

## JOB DESCRIPTION

### Title: Biology Research Scientist, for Kytopen

#### Overview

[Kytopen](#) is an MIT spinout streamlining the engineering of a wide array of human and human-derived cells for use in next-generation cell therapies, with the goal of expanding access to powerful new living medicines. We enable transformative therapies with our patent-pending continuous *Flowfect*<sup>®</sup> cell engineering platforms. The non-viral *Flowfect*<sup>®</sup> technology is a fast, scalable, and gentle gene delivery process that yields billions of high-quality engineered cells in minutes while maintaining cell health and function. We seek passionate, pioneering people to join the team on this mission.

#### Summary

The Research Scientist will work with R&D leadership, with responsibility for planning and execution of scientific efforts for Kytopen. The qualified candidate will demonstrate the ability to independently execute Biology research and development as required for the development and use of the Kytopen *Flowfect*<sup>®</sup> cell transfection systems. This individual will work in coordination with all internal and external personnel and resources required to deliver on the research plans in order to realize the company's goals. The Research Scientist will also possess and demonstrate expertise and skills required for these efforts, as well as collaborate and mentor other team members as needed.

#### Qualifications and Skills

The ideal candidate will be a high energy, confident individual possessing strong analytical and communication skills with a M.S./Ph.D. in Biology, Immunology, or a related field, with at least 5-7 years of industry experience developing cell therapies, cell line development, (or supporting technologies).

#### Responsibilities and Duties (What we need)

- Design and conduct experiments to develop and support the Kytopen *Flowfect*<sup>®</sup> technology
- Lead scientific efforts with both internal strategic development and collaborator driven projects to ensure milestones delivered with targets achieved
- Collaborate with and support the Engineering team in defining requirements, specifications, and procedures for *Flowfect*<sup>®</sup> technology platforms
- Work with external collaborators to define project workplans and align on deliverables and milestones
- Work with project manager to coordinate schedules and deliverables
- Serve as subject matter expert in internal and external scientific efforts utilizing the *Flowfect*<sup>®</sup> technology
- Execute plans with Biology team in specific areas of interest, including delivery of molecules to HSCs and immune cells
- Perform ex vivo/in vitro cellular assays with an emphasis on flow cytometry and ELISA
- Experience with current non-viral cell transfection processing solutions
- Ensure excellent laboratory approach, adherence to protocol, and meticulous lab documentation
- Generate high-quality experimental reports for internal and external review
- Provide reports at Lab Meetings, Project Meetings, external partners as necessary
- Perform statistical analysis on characterization/validation data

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- Maintain shared responsibility of inventory management, equipment maintenance, and continuous process improvement

## Requirements (About you)

### What:

- Advanced degree (M.S. or Ph.D.) in Biology, Immunology, or a related field
- At least 7 years of industry experience with a biotech, diagnostic, pharmaceutical company (at least 5 years with a Ph.D.)
- Familiarity and experience working in a regulated environment and building products according to Industry Standards
- Experience working with human HSC and/or immune cell biology, including *ex vivo* culture and genetic manipulation, viral and non-viral biomolecule delivery, and *in vivo* animal studies
- Experience in standard processing techniques including multi-parameter flow cytometry, immunological assays, and cell culture
- Experience with statistical software packages such as JMP, Minitab, and/or R is highly preferred
- Strong organizational, analytical, problem-solving, root-cause-analysis, and trouble-shooting skills
- Strong written and verbal communication skills

### How:

- Ability to work within a diverse workforce and provide a positive and motivational work environment
- Scientifically motivated with the ability to design, conduct, and analyze experiments
- Entrepreneurial and comfortable in a fast-paced environment
- Ability to adapt to shifting constraints while maintaining high performance and morale
- Self-motivated and collaborative, with excellent time management
- Creative and adaptable in identifying and implementing best practices across team
- Demonstrated leadership ability to exemplify Kytopen's values of: Impact, Passion, Integrity, Resilience, and Inclusivity

## Preferred (More about you...)

- Ph.D. in Biology, Immunology, or a related field
- Track record of platform development and technological innovation
- Familiarity with gene editing via current technologies (e.g. CRISPR, TALENs), including the ability to perform CRISPR screens with downstream functional assays
- Experience with leveraging high throughput screening for drug discovery and development