

## Building a Global Informatics Infrastructure

Agenus is a global biopharmaceutical company with multiple immunotherapy and vaccine pipeline programs. The company employs scientific staff spread across four discovery, screening, and characterization facilities around the world.



### PRIOR CHALLENGES

- 1 /** Without unified systems, it was difficult for scientists to effectively find and share information.
- 2 /** Globally-distributed R&D team impeded team collaboration.
- 3 /** Complexity of R&D workflows exacerbated difficulties tracking samples and experiments.

### KEY BENEFITS

- 1 / Centralizing experimental data**  
Benchling replaced Agenus's multiple informatics systems with a single, end-to-end platform where they track all of their experiments, results, and samples.
- 2 / Tracking across international sites**  
Benchling made all institutional knowledge accessible to scientists across the globe, dramatically streamlining data transfer and sample tracking.
- 3 / Mining success patterns**  
Agenus mines data across past experiments to determine which factors led to success and optimize future experimental design.

“ Biologics R&D is an environment that's very difficult to integrate data across, but Benchling gives us access to all of it. ”

**Dennis Underwood, VP Molecular & Informatics Systems**

## APPLICATIONS USED



Notebook



Molecular Biology



Registry



## Achieving shorter timelines with seamless collaboration

- At any given time, Agenus's scientists can see the experiments, results, and proteins of their colleagues.
- By knowing every experiment done previously and which reagents have been produced, scientists can review and plan experiments much faster.
- Across the board, Agenus as a company is accelerating their timelines.



## Answering any question about any sample across international sites

- With complex workflows, scientists input initial information and capture every subsequent detail as experiments transfer across groups and sites.
- For a given protein, Agenus knows which cell line produced it, which sequence engineered the cell line, and which processes took place.
- Agenus knows exactly how every candidate was derived without **any** ambiguity.



## Learning more from every experiment

- Agenus reviews their historical data to understand what distinguishes each of their molecules.
- For example, certain peptides are more difficult to synthesize than others. Agenus mines patterns across these peptides to determine what predicts difficult synthesis.
- Agenus works even faster by proactively applying these learnings. They predict which proteins will be more difficult to synthesize and adjust their processes accordingly.

