Position Description:
Applicants are invited to apply for a senior research fellow position in the Bioinformatics and Systems Biology Core, Systems Biology Center at the National Heart, Lung, and Blood Institute (NHLBI), the National Institute of Health (NIH) in Bethesda, Maryland. The core has a vibrant, multidisciplinary team of scientists, and closely collaborates with laboratory and clinical investigators. It focuses on research, methodology development, education, and applications in areas including but not limited to: integrated analysis and modeling of Big Omics Data such as those generated using the Next-Generation sequencing (NGS) technologies and the proteomics technologies; and multi-scale modeling of emergent spatiotemporal orders in physiological systems.

The position is designated Full-Time Equivalent Employment (FTE). Initial appointment is for one year, renewable for up to 5 years, subject to the 5 Year/8 Year Duration Rule of the length of time spent at NIH in all fellowship capacities, with the opportunity to be promoted to Staff Scientist during the fellowship. Scientists with considerable experience beyond postdoctoral training may be appointed Staff Scientist directly.

Requirements: We expect the position to be filled with a candidate with PhD training in Statistical Genetics, Biostatistics, Bioinformatics, Computational Biology, Computer Science, Mathematical or Physical sciences, or other related quantitative sciences, with >3 years of postdoctoral experience. The ideal candidate would have in-depth understanding with NGS data analysis and the statistical models, and has at least 3 years' postdoctoral experience with large scale sequencing data analysis and bioinformatics. Candidates with knowledge, experience, and keen interest in computer algorithm development, and in data integration and network theory are particularly encouraged to apply. Experience with statistical models and associated software for NGS data is required. Programming skills in major programming languages Python, R, Java, and MatLab are essential. Strong skills in the use of new computer software, critical thinking, problem-solving abilities, and the ability to conduct successfully, with minimal supervision, a pre-established research program are also required. Must be a team player with excellent verbal and written communication skills.

Duties and responsibilities: The primary role of this position is to lead the analysis and modeling of various types of NGS data, to lead core's research of new methods of analyzing and modeling NGS data, and to lead the development and application of NGS data analysis pipeline. Other responsibilities include: participate in wider group endeavors by working with our proteomics data analysis team to integrate the proteomics and sequencing data; develop and implement new methods and computational software for NGS data analysis; Perform statistical analysis, data mining of NGS data, and interpret the output in biological and/or clinical context; Contribute to integration of data across individual experiments in order to answer broader scientific questions; Present and report methods, results and conclusions to a publishable standard; supervise junior fellows.
How to apply: Applicants should submit the following: a summary of past research experience and a brief description of research interests and career goals, CV, and contact information for three references to Wang, Xujing xujing.wang@nih.gov.

Salary and Benefit:
Salary is competitive and commensurate with research experience and accomplishments. Additional information regarding the NHLBI DIR is available at the following website http://www.nhlbi.nih.gov/research/intramural/.

The Intramural Research Program is on the Bethesda campus and offers a wide array of training opportunities for scientists early in their careers. The successful candidate will have access to the cores established and robust bioinformatics infrastructure, as well as resources made available through NIH's Center for Information Technology (CIT), the National Center for Biotechnology Information (NCBI) and NISC.