High School Apprenticeship Challenge

2022 Information & Outcomes
The BioBuilder High School Apprenticeship Challenge is an eight-week specialized program to help prepare high school students to apply to paid summer internships in the life sciences. Interested students from the Boston metro area must submit an application, and our selected students build technical knowledge, lab techniques, research-based thinking, and professional skills needed for internship opportunities.

During the eight-week program, Apprentices attend twice per week after school and for three hours on Saturday mornings. They learn fundamentals of life science engineering as well as lab math by working in biodesign teams and at the lab bench. Professional communication skills are strengthened by participating in a public poster session, in resume writing workshops, and in mock interviews.

BioBuilder Instructors
Kate Bacon Schneider, PhD
Hiroko Kaczmarek, PhD
Michael Sheets, PhD Candidate
Nancy Otaluka

75% of Apprentices have confirmed summer plans

2022 Apprentices are going into internships at organizations including:
- Broad Summer Scholars Program
- Cure Summer Only Program
- GROW, Boston University
- RISE
- TAHSS, Tufts Medical
- The Youth Food Project
- Weinberg Lab, Whitehead Institute
- YES for CURE, Dana-Farber

Nancy Otaluka is a 2016 alumna of the High School Apprenticeship Challenge. This year, she returned to the Apprenticeship program to help teach. She is currently a Clinical Research Assistant at Beth Israel Deaconess Medical Center and a graduate of the University of Massachusetts Dartmouth.
POSTER SESSION

CLOSING CEREMONY
24 | 15 | 12
APPLIED ACCEPTED COMPLETED

Race/Ethnicity
- White/Caucasian: 28.6%
- Hispanic or Latino: 14.3%
- Black or African American: 21.4%
- Asian (origins in the Far East, Southeast Asia, or Indian subcontinent): 35.7%

Will Be First Generation College Students: 92%

Gender Identity
- Male: 16.7%
- Female: 75%
- Not listed: 8.3%

Schools Represented by Accepted Students
- Belmont High School
- Brooke Charter High School
- Cambridge Rindge and Latin School
- Everett High School
- Excel Academy Charter High School
- Excel High School
- Lexington High School
- Medford Vocational Technical High School
- Pioneer Charter School of Science II
- Prospect Hill Academy
- Somerville High School

Grade Level
- 10th Grade
- 11th Grade
- 12th Grade
"Working in the lab really made it clear for me that this is what I want to do in my career. I thought it was really interesting and fun and I was constantly learning something new and I really want to continue doing that."

Mina Pitnerova, Belmont High School, intern at Youth Food Project

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Surveyed Apprentices Report:

- Increased confidence in lab skills such as using a micropipette, culturing microbes, and interpreting the results of a lab experiment
- Building a strong and supportive community among the Apprentices and instructors
- Increased clarity on future aspirations in STEM

"While I was extremely invested in molecular sciences I had no idea what it was actually like and that was quite daunting to me. Now that I know the variety of jobs and how good the communities can be I feel better about my future."

Shakhi Andrews, Brooke Charter School, intern at CURE Summer Only
This year, the Apprenticeship program took place at BioBuilder’s new, state-of-the-art Learning Lab @ Ginkgo in Boston’s Seaport district. BioBuilder dedicated fundraising efforts to support the cost of transporting students to the lab from distant schools. Marcus Partners, a Boston-based real estate firm, generously provided matching funds to support student shuttles. All students who took the shuttle indicated that it was critically important to them—without the shuttle, they would not have been able to complete the program.

BioBuilder gratefully acknowledges all our partners for their support of the 2022 Apprenticeship Challenge. Together, we are transforming education.