

# BioBuilder

## High School Apprenticeship Challenge

## Impact Report FALL 2025

### Inspiring high school students to learn and love life science

The Fall 2025 High School Apprenticeship Challenge was an eight-week specialized program that prepared high school students to apply for paid summer internships, higher education, and full-time jobs in the life sciences. From October to mid-December, our students built technical knowledge, lab techniques, research-based thinking, and professional skills.



- 20 Students Graduated
- 15 Schools Represented
- 56 Hours of Training
- 7 Career Conversations
- 69 Microcredentials Earned

“I didn’t know much about what lab work would look like before this program. It has really solidified my understanding of science and research as a career choice, and I think that I will try to pursue a career in molecular biology and/or lab work.”

- Lillian B

## ABOUT OUR APPRENTICES

### Demographics

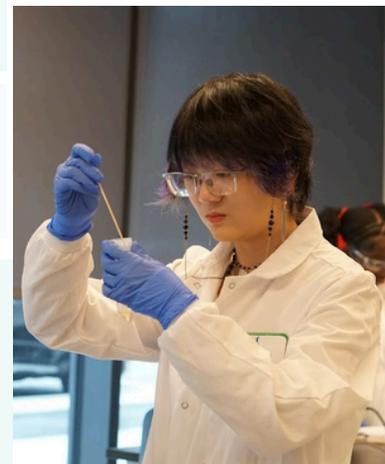
60% Female  
70% will be first-generation college students

### % of Students Confident in STEM Skills

87% of students agreed or strongly agreed that they could confidently work at a lab bench after completing this program

### Plans for the Future After Program Completion

93% of students are interested in pursuing life science careers through either higher education or full-time employment



# Microcredentials

Our Fall 2025 students underwent microcredential testing through Bioscience Core Skills Institute (BCSI) and Biotechnology Aptitude and Competency Exam (BACE). The apprentices were evaluated on their biotechnology skills, use of essential lab equipment, lab safety, and numeracy. These credentials can support students' immediate entry into the biotech workforce after high school graduation.

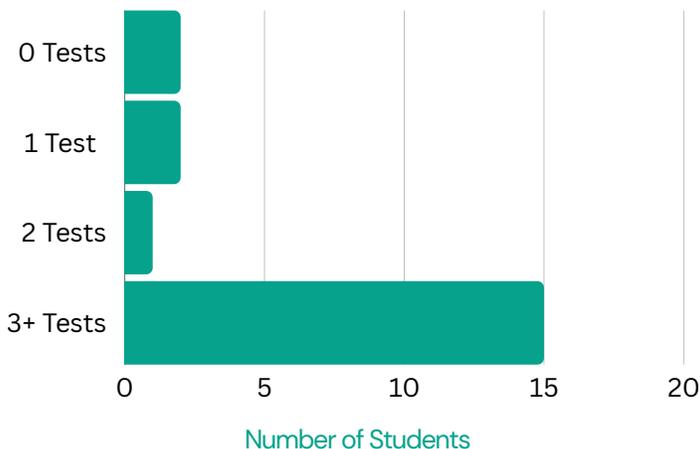


## Biotechnology Aptitude and Competency Exam (BACE) & Bioscience Core Skills Institute (BCSI) Testing

BCSI and BACE offer national industry-recognized testing that verifies students' mastery of core bioscience knowledge and skills. Through performance-based assessments, apprentices demonstrate competencies aligned with current biotechnology workforce standards and expectations. Students who earn these credentials show documented proficiency in essential laboratory techniques, safety practices, and analytical skills. As BCSI and BACE credentials are verifiable and valued by employers, they allow students to showcase the skills they've gained through the High School Apprenticeship Challenge in a tangible way that employers value.

## 90% of our Apprentices Earned at Least One Microcredential

### 75% of our Apprentices Passed 3 or More Tests



### Microcredential Awards Earned by Apprentices



### Career Conversations

A diverse group of industry professionals participated in our Thursday afternoon sessions, engaging with apprentices and sharing their expertise. Speakers included research scientists, program managers, and other industry professionals from leading biotechnology companies. These conversations both inspired our students and provided valuable networking opportunities, which will continue through our robust alumni network. This year, we partnered with Kelly Science & Clinical, a prominent science staffing agency, to help guide students in their job searches and professional trajectories.



### Organizations where our Career Conversations Speakers Work



Kelly Science & Clinical



Inspired by patients.  
Driven by science.

UCB



Private Health Management

Private Health Management

### Where Are They Now?

#### HSAC Alumni Jobs

- Scientist at Sunflower Therapeutics,
- Associate Scientist II at GentiBio
- Scientific Support Specialist at ThermoFisher Scientific
- Research Technician at Massachusetts General Hospital's Edlow Lab
- Laboratory Assistant at Novo Nordisk
- Research Associate at Seia Bio
- Research Intern at Brigham and Women's Hospital

#### Kelly Science and Clinical

Kelly Science & Clinical is a leading staffing agency, specializing in placing professionals in roles across various sectors, including biotechnology, pharmaceuticals, and medical devices. Their extensive network and expertise will assist our students in securing job placements and offer career advice, further enhancing their professional development.

## Sponsors and Instructors

BioBuilder gratefully acknowledges all of our partners and instructors, both listed below, for their support and leadership of the Fall 2025 Apprenticeship Challenge. Together, we are transforming education and giving students the opportunity to shape their futures.



## Thanks to our hosts for this program

### Allston Labworks

BioBuilder's Learning Lab in Allston, a fully equipped bioengineering lab and teaching space where this program was conducted, was generously donated by Allston Labworks. We are thankful for their partnership.

### City of Boston

We are grateful for the City of Boston, whose support allows us to expand workforce training and career opportunities for young people across the city. With this partnership, BioBuilder is addressing Boston's demand for skilled talent in the life sciences industry.

### BioBuilder Instructors

Natalie Kuldell, PhD

Hiroko Kaczmarek, PhD

Katie Bacon Schneider, PhD

Becky Meyer, PhD

Vivek Bajaj, PhD

Yazmin Camacho, MS

Joseph Switzer

Jackie Thompson

### HSAC Sponsors

**ALLSTON  
LABWORKS**

**CITY of BOSTON**

**Kelly** Massachusetts  
LIFE SCIENCES CENTER

**WIB**  **GINKGO  
BIOWORKS** 

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Josephine Lawrence Hopkins Foundation

**BioBuilder**  
Educational Foundation