Clinical Bioinformatics Informationist
Samuel J. Wood Library and C.V. Starr Biomedical Information Center
Weill Cornell Medicine

Job Description:
The Samuel J. Wood Library and the C.V. Starr Biomedical Information Center has been the traditional information hub of Weill Cornell Medicine (WCM), as well as providing clinical information services to NewYork-Presbyterian Hospital. The recently-established library bioinformatics service (LBS) provides training and analytical support to faculty, staff and students in research bioinformatics. Under the direction of the Associate Director for Research Services, the Clinical Bioinformatics Informationist will be responsible for expanding the clinical bioinformatics support offered by the LBS to inform improved healthcare practice. This includes the development of data curation and workflow methodologies for using clinical data within the WCM Data Core.

Specifically, this position will serve as a subject matter expert in clinical genomics, and provide recommendations for the curation and analysis of a Precision Medicine Oncology Knowledgebase. The incumbent will work as part of the Precision Medicine Initiative project team in providing optimal data-management solutions within the given constraints such as time-line and budget. This individual will provide guidance to scientists, research administrators, and others working with clinical or genetic data, and collaboratively develops analysis pipelines to assist in interpretation and understanding of the data.

This individual will provide services such as retrieving data from NCBI databases, and calculating and creating statistical reports for scientific publications or presentations. They will also provide consulting services for the WCM community on the application of bioinformatics tools for their specific research questions.

This position will assist with the development and running of workshops on bioinformatics analysis, databases, and data management, including teaching Data Carpentry workshops. Furthermore, the individual will create bioinformatics training material to meet the research and clinical needs of WCM.

The incumbent will serve as a member of the Samuel J. Wood Library research team. This position will assist the Library Director, the Associate Director for Research Services, and other Information Technologies & Services (ITS) leaders, in strategic planning and execution of a customized data repository that provides an environment where faculty and students can run statistical queries, and where they can computationally identify healthcare policy best practices using clinical data in simulated situations. This individual will also join other Weill Cornell thought leaders in health informatics. It is expected that this individual will actively work towards publication in peer-reviewed journals, and continue their professional growth and development through participation in educational programs, reviewing current software and bioinformatics literature, and attending meetings and workshops.

Essential Duties and Responsibilities:
- Provide clinical bioinformatics guidance to researchers, students and staff, as part of the library bioinformatics service
- Manage the curation of the Precision Medicine oncology knowledgebase, in partnership with the Caryl and Israel Englander Institute for Precision Medicine

- Develop bioinformatics training curricula that meets the research and clinical needs of WCM
- Organize and run training programs in data science, and bioinformatics, including certified workshops from The Carpentries organization.
- Contribute to the research mission of WCM, including publishing in peer-reviewed journals, and presenting at professional conferences

Requirements:
- PhD in bioinformatics or computer science (or in another scientific field, provided the candidate has demonstrated excellence in computational skills)
- Proven understanding and experience in clinical genomics, experimental data processing, high-throughput data analysis, and genomic databases
- At least two years of post-doctoral experience
- Publication and presentation history commensurate with academic level
- Demonstrated excellence in teaching bioinformatics and/or data science
- Demonstrable skill with Python and/or R, open source tools, libraries, and relational databases

Work Ethic and Cultural Fit
- Willingness to work occasional overtime in order to meet deadlines
- Excellent communication and collaboration skills. Capable of working in a fast-paced, team-based environment with shared deadlines and project tasks
- Self-motivated, and demonstrates strong initiative and ability to work independently as well as with others
- Demonstrates flexibility and calmness in stressful situations
- Possesses superior skills in problem identification, analysis, and resolution; is a systems thinker
- Ability to work efficiently on multiple projects simultaneously and meet necessary deadlines successfully
- Ability to anticipate needs and problems while creating solutions

Highly Desired:
- Experience with bioinformatics analyses in the context of precision medicine
- Experience in applying the FAIR framework to data management
- Knowledge of and experience with semantic technologies
- Data visualization skills
- High performance computing experience, including job submission and management, and parallel programming libraries and frameworks
- Experience with programming languages (Java, C/C++/C#)
- Wet-lab experience such as cell culture, western/northern blots, plasmid generation, gel electrophoresis, qPCR

Working Conditions:
Position requires working in an office environment where there are a few physical discomforts such as dust, dirt, noise and the like. Ability to work more than 40 hours a week, off-hours and weekends during periods of heavy workload is required. Light travel between office locations, primarily within Manhattan is required. Occasional meetings or clinical staff interactions in typical patient care areas may be required, though direct patient exposure is not anticipated.

Privacy Notice:

This position could have exposure and/or access to Protected Health Information (PHI) or Personally Identifiable Information (PII) as part of normal duties. Access to data within systems that contain significant portions of confidential staff or even medical records may be necessary for completion of daily tasks.

With regard to HIPAA and protection of employee, student subject and patient privacy, it is the responsibility of each WCM employee to limit viewing of PHI or PII to the minimum as necessary to perform assigned duties.

To Apply: Please email cover letter and curriculum vitae to librecruiting@med.cornell.edu with "Clinical Bioinformatics Informationist" included in the subject line. Applications will be accepted through June 15, 2018.

Founded in 1898, and affiliated with what is now New York-Presbyterian Hospital since 1927, Weill Cornell Medical College is among the top-ranked clinical and medical research centers in the country. In addition to offering degrees in medicine, Cornell also has Ph.D. programs in biomedical research and education at the Weill Graduate School of Medical Sciences, and with neighboring Rockefeller University and the Sloan Kettering Institute, has established a joint MD-PhD. program for students to intensify their pursuit of Cornell's triple mission of education, research, and patient care. Weill Cornell Medical College's educational mission emphasizes the importance of combining a strong foundation in the medical sciences with extensive clinical training in patient care. By promoting a true social commitment, stimulating creativity, and fostering independent thought and study, Weill Cornell Medical College continues to cultivate the best of tomorrow's leaders in the field of medicine.

Weill Cornell Medical College is an equal opportunity, affirmative action educator and employer.

We look forward to hearing from you.