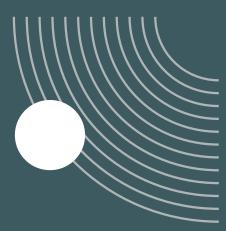
### Benchling Bioresearch



# Plan, capture, and share research with software that scientists use



Accelerate R&D discovery with the platform of choice for leading research organizations of all sizes Are your research teams looking for ways to centralize data, design novel biomolecules, and increase speed, coordination and throughput?

# Still relying on legacy ELN and LIMS platforms, spreadsheets, and point solutions to manage experimental data?

Benchling Bioresearch gives teams a shared space to design and manage experiments, biological entities, workflows, and results endto-end. It's easy to implement, configure, and maintain — all in a secure platform. And by integrating into the larger digital ecosystem of laboratories, Benchling Bioresearch gives scientists a central, modern interface to turn ideas and insights into products.

#### Learn more about...

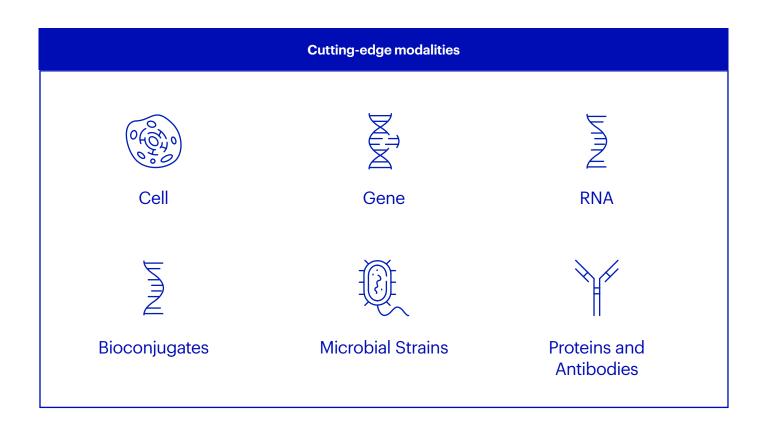
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Generic software, basic lab notebooks, and disconnected registries don't work for modern science. This leads to an incredible cost to your team's time, missed opportunities, and ultimately the bottom line.

We surveyed over 1000 scientists and found:



# Discovery of complex molecules requires a bio-intelligent approach



Continually evolving molecular modeling capabilities
DESIGN
CHARACTERIZE
REGISTER
ANALYZE

## Get to know Benchling Bioresearch

The introduction of new technology is rapidly changing in the life sciences — creating more data than ever before. This surge presents challenges for research teams, necessitating a comprehensive data strategy to effectively achieve their goals in discovery programs. Mirroring other industries that have seen substantial improvements in productivity, efficiency, and accuracy through digital transformation, biotech and pharmaceuticals are also shifting towards a digital-first approach. This shift aims to streamline lab operations and expedite scientific breakthroughs.

Despite a general consensus on the benefits of a modern, data-driven research methodology in enhancing chances of success, many organizations still struggle to adopt effective solutions. Traditionally, researchers have relied on physical lab notebooks, spreadsheets, and outdated Laboratory Information Management Systems (LIMS) to document experimental data and manage samples. These methods, often inflexible and difficult to scale, lead to isolated data pools, increased error rates, and lack bio-aware traceability. Consequently, they suffer from low user adoption and result in significant time loss from needing to reconcile data sets and trace experiment lineages. This inefficiency not only slows down the progress of research programs, but also limits scientists' ability to focus on hands-on lab work or computational experiments. Teams adhering to these outdated practices risk falling behind their counterparts who use advanced software solutions.

Benchling Bioresearch, a platform chosen by leading research organizations of various sizes, enables R&D teams to accelerate their discovery processes and improve their success rates.

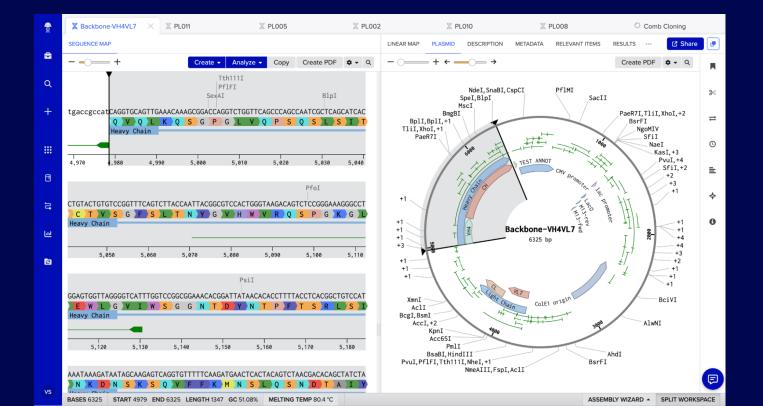
#### Who is it for?

Benchling Bioresearch is for any biotech and biopharma research and discovery teams working on early phases of drug discovery, synthetic biology and other biological research applications in fields like agtech, food science and fermentation.

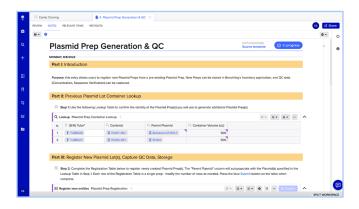
Centralize and standardize data to make better scientific decisions

Discover and design novel biomolecules

Increase speed, coordination and throughput

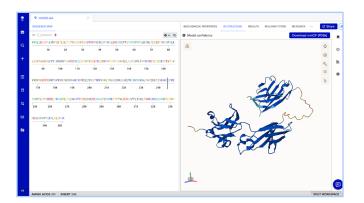


## What can you do with Benchling Bioresearch?



#### **Experimental Data Capture**

- Document rich experimental details and assay data with customizable data entry using either freeform entry or structured tables depending on research needs.
- Connect all relevant items by linking everything from plates, containers, and results to automation runs, file attachments, and blob links from within an entry.
- Create, use, and share a library of templates and subtemplates with reusable content for faster experiment setup and scalability across teams.
- Customize your own review and approval processes with shared, live editing within an entry or @ mentioning collaborators.



#### **Molecular Design**

- Perform single or bulk in silico cloning with common assembly methods and optimize primers using stepby-step guided wizards. View DNA, RNA, proteins, and oligos.
- Perform single or multiple alignments in bulk using an expanded set of algorithms and auto-compute biochemical properties of any sequence.
- Use cutting-edge molecular algorithms like AlphaFold2 and BLAST to analyze sequences.
- Search and find everything from parts and sequences to downstream end products with full experimental context and version history.

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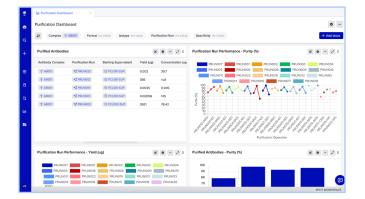
#### Registration

- A biologically aware registry that can capture DNA, RNA, AA, and oligos with or without modifications. Register entities and manage samples directly from experiment entries.
- Simplify intake with common data fields to standardize conventions for sample collection.
   Enforce uniqueness constraints based on sequence or chemical structure and ensure consistent use across teams.
- Designate role-based user privileges to view, create, modify, and manage biomolecules and materials.
- Search the registry of sequences for similar entities using industry standard algorithms like BLASTn and BLASTp.

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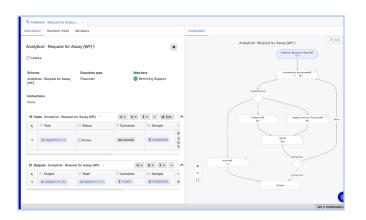
#### **Inventory and Sample Management**

- Establish an inventory of lab consumables, equipment, and samples using a flexible framework that is linked closely with the registry and notebook.
- Customize inventory hierarchy by mapping relationships between registered entities and creating explicit parent/child links between entities and their preps, lots, or aliquots.
- Search for and view complete sample data within and across sites with linking among results, experimental info, and entries with registered entities and inventory items.
- Automatically deprecate quantities of reagents and consumables for an accurate record of current stock. Reserve, check in, and check out samples to manage custody.



#### **Operational Insights**

- Build and share dashboards and reports that track metrics and answer questions from all data created within or pulled into Benchling.
- Use complex SQL queries as a hypothesis building tool to guide future research.
- View resource and team progress in real-time, and identify opportunities to optimize processes programmatically.
- Query and analyze experimental data to better understand and compare results, including from integrations with JMP, Pluto, Watershed, and other analytics tools.



#### **Workflow Management**

- Drag-and-drop tasks in an easy-to-use flowchart to map activities from simple tasks like making a request through complex process dependencies.
- Initiate workflows and assign the next resource when a task is complete to maintain flow, and reroute activities as needed.
- Create and use templates connected to workflows to complete processes efficiently. Propagate data across lab work by establishing how the output of one step becomes the input to the next step.
- Track progress and share program status using real-time status dashboards, notifications, and operational reports.

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#### Platform

Benchling Bioresearch capabilities sit on top of the industry's leading cloud-native R&D platform.

- The Benchling platform is flexible to support discovery teams working across a wide array of fastevolving modalities, activities, and data types.
- Make the system extensible using API to build integrations that automatically pull and push data out of Benchling.
- Extend platform capabilities to third party apps and analytical tools to achieve organizational goals.
- Configure, and reconfigure as needed, everything from permissions to workflows without any code, IT, or vendor involvement.
- Using 21 CFR Part 11 compliant tools, teams can also set up controlled review processes, and use audit trails with human-readable versioning. With a shared data model, users can search across entries, samples, and results generated organization-wide.
- Make FAIR data a reality with <u>Benchling Connect</u>, a flexible, powerful platform for end-to-end data management. Integrate your most-used lab instruments and systems with Benchling to power better decision making and higher R&D throughput.

# What Benchling Bioresearch can do for your organization

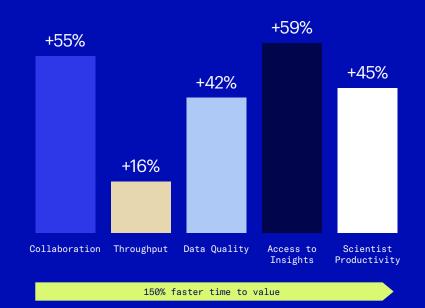
Benchling customers report improvements across 5 areas in their daily activities:

1	2	3	4	5
Higher collaboration across team mates and cross- functional teams.	A flexible and structured platform that allows for higher throughput of samples	Increased data quality due to metadata capture and reduced manual data entr	Easily accessible data insights using dashboards and workflows	Increased overall productivity due to less time spend on searching for the right information

## The value of Benchling

Researchers have reported significant measurable improvements working in Benchling.

Source: Benchling customer surveys conducted across a random sample set of customers in R&D. Intended as a guideline based upon historical results. ROI is dependent upon many different factors that are customer - specific. Therefore, actual results will vary.



"Plasmids are critical for so many processes in early drug discovery. They're critical for protein production, cell line engineering, CAR-T, viral vector generation, therapeutic genome editing, mRNA vaccine production and more. The time it takes and the cost of producing them is a critical limiting factor. Benchling helped make that possible by streamlining processes, eliminating time consuming manual interrogations, adding structure to sample management, and bringing standardization to their entire workflow."



David Öling **Associate Principal Scientist** AstraZeneca



11

Read the AstraZeneca White Paper

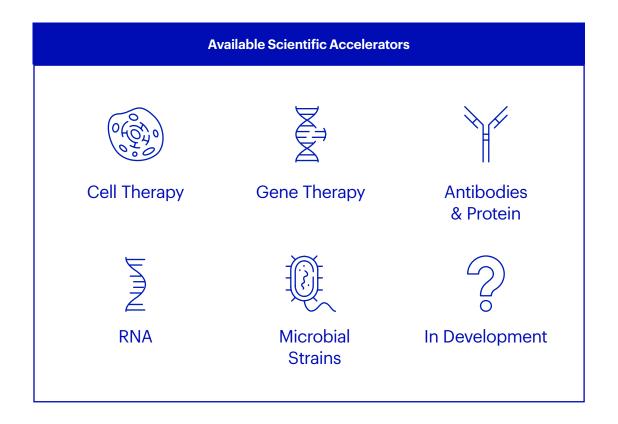
# What's included with Benchling Bioresearch

	B	enchling Bioresearc	h	
Biomolecule design		istration	Inventory Management	Operational insights
Essential R&D capabilit	ies			
Experiment data capture	Sample management	Study management	Workflows	Analytics
Benchling R&D Cloud F	Platform			
Access controls	Unified data model	System-wide search	Codeless configuration	Best-in-class security
Scientific Accelerators	Cell therapy	Gene therapy		IA Microbial strains
	Р	rofessional Service	S	
<b>Bioresearch Services P</b> Standard implementatio	•	pedited delivery, inc	ludes training	
		Optional		
Benchling Connect An advanced platform fo instrument connectivity and analytics.	r Ta	tom Statement of W ilored implementation bath for larger, more plex user requirement includes training	on Col e plans ents, sup	<b>Success Packages</b> mprehensive annual s for training, product oport, and technical vices after going live

## Benchling Bioresearch: Scientific Accelerators

Scientific Accelerators provide a foundational set of data model schemas, configurations, and templates to jump start your implementation. These are based on best practices developed through implementations at over 1,200 customers, and have been shown to be reliable in real-world usage.

When getting started with Benchling Bioresearch for your organization, your Professional Services team will walk you through the Scientific Accelerator that best fits your needs, make any necessary adjustments, then begin the implementation.



## Implementation by Benchling's Professional Services

Benchling's Professional Services team consists of scientifically-trained experts who will understand your R&D and have run thousands of successful implementations for our customers. These range from early startups all the way to the world's largest global enterprises. Professional Services team members work closely with all of our customers to fully understand their R&D requirements and then scope the appropriate implementation work.

Our Professional Services team will serve as project managers to ensure steady progress towards a successful implementation. While each project is tailored to your specific needs, these are some of the typical activities in each phase of implementation.

## 95% Post-implementation customer satisfaction

Source: Benchling customer surveys

#### **Kickoff and planning**

- Pre-project questionnaire
- · Align on project scope
- Confirm R&Rs
- Detailed project plan
- Discuss test and training plans
- Set up governance structures
- Initial design workshops
- · Access to training content
- · Policies and permission setup

#### Configuration, training, and initial user testing

- · Review and understand current process by team
- Configure Benchling to support each team
  - Review configurations, capture feedback, update data models and configurations
- Layer in application specific trainings (train the trainer)
- Prepare for UAT

#### **Test and launch**

- Complete training delivery
- Execute UAT
- Address Issues
- Plan for post go-live updates
- Execute launch plan
- Launch support
- Celebrate!

Learn more about our Enterprise Implementation Methodology

## Customer Success with Benchling Bioresearch

Benchling's Customer Success team helps ensure our customers realize continual value from their Benchling implementations. Our Customer Success Managers take a proactive approach with continual assessment, utilization monitoring, and routine communication.

Every Benchling Bioresearch customer receives our foundational Customer Success Program as part of their product license. This entitles you to product support, selfserve Help Center, access to <u>Benchling Learning Labs</u>, and periodic check-ins with our Customer Success team. You can also select one of our Premier Success Packages which extend the level of support with faster response times, optimization services, customized trainings, and a named Technical Account Manager and Customer Success Manager.

Learn more with our Customer Success Guide

99% Benchling customer retention

Source: Benchling customer surveys

The Benchling R&D Cloud is trusted by leading life science companies

















### Still exploring R&D software options?

Learn more on our web site and reach out for an initial call with a product specialist to see how Benchling Bioresearch can help transform your process development organization.

Learn more about Benchling Bioresearch

Request a Demo

### Already a Benchling customer?

Reach out to your Account Executive and Customer Success team to learn how Benchling Bioresearch can help your organization, and discuss the optimal transition from your current implementation if needed.

**Contact Sales** 

