Benchling

Zymergen

Integrating the Custom Solutions of a Technology Powerhouse

Zymergen is an industrial biotechnology company that engineers microbes to produce high-value commercial molecules. The company employs many custom software systems and algorithms that allow their scientists to push the boundaries of strain engineering.

PRIOR CHALLENGES

1 / With many siloed pieces of custom software, it was difficult for scientists to enter and extract data.

2 / Scientists in the strain optimization and fermentation & production teams couldn't share complete experimental context.

3 / Zymergen's disparate systems couldn't scale with their rapidly growing company.

KEY BENEFITS

1 / Integration Innovation
Zymergen uses Benchling as a central platform to unite their custom tools. Proprietary algorithms, instruments, and niche software all integrate into Benchling.

2 / Complete Experiment Histories
From every plasmid to every fermentation run, Zymergen's scientists view and share a complete, step-by-step data trail.

3 / Organic Growth and Onboarding
Since starting with 10 Benchling users, Zymergen's deployment has grown to over 140 users, with ongoing onboarding handled completely internally.

> " Benchling has been a model partner for us as we have grown our business. We would highly recommend Benchling to any growing biotechnology or life science firm. "
> **Jed Dean, Cofounder**

APPLICATIONS USED

📖 **Notebook**

🧬 **Molecular Biology**

Unifying custom tools on a central informatics platform

- Zymergen integrates custom sequence analysis algorithms with Benchling, eliminating data import/export.

- By integrating automated data capture across plate groups, Zymergen populates notebook entries with data in real-time.

- With centralized functional data, analysis, and records, the speed with which Zymergen generates decision-quality results is a competitive advantage.

Collaborating seamlessly across teams

- Zymergen scientists share and collaborate on the same up-to-date plasmids

- Protocols and templatized Notebook entries enforce SOPs across the Zymergen organization

- Production teams review upstream strain optimization teams' work to inform their own processes.

Scaling and optimizing processes over time

- Given how intuitive Benchling is, Zymergen has been able to handle all software training internally.

- Rich protocol versioning empowers Zymergen to optimize their processes by comparing results across conditions.

- As the company has scaled, more of their clients share classified data. Benchling's permissions features intelligently restrict data access.