

BloBuilder Educational Foundation

EDUCATION FOR THE (R)EVOLUTION OF BIOTECHNOLOGY

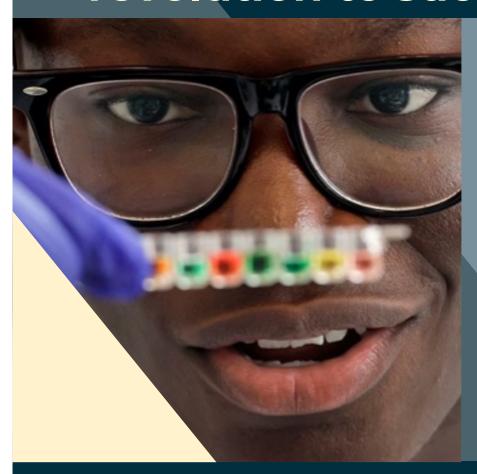
5 MINUTE READ

We are on the cusp of the fourth industrial revolution, powered by biotechnology.

"The biotechnology revolution will ...improve food and energy security, and drive agricultural innovation while mitigating the impacts of climate change. It will ensure that ...people live longer healthier lives..."

FACT SHEET: President Biden to Launch a National Biotechnology and Biomanufacturing Initiative
The White House Briefing Room, Statements and Releases
September 12, 2022

What will it take for this revolution to succeed?



"...in the future, talent, more than capital, will represent the critical factor of production."

Klaus Schwab

Founder, Executive Chairman, World Economic Forum "The Fourth Industrial Revolution: what it means, how to respond"

BioBuilder:

Equipping the next generation with the skills and knowledge to drive the fourth industrial revolution.



"We need to approach synthetic biology with care and promote bio-literacy.
I encourage you to follow #BioBuilder who (is) the world's best at teaching students to read and write DNA."

Jason Kelly

Founder and CEO, Ginkgo Bioworks

BioBuilder delivers comprehensive life science education and workforce training to high school students, educators, and industry professionals.

"We learned much!
However, the most
differentiated learning was
the hands on, in the lab
training connecting the
textbook to reality. I greatly
appreciated seeing how
synthetic biology comes to
life through the various lab
activities."

Thinking back at that BioBuilder experience, it was the first time my entrepreneurship spirit was awakened.

"The BioBuilder curriculum takes education where it really should be, student centered and project based."

"I wasn't quite prepared for the impact BioBuilder was going to make, and how much it would revolutionize how I teach science, and rejuvenate me as a science educator."

> "A lot of concepts that were taught in 1st year college labs, I already knew because of my BioBuilder experience."



Quotes are from guests on Life-Changing Science:

The BioBuilder Podcast

The BioBuilder Education Foundation was created by an award-winning team from MIT.

A proven curriculum that has prepared students for college and career for more than a decade.

Key milestones in BioBuilder's growth and expansion

2011

and MIT, BioBuilder is established as a 501c3 and begins to publish curricula online

2015

With support from NSF Writes the "Building" With Biology" activities with the Museum of Science in Boston, which facilitated public engagement in museums around the U.S.

2017

BioBuilder opens its first dedicated teaching space inside LabCentral's entrepreneurial community in Cambridge, MA

2021

BioBuilder Learning Lab opens inside Ginkgo Bioworks headquarters, further enriching our exceptional programming in combination with the world-leading synthetic biology company

'BioBuilder: Synthetic Biology in the Lab" is published by O'Reilly in English, and later in Japanese (2018) and Russian (2019)

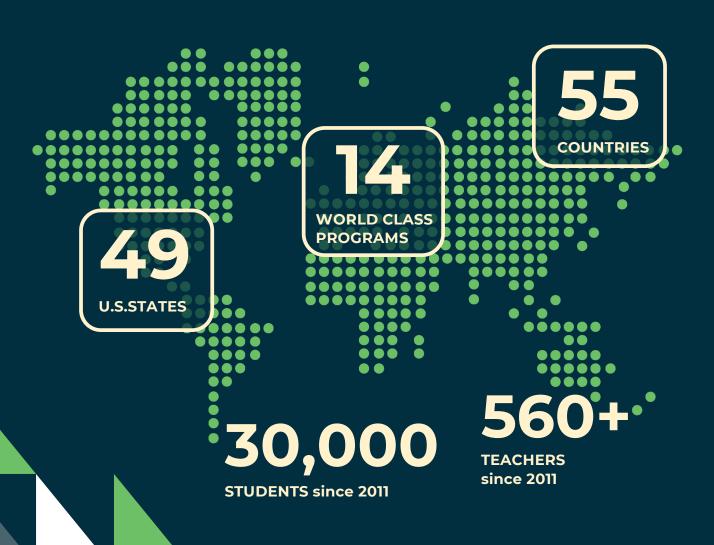
2016

BioBuilder launches its workforce training initiative for underserved high school students, in partnership with MA Life Sciences Center

BioBuilder teams up with world renowned Carolina **Biological Supply** Company as exclusive global distributor of BioBuilder Lab Kits

Since its inception in 2011, BioBuilder has evolved into a global presence.

BioBuilder is an established program that partners with schools in almost every state and around the world, focusing on traditionally underserved students and regions.



Outcome

Teaching and learning through BioBuilder is different.

We approach many aspects of education in a way that's better suited for the next revolution.

What	Is traditionally	with BioBuilder
Learning	Passive	Engaged
Teaching	Generic	Personalized
Curriculum	Standardized	Adaptable
Assessment	Regurgitative	Creative
Environment	Competitive	Collaborative

Degree-focused

Skill-focused



"If we teach today as we taught yesterday, we rob our children of tomorrow"

John Dewey

American Philosopher, Psychologist and Education Reformer



The BioBuilder Education Foundation cultivates the adaptable, creative, and collaborative talent that is necessary for us all to flourish in the biotechnology revolution.

BioBuilder's Executive Board



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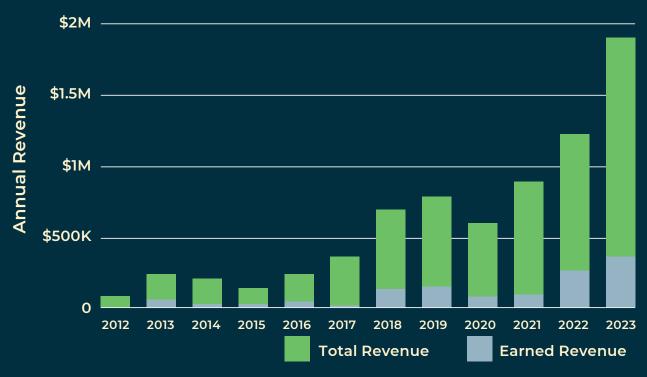


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Financial Trajectory



Key Partners























BioBuilder Educational Foundation

The BioBuilder Educational Foundation is 501(c)3 organization

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Individuals and Foundations are vital partners in BioBuilder's educational mission. To discuss charitable giving, contact our Executive Director: natalie@biobuilder.org