

**Computational Genomics and Multi-omics Data Science
Postdoctoral Research Scientist Position**

The Functional Genomics research group in the Department of Neurology at Columbia University Vagelos College of Physicians and Surgeons currently has openings for **highly-motivated Postdoctoral Research Scientists in computational genomics and multi-omics data science**. Individuals who earned Ph.D. with research backgrounds in computational biology, bioinformatics, genetics, biostatistics, or a closely related discipline are encouraged to apply. Strong expertise in bioinformatics and programming in R, Python, bioinformatics workflow languages and Linux shell scripting is required. The candidate must have extensive experiences with applied large-scale genomics and other 'omics data analysis. Preference will be given to candidates with knowledge on statistical modeling in genetics and genomics, and/or strong background in human and medical genetics. Excellent 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, bioinformatics and machine learning, with a sole focus on the functional genomic regulations 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 our study on the possible molecular mechanisms leading to AD pathology. Novel computational methods are motivated by unique challenges emerged during the course of investigation into these problems, and are developed in parallel with applied studies either led by the candidates or through collaboration with other postdoctoral research scientists in our lab. 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 in our labs. Successful candidates will lead the application of state-of-the-art computational methods developed in the community and in our lab to integrate multi-omics molecular phenotypes and their quantitative trait loci (QTL) to elucidate the genetic basis of Alzheimer's disease. 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, and to apply for their independent research grants (such as NIH K99).

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), using the subject header *Computational Genomics Postdoc Application*. The positions are open until filled and applications will be reviewed on a rolling basis. Informal inquiries are welcome.