

**On August 5, 2019, the GA Sciences Education Foundation announced awards of \$43,000 in funding for improving K-12 STEM education to 9 institutions.**

**1. \$12,500 to the Elementary Institute of Science to support the Girls Take Flight Program**

Funding will support the 2019-2020 Girls Take Flight program. Girls Take Flight is the first drone pilot training program for high school girls in California. This intensive program invests over 150 hours teaching female high school students from low-income communities to build, repair, code, and fly drones, ultimately leading to FAA 107 remote pilot certification. Girls Take Flight thrived in its first year, with 65 girls participating in the initial kick-off event to introduce the world of Autonomous Unmanned Vehicles. Twenty of these girls were selected to participate in a one-week drone camp, and of these, 10 girls qualified for and completed the intensive 28-week internship. Similar numbers are expected for 2019-2020. The target population is female high school students that either attend school or reside in the ethnically diverse low income communities of Southeast San Diego, City Heights, and Paradise Hills that are most impacted by deficits in STEM education.

**2. \$10,000 to Boys and Girls Clubs of Greater San Diego for the Stepping Stones to STEM Success Program**

Funds support The Boys and Girls Clubs of Greater San Diego STEM programs, Stepping Stones to STEM Success, for the period July 2019 to June 2020 at their Ron Roberts (Linda Vista) Branch, the Clairemont Branch, and William J. Oakes (Logan Heights) Branch. This program engages at-risk low-income youth to enhance their STEM knowledge and appreciation. This funding will serve approximately 330 Clairemont, 160 Oakes (Logan Heights), and 300 Roberts (Linda Vista) youth from highly diverse, low-income backgrounds. STEM modules are offered as 2-hour curriculum based programs that meet twice weekly for 8-week cycles.

**3. \$5,000 to the San Diego Natural History Museum to support the Museum Access Fund**

Funding will support the Museum Access Fund (MAF), which provides access to high-quality STEM programs to underrepresented students in San Diego County for one calendar year. This program is designed specifically for economically disadvantaged students who attend San Diego County Title I schools and will allow up to 333 students from Title I schools to access the Next Generation Science Standards-based education that are delivered in the Museum. These programs are geared primarily towards students in kindergarten through eighth grades throughout San Diego County. Students experience award-winning exhibitions, large format nature films, a variety of science classes, guided gallery experiences, and observe scientists preparing specimens for study. They are exposed to job possibilities most would never have known about as they observe museum scientists and educators.

**4. \$4,000 to the Ocean Discovery Institute for the City Heights Student Initiative**

Funds will support expansion of the Student Initiative for the 2019-2020 academic year. This year-round program provides STEM education, hands-on science activities, and career exploration opportunities to thousands of third through seventh grade students in City Heights, one of the most diverse and underserved communities in San Diego. Every third through seventh grade public school student in the City Heights community participates in a comprehensive unit consisting of four hands-on science activities, a field exploration of an outdoor laboratory, and a locally-based environmental service project. Their teachers participate in a professional development opportunity that includes science content, interactions with STEM professionals, and trainings to increase familiarity with the Next Generation Science Standards.

**5. \$3,000 to the STEMdude Foundation for San Diego County Robotics STEM classes**

Funding will provide free Robotics STEM classes to approximately 200 underserved students in grades 2-4 throughout San Diego County during the school year July 2019 to June 2020. The actual teaching will cover coding and robot building using STEM principles specific for their age and grade level. Funding will cover instructor compensation, new robotics and computer equipment plus maintenance, and training and recruiting of new instructors. The student population will be selected from San Diego County elementary school districts where over 40% of the students must qualify for free or reduced lunch.

**6. \$3,000 to the EnCorps STEM Teachers Program to sponsor STEM Fellows for San Diego schools**

EnCorps empowers science, technology, engineering and math (STEM) professionals to transform public education by teaching in high need schools. EnCorps will recruit, select, train and place STEM professionals (EnCorps STEM Fellows) for guest teaching roles in FY2020 in underserved science classrooms (grades 6-12) in San Diego public schools. The EnCorps STEM Fellows will impact hundreds of low-income middle and high school students, ages 11-18 over 1-2 semesters. Throughout the program year, EnCorps provides guest teachers with 50 hours of professional development designed to build a strong foundation in teaching, including Fall Institute, Spring Institute, Summer Residential Institute and trainings and resources via Google Classroom.

**7. \$2,500 to Science Buddies for Science Kits for San Diego County Schools**

Funds will support the Science Buddies Kit Club program. The “Bringing Hands-On STEM to Underserved Students in General Atomics Communities” project will provide science and engineering learning kits and curriculum directly to teachers and students in 4 underserved schools in the San Diego County that have asked to participate: Sherman Oaks Elementary, Roosevelt International Middle School, Howard Gardner Community, and San Marcos Elementary. The Science Buddies Kit Club provides students with quality materials to conduct fun, hands-on science explorations in class or independently. Each kit is accompanied by easy-to-follow frameworks for teachers and students. With scientist authored projects designed around topics that naturally engage student interest, students will learn scientific and engineering concepts and gain the skills they’ll need to lead the next generation.

**8. \$1,500 to Association for Women in Science, San Diego Chapter for K-12 Outreach**

Funds to be used to support K-12 outreach programs for the 2019-2020 school year. Supplies will be purchased to be used in demonstrations at multiple activities that Association for Women in Science female scientists and engineers participate in, including Maker Faire, Chem Expo, Expanding Your Horizons, and the San Diego Festival of Science and Engineering, some of which are attended by hundreds of middle school girls and others that thousands of all ages participate in.

**9. \$1,500 to The New Children’s Museum for their Innovator’s Lab**

Funding will support the Museum’s Innovators Lab with equipment, tools and materials as well as wages for the professional teaching artists who lead the Lab’s daily programming. The Lab is specifically designed for children ages 7-13 – those ripe for becoming the next generation of innovators. In 2019, NCM will test a new format of residency that incorporates foundational principles and extends the Lab’s targeted age range, adding specific activities for ages 5-6. The Lab has grown in popularity among visitors: 9,000 children participated in facilitated STEAM workshops last year, and 90,000 people participated in Lab activities. Providing access to equipment and materials allows schoolchildren to be introduced to engineering, prototyping and manufacturing principals well before they reach junior high, high school and college.