



**Scientist, Molecular Engineering**  
**Job code 398HC**

**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 synthetic biology and genomic engineering techniques as well as strong expertise in 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 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 novel editing platforms.
- Comprehensive molecular and phenotypic characterization of stable/clonal genetically modified cell lines.
- Develop molecular strategies for genomic engineering by applying the latest genetic manipulation technologies for optimized efficiency and specificity scalable for manufacturing processes.
- 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 ELISA/Flow cytometry/qPCR.
- 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, genome cleavage assays, off-target editing evaluation, genomic integration analysis, etc.



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

#### **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
- 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](mailto:careers@fatetherapeutics.com) and reference job code 398HC.

#### **About Fate Therapeutics, Inc.**

Fate Therapeutics is a clinical-stage biopharmaceutical company dedicated to the development of first-in-class cellular immunotherapies for cancer and immune disorders. 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 product candidates include natural killer (NK) cell and T-cell cancer immunotherapies, which are designed to synergize with well-established cancer therapies, including immune checkpoint inhibitors and monoclonal antibodies, and to target tumor-associated antigens with chimeric antigen receptors (CARs). The Company's immuno-regulatory product candidates include ProTmune™, a pharmacologically modulated, donor cell graft that is currently being evaluated in a Phase 2 clinical trial for the prevention of graft-versus-host disease, and a myeloid-derived suppressor cell immunotherapy for promoting immune tolerance in patients with immune disorders. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit [www.fatetherapeutics.com](http://www.fatetherapeutics.com).