The EE Just Youth Science Program is named after Dr. Ernest Everett Just, who was a pioneering African-American biologist, academic and science writer. Just is remembered today as one of the most famous biologists who transcended the barriers faced by early twentieth century black scholars in the U.S.

Since 1999, the Bridge Builders Foundation has provided a field-oriented Youth Marine Science Camp targeting middle school-aged youth of color. The Marine Science Program spans over three consecutive weekends for seven days during the Summer and includes activities at four venues across Southern California – Cabrillo Aquarium and Park in San Pedro, the Bolsa Chica Conservancy at Huntington Beach, the Aquarium of the Pacific at Long Beach, and a three-day, two night sleepover at USC/Wrigley Marine Science Center at Catalina Island.

The program was expanded in 2012 to include a year-round Saturday Science Academy that focuses on exposing middle school-aged students to science, technology, engineering, and math (STEM) disciplines and careers. The program is generally conducted on the third and fourth Saturdays of each month and includes a combination of classes and field trips. Related field trips allow the students to benefit from real-world STEM applications and appreciate the importance of STEM subject matter in our daily lives.
THE NEED
Decreasing enrollment of students in science, technology, engineering and math (STEM) disciplines has threatened the US competitiveness in the global economy. Women and minorities traditionally have been underrepresented in STEM disciplines. The US workforce cannot remain competitive unless it leverages the talent of women and under-represented minorities.

African American and Latino students continue to perform poorly in science and math (Standardized Testing and Reporting (STAR) data), with both groups achieving less than 20% proficiency scores in science (2016 ACT College Readiness, “California STEM Report”). Low proficiency scores create a trajectory of low levels of participation in STEM careers in the future. Researchers have identified the following as critical factors in addressing the problem:

- Solid preparation from an early age in science and math content
- Experience with hands-on content
- Awareness of the utility of school based learning in the workplace
- Exposure to role models and mentors who work in STEM fields
- Access to peers who share STEM interests

About the EE Just Youth Science Program
The Ernest E. Just Youth Science Program exposes youth to instruction and activities across a wide range of science, technology, engineering and math (STEM) subjects and careers as well as experiences at the southland’s premier STEM venues. Youth receive instruction, demonstrations and field exploration activities from qualified instructors and professional field practitioners in diverse STEM disciplines. Youth explore the wonders of Life, Earth and Physical Sciences in a variety of settings. Sessions are presented in a context that encourages questions that improves comprehension and exploration into career tracts. Students gain confidence in their ability to succeed, and are educated on the payoffs and rewards of a STEM career career. Students learn the value of teamwork through small group assignments and structured contacts with other youth who share an interest in STEM subjects.
**Summer Marine Science Camp**

Classroom instruction is led by Marine Science faculty from the University of Southern California. Visits to science facilities like Catalina Island, provide youth an opportunity to travel aboard a field exploration boat, where they engage with the captain and crew about marine exploration activities. While at Catalina Island, youth live in a college dormitory setting and engage in exciting science activities such as lab experiments, snorkeling, kayaking, etc. For many, participation in these activities represents a “Series of Firsts.”

In addition, youth are exposed to materials in an informal, real-world setting and are challenged to use their minds and imaginations. Students perform field exploration activities, where they learn concepts in math (charting, use of graphs, probability, sampling); and science (PH Salinity, Scientific Inquiry, Interpretation, Experimentation, Problem Formulation and Reasoning). Students leave the program with an increased awareness of the ocean environment, ecology, math and science.

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**Saturday Science Academy**

This year-round program is for middle school youth, ages 10-14. Curriculum and instructional support is provided by Los Angeles Southwest College (LASC) science instructors, University of Southern California (USC) Marine Science faculty and other STEM professionals, who give students insight on pursuing a career in STEM. Youth develop confidence in STEM disciplines while gaining access to STEM professionals and facilities that they would not otherwise be privy to. Classroom instruction is conducted on the LASC campus on the third Saturday of each month from January thru July. Lessons are hands-on, inquiry-based and augmented with a field trip the following Saturday. The field trips not only connect back to concepts learned in the classroom, but they also provide students with real-world applications. Typical subject matter includes: Aerospace Science, Architecture and Civil Engineering, Electrical Engineering, Human Anatomy, Computer Science, Energy Technology, Transportation Engineering and Marine Biology.
Stimulating Minds…Raising Expectations

PROGRAMS ARE OPEN TO
Middle School-Aged Youth (Boys and Girls age 10-14)

ACCEPTANCE CRITERIA
(NOT IN ORDER OF RANKING)
Demonstrated Academic Grades
Demonstrated Citizenship
Quality of Essay
Date Application Received
Targeted Schools Given Preference

APPLICATIONS ARE ACCEPTED
Saturday Science Academy (October through December)
Summer Marine Science Camp (April through July)
Obtain Applications at www.bridgebuildersla.org or Call (888) 355-0917
Mail Applications to P.O. Box 431358, Los Angeles, CA 90043
or Email to bridgebld@bridgebuildersla.org

PROGRAMS ARE FREE TO STUDENTS AND FAMILIES
We are able to provide these programs free of charge through strong corporate and foundation financial support, committed volunteers, and generous donations from many individuals.

THANKS TO OUR SPONSORS OVER THE YEARS

For additional Program and Foundation information
Please visit our website www.bridgebuildersla.org or call (888) 355-0917

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