

64x Bio

An evolution
in cell line engineering.



Founding team

Co-founder

Scientific Co-founder



Alexis Rovner

Co-founder, CEO

Genome Engineering, Postdoc Church lab
Science, Nature Papers



David Thompson

Scientific Co-founder

Massively Parallel Assays, Postdoc Church lab
Inventor of early CRISPR IP



George Church

Scientific Co-founder

Massively Parallel Assays, Gene Therapy
Helped develop genome sequencing, CRISPR editing



Pam Silver

Scientific Co-founder

Genome Engineering, Synthetic Biology



Jeff Way

Scientific Co-founder

Genome Engineering, Mammalian Biology



Seed round, 2019 **\$4.5M**

Lead Investors



Headquarters **San Francisco, CA**

What is a viral vector?

A tool that is used to deliver genetic material into cells.

Viral vector



Critical to delivering drugs with massive markets

Cell therapies

Gene therapies

Vaccines

Cancer therapies

Viral vectors are hard to produce

Especially at sufficient scale and quality.

Manufacturing cell



Why?

Viral vectors are created in living cells, which produce viral vector at low yield and poor quality.

Viral vector manufacturing is a massive bottleneck

limiting new drug development

GEN Genetic Engineering & Biotechnology Review

Gene Therapy Dollar Is Waiting on Viral Vector Dime

Manufacturers of viral vectors need to expand capacity and adopt industrial processes that can raise yields and avoid batch failures.

By Mike May PhD February 1, 2020 PG 10



PHARMACEUTICAL TECHNOLOGY

Strategies to address the viral vector manufacturing shortage

By Mike May



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With the exciting promise of addressing previously untreatable medical needs, the rapidly growing field of gene therapy has already begun to revolutionize patient treatment. The ability to create a genetic fix for certain cancers and other rare diseases has resulted in the launch of

FIERCE
Pharma

Vexed by vectors: How COVID-19 vaccine and cell and gene players are tackling the viral vector bottleneck

By Frances Foster/Editor July 16, 2020 P10/11

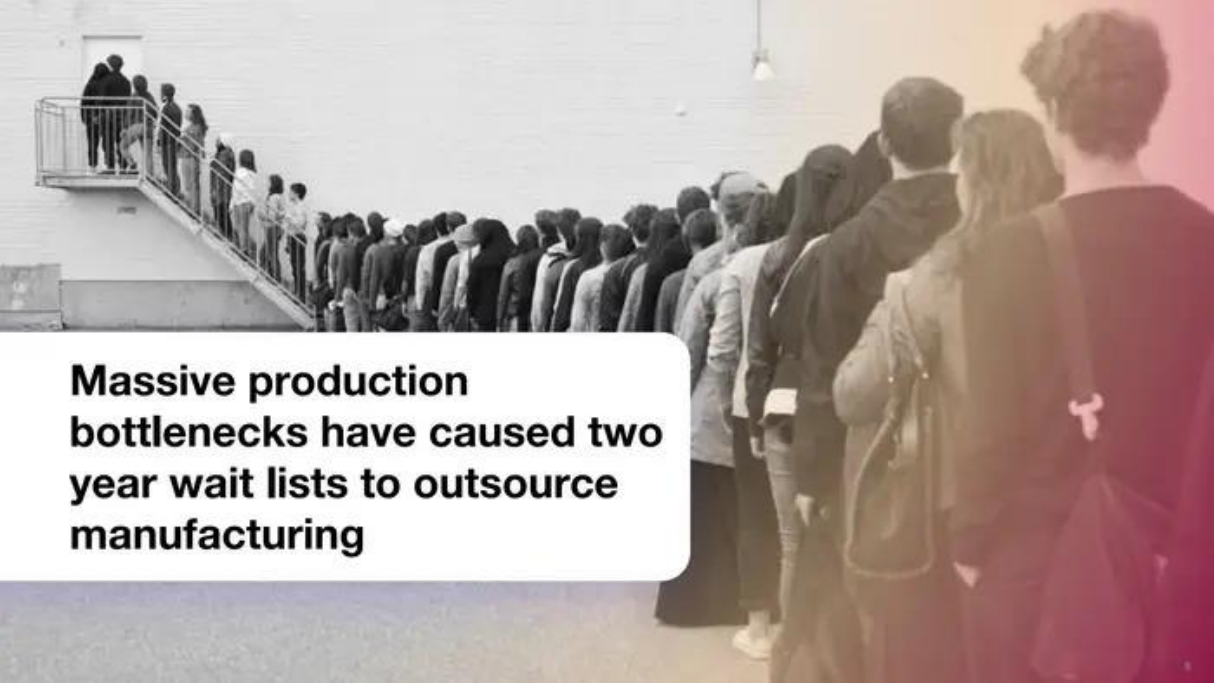


Pharmaceutical research firms gathered to address capacity and economic challenges

Squad's cancer cell therapy Bimapan, Johnson & Johnson and its recombinant COVID-19 vaccines, Novartis' gene therapy. 3 of these, plus many others, are joined by a common element—viral vectors. That's creating big problems for the industry.

are engineered viruses used to deliver gene therapies, gene therapies such as Novartis' CAR-T Kymriah—and certain their shortage is already upon us, thanks to manufacturing that simply hasn't kept pace with the advance of cell and gene

or role of viral vectors in AstraZeneca and Johnson & Johnson's clinics, plus a looming wave of new drug approvals, and the due to tighten even more. That's unless regulators, biopharmaceutical drugmakers also caught a big virus—COVID-19—in a moment



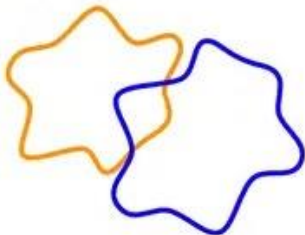
**Massive production
bottlenecks have caused two
year wait lists to outsource
manufacturing**

How do you fix this?

Current solutions are laborious and time consuming

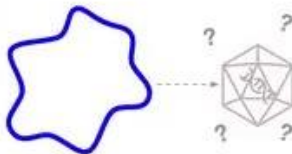
1

Introduce mutations into a cell via CRISPR



2

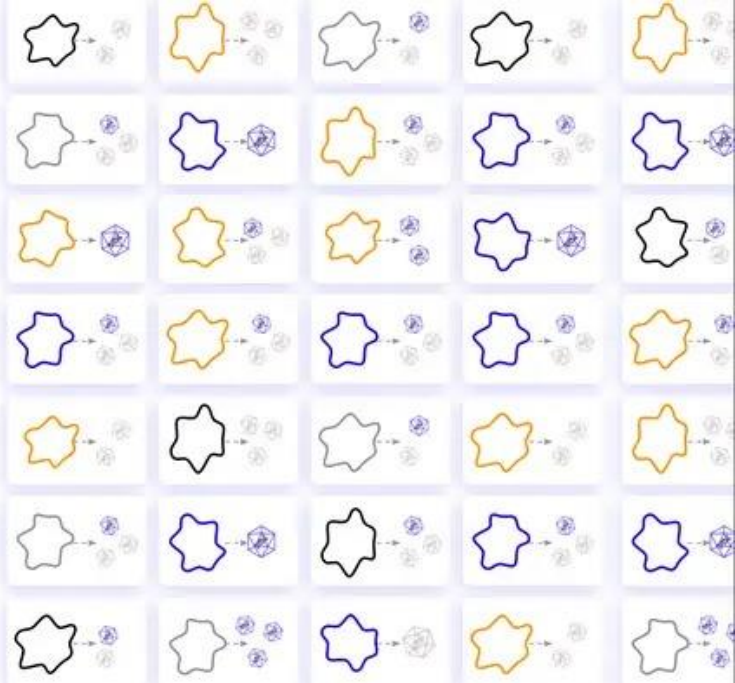
Test production ability one or a few at a time



Our solution

Test millions of cells at once

High throughput experimentation enables 64x Bio to 1) move fast and 2) build a computational map of cell types that tells us where to move.



Library design & assembly

Multiplexed measurement

VectorSelect™

We built this technology into a platform that enables custom generation of better manufacturing cells.

Characterization

Learn & model trends



CellMap™

CellMap™ learns from the trends in our proprietary data to predict winning mutation combinations, which will enable us to build better cells over time.

Contact us



Alexis Rovner

Co-founder, CEO

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ENDPOINTSNEWS

