The BioBuilder High School Apprenticeship challenge is an eight-week specialized program to prepare high school students for paid summer internships in the life sciences. Selected high school students from the Boston metro area build technical knowledge, lab techniques, research-based thinking and professional skills needed for internship opportunities.

During our 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.

Applicants to our High School Apprenticeship Challenge completed a Math and English assessment, three short essay questions and provided the name of a recommending teacher.
Apprentice Data

Demographics

- 54 applicants
- 19 accepted

Grade level
- 62.5% 10th
- 31.3% 11th
- 6.2% 12th

Gender
- 68.8% Male
- 31.3% Female

Race
- 68.8% Black (African, African-American, Caribbean)
- 18.8% Hispanic/Latino
- 12.5% Caucasian
- 2.5% Asian/South Asian/Asian-American

Background
- 68.8% First Generation American
- 18.8% Non-first Generation
- 12.5% Prefer not to say

"I loved that I got to practice basic laboratory skills and do laboratory math that I can use in the future. I liked researching for the posters and reading abstracts. It’s fun at work in the lab, you make new friends, and you get free snacks."

"I was able to acknowledge the idea that making mistakes in the lab is OK and if I do, I need to tell my instructor and not be scared to. I also learned to not to be scared to try."

"If you're even slightly interested in pursuing science as a major or just purely interested in the topic, apply! The whole experience is amazing, you get to meet such amazing and nice people, who all share the same ideas as you. You'll love the whole experience of it, there's no doubt about it."
100% of students strongly agreed that the laboratory component helped them learn
100% are glad they participated in this program
95% of graduating Apprentices agreed or strongly agreed that they learned interesting aspects of science and engineering in this program
100% of students have goals to attend college with plans to major in science-related fields such as Biomedical Engineering, Cognitive Neuroscience, Synthetic Biology, Medical Lab Sciences, Nursing, and Pre-medicine
BioBuilder gratefully acknowledges our partners for their support of the Apprenticeship Challenge

Together we're transforming education