

Inspiring high school students to learn and love life science

The BioBuilder High School Apprenticeship Spring 2025 Challenge, was an eight-week specialized program that helped prepare high school students to apply to paid summer internships, higher education, or full-time jobs in the life sciences. Our students built technical knowledge, lab techniques, research-based thinking, and professional skills.



- 38 Students
- 26 Schools Represented
- 55 Hours of Training
- 7 Career Conversations
- 107 Microcredentials Earned

“My favorite part of HSAC was the variety of lab procedures that we had to do. I feel like I’m coming out of this program with an abundance of new knowledge, along with a mindset that encourages me to try new things more frequently. The instructors were very patient, and I’m glad I came across this opportunity when I did.”
- Josie S

ABOUT OUR APPRENTICES

Demographics

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

% of Students Confident in STEM Skills

97% of students agreed or strongly agreed that they could confidently work at a lab bench after completing this program

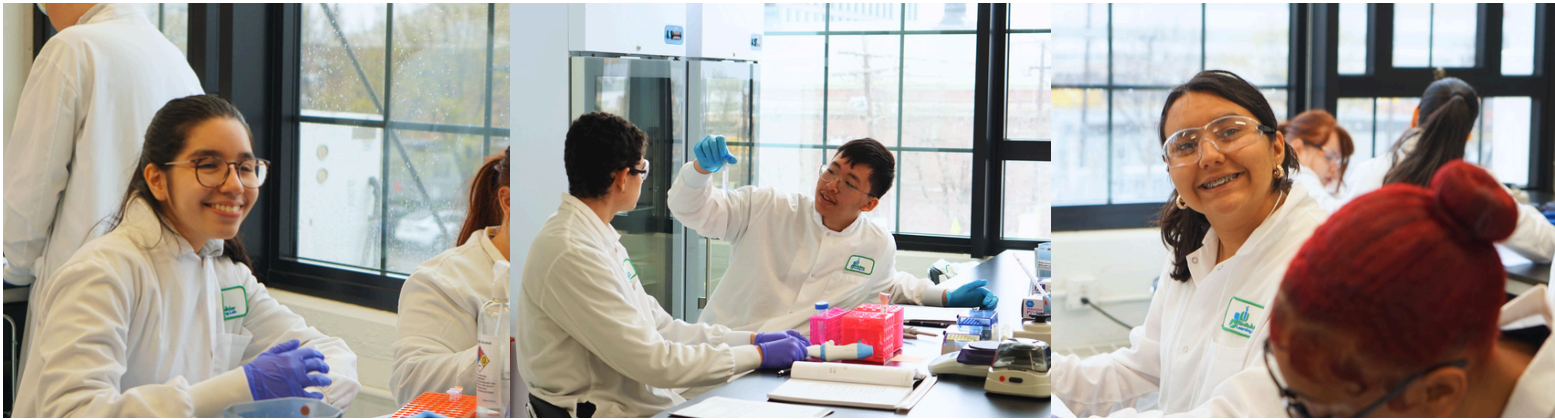
Plans for the Future After Program Completion

86% of students are interested in pursuing life science careers through either higher education or full-time employment



Microcredentials

The Spring 2025 apprentices also underwent microcredential testing through Bioscience Core Skills Institute (BCSI) at the end of the program. The apprentices were tested in small volume metrology (SVM), aseptic techniques, hazard assessments, documentation and SOP, hazard assessments, and numeracy. These earned credentials can support students' immediate entry into the biotech workforce after high school graduation.

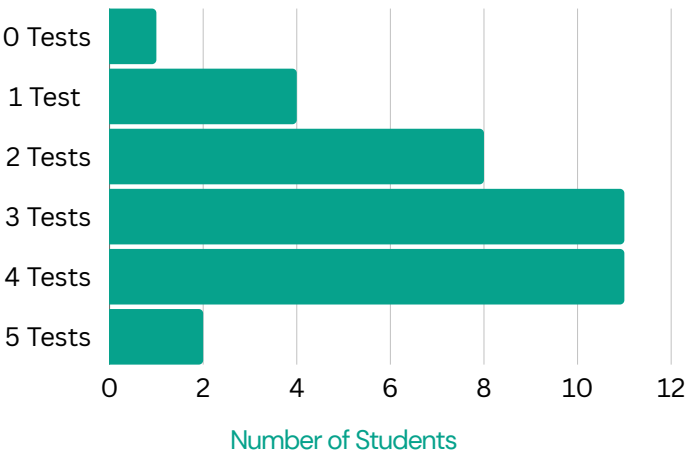


Bioscience Core Skills Institute (BCSI) Testing

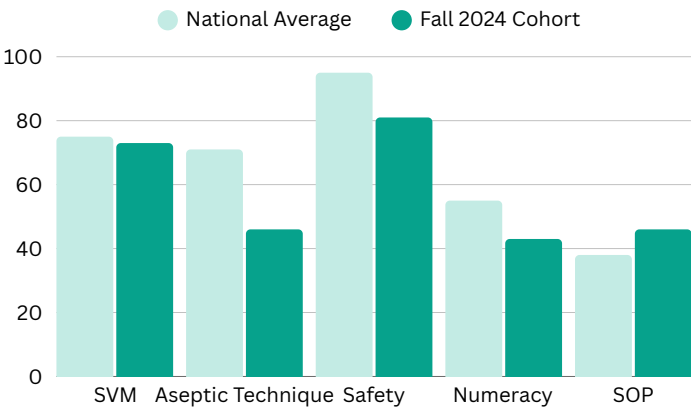
BCSI is a leading organization that offers microcredentials to students based on their demonstration of biotechnology skills that meet industry standards. Collaborating with top industry partners, BCSI ensures that skill verification aligns with current industry requirements and expectations. These stackable credentials allow students to validate the skills they've gained through the High School Apprenticeship Challenge in a tangible way that employers value.

97% of our Apprentices Earned at Least One Microcredential

65% of our Apprentices Passed 3 or More Tests



Apprentices Performed Close to or Better than the National Average in 4 Tests



Career Conversations

A diverse group of industry professionals participated in our Thursday afternoon Zoom sessions, engaging with apprentices and sharing their expertise. Speakers included MIT professors and scientists 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 also partnered with Kelly Science & Clinical, a prominent science staffing agency, to help guide students in their job searches.



Organizations that our Career Conversations Speakers Work

Medtronic

East Tennessee State University

LanzaTech

MIT

Stellix Global Services

UMass Boston



Where Are They Now?

Current HSAC Alumni Jobs

Associate Scientist II at GentiBio

Research Technician at Massachusetts General
Hospital's Edlow Lab

Laboratory Assistant at Novo Nordisk

Research Associate at Seia Bio

Boston University STEM Pathways Summer High
School Research Experience

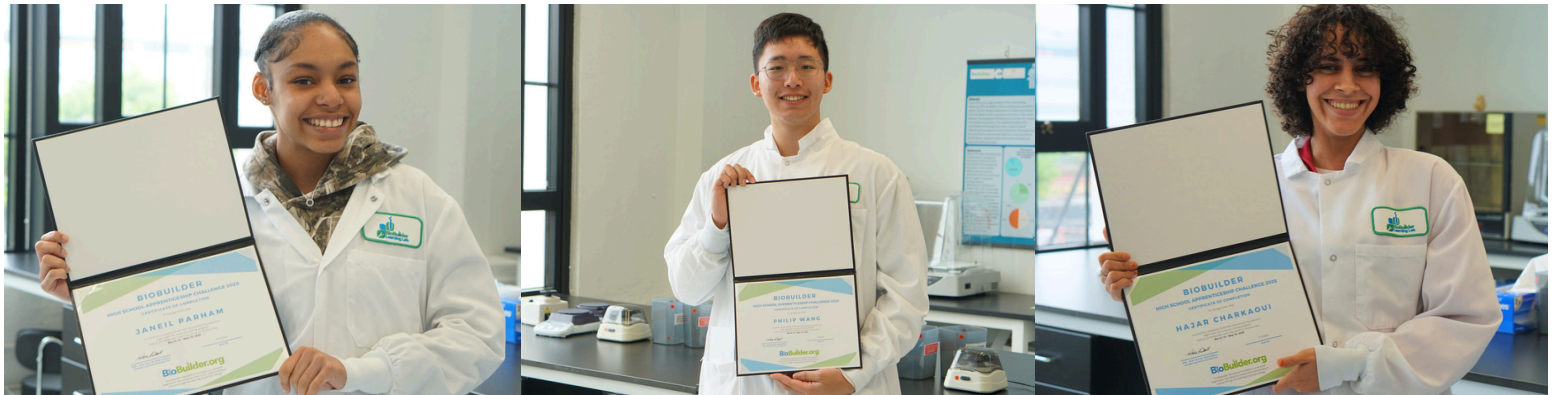
Research Intern at Brigham and Women's Hospital

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 Spring 2025 Apprenticeship Challenge. Together, we are transforming education and giving students the opportunity to shape their futures.



Thanks to our hosts for this program

Ginkgo Bioworks

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

Clark University

We are deeply grateful for our partnership with Clark University, especially for the invaluable support of Professor Don Spratt. His generosity has provided our students with firsthand experience in a collegiate research environment.

BioBuilder Instructors

Natalie Kuldell, PhD
Hiroko Kaczmarek, PhD
Racquel Sherwood, PhD
Katie Bacon Schneider, PhD
Vivek Bajaj, PhD
Yazmin Camacho, MS
Joseph Switzer
Jackie Thompson
Mary Riyazi
Will Luschen-Miskovsky

HSAC Sponsors

