



FISCAL YEAR 2022

ANNUAL REPORT

BioBuilder
Educational Foundation

Dear Friends,

As we close the book on our 10th anniversary year and look ahead to our next decade, I see how these growing up years have sharpened our focus on the future. As you'll see in this impact report, BioBuilder is reaching students, educators, and industry professionals throughout the country and around the world. This report celebrates our recent successes that are opening pathways leading to bright futures, successful careers, and a better world.

Of course we could not have done such important work were it not for the extraordinary BioBuilder community. Everyone -- from our generous supporters to our engaged partners to our energetic Board members and our unparalleled educators and staff -- all have played a vital role. Together we are enriching the lives of future life science innovators by providing them with tools and programs that unlock their potential and creativity.

And today I feel more confident than any "tween" I know. I'm confident we will expand on our good work. We will continue to identify, train, and nurture young innovators. We will continue to inspire students to learn and love life science, and help them become groundbreaking leaders and thoughtful bio-citizens. We will continue to reach new regions, where partnering with community leaders can shape and strengthen the local economy. And we will continue to make our comprehensive programs even more publicly accessible, knowing that BioBuilder's educational model is essential to realize the promise of the DNA revolution.

I hope that you will join us as we grow a brighter future for us all.



With gratitude.

Natalie Kuldell, PhD

Founder and Executive Director

BioBuilder Educational Foundation



Our innovative science and engineering programs open pathways to bright futures, successful careers, and a better world.

Dedicated to helping students



ACCESS TOOLS AND PROGRAMS that unlock their potential as life science innovators



ACQUIRE SKILLS to be able to build with biology



DISCOVER WAYS synthetic biology can make the world better

We inspire students to learn and love life science, opening pathways to academic pursuits and career success. But don't just take our word for it... listen to some of those who have been impacted by our programming and training.

“ 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. ”

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

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

“ My experience in BioBuilder, I'd say was the main driving factor towards me deciding what I wanted to pursue in college. ”



LINK TO PODCASTS

All quotes are from this year's guests on Life-Changing Science: The BioBuilder Podcast

OUR REACH

In 2021-2022, participation
in BioBuilder Programs
increased by

20%

COUNTRIES

Argentina	Hong Kong	Spain
Brazil	India	Taiwan
Cameroon	Indonesia	Thailand
Canada	Italy	United Kingdom
Chile	Jamaica	United States
China	Japan	Vietnam
Czechia	Mexico	
France	Netherlands	
Germany	Peru	
Guatemala	South Africa	

STATES WITH BIOBUILDER TEACHERS or STUDENTS

District of Columbia	Illinois	Minnesota	South Dakota
Alabama	Indiana	Missouri	Tennessee
Arizona	Iowa	Nebraska	Texas
California	Kansas	Nevada	Utah
Colorado	Kentucky	New Hampshire	Vermont
Connecticut	Louisiana	New Jersey	Virginia
Delaware	Maine	New York	Washington
Florida	Maryland	Ohio	West Virginia
Georgia	Massachusetts	Oklahoma	Wisconsin
Hawaii	Michigan	Oregon	



MORE ABOUT US

BIO101 FOR INDUSTRY PROFESSIONALS

“ Having the opportunity to go to BIO101 was an eye-opener for me on how engineering biology works and how the magic happens in the lab. ”

NEW IN FY2021-2022

BioBuilder's upskilling workshops familiarized ~100 professionals in science-adjacent jobs with synthetic biology and modern biotechnology through interactive lectures, hands-on lab training, and biodesign challenges.



READ MORE

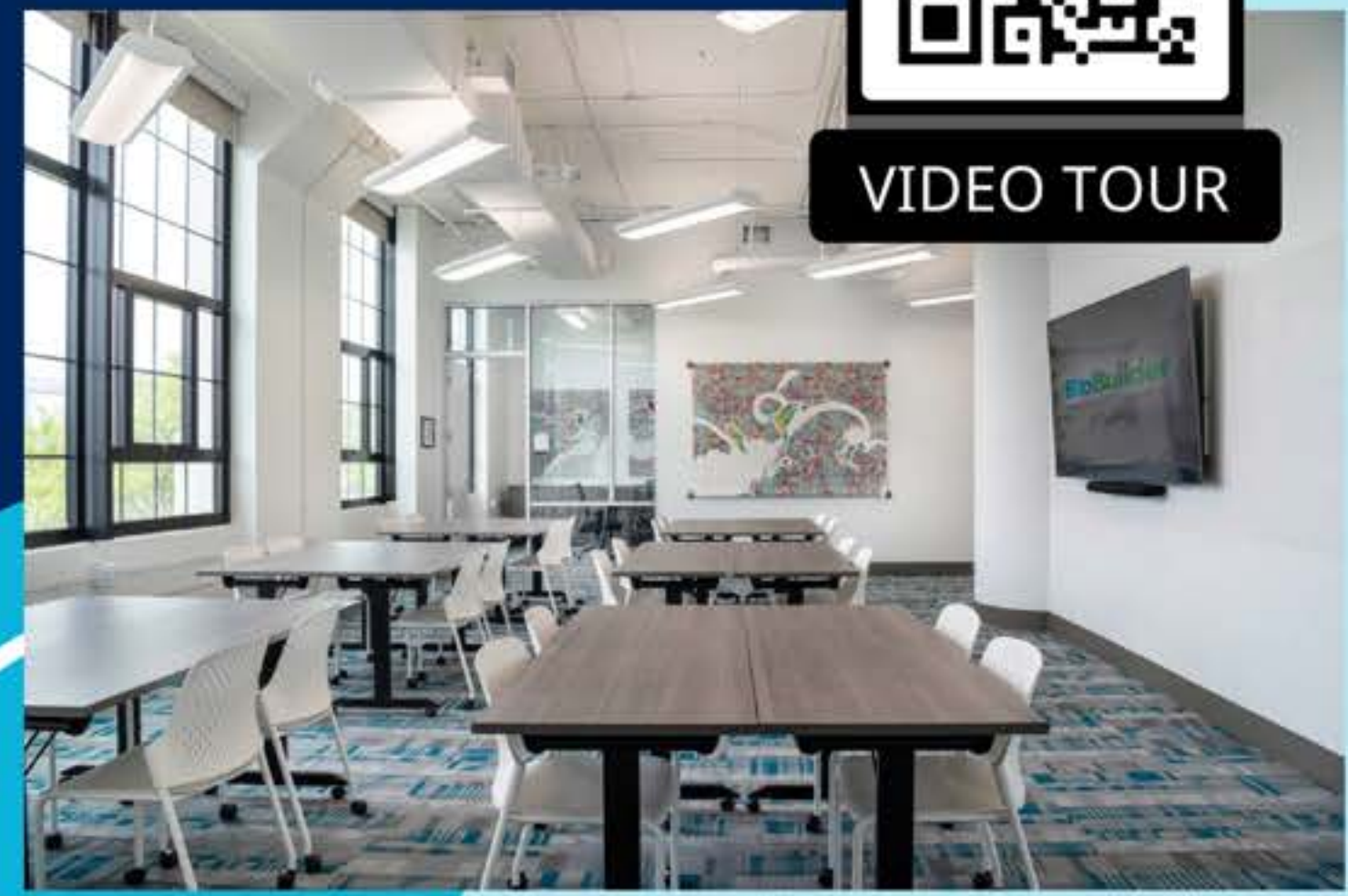
NEW IN FY2021-2022 LEARNING LAB @ GINKGO BIOWORKS

On July 1st we opened the doors of our new headquarters and state-of-the-art teaching lab in Boston's Seaport District.

800 people visited in our inaugural year for professional development, community engagement, programs and much more!



VIDEO TOUR



NEW IN FY2021-2022

HIGH SCHOOL BIOTECHNOLOGY CERTIFICATE PROGRAM

BioBuilder has adapted its classroom curriculum to emphasize career and technical skills. Students graduate high school with credentials, college credit, and workplace experience, positioning them for successful careers in today's life science industry.



LEARN MORE

PROGRAM SPOTLIGHT

BIOBUILDERCLUB

FY2021-2022

192 *Students*

26 *Teams*

21 *Mentors*

8 *States*



VISIT THE PROJECT LIBRARY

High school teams combine engineering approaches and scientific know-how to design, build, and test their own project ideas.

PROGRAM SPOTLIGHT

HIGH SCHOOL APPRENTICESHIP CHALLENGE

FY2021-2022

11 different high schools

71% students of color

90% secured paid
summer internships

This program prepares low income or recently immigrated high school students for paid summer internships in the life sciences. Since 2016, we have accepted 150 students from 36 schools .



READ MORE

FISCAL SUMMARY

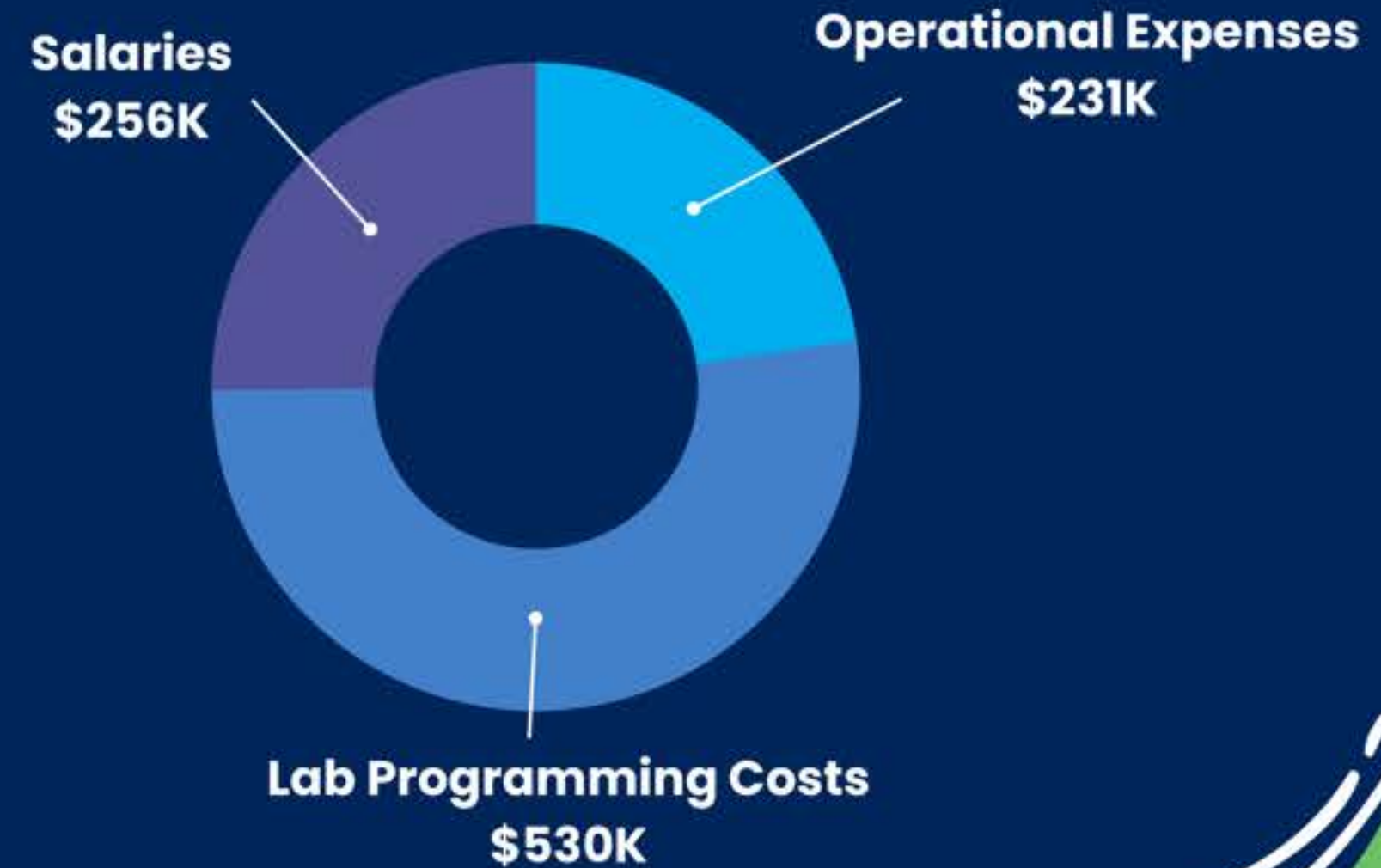
Total Revenue

\$1.2M



Total Expenses

\$1M



OUR TEAM

In FY2021-2022, we welcomed five new board members.



Mary Tamer
Director, DFER Massachusetts
Board President



Natalie Kuldell
Founder, BioBuilder
Executive Director



Drew Endy
Professor, Stanford University
NEW BOARD MEMBER



Kathryn Hart
Professor, Williams College



Keira Krausz
Chief Marketing Officer, Purple
NEW BOARD MEMBER



Theresa Lynn
United Way of Central MA
NEW BOARD MEMBER



Rebekah Ravgiala
Teacher, Tyngsborough HS



Don Shobrys
Director, MIT VMS
NEW BOARD MEMBER



Valerie Tutson
Storyteller, Providence RI



Josh Zinns
Founder, Botanic Properties
NEW BOARD MEMBER



FY2021-2022 Partners



GINKGO
BIOWORKS



BioMADE



Inspired by **patients.**
Driven by **science.**

MASSACHUSETTS
LIFE SCIENCES CENTER

Investing in the State of Innovation

CAROLINA[®]

K2 SCIENTIFIC



TEKNOVA
science matters

RICHMOND



O'REILLY[®]



CITY OF
CAMBRIDGE



MARCUS PARTNERS



TWIST
BIOSCIENCE

M
MINTZ

NOVARTIS

petri
BY **pillar**

arbor
biosciences

WPI

