

Pathways to STEM: Igniting Future

By Marc Baum, Oak Crest Institute of Science | Photos by Paul Webster



Oak Crest is part of a program called Pathways to STEM, which is funded by the National Science Foundation. This program is for community college undergraduates to introduce them to various career options available with a STEM degree. It also provides a platform for students to meet

fellow students, college faculty, and professional scientists in an informal setting. Every year, 60 students are chosen and divided into three groups. Throughout the year, they participate in four off-campus modules.

This year, the Biology and Chemistry group of students spent six weeks at Oak Crest. They worked in the labs, learning how

to handle bacteria safely, and conducted experiments to isolate and identify bacteria from soil samples collected locally. For the second module, the same group visited the California Botanic Garden in Claremont. They had the opportunity to explore the laboratories, library, herbarium, nursery, and garden grounds. During their visit, they interacted with botanists and other specialists associated with the garden. In the third module, the students went on a four-day trip to Catalina Island. They visited the USC Dornsife Wrigley Marine Science Center and studied the chlorophyll and phosphate content of the water in the bay. A significant aspect of these modules is developing presentation and communication skills, allowing students to engage with audiences and share their findings. Students in other groups also have exciting opportunities, such as visiting



Oak Crest Institute of Science (Oak Crest) is a 501(c)(3) non-profit organization established to teach and conduct cutting-edge science research. The institute provides an experience-giving role in education, where students work on authentic, funded research projects and develop a sense of belonging to the STEM community.

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Scientists at Oak Crest



Students Hanah Amor, Angelica Arechiga, and Katey Maney after snorkeling



Jessica Uribe preparing to dive

JPL, Honeybee Robotics, Silicon Valley tech companies, and the University of Colorado in Buffalo.

The main objective of the program is to provide students with a glimpse into the life of a scientist and help them understand how they can contribute to the scientific community. Student feedback shows the profound effect this program has on academic and career choices. A special thanks goes to Dr. Marianne Smith, one of our senior faculty members, for organizing this

fantastic opportunity for students in our local area. Dr. Smith's dedication and commitment to empowering the next generation of scientists are truly commendable.

If you are interested in hands-on educational opportunities like these or if you would like to partner with us on an innovative research project, please contact us via our website at www.oak-crest.org.