

Scientist, Computational Biology

Company Overview

GC Therapeutics is the first genome-wide cell landscape exploration company using an integrated synthetic biology and AI-driven platform for cell programming. Its patent-pending and proprietary pluripotent stem cell differentiation technology platform TFome™ was developed in Professor George Church's lab, a pioneer in synthetic biology, and allows for the development of unique cell therapies with significantly streamlined manufacturing, improved cell quality, efficiency and speed. GC Therapeutics is based in Cambridge, MA. For additional information, please visit www.gc-tx.com.

Job Purpose

GC Therapeutics is seeking a talented and highly motivated Scientist/Senior Scientist for our Single Cell Genomics team. The candidate will have strong expertise in single cell genome-scale assays from both experimental and computational approaches. The candidate will be responsible for the analysis and interpretation of genome-scale datasets (RNA-seq, single-cell RNA-seq, whole genome sequencing), a major area of interest at the GCTx. The job requires innovative problem solving in all parts of the process from sequencing, estimating gene and transcript expression, applying statistical methods for dimensionality reduction, differential analyses and clustering, to biological interpretation and multimodal data integration. Reporting to the Head of Discovery Platforms, this individual will apply these assays to develop novel cell therapies derived from human induced pluripotent stem cells (iPSCs) for regenerative and cell-based therapies. This role will involve bringing a new class of cellular therapies to patients using GCTx's TFome™ platform, a synthetic biology-driven technology to differentiate human stem cells.

Duties and Responsibilities

General Scientific Roles:

- Maintain a detailed laboratory journal, summarize results and create presentations for internal group meetings.
- Exemplify scientific curiosity and deep expertise with relevant literature and cutting-edge technologies to advance research directions.
- Provide scientific and technical supervision to junior staff or contract research organizations (CRO) for defined projects.
- Work with other members of the research team and within GCTx to accomplish company goals.
- Follow all safe laboratory practices and company policies.

Scientific Techniques:

Computational Biology:

- Consult on the design and implementation of experimental workflows for obtaining sequencing data.
- Establish and improve next generation sequencing data analysis algorithms and pipelines and/or statistical methods to analyze results for single-cell RNA-seq experiments.
- Perform computational analysis and integrate diverse and challenging genome-scale datasets.
- Derive insights from large, complex datasets to inform cell programming experiments.
- Advance internal machine learning models to generate testable hypotheses and refine GCTx's existing computational models.
- Utilize statistical inference methods to guide genome-scale experiments.
- Support research teams by providing bioinformatics analysis as needed.
- Assist, collaborate, and consult with internal/external researchers on analysis of transcriptomic data.

Qualifications

Essential Qualifications:

- Ph.D. degree in computational biology, bioinformatics, systems biology, statistics, physics, biostatistics or related discipline and 5+ years of work experience in academia or industry.
- Required experimental and computational experience with single cell genome-scale assays in mammalian cells.
- Proven knowledge of applied statistics and machine learning experience and ability to derive insights and generate biologically relevant and testable hypotheses.
- Proficiency in R and Python, and expertise in high-throughput sequencing data analysis and integration.
- Experience designing and interpreting mammalian cell culture or in vivo experiments, ideally in the area of developmental biology or stem cell differentiation.
- Strong work ethic with the ability to perform tasks independently and lead junior staff effectively.
- Proficient in analysis, presentation and documentation of scientific data as well as preparation of scientific reports.
- Effective communicator with excellent interpersonal skills.
- Strong project management and organizational skills and ability to prioritize and multitask.



Interested? Contact recruiting@gc-tx.com to apply!

- Send your CV with the subject "Scientist, Computational Biology".

Equal Opportunity Workplace: GC Therapeutics is an equal opportunity employer. We provide equal employment opportunities to all applicants for employment and existing employees without regard to ancestry, national origin, place of birth, race, color, gender, sexual orientation, marital status, pregnancy, religion, age, disability, gender identity, results of genetic testing, service in the military or otherwise to the full extent of all federal, state and local laws. GC Therapeutics' equal employment opportunity policy applies to all terms and conditions of recruiting, hiring, placement, training, compensation, transfer, leave of absence, employment, promotion, layoff and termination of employment.