

Postdoctoral Position of Bioinformatics and Computational Genomics at Northwestern University

We are looking for a highly motivated candidate specializing in Bioinformatics to join Dr. Rendong Yang's laboratory at the Northwestern University Feinberg School of Medicine located in Chicago, IL. The goal of this position will be to lead multiple research projects, develop novel computational algorithm(s), perform data analysis, collaborate with biologists and physicians, and present/publish the results in scientific conferences/journals. The main focus is to explore the functional consequences of somatic alterations in cancer patients, to identify driver alterations, and to understand the genetic mechanisms of cancer progression and drug resistance by integrating multi-dimensional data from large-scale cancer studies, such as TCGA, ICGC and CPTAC.

Qualifications

A Ph.D. in Bioinformatics/Computational Biology/Computer Science/Statistics/Physics/Biology or a related field is required along with experience in Linux, proficiency in at least one programming languages (e.g. Python, R, Perl, Java, C/C++) and experiences with high-throughput sequencing data (WGS, WES, RNA-Seq, ChIP-Seq, long reads) analysis. The candidate must demonstrate effective verbal and written communication skills.

About the Lab

Our laboratory is interested in the integrative analysis of large-scale, multi-dimensional genomic data to understand the initiation and progression of diseases. The research projects involve in the development of highly accurate and sensitive computational methods for analyzing large-scale genomic data, especially in the area of detecting and analyzing genetic variations and somatic mutations. Example projects span from technique-driven research that aims developing algorithms for a wide range of applications (e.g. Yang et al., *Bioinformatics* 2010; Yang et al., *BMC Genomics* 2014; Yang et al., *Genome Medicine* 2015), to hypothesis-driven investigation of specific biological problems where the main goal is the discovery and advancement of biological knowledge (e.g. Asangani et al., *Nature* 2014; Henzler et al., *Nature Communications* 2016; Katerndahl et al., *Nature Immunology* 2017, Wang et al. *Molecular Cell* 2021). More information can be found by visiting the lab website: <https://ylab-hi.github.io/>

How to Apply

Send a CV to Dr. Rendong Yang (rendong.yang@northwestern.edu)