Job Title	Bioinformatics Associate
PVN ID	MD-2412-006605
Category	Research
Location	CUNY SCHOOL OF MEDICINE
Department	Office of Research
Status	Full Time
Annual Salary	$54,715.00 - $97,270.00
Hour(s) a Week	35
Closing Date	Nov 30, 2025 (Or Until Filled)

General Description

The CUNY School of Medicine (CUNY MED) is the only medical school in the City University of New York (CUNY) system. Our innovative curriculum allows students to complete both their Bachelor of Science and Doctor of Medicine degrees in seven years. The CUNY School of Medicine also offers a Master of Science degree in Physician Assistant Studies. Our mission is to provide access to medical education for talented individuals from social, ethnic and racial backgrounds historically underrepresented in medicine, and to develop health professionals committed to practicing in under-served communities with a special emphasis on reducing health disparities.

As the recipient of a Research Centers in Minority Institutions (RCMI) U54 Cooperative Award from the National Institutes of Health, Chummed has established the New York Center for Minority Health Equity and Social Justice (NYC-MHESJ), whose mission is to address and advance the science of health disparities affecting historically underserved communities in New York City. The NYC-MHESJ is aligned with the National Institute on Minority Health and Health Disparities (NIMHD) vision to advance the science of minority health and health disparities research by developing & strengthening the research infrastructure to conduct state-of-the-art research and foster the development of the next generation of scientists focused on diseases that disproportionately affect minority populations.

Under the general supervision of the RCMI NYC-MHESJ Multiple Principal Investigators (MPIs), and reporting directly to the Research Capacity Core (RCC) director, the Bioinformatics Associate (BA) will provide analytical expertise and The BA will provide bioinformatics support for cutting-edge research projects, primarily focusing on genomic data analysis, systems biology, and computational modeling in the context of medical and biological research. The BA will give you the opportunity to work alongside faculty, researchers, and clinicians to solve complex biological problems using state-of-the-art tools and techniques in bioinformatics.

The ideal candidate will have expertise in bioinformatics, data analysis, and computational biology, along with a passion for applying these skills to advance scientific discovery in health, disease mechanisms, and therapeutic development.

Other Duties

- Perform bioinformatics analysis of high-throughput genomic, transcriptomic, and proteomic data, including next-generation sequencing (NGS), microarray, and other omics data.
- Apply computational tools and algorithms to analyze large-scale datasets, such as gene expression, variant calling, and pathway analysis
- Develop, implement, and optimize bioinformatics pipelines and workflows for data processing, analysis, and visualization
- Integrate genomic data with clinical, epidemiological, and other research data to identify biomarkers, disease pathways, and therapeutic targets
- Collaborate with researchers across multiple disciplines, including biologists, clinicians, statisticians, and engineers, to interpret results and inform study designs
- Communicate findings through written reports, presentations, and contributions to publications and grant proposals
- Continually review emerging bioinformatics concepts and tools for adoption, and contribute to the development of new research tools and methodologies
- Train and mentor graduate students and researchers in the principles and practice of bioinformatics, including bioinformatics methodologies and software tools
- Stay current with developments and trends in the field of bioinformatics and integrate new concepts and techniques into research projects
- Other duties as assigned

Qualifications

- Ph.D. from an accredited institution and not fewer than two (2) years **additional** research experience in Bioinformatics, Computational Biology, Computer Science, Genomics, or related medical or STEM field related to the scope and complexity of the project; and, a record of research, publications, and scholarship in a related field, **OR**
- A Master's Degree in Computer Science, Artificial Intelligence, Machine Learning, Bioinformatics, Data Science, or a closely related field from an accredited institution, **and** at least four (4) years of **additional** research experience pertinent to the scope and complexity of the project; **OR**
- Equivalent intellectual strength and experience as evidenced in progressively responsible research experience, publications in the field, and/or other accomplishments (e.g. significant participation in important inventions, artistic endeavors, etc.);

Preferred Qualifications:

- Experience with machine learning or artificial intelligence techniques applied to genomic data
- Familiarity with clinical data integration and electronic health record (EHR) systems
- Experience with statistical analysis and data visualization using R or similar tools
- Familiarity with scientific databases such as NCBI, UCSC Genome Browser, Ensembl, and other largescale genomic resources
- Publication record in bioinformatics or related field
- Prior experience working in an academic or medical research environment including experimental design, grant writing, and manuscript preparation

Core Competencies:

- Proficiency in programming languages such as Python, R, or Perl for data analysis and pipeline development
- Strong experience with bioinformatics tools and software for genomic data analysis (e.g., GATK, Bowtie, STAR, DESeq2, etc.)
- Familiarity with next-generation sequencing (NGS) data analysis, including RNA-Seq, DNA-Seq, ChIP-Seq, ATAC-Seq, and single-cell RNA-Seq
- Experience with cloud computing platforms (e.g., AWS, Google Cloud) and large-scale data storage systems
- Strong understanding of molecular biology, genomics, and systems biology concepts
- Strong analytical and problem-solving skills, with demonstrated ability to work independently on complex tasks and collaborate in a team environment
- Proficient written and verbal communication, with the ability to explain complex bioinformatics concepts and results to both technical and non-technical stakeholders