On June 8, 2020, the GA Sciences Education Foundation announced awards of $47,500 in funding for improving K-12 STEM education to the following 7 organizations.

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

EIS is an educational equity and social justice organization with science as the engine. Girls Take Flight is the first drone pilot training program for high school girls in California and is beginning its third year. Girls Take Flight provides female high school students with 180 hours of practical hands-on experience building, programming, and flying drones, leading to FAA Part 107 Remote Pilot Certification. Thus far, 19 girls have completed the full program, 16 of whom achieved their FAA certification. Those 16 girls represent 17% of all certified female drone pilots in the US under the age of 20. In addition to the training the program participants, Girls Take Flight also raises awareness of the many uses of drone and drone careers through presentations directed at approximately 200 elementary school age children and female middle and high school students. Funds will support the participation of 10 female high school students in Girls Take Flight. Numerous GA-ASI female engineers have been guest speakers and the students have toured GA-ASI.

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

Funding will continue support of the Boys and Girls Clubs of San Diego Stepping Stones to STEM Success program at the Ron Roberts (Linda Vista) Branch in addition to the Clairemont Branch and William J. Oakes (Logan Heights) Branch, the lower income branches of the Clubs, from July 2020 – June 2021. BGCGSD's STEM program immerses youth (K-12) from diverse, low-income backgrounds in a multi-faceted journey into STEM through various curriculum-based modules. They also plan to develop a series of short STEM videos and lesson plans that would be placed on their website so families can access them from home. For families without internet access, paper copies of the lesson plans would be available at their local Club. About 900 students ages 5-18 will be served at these locations and about 90% of these students live at or below the poverty level.

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

Funding will provide 333 students to access the Next Generation Science Standards-based education that are delivered in the Museum via the Museum Access Fund. This program is open to all school districts in San Diego County, CA - status as a Title I school is the only requirement for participation. The program is designed to meet the needs of students who attend Title I schools that are often located in some of San Diego's most economically disadvantaged communities. Title I schools are defined by the US Department of Education as those where 40% or more of the students are low income and qualify for the Federal Free and Reduced Lunch Program. Students experience award-winning exhibitions, large format nature films, different science classes, guided gallery experiences, and scientists preparing specimens for study. They are further exposed to job possibilities most would never have known about as they observe Museum scientists, in addition to Museum educators.

4. $5,000 to the Ocean Discovery Institute for the City Heights Student Initiative

Funding will allow expansion of in-school programming and support the Institute's Student Initiative by providing scientific equipment and supplies, curricular materials for classrooms, instructors in the classroom, and transportation to field-based science learning activities. This year-round program provides STEM education, hands-on science activities, and career exploration opportunities to 6,000 elementary and middle school students in City Heights, one of the most diverse and underserved communities in San Diego. This funding will help the Institute continue their advance toward reaching

every K-12th grade student in their school-shed. In 2019, they grew to serve 2,500 more students than ever before at the Living Lab, which is located within a one-mile radius of nine different schools.

5. $5,000 to Kid Spark Education

Funds will support the Michael W. Neden Emerging Engineers Program, which consists of consists of: 1) a hands-on, research-based STEM curriculum; 2) professional development for teachers; and 3) engineering materials including building blocks, robotics components and coding systems. The Program enables schools to provide regular, consistent, and affordable STEM learning opportunities to underserved K-5 students. The Program focus is to serve Title I schools - those schools where at least 40% of students qualify for free and/or reduced lunches. They serve 85% children of color, and 15% Caucasian children. Funding will serve approximately 300 students in the first year, and over the next two subsequent years an additional 140 students per year will be served (2 additional grade levels of 70 students, plus 70 new kindergartners). In three years, the original investment in two schools will serve approximately 580 students. The program is self-sustaining after the initial investment and has been implemented in 19 schools in San Diego, with 4 more schools scheduled for fall 2020.

6. $5,000 to Treobytes

Funds will support the 2020 Tech Hub Summer Institute, designed for 180 students from grades 3-10 at Mesa College. The four-week camp is comprised of various programs: engineering and circuitry fundamentals to design, build, and test prototypes, robotics and computer programming with game design, building modular computer kits and learning IT industry basics, as well as designing little robots. 70% of these funds would provide 6 students with 4-weeks of summer camp. Students that fall within one of the three categories are eligible: 1. from Title I schools; 2. that may not have had STEM programs; or 3. their households are working families falling within low- and moderate- income households. STEM kits will be provided to all campers to continue the learning process beyond the summer.

7. $5,000 to Boys and Girls Clubs of Oceanside

Funding received will support the 500 youth who participate daily in the STREAMing Ahead program from June to August during summer camp sessions. Youth participate in project based, hands-on learning four days a week, and each program component runs for two weeks. The youth who attend the Club face multiple challenges including poverty, violence, and gang involvement. Funds will provide program supplies. Program topics can include Building Big (structural engineering projects), Solar Science, Roaring Robots, Extraordinary Optics, and Cool Chemistry. There is no better example of the profound impact of this program than Julie Hernandez, their 2016 Youth of the Year, awardee of the San Diego County Youth of the Year and California Youth of the Year titles. Julie was a shy eleven year old when she began coming to the Club and, with staff support and encouragement, came out of her shell and began to develop her love of chemistry. Julie, now 20, graduated from El Camino High School, completed 2 years of college at Mira Costa, then transferred to UC Berkeley to become a bio-chemist.

Due to restrictions caused by the Covid-19 pandemic and uncertainty how the pandemic response may progress, all those receiving funding were provided the following guidance:
"We understand that your program may need to be modified to accommodate pandemic prevention methods and we approve of your being flexible to best provide for the students that you serve."

Since 1995, the General Atomics Sciences Education Foundation has provided support for K-12 STEM education projects, and has given over $483,000 to science education non-profit agencies in San Diego and other locations to improve elementary, middle, and high school STEM, with a focus on traditionally underserved students.

The Foundation also supports STEM outreach for GA&A employees via the GASSSS (GA Scientists/Engineers Supporting Science/Engineering for Students) program, where GA employees perform education activities in K-12 settings, are reimbursed for STEM purchases, and are provided with a charge numbers for their time. Since the program started in 2010, over 620 employees have participated and over $164,000 in funding to schools and programs has been provided.