Middle School Students in UCSB's MESA Program Take First Place in National Engineering Competition

Representing their home state, a team of four sixth-graders from UC Santa Barbara's Mathematics, Engineering and Science Achievement (MESA) program took first place honors in the National Engineering Design -- Wind Energy Challenge held June 22-24 at the Boeing Assembly Facility in Renton, Wash.

The students, all from Isbell Middle School in Santa Paula, include Tobin Fincher, Nathan Rabago, Carlos Gomez, and Carson Gray. They beat their competition by designing the best wind energy device, which was judged on its mechanical and wind-to-vehicle power.

The team, also known as the Pop Flies, was accompanied to Washington by Mario Castellanos and Phyllis Brady, director and assistant director, respectively, of UCSB MESA; and by Cari Leidig and Diana Georghiou, Isbell Middle School teachers and the Pop Flies' MESA advisors.

"On behalf of the UC Santa Barbara community, I congratulate the four MESA students -- and their Isbell Middle School teachers -- on this great accomplishment," said UCSB Chancellor Henry T. Yang. Yang also serves as a principal investigator and leader for the statewide MESA program. "Tobin, Nathan, Carlos, and Carson represent the next generation of engineers and scientists, and their triumph in
Washington demonstrates not only their own excellence, but also the important role MESA plays in opening the door to education in mathematics, engineering, and science."

"We are extremely impressed by the Pop Flies," said Castellanos. "Carlos, Nathan, Tobin, and Carson exemplified true sportsmanship and made friends from around the country. They set a high bar for quality engineering, public speaking, and technical writing. This was truly a once-in-a-lifetime opportunity, as the students got to compete on the Boeing 737 airplane production line. How many sixth graders can say that?"

The wind energy design competition reflects MESA's goal of staying current with science, engineering, and technology trends. The project teaches students to understand design principles -- such as torque, and generating and storing wind energy -- as well as how to think like environmental scientists.

Supported by the College of Engineering and the Office of Education Partnerships, MESA serves more than 20,000 K-12, community college, and four-year college students each year. The program prepares students academically so they graduate with baccalaureate degrees in math-related disciplines. A total of 70 percent of MESA high school graduates pursue college degrees. In comparison, 48 percent of all California high school graduates go to college. UCSB is among the top university destinations for MESA high school graduates.

The MESA program serves educationally disadvantaged students and is open to all first-generation college-bound students. Many students are also from low-income backgrounds. The program includes academic counseling, classroom support, and hands-on projects. Industrial partners provide financial assistance for campus workshops, as well as science and engineering competitions, scholarships, and internships.

MESA has been recognized as an outstanding public program by Innovations in American Government, a project of the Kennedy School of Government at Harvard University and the Ford Foundation. MESA has also received the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring.
† Top image: From left, Mario Castellanos, Tobin Fincher, Cari Leidig, Carson Gray, Phyllis Brady, Carlos Gomez, Diana Georghiou, and Nathan Rabago

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MESA

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