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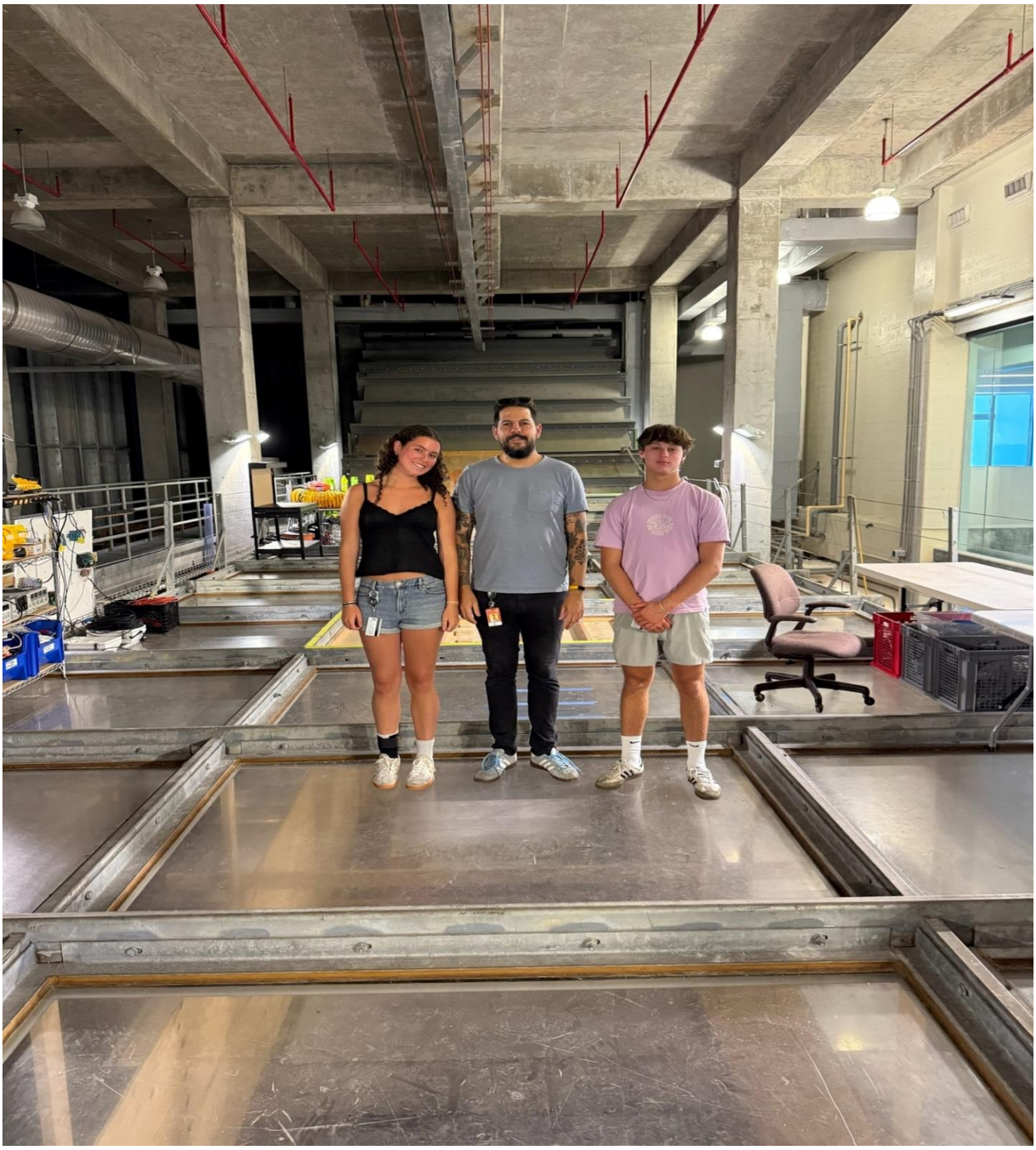
'Eye-Opening and Unbelievable': East Hampton Students Dive Into Real-World Science Research, Cailin Riley, on Aug 28, 2025



Ella Menu with mentor Dr. Milan Curcic and Cole Dunchick in the University of Miami's Alfred C. Glassell, Jr SUSTAIN (SUrge-STructure-Atmosphere-Interaction) Lab, standing on top of a 75-foot long, 38,000 gallon wind-wave tank that scientists use to simulate tropical storm, hurricane and storm surge impacts.

The students spent part of their summer working closely with Dr. Curcic in the lab as part of their summer science research project.

While many teenagers are gearing up this week to get back into the school routine — and some possibly dreading it — a group of East Hampton High School students will be ready to hit the ground running upon their return, thanks to a unique and stimulating three-year science program that, by their accounts, has been an eye-opening and riveting educational experience.

East Hampton High School's science research program — which students enter in their sophomore year — is run by teachers Dr. Stephanie Forsberg (a Bonac alum) and Dr. Paul Rabito. It has given participating students a chance to do cutting edge scientific research off campus, at places like Brookhaven National Laboratory and the Rosenstiel School of Marine, Atmospheric and Earth Sciences school at the University of Miami, and has also provided a chance for them to not only explore what scientific research is all about, but to gain a greater understanding of what a future career in science and scientific research might be like.

Because both Forsberg and Rabito are also professors with the University of Albany, the students who complete the program earn a total of 12 college credits. They earn four credits each during their junior and senior years, and two credits with work they complete over two summers. Their first year in the program is spent figuring out what they want to research, and reaching out to scientists in the field to ask if they can serve as their mentors.

The idea of doing schoolwork over the summer is probably not enticing to a lot of students. But the teens who spoke about their experiences made it clear that the program had a huge impact on them, and that the work they did over the summer didn't really feel like work, in the traditional sense.

They spoke, with enthusiasm and excitement, about their research projects, what they learned, and what the experience of getting to work in a lab where some of the world's best scientists gather was like.

Forsberg is equally enthusiastic about the program, saying that 101 students are currently signed up for research this coming year, an impressive number. She said that while other schools have research programs, the program at East Hampton is unique for several reasons.

She said the support of the School Board and administration has been key in making the program a success. Forsberg also added that, more than 10 years into her teaching career, she can now experience the "full circle" moment of having former students who went into science research fields offering to serve as mentors for the current students. (Acquiring a mentor in the field of research each student is working in is a requirement of the program).

"Some of the research the students are doing is really groundbreaking, and really big for the whole nation, even the globe," Forsberg said.

East Hampton is one of a few high schools in the county that is part of a program called Spark. It's run by several teachers — including Dr. Dianna Gobler at Westhampton Beach — who get the students together and help them work on research projects, creating opportunities for them.

The opportunity to conduct research at Brookhaven National Laboratory was a process years in the making, Forsberg said, requiring her to write a research proposal that would give her students access to the lab, which is offered to a select group of students through the U.S. Department of Energy.

At the lab over the summer, many of the students had the opportunity to work with the XPD beamline, which functions essentially like a highly analytic microscope. The XPD beamline has the power to slow down or speed up electrons down to the energy needed for the specific type of research being conducted.

Chelsea Fromm, Bea Flight and Griffin Beckman worked on a project studying beech tree leaf disease, and the beam line allowed them to analyze certain leaf samples to determine what minerals were or were not present in diseased leaves. It's the kind of research that can potentially unlock a cure.

Forsberg has a background in marine science research, and plenty of experience working in many different labs. But she said the experience of taking her students to Brookhaven Lab "tops them all."

The students agreed.

Wilmer Verdugo and Sophie Lancashire worked at the lab together on a project centered around how bacteria can affect the growth of hydroponic lettuce. Verdugo described what it was like being at Brookhaven Lab.

"I've always been a big fan of wanting to visit a lab," he said. "The place was ginormous. It was so cool being able to see this national facility with cutting-edge technology. It was a genuine inspiration.

“It really solidified the fact that I enjoy science and doing research,” he added. “Maybe one day I might want to work in a lab.”

He said that it’s a future he had never previously considered, but the program made him open to the idea. That has been a common theme for students in the program.

Beckmann’s project centered around the problem of beech leaf disease, and how it is spreading rapidly around the country, including in East Hampton, and threatening trees. He praised Forsberg for the way she runs the research program, saying she made the process, “very comprehensive,” and adding that the people they met at the lab were a big part of the program’s success as well.

“The researchers there made it extremely interesting at all times,” he said. He described the experience as “beyond exciting and unbelievable.”

“This program was something I never could’ve expected in high school,” he said. “But looking back, I never could’ve gone without it. It’s a really special thing to have an opportunity to do nationwide research in a worldwide lab. It’s also been really eye-opening to see how the world of professionalism really works.”

Some students had the opportunity to pursue research projects even farther afield this summer.

Both Cole Dunchick and Ella Menu worked with mentor Dr. Milan Curcic at the Rosenstiel School of Marine, Atmospheric and Earth Sciences school at the University of Miami, studying the impacts of intense weather systems like tropical cyclones and hurricanes, inside one of the hurricane simulators at the university. They were both able to go inside the tank to set up instruments for the research, which they both said was an eye-opening experience.

Menu described the experience as “amazing.”

“My mentor [Dr. Curcic] really trusted me a lot,” she said. “He threw me right in. I got to go inside the tank and attach all the instruments. I learned a lot about how they get their data. To see it with your own eyes, it’s really amazing.”

Menu expressed a sentiment that was shared by almost all of the students, regardless of what they were researching, saying it helped her gain a greater sense and understanding of what they might want their futures to look like, at a crucial time when they need to start thinking about what life beyond high school might hold in store for them.

“Going into this program, I had so many different things I wanted to do,” she said. “But this program has pushed me further to go into something in the STEM field. I think it’s really important, especially now; we need people in STEM. It’s definitely helped me get a better idea of what I want to do. I think that, overall, the program has gotten me thinking further into the future.”

For Forsberg, that’s the ultimate goal.

“I always joke that they’re my research children,” she said. “I just want the best for them.”