

## Data Analyst Position at VA Boston Research Center

Our research center is hiring a full-time Data Analyst to begin during the Summer of 2023. Our laboratory is located at the Veterans Administration Boston Healthcare System in Boston, MA.

This position will support our studies at the Translational Research Center for Traumatic Brain Injury and Stress Disorders (TRACTS). Our mission is to understand the modifying impact of traumatic brain injury (TBI) on the effects of stress-related emotional disorders on brain structure and function. The data analyst will work with an interdisciplinary team of biostatisticians, neuroscientists, and clinical psychologists on projects examining the genetics, epigenetics, and neurobiology of PTSD. The data analyst will process and analyze genomic (genotype, DNA methylation, and RNA expression) datasets using R, PLINK, and other data analytic platforms, process and assemble neuroimaging datafiles using MATLAB and related programs, develop new computational codes, and contribute to manuscripts, conference presentations, and grant applications. This is an ideal opportunity for individuals interested in developing their research portfolio before applying to doctoral programs in biostatistics, neuroscience, statistical genetics, or related fields. The candidate will be responsible for managing data access and large data transfers and should therefore have experience in data management and security using common programming and/or scripting languages.

Major duties and responsibilities will include the following:

- Creates and manages large-scale genetic, epigenetic, clinical, and neuroimaging datasets to provide clear, unbiased written reports to research program directors, individual research investigators, and management to be used for research evaluations, translational research, operational improvements, clinical improvements, or to establish policy
- Maintains data management systems using tools such as R, MATLAB, SAS, SPSS, Python, Excel, and SQL to store, clean, manipulate, validate, and analyze data
- Works with individual investigators to conceptually develop databases, data collection and data extraction tools specifically for each project
- Implements and documents data extraction and analysis protocols and establishes and implements data validation and quality control procedures
- Provides advice to principal investigator and co-investigators with regard to the study design, statistical techniques drawing up a study data analysis plan, and handling and structuring collected data
- Develops code to analyze and visualize datasets under the supervision of the team's lead statistician
- Performs advanced statistical analyses (e.g., generalized linear models, generalized estimating equation models, causal mediation models, machine learning algorithms, etc.), studies new statistical methodology, and explores new technology
- Provides information and reports (such as data analyses, summary data and tables, study activity) to the principal investigator and co-investigators

- Contributes to the preparation of grant proposals to funding agencies, scholarly manuscripts in peer-reviewed journals, and presentation of study findings at local and national scientific meetings
- Devises and recommends process improvements including new technology, methods, and instrumentation and follows all established information security policies and procedures

Applicants should have a Bachelor's or Master's degree in mathematics, computer science, biostatistics, biology, and/or related disciplines. Candidates must possess strong analytical and programming skills. ***Coursework and experience with scientific computing using a language such as R or MATLAB is required.*** Candidates should be proficient working with large datasets and willing to learn new software tools and statistical techniques as needed. Candidates should also be able to communicate clearly and effectively within a multidisciplinary team. Experience in the processing of neuroimaging is not required as such training will be provided. A two-year time commitment is required.

Hybrid work options are available.

If you are interested in applying for this position, please email your cover letter and resume to Christine Clermont at [Christine.Clermont@va.gov](mailto:Christine.Clermont@va.gov).