## UC SANTA BARBARA



March 2, 2020 Harrison Tasoff

## **Tomorrow's Scientists**

More than 500 students from 19 middle and high schools in Santa Barbara and Ventura counties converged on UC Santa Barbara on Saturday for the campus's 21<sup>st</sup> annual Destination College! Science & Technology MESA Day.

Established 50 years ago, the Mathematics, Engineering, Science Achievement (MESA) program is dedicated to helping underserved and underrepresented students achieve success in STEM (science, technology, engineering and mathematics) studies and careers. The program's mission is similar to that of the university's new Destination College Advising Corps (DCAC): to increase the number of low-income, first-generation college and underrepresented high school students who enter and complete higher education.

Both MESA and DCAC are national organizations, and the two are closely linked at UC Santa Barbara. DCAC was incorporated into MESA day this year.

The day began with remarks from Sammy Davis, the undergraduate research programs coordinator at the university's Center for Science and Engineering Partnerships. She shared her own journey pursuing a career in marine biology having come from a Black, midwestern family.

After watching the film "The Little Mermaid," a young Davis informed her parents she wanted to become a mermaid. Seeking to adjust her daughter's ambition to something a bit more realistic, Davis's mother, an engineer, suggested she become a marine biologist. "And I was like, 'Fine, a marine biologist mermaid,'" Davis recalled.

She proceeded to follow her passion throughout college and graduate school at UC Santa Barbara, earning a doctorate studying coral reef resiliency.

"The struggle is real," Davis told the students. "I think you'll find anybody here who is a graduate student, an undergraduate, faculty, they'll tell you they struggled with things, too.

The struggle is real, but it's worth it."

The students participated in a variety of STEM-related competitions throughout the day: a bean bag toss requiring the use of prosthetic hands, for example, and teams pitting Lego robots against each other sumo-style. A bridge-crushing competition used a rig designed and built several years ago by one of UC Santa Barbara's mechanical engineering students. The first-place winners of each event will be invited to the MESA Regional Competition at the Bourns Technology Center in Riverside on April 4.

The event also included hands-on STEM activities, interactive college preparation workshops and various tours. Some students built their own speakers, while others learned about upcycling, the process of transforming disposed items into goods of greater value than the originals. At lunch, undergraduate event staff treated the attendees to liquid nitrogen sorbet.

University staff also hosted sessions at which they discussed the college application process, financial aid and the transfer process with high school students.

The undergraduate MESA University Program students were critical in making the event possible, said Micaela Morgan, the program's director, helping organize, plan and fund the event. Among the groups that contributed were Los Ingenieros, the National Society of Black Engineers, the Society for the Advancement of Chicanas/os and Native Americans in Science, and Out in STEM.

"The organizations work together with MESA to put on this event," said Jorge Jimenez, a third-year physics major and a vice presidents of Los Ingenieros.

Executive Vice Chancellor David Marshal captured the spirit of the day during his address in Campbell Hall. "You're learning a lot of things that are going to be very good preparation for being a college student," he told the students, adding, "you are the ones who are going to create the jobs that don't exist today."

## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.