

POSTDOCTORAL RESEARCH SCIENTIST IN BIOSTATISTICS AND MACHINE LEARNING

MEDICAL CENTER

We are seeking highly motivated Postdoctoral Research Scientists with formal training in Biostatistics or Statistics to join Columbia University in New York City. Successful candidate will be jointly advised by Drs. Yuanjia Wang (Professor of Biostatistics) and Annie Lee (Assistant Professor of Neurological Sciences in *Neurology*). The position will provide a wide range of exciting opportunities to develop methodological research at the interface of statistics, machine learning, and multi-omics data science focusing on Alzheimer's Disease and other age-related neurodegenerative diseases.

Position Description:

The candidates will develop machine learning methods to integrate high dimensional multi-omics data, including genomics, epigenomics, transcriptomics, proteomics, or metabolomics, and other biomarkers to investigate putative molecular mechanisms in Alzheimer's Disease and other age-related neurodegenerative diseases. The candidate will lead causal mediation and pathway analyses using biomarker data to understand putative causal mechanisms involved in complex human diseases. Our group enjoys collaborating with interdisciplinary groups from Columbia University Irving Medical Center with a wide range of expertise (e.g., Neurology, Epidemiology, Cell biology, Bioinformatics, and Statistics, etc.). The candidate will gain significantly from working with other scientists including Drs. Richard Mayeux (Gertrude H. Sergievsky Professor of Neurology, Psychiatry and Epidemiology, Chair of the Department of Neurology, Director of the Gertrude H. Sergievsky Center, and Co-Director of the Taub Institute for Research on Alzheimer's Disease and the Aging Brain) and Philip De Jager (Weil-Granat Professor of Neurology, Director of Center for Translational and Computational Neuroimmunology, and Director of Multiple Sclerosis Clinical Care and Research Center). Candidates with experience in machine learning, advanced computing, and analytics for large-scale multi-omics data are strongly encouraged to apply but candidates in all fields of biostatistics will be considered. Details of our work can be found at https://blogs.cuit.columbia.edu/yw2016/ and https://www.neurology.columbia.edu/profile/annie-j-lee-phd.

Requirements and Expectations:

Candidates must have a PhD degree in biostatistics, statistics, or a closely related discipline. Successful candidates should have solid training in statistical methods, excellent computational skills, and experience working with multi-omics data. The primary responsibilities include developing methods, implementation with software, analyzing real world data, and co-authoring manuscripts. The results are expected to be published in both methodological and substantive journals. Good written and verbal communication skills are required to publish manuscripts, write grants, and give presentations at national and international conferences. Strong selfmotivation and ability to work independently, efficiently, and collaboratively with a highly interactive research group are important considerations.

Compensation and Benefits:

Salary Range \$65,000-\$70,000. The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, specialty, and training.

Application Deadline:

This position is open immediately until filled (expected start date Fall 2023). The appointment will be made for a two-year contract with a possibility for renewal. To apply, submit application materials (cover letter, CV, statement of research interests, and the contact information for at least three references) through our website at https://apply.interfolio.com/125217. Please note- only applications submitted through our website will be considered.