Jourbienthia Paul picked up her first micropipette sophomore year at Match High School when Whitney Hagins, BioTeach Instructor, came into her classroom to guide students through a photosynthesis lab activity. After multiple visits, Jourbienthia was excited to be able to do the hands-on learning she had read about throughout her education. That same summer, Whitney encouraged her to apply to the LEAH Knox Scholars Program at MIT which provides lab training to students and matches them with internships. She was accepted into the program.

Jourbienthia earned a scholarship from her high school that helped her attend Smith College, where she studies Biochemistry. Epigenetics intrigues her the most and seeing how environmental factors can determine what genes get expressed. Specifically, she is interested in how HIV can be used as a tool to edit genes, since the virus embeds its genome into ours. She is currently part of the Achieving Excellence in Mathematics, Engineering and Sciences (AEMES) Scholars at Smith College, which gives first-generation freshmen and sophomores the opportunity to work with a professor on their research.

“I was always interested in science for as long as I can remember. It began with space, specifically,” she said.

When Jourbienthia first came to the U.S. from Haiti, she was six years old. The first book she received after arriving in America was about outer space. Though she couldn’t read in English yet, the images sparked her curiosity.

During the LEAH Knox Program, she realized she didn’t have as much lab experience as other students. “It made me a bit sad that we had not done as many hands-on labs at Match.” The limited lab exposure Jourbienthia did have at Match High School was supported by MassBioEd’s ACCESS program. Jourbienthia credits ACCESS instructor, Whitney Hagins, for introducing her to opportunities in the life sciences.

“Whitney gave me lab experience and encouraged me to apply to the LEAH program.”

As a LEAH Scholar, Jourbienthia was nervous to speak with the summer professors because she had so little lab experience. However, she felt comfortable with the Teaching Assistants and could explain to them when she wasn’t familiar with something.

So, when Whitney asked her to return to the 2022 Student Summer Training Program, this time as a Teaching Assistant for a joint MassBioEd, LEAH Knox, and Lab Central initiative, she saw it as an opportunity to make a difference for others now in that same position. “My goal is to make the students feel comfortable enough to ask questions and share when they don’t know something.”
Jourbienthia is looking forward to her next few years in college, doing more internships and research. Next summer, she is hoping to focus on research. She will apply to the Summer Undergraduate Research Fellowships (SURF) Program at Smith College which would allow her to do research under Professor’s supervision and gain more lab experience.

“Younger me would love to hear from myself now to not restrict yourself and be open minded.” Jourbienthia said.

She is contemplating pursuing her PhD after earning her Bachelor of Science in Biochemistry.

The continuation and expansion of the Student Summer Training Program, piloted in 2022, will help other students from ACCESS schools gain in-lab and internship experience before college. As MassBioEd’s ACCESS Program grows, and we work with more teachers and students in high-need districts, we aim to inspire students to pursue science and bring diversity of thought into colleges, universities and the industry across different career tracks.

ACCESS Program Highlights

• ACCESS is a district-wide, intensive three-year program focused on underserved schools.

• Partner districts receive vertically-aligned, hands-on life science lab lessons and career experiences for students in grades 6-10.

• Teachers are provided training, equipment, and in-school mentoring to implement lessons and career awareness into existing curriculum.