



Scientist, Molecular Engineering
Job code 582HC

Description

Fate Therapeutics is currently seeking a talented and highly motivated molecular biologist with strong genetic engineering background to join a multidisciplinary R&D team for developing stem cell derived off-the-shelf immunotherapies. The candidate will be responsible for the design, engineering, and optimization of multiple genetically modified cell types including induced pluripotent stem cell (iPSC) lines used for derivation of cell therapy products. The candidate will also be involved in developing and validating novel engineering modalities to support Fate's fast-growing preclinical pipeline. The successful candidate must demonstrate broad and in-depth knowledge of cutting-edge genomic engineering techniques, design and control of synthetic gene expression circuits, and generation and characterization of genetically modified cell lines. The position will require innovative thinking, strong independent and collaborative research abilities, and excellent oral and written communication skills. This is a full-time hands-on research position, reporting to a Senior Scientist, and is located at Fate's corporate headquarters in San Diego, CA.

Responsibilities

- Genetic editing/engineering of various cell populations including iPSC, using lentiviral transduction, CRISPR engineering or other desirable editing platforms.
- Develop molecular strategies for genomic engineering by applying the latest genetic manipulation technologies for optimized efficiency and specificity scalable for manufacturing processes.
- Develop synthetic biology strategies for multi-level control of gene expression to facilitate discovery of novel modalities.
- Establish assays to characterize genetically engineered iPSCs to support early product characterization.
- Design, generate, and produce DNA constructs using standard cloning techniques including ligation and assembly.
- Generate stable/clonal genetically modified iPSC lines with comprehensive molecular and phenotypic characterization.
- Perform lentivirus production and characterization by titration using Flow cytometry.
- Communicate research and development findings in cross-disciplinary team meetings as well as with external partners.

Qualifications

- Requires Ph.D. degree in a biological science field and minimum 2 years postdoctoral experience in academia or industry.
- Demonstrated expertise in cutting edge gene editing technologies, including gRNA design, donor template building, cleavage efficiency assays, off-target editing evaluation, genomic integration analysis, etc.



- Extensive experience in molecular cloning, vector construction, transfection and viral infection, and transgene expression
- Prior immunology experience including T cell biology, NK cell biology, and/or chimeric antigen receptors is preferred
- Prior stem cell experience including iPSC is preferred
- Excellent creativity, technical decision-making, and trouble shooting skills
- Excellent collaborative experience, communication, and presentation skills
- Experience in working with cGMP compliant/quality-controlled procedures is a plus

Working Conditions and Physical Requirements

- Will require working with blood and cell lines of human and animal origin
- Will require working with hazardous materials
- 100% on-site work at corporate headquarters in San Diego, CA with travel to other research facilities in San Diego as required
- Occasional evening and weekend work will be required

The preceding job description indicates the general nature and level of work performed by employees within this classification. Additional and incidental duties related to the primary duties may be required from time to time.

For consideration send cover letter and resume to: careers@fatetherapeutics.com and reference job code 582HC.

About Fate Therapeutics, Inc.

Fate Therapeutics is a clinical-stage biopharmaceutical company dedicated to the development of first-in-class cellular immunotherapies for patients with cancer. The Company has established a leadership position in the clinical development and manufacture of universal, off-the-shelf cell products using its proprietary induced pluripotent stem cell (iPSC) product platform. The Company's immuno-oncology pipeline includes off-the-shelf, iPSC-derived natural killer (NK) cell and T-cell product candidates, which are designed to synergize with well-established cancer therapies, including immune checkpoint inhibitors and monoclonal antibodies, and to target tumor-associated antigens using chimeric antigen receptors (CARs). Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit www.fatetherapeutics.com.