

Data obtained in the lab include (1) an array of EEG and event-related potential responses (2) GWAS genotype, (3) structural brain imaging and brain biochemistry, (4) cognition, (5) functional recovery assessments, and (6) an array of clinical assessments. This position requires maintaining and extending data processing pipelines of longitudinal studies and applying explanatory computational models (data-driven) to test underlying brain and behavioral mechanisms and to develop optimize predictive models of outcome trajectories.

The candidate should have a background in neuropsychiatry, neuroscience, bioinformatics, biostatistics, computer and information science, or a related discipline (including data mining) with primary experience in apply/develop computational approaches for integrating/linking large datasets in psychiatry or neuroscience. Programming skills in Matlab, R, and Unix/Linux and scientific computing are highly desired. Secondary experience with image processing would be helpful.

The candidate will be based in the Psychosis Neurobiology Laboratory and Psychotic Disorders Division and will participate in studies with humans. In addition to the primary projects, research collaborations can be undertaken with interdisciplinary investigators in cognitive science, clinical service, and anxiety and depression among others. The selected candidate will also be encouraged to develop his/her own independent research projects.

Salary is commensurate with experience and excellent benefits are included. McLean is an equal opportunity and affirmative action employer committed to diversity and inclusion in all aspects of recruiting and employment.

All qualified individuals are encouraged to apply. To be considered for this position, please send your CV and cover letter to **Dr. Mei-Hua Hall (mhall@mclean.harvard.edu).**

QUALIFICATIONS:

Required:
•   PhD or MD in neuroscience, psychiatry, computer and information science, bioinformatics, statistics or related fields.

- Candidates should have previously participated in research or performed relevant coursework in neurophysiology, psychiatric neurobiology, statistical or computational analyses.
- Experience with EEG and/or neuroimaging data processing.

Preferred:

- Master degree or equivalent level education in biostatistics, bioinformatics, computer science, data science or other discipline requiring intense data analysis
- Experience in computational approaches for integrating across multiple data types to identify risk patterns and to develop predictive models.