

Scientist / Senior 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 (GCTx) 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 Genomics team. The candidate will have strong expertise in the analysis and interpretation of genomic assays for R&D and product development/release. The candidate will be responsible for determining the safety and efficiency of the company's cell products using genomic assays such as whole-genome sequencing, cancer panels etc. The job requires innovative problem solving in all parts of the process from sequencing, variant calling, determining release criteria and establishing safety profiles. Additional experience in analyzing (single-cell) transcriptomic data is desired but not essential. Reporting to the lead of the Genomics team, 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, organize databases, 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.

Computational Biology Roles:

- Consult on the design and implementation of experimental workflows for obtaining sequencing data.
- Establish and improve next generation sequencing data analysis workflows and pipelines and/or statistical methods to analyze results for genome sequencing experiments.
- Perform computational analysis and derive insights from large, challenging genome-scale datasets.
- Derive insights from large, complex datasets to inform cell programming experiments.
- Define and improve release criteria to determine and maintain the genomic safety of cell products.
- Support research teams by providing bioinformatics analysis as needed.

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 computational experience with whole-genome and targeted genome sequencing (e.g. cancer panels) of mammalian cells.
- Experience with release and safety considerations for cell therapy products including the writing of SOPs and documentation for clinical/regulatory filing.
- Proven knowledge of applied statistics and machine learning experience and ability to derive insights and generate biologically relevant and testable hypotheses.
- Proficiency in Python and Unix/bash, and expertise in high-throughput sequencing data analysis and integration.
- Experience designing and interpreting mammalian cell culture or in vivo experiments, ideally in cell therapy product optimization and process development.
- 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.

Additional Preferred Qualifications:

- Experience in the computational analysis of (single cell) transcriptomic datasets.
- Experience with cloud-based computing solutions.
- Experience managing and maintaining genome-scale databases.
- Experience with genome editing of pluripotent stem cells (e.g. hiPSCs).
- Proven track record and strong publications in computational biology or stem cell biology.
- Experience designing and interpreting mammalian cell culture or in vivo experiments, ideally in cell therapy product optimization and process development.

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.