



Case Study

Accelerating the  
discovery of multi-  
domain proteins for  
next-generation cell  
and gene therapies

# Serotiny





# Create scale with a modern, centralized cloud solution to accelerate scientific innovation by uniting cutting edge synthetic biology and machine learning models

Serotiny is a therapeutic discovery company that designs new genes for next generation cell & gene therapies. Their goal is to design new treatments for cancers and genetic disorders. To do so, they've developed proprietary technology to create high-throughput, multi-domain proteins with novel functionalities.

Serotiny's platform requires them to build and maintain a reusable, and scalable design-build-test-learn process that generates & evaluates therapeutic candidates for these next-generation therapies.

## Company Profile

Number of Employees

11-50

Industry

Biotechnology  
Research

Location

South San  
Francisco, CA

### Serotiny reported:

#### ↑ Collaboration

Wet lab and computational teams can easily collaborate by linking sequences with the most up to date data sets

#### ↑ Access to insights

All of Serotiny's data is stored in a central place, giving the team a comprehensive view into research progress

#### ↑ Data quality

Data is structured and traceable allowing Serotiny to reduce repeated work and ask novel complex computational questions

“Benchling has given the Serotiny team a 360° degree view into our R&D progress. This has improved collaboration and time to insight, and has enabled us to ask new questions we weren’t previously able to.”



Diego Vargas  
Senior Director of Research



## Challenges addressed

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### **Basic office productivity tools, not designed for biotech R&D, made it difficult to find samples and surface past results**

Before Benchling, Serotiny used a collection of Microsoft products to keep track of protocols, experiments, samples and results. This collection of software wasn't built for biotech, which made it difficult and time consuming to organize and find past samples or results.

### **Time spent on administrative tasks was duplicative and costly**

Lacking easy to use templates, the teams at Serotiny often had to write new protocols from scratch, taking precious time away from research.

### **Legacy molecular design tools resulted in time-consuming and costly errors**

Serotiny legacy molecular biology tools were clunky, fickle and did not integrate with their other systems. This forced teams to resort to copy/paste actions, which proved to be tedious, slow, and error prone.

## Outcomes delivered

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### **Improved data quality through standardization and centralization**

A unified suite of applications means sequence design & analysis, sample management, and experimental record keeping are all connected in the same platform and accessible by API

### **Access to scientific and operational insights drive faster and better decision-making**

Global search within Benchling surfaces all previous experiments, results, biological entities, and their physical locations in the lab, leading to more efficient, informed decisions

### **Collaborating from a cloud-based, central source of truth between different technical teams**

Benchling allows Serotiny to collaborate in real-time within the platform and unlocks the ability to search and interact with data across teams and experiments, driving optimization across scientific workflows.

“We’ve increased our Benchling footprint 3x in just 1 year, helping us grow effectively. We’ve been focused on our science and building the team, and we’re thankful to have Benchling as a partner as we scale.”



Colin Farlow  
CEO

