



Laureate Institute for Brain Research

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## **Applied Statistician for Neuroimaging, Genomics, and Big Longitudinal Data Analytics in Population Neuroscience Cohorts: Population Neuroscience and Genetics Center at the Laureate Institute for Brain Imaging Research**

The Population Neuroscience and Genetics (PNG) Center at the Laureate Institute for Brain Imaging Research (LIBR) is seeking talented data scientists for a postdoctoral position to work on high dimensional, multimodal data, including neuroimaging, genomics, and longitudinal clinical assessments. The ideal candidate will be motivated by making a substantial scientific impact on ongoing large-scale neuroimaging and/or genomic related research with, as a part of large National and international research studies.

### **The profile of research organization**

Our Center is a pioneer in the development of methods for quantitative analysis of large-scale studies of imaging and genetics. Among other large projects, we lead the data analysis for Adolescent Brain Cognitive Development (ABCD) Study<sup>®</sup>. The ABCD Study is the largest long-term study of brain development and child health in the United States. The National Institutes of Health (NIH) funds leading researchers in the fields of adolescent development and neuroscience to conduct this ambitious project. The ABCD Research Consortium consists of a Coordinating Center, a Data Analysis, Informatics & Resource Center, and 21 research sites across the country, which have enrolled 11,880 children ages 9-10 and their families in the study. Researchers will track their biological and behavioral development through adolescence into young adulthood. The research team have strong track records in publishing high impact papers in top tier journals, including Science, Nature, Neuron, and JAMA. Our highly collaborative, interdisciplinary, and international team have been successfully pushing the frontiers in both method development and domain specific research for large scale neuroscience data.

### **Job description**

The postdoctoral fellows will work as part of a multi-institution team to develop and apply advanced statistical methods for analyzing multimodal behavioral, neuroimaging, and genetic data, with the goal of understanding the complex interplays between brain and behaviors in the context of human development.

### **Qualifications**

#### Necessary qualifications

- Background in applied statistics and high-dimensional data analytics
- A relevant PhD degree or equivalent qualifications
- Computational expertise in analyzing high-dimensional data, e.g. GWAS, Neuroimaging, large scale EHR mining.
- Experience with programming in R and Python

### Preferred qualifications

- Experience in Neuroimaging and Genomics
- Experience in developing methods for high-dimensional data analysis
- Experience in analyzing multivariate longitudinal and survival data

### Personal qualifications

- Strong drive to obtain established goals
- Excellent collaborative, communication and presentation skills
- Scientifically self-motivated and creative
- Ability to work both independently and in structured groups
- Open-minded and analytical personality

**How to Apply:** Interested candidates should email a CV, a brief statement of long-term career goals, and contact information for 3 references to Dr. Wes Thompson, LIBR Principal Investigator, [wthompson@laureateinstitute.org](mailto:wthompson@laureateinstitute.org)