



The lab of Dr. Kaifu Chen (<http://chenlab.openwetware.org/>) in the Harvard Medical School at Boston Children's Hospital is seeking a bioinformatics postdoc, data analyst, or programmer for single-cell multi-omics research. This researcher will develop bioinformatics technology for single-cell analysis of gene expression regulation. Experiences with bioinformatics technique development and investigation of 3D genome, RNA methylation, cardiovascular system, and cancer diseases will be considered as high priority (but not a prerequisite). The lab is productive in recent years in both development of bioinformatics methods (*Nature Genetics* 2015, *Nature Communications* 2020a, *Nature Communications* 2020b, *Genome Biology* 2020, etc.) and biomedical research based on cutting-edge bioinformatics techniques (*Nature* 2018, *Science* 2019, *Circulation* 2020, *Nature Cell Biology* 2021, etc). Both the School and Hospital offer rich and dynamic research environments. The work location is embraced by tens of other top institutes such as the Massachusetts General Hospital, Dana-Farber Cancer Institute, and Broad Institute. The position will have salary commensurate with training and experience.

Responsibilities:

- Develop computational tools, statistical methods, artificial intelligence techniques, machine learning algorithms, and network models to interpret single-cell sequencing data.
- Analyze single cell sequencing data to study cell identity regulation and dysregulation.
- Analyze Hi-C, ChIP-seq, ATAC-seq, and RNA-seq data to study epigenetic regulation of transcription.
- Analyze high throughput profiling of RNA methylation, RNA binding proteins, and ribosome positioning to study post transcriptional regulation of gene expression.
- Collaborations between bioinformatician, biologist and clinician to leverage research output, innovation, and significance.

Qualifications: Applicants must have a training in area related to bioinformatics. Experiences with algorithm development and analysis of multiple types of genomic datasets will be a strong plus but not a prerequisite. Candidates with a PhD or master's degree in biology, medicine, genomics, bioinformatics, computer science, electronics engineering, mathematics, statistics, physics, or other related area are encouraged to apply.

Commitment to Diversity: We are committed to cultivating a diverse workplace. We do not discriminate on the basis of race, gender, gender identity, color, religion, age, disability, or national origin. We encourage individuals with diverse backgrounds to apply.

Interested candidates should send a CV, cover letter or research statement, and information of three references to Kaifu.Chen@childrens.harvard.edu