## **Statistical Analyst**

The Boston University Alzheimer's Disease and Chronic Traumatic Encephalopathy (BU AD & CTE) Center is seeking a highly motivated Data Analyst with strong expertise in bioinformatics and/or statistics to lead data analyses in large-scale genomic studies of AD and CTE. The mission of the Center is to conduct state-of-the-art research on AD, CTE and other dementing illnesses, including their neuropathology and pathogenesis, clinical presentation, genetics and other risk factors, biomarkers, methods of detection during life, and methods of prevention and treatment.

## **Characteristic Duties and Responsibilities:**

Design, execute, interpret and present results of statistical analyses, as well as manage the collection and processing of data for epidemiological and biomedical research projects.

Statistical Programming: Write code to label & format variables in project data sets and create derived variables; create & execute programs to generate descriptive statistics & frequencies on all variables; create & maintain programs to generate reports of study progress and other reports required by project; develop programs for data quality checks.

Apply state-of-the-art computational methods to analyze large-scale genomic data to support data analysis in genetic studies.

Create and/or improve robust and highly automated computational pipelines to identify and interpret genetic variants from genomic data.

Collect and curate publicly available genomic data sets to support integrative analysis in genetic studies.

Design Statistical Analyses & present results: Determine the type of analyses for the project in collaboration with project statistician and principal investigator. Write programming code for statistical analyses required for abstracts, manuscripts and presentations. Produce table and figures depicting results of analyses, along with written interpretation.

Data Management: Develop and implement procedures for data quality checks; communicate details on data discrepancies with study staff; coordinate and document data received from different sources; advise on development of forms for data collection.

Provide Principal Investigators written sections on data management and statistical methods for grants

**Required Skills**: Master's Degree and 2+ years of experience required. Demonstrated experience in genome-wide association and/or high-throughput sequencing data analysis or method development. Knowledge of population genetics, statistical genetics, and/or molecular biology. Research experience in human genetic studies.

Programming: fluency with Unix shell scripts, and R scientific programming language. Experience with source code version control systems.

Strong creative thinking and problem solving skills. Excellent communication skills, good writing, and teamwork.

To apply please send your resume to Elizabeth Fay at erfay@bu.edu.