Scientist/Senior Scientist - Stem Cell Engineering

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 Senior Scientist for our Stem Cell team. The candidate will have strong expertise in human pluripotent stem cell biology. Reporting to the Head of Discovery Platforms, this individual will engineer 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 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 or contract research organizations (CRO) 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.
- Lead and manage 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:

- Design and execute synthetic biology-based differentiation experiments of pluripotent stem cells.
- Optimize, refine and scale differentiation protocols for candidate cell therapeutic products.
- Analyze differentiated cell products and establish QC metrics.
- Culture PSC lines including maintenance and analysis (e.g. cell culture, transfection, preparation of media, passaging, cryopreservation).
- Perform cell type differentiation, characterization and experimental endpoint analysis including flow cytometry, ELISA and microscopy.
- Develop and optimize new approaches to genetically engineer PSCs.

Molecular Biology:

- Utilize techniques such as PCR, molecular cloning and plasmid isolation.
- Design, synthesize and test new vectors for genome engineering PSCs.
- 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 2+ years of laboratory work experience in industry.
- Required experience with pluripotent stem cells (e.g. hiPSCs).

- Proven experience in molecular biology laboratory techniques.
- Practical familiarity with stem cell differentiation protocols.
- Experience in genome editing.
- 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.
- Ability to work in a laboratory environment approximately 75% of the time including some weekends.

Additional Preferred Qualifications:

- Proven track record and strong publications in stem cell or developmental biology.
- Ability to analyze next generation sequencing or other genome-scale datasets.
- Knowledge of R, Python and FlowJo.

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

Send your CV with the subject "Senior Scientist - Stem Cell Engineering".