

Scientist - Functional 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 for our Functional Biology team. The candidate will have strong expertise in pluripotent stem cell culture, differentiation of stem cells into specific lineages, and characterization of the differentiated cells by *in vitro* functional assays and transcriptomic analysis. As a member of the Functional Biology team, this candidate will engineer novel cell therapies derived from human induced pluripotent stem cells (iPSCs) for regenerative and cell-based therapies and characterize the differentiated cells. This role will involve bringing a new class of cellular therapies to patients using GCTx's Human TFome™ platform, a synthetic biology-driven technology to differentiate human stem cells. The scientist will be responsible for daily tasks involving the growth and differentiation of pluripotent stem cells and characterization of the target cell type.

Duties and Responsibilities

General Laboratory Roles:

- Responsible for experimental design, data generation, analysis, and communication of results to supervisor, and team members.
- Provide scientific and technical supervision to junior staff, collaborators, or contract research organizations (CROs) for defined projects.
- 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.
- Work with other members of the research team and within GCTx to accomplish company goals.
- Follow all safe laboratory practices and company policies.

Experimental Techniques:

Cellular Biology:

- Culture iPSC lines including maintenance and analysis (e.g. cell culture, transfection, preparation of media, passaging, cryopreservation).
- Design and execute experiments to differentiate iPSCs to cell types of interest.
- Optimize, refine and scale differentiation protocols for candidate cell therapeutic products.
- Establish and perform assays to characterize differentiated cells using methods such as microscopy, flow cytometry, qPCR, ELISA, and other *in vitro* functional assays relevant to the cell type of interest.
- Analyze differentiated cell products and establish QC metrics.

Molecular Biology:

- Utilize techniques such as PCR, molecular cloning and plasmid isolation.
- Characterize target cell types using next-generation sequencing methods (e.g. library preparation for bulk and single cell RNA-seq) and other gene expression analysis techniques.

Qualifications

Essential Qualifications:

- Ph.D. degree in stem cell biology, cell biology, bioengineering, biochemistry, or related discipline and 5+ years of laboratory work experience in academia or industry.
- Required experience with mammalian cell culture, preferably stem cell culture.
- Proven experience in basic molecular biology laboratory techniques.
- Strong work ethic with the ability to perform tasks independently and lead junior staff effectively.
- Proficient in analysis, presentation, and documentation of scientific data and scientific reports.
- Effective communicator with excellent interpersonal skills.
- Strong project management and organizational skills and ability to prioritize and multitask.
- Ability to work in a laboratory environment approximately 75% of the time including occasional weekend hours.

Additional Preferred Qualifications:

- Experience with pluripotent stem cells (e.g. iPSCs).
- Practical familiarity with stem cell differentiation protocols.
- Experience in genome editing or high throughput library screening.
- Ability to analyze next generation sequencing or other genome-scale datasets.
- Proven track record and strong publications in stem cell or developmental biology.
- Knowledge of R, Python and FlowJo.

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

Send your CV with the subject "Scientist - Functional 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.