

Industry:

- Pharma
- Biotech service
- Medical Device
- Diagnostic
- Research tool

Management:

- Executive Leadership
CEO and CSO: **Wenyan Jiang**
Business Development: **Yuchen Qi**

- Scientific Advisory Board
Luciano Marraffini, Ph.D.
Associate Professor
Rockefeller University
Microbiologist and CRISPR pioneer

- Vincent Fischetti**, Ph.D.
Professor
Rockefeller University
Microbiologist and phage biologist

Number of Employees: 4

Finance:

- Auditor: N/A

- Seeking funding

- Amount of Financing Sought:
100,000 USD

Legal:

- IP: US20150031134A1 (pending)

Executive Summary:

Unicrobe provides dedicated microbial genome editing and consulting services. With our CRISPR editing technologies developed at Rockefeller University, our mission is to reduce time and labor costs for academic labs that study microbiology, microbiome, infectious diseases and biotech companies that work with energy, bacteria-assisted manufacturing, microbiome engineering and therapeutics. By establishing a centralized bacterial genome editing platform in New York City, we aim to accelerate both scientific discovery and commercialization. We are currently looking for investment. Alternatively, we are exploring opportunities to launch our service under an academic institution in a format similar to a resource center.

Company History:

The existing genome editing technologies in bacteria are slow and labor-intensive. Following our first proof-of-principle demonstration of a rapid, CRISPR-mediated genome editing technology in bacteria in 2013, we received an ever-increasing amount of emails from institutes all over the world, requesting assistance to apply our technology to a wide range of bacterial species. Unicrobe was formed in early 2016 in order to satisfy this unmet need for bacterial genome editing.

Market Opportunity / Unmet Need:

Bacteria play many important roles ranging from human health to various industries such as agriculture, energy and manufacturing. In order to study these microorganisms and unlock their potential to benefit humanity, scientists need to modify their DNA, a process called genome editing. This allows them to interrogate gene functions or to improve the yield and quality of certain biomolecules. For instance, many life-saving drugs, such as insulin and other recombinant therapeutic proteins are produced from large-scale, genetically-modified bacteria.

Contrary to popular belief, many bacteria are hard to manipulate genetically! There is an urgent need to develop new enabling technologies and to establish specialized service centers that perform rapid and affordable bacterial genome editing. Our editing technologies shorten the turnaround time from months to 1-3 weeks and reduce the cost. Together, our services allow customers to explore entirely new avenues of research that were previously untenable, and have a potential to accelerate scientific discovery and commercialization.

Products/Services – Launched & Pipeline:

We currently provide on-demand microbial genome editing services in a variety of bacterial species, including *E.coli*, salmonella, *Staphylococcus aureus*, *Streptococcus pneumoniae* and their phages. Following our launch, we plan to develop new editing services in ten more bacteria that are of industrial and medical importance.

Commercial / Technical Milestones:

Summer of 2016: launch

Our technical milestones are to research and develop genome editing technologies in new species of bacteria that are industrially and medically important every year and start selling immediately after.

Intellectual Property:

US20150031134A1: CRISPR-Cas component systems, methods and composition for sequence manipulation (filed by Rockefeller University)

Competition:

Genscript provides genome editing service for only one bacterial species (*E.coli*) with a technology similar to ours. Their turnaround time and price are > 4 weeks and >\$4000. Our turnaround time is 1-3 weeks and we have a two-tier rate for academia (\$500-\$900) and industry (\$1000-\$1800).

Financial Projections (Unaudited):

Profitable: 2018 Q1

Please indicate primary purpose of Presentation:

Investment Non-profit organization