teselagen
BIOTECHNOLOGY

the Operating System for Biotechnology

Make Life Better™

The Artificial Intelligence enabled Operating System for Biotechnology.

The TeselaGen® operating system connects biologists, lab technicians, and bioinformaticians so that they can collaboratively design and build experiments, organize and standardize data, test and continually learn. Our modern approach, coupled with artificial intelligence modeling, has opened the door for a radical transformation of biology and chemistry, enabling rapid expansion of potential applications.

TeselaGen's founding team met at Stanford while working on problems in computational and molecular biology. The team includes an elite group of engineers, biologists and physicists from Stanford, Cal, MIT and Harvard with wide experience in synthetic biology, molecular biology, automation, artificial intelligence, software development, and business development. TeselaGen has been now deployed by a number of small startups, Fortune 50 companies, as well as emerging innovators in biopharmaceuticals, agriculture, and specialty chemicals.

Reduce cost and time to market.

Our Artificial Intelligence-enabled operating system radically accelerates product development of therapeutics, high value chemicals, and agricultural products. TeselaGen has demonstrated that it can increase the design and build speed, as well as reduce the costs associated with research & development, by an order of magnitude.

TeselaGen as your Operating System for R&D.

➤ ## Why TeselaGen?

Large and small companies that participate in the bio-economy are replacing traditional methods with modern biotechnology and machine learning driven techniques. This is opening the door for a radical transformation of biology and a rapid expansion of potential applications. This increased demand requires a secure, scalable, interoperable, protocol-driven platform that can span multiple users working on multiple projects across large, geographically distributed organizations.

➤ ## The four pillars of our system

- **Design Management:** From DNA to protein design, to the most advanced large scale combinatorial and hierarchical designs that use state-of-art synthetic biology approaches for product development, our design tools help you design complex libraries that can get built quickly in the lab.

- **Lab Management:** A fully integrated laboratory management system that knows how to talk to you and your robots. Our system can orchestrate workflows, hands off to automation, manages samples, freezers and inventory, coordinates inventory and purchasing, guides quality control, and keeps track of everything you need to apply machine learning to optimizing your product.

- **Data Management:** All too often, data is scattered and isolated in places that make it hard to find and difficult to use. Our system provides a connected resource that acquires data from analytic and monitoring equipment and brings it together, links it to your design-build process, transforms it and makes it ready for analysis, predictive modeling, and machine learning.

- **Intelligence:** teams can combine their knowledge and data with AI algorithms built to understand biology — leading to new, high performance bio based products faster than ever before. Our AI models allow you to converge on an optimal product ten times faster then using traditional approaches.

What makes TeselaGen special?

AN OPERATING SYSTEM FOR BIOTECH

Security and Interoperability
Security is paramount. Our platform is compliant with ISO 27001 on network security, data encryption, and availability. Our modular architecture offers multiple 3rd party integration points through an Application Programming Interface (API), a Command Line Interface (CLI) tool, our Microservice Framework, and a browser-based flow editor.

End to end solution to designing, building and optimizing biological products
With our system you will be able to manage the complete information flow, from end-to-end, as you design, build and optimize your biological products.

A HIGH-THROUGHPUT SOLUTION

Executing complex and high throughput workflows
Designing highly complex combinatorial libraries becomes extremely easy with our platform. Quickly check for the buildability of your molecules, automatically generate DNA synthesis, assembly and amplification instructions. Define and execute high throughput experimental workflows, and interface with automation.

Increasing the design and build speed
Bring your ideas to fruition fast using our easy to use but powerful design and bioinformatic tools. You shouldn't be spending time adapting to your product development workflow, let us adapt it to you. Easily automate, manage and track what's happening in your lab.
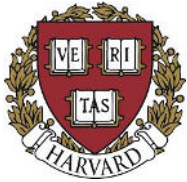
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Selected Partners using **TeselaGen**

Customer Testimonials

"TeselaGen has demonstrated a robust, scalable, and easy-to-use platform that we can trust as a cornerstone of our DNA manufacturing processes."

-George McArthur, Head of Product, Ansa Biotechnologies.

"In collaboration with TeselaGen, at DTU we have used machine learning models to generate new design recommendations, enabling us to successfully forward engineer the aromatic amino acid metabolism in yeast."

-Michael Krogh Jensen, PhD, Co-Principal Investigator,
The Novo Nordisk Foundation Center for Biosustainability.

"TeselaGen has developed one of the most advanced cloud-based solutions for designing, building, and optimizing complex biological workflows and products. We are enthusiastic about extending our collaboration with the TeselaGen team."

-Dr. Michael Köpke, Vice President Synthetic Biology, LanzaTech.