On February 9, 2021, the General Atomics Sciences Education Foundation announced awards of \$83,000 in funding to 7 organizations to improve K-12 STEM education.

#### 1. \$5,000 to ECOLIFE Conservation to support Aquaponics STEM curricula

Funding will place ECO-Cycle Aquaponics Kits, K-12 STEM curricula, and associated supplies such as fish tanks, water chemistry testing equipment, fish food, seeds, decor, and cleaning supplies in classrooms throughout San Diego Unified schools from July 2021-July 2022. ECOLIFE's primary partner on this grant, San Diego Unified School District, has a diverse student population that consists largely of Hispanic or Latino students (46.2%), white students (23.1%), and Asian American students (8.5%). Title 1 schools remain prevalent in the school district, offering free and reduced lunch programs to more than 70,000 students. The program provides classrooms with tools to better understand complex concepts such as climate science, ecology, chemistry, biology, nutrient cycling, and more. ECOLIFE is able to visit classrooms and speak directly with students about the educational and personal benefits they've gained from the ECOCycle. ECOLIFE has also increased remote capabilities to ensure virtual opportunities for interaction and program oversight.

# 2. \$3,000 to Links Foundation for their Links to STEM program

The purpose of the program is to address the underrepresentation of diverse students pursuing a STEM related college degree and related careers of the future. The program includes robotics training, educational field trips, scientific experiments, math challenges, research projects and oral presentations by the students. The Links to STEM program serves thirty 4th through 8th grade students, 15 girls and 15 boys, who attend a variety of schools throughout San Diego. Students are accepted into the program in the 4th grade and remain in the program until they begin high school. The children are 90% African American, the majority from middle to low income households. The funds will be used for the continued expenses of providing equipment and supplies to the students as long as they are virtual and to fund group supplies and fieldtrips when they are finally able to meet again in person from June 2021- May 2022.

#### 3. \$5,000 to the Science Delivered for their Science Kit program

Funds will provide take-home kits for at-home science to be given up to 1,200 students at Title 1 schools during May 2021. This year, in lieu of classroom visits, they are providing take-home science kits. Science Delivered works closely with four schools: Adams Elementary (~290 students): 86% low-income; Cesar Chavez Elementary (~480 students): 94% low-income; Cherokee Point Elementary (~320 students): 96% low-income; Holly Drive Leadership Academy (~80 K-5 students): 88% low-income. Kits will come with instructions and simple lessons will be provided to the teacher to help guide the students to deeper learning.

4. \$10,000 to the San Diego Children's Discovery Museum for their Access for All scholarship program

Funding will support the Access for All scholarship program from January 2021 to December 2021. It will bring Museum learning to approximately 1,000 children in low-income and Title-1 schools in San Diego County through virtual workshops. Their virtual STEM workshops are designed for children in Preschool through 3rd Grade and include live video calls facilitated by professional Museum Educators, bespoke activity kits, and instructional videos aligned to California State Standards. Grant funds will be used to subsidize workshop costs for Title-I and low income schools through scholarships. The Virtual Workshops include curricula for Preschool through Grade 3 and focus on four STEM subjects, including: Life Science, Physical Science, Earth Science and Engineering.

## 5. \$5,000 to North County Education Foundation for computers for Classical Academies students

Funds will support the purchase of Chromebook computers to support disadvantaged students and accommodate distance learning STEM needs for the school year ending June 30, 2021 in classrooms that support low and moderate income students. Because of their longstanding experience in personalized education, the Classical Academies saw a huge influx of students who are not otherwise thriving in a traditional school setting. With the Governor and legislature capping enrollment funding to February 2020 numbers, this created a unique hardship for the more than 1,000 new students.

## 6. \$5,000 to MiraCosta College Foundation for their dual enrollment program

Funds will support the MiraCosta College (MCC) K-12 dual enrollment program from April 2021 to January 2022. MCC provides a robust array of outreach services to its three partnering K-12 school districts. 18% of students are first generation college students and of MiraCosta's first time-full-time Latinx students, 80% are also low income. The funding will build on the already strong foundation of the MCC dual enrollment program by designing more clear and systematic STEM dual enrollment pathways for low-income, Latinx, and Black/African American high school students within Oceanside USD. Funds will help develop the infrastructure to promote STEM dual enrollment pathways to parents and communities to increase enrollment and participation through: dual enrollment website; social media; videography; and student and parent orientation. They expect to reach out to about 300-400 high school students and their families, 63% who would be considered first-generation college students and 71% who are Latinx.

## 7. \$50,000 to Science Spark for the San Diego X-STEM event

Funds will support the first ever San Diego X-STEM in October 2021 or possibly a later date depending on Covid. X-STEM is a special "Extreme" symposium for middle and high school students featuring interactive presentations and workshops by an exclusive group of visionaries who aim to empower and inspire youth about careers in science, technology, engineering, and math. These STEM industry leaders ignite students' curiosity through storytelling and live demonstrations, and workshops. Priority registration and pre-event promotion will be given to students from underrepresented communities throughout San Diego County. Funds will be utilized for overall production costs for this one-day conference (note: X-STEM San Diego may expand into a two-day event). Funding will support facility requirements, travel costs, 3rd party logistical support, administrative and organizational costs as well as event promotional needs. An X-STEM symposium example is linked here. This would be the first X-STEM event in San Diego and will come at a time that is ripe for inspiring students about STEM in a personal environment after the Covid caused virtual education and isolation that has been prevalent for over a year. Science Spark organizes the very popular USA Science and Engineering Festival.

Since 1995, the <u>General Atomics Sciences Education Foundation</u> has provided support for K-12 STEM education projects, and has given over \$599,000 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. Through December 2020, over 662 employees have participated in the Foundation's GASSSS outreach program, which has provided over 2300 outreach hours to GA staff and over \$170,000 in funding to schools and programs for STEM supplies and support.