



VAGELOS COLLEGE OF  
PHYSICIANS AND SURGEONS

Center for Statistical Genetics

## Computational Biology and Statistical Genetics Postdoctoral Research Scientist Position

The Functional Genomics research team at the Center for Statistical Genetics and the Center for Translational and Computational Neuroimmunology at Columbia University Vagelos College of Physicians and Surgeons currently has openings for **Postdoctoral Research Scientists**. Individuals who earned Ph.D. with research backgrounds in computational biology, statistics/biostatistics/data science, bioinformatics, genetic epidemiology, or a closely related discipline are encouraged to apply. Knowledge on statistical modeling and methodology in statistical genetics, experience working with multi-omics data as well as expertise in R, Python and/or C++ programming are highly desirable. Preference will also be given to highly motivated candidates with strong background in human and medical genetics, and extensive experiences in applied genomic data analysis. Good written and verbal communication skills are required to publish manuscripts and give presentations at national / international conferences.

Our work spans a range of subjects at the interface of genetics, statistics, neurological sciences, machine learning and bioinformatics — all centered around the functional genomics in human brains and their impact on neurodegenerative disorders, particularly Alzheimer's disease (AD). A diverse source of multi-omics data is available to support inference on molecular mechanisms of functional genomics landscape in human brains as well as how they potentially contribute to AD. Novel computational methods are often developed during the course of investigations into these problems. More details of our work can be found at <https://wanggroup.org> and <https://columbiactcn.org/>.

Successful candidates will be jointly supervised by Gao Wang (Assistant Professor of Neurological Sciences) and Philip De Jager (Weil-Granat Professor of Neurology and Chief of Division of Neuroimmunology), with support from other members at the Center for Statistical Genetics and the Center for Translational and Computational Neuroimmunology. Successful candidates will either lead the computational methods development to integrate multi-omics data in the context of AD genetics studies; or the analyses of a wide range of brain molecular phenotypes and their QTL to explore genetic basis of molecular phenotypes and AD. Development of high quality open-source software, benchmarks and/or analysis pipelines are required for these projects. The candidates will also be encouraged to design and develop new projects with help from their advisors, and to apply for their independent research grants.

Our team enjoys a **dynamic and stimulating research and education environment** in Columbia University Medical Center on the West 168th street in Manhattan. Office area is shared with other interdisciplinary groups focusing on a diverse range of computational, experimental and clinical topics. The candidate will thus benefit tremendously from learning and collaborating with other scientists.

To apply, please email a cover letter, a curriculum vitae, and contact information of up to four references to Gao Wang ([wang.gao@columbia.edu](mailto:wang.gao@columbia.edu)), using the subject header *Postdoc Application*. The positions are open until filled and applications will be reviewed on a rolling basis. Informal inquiries are welcome.