

**On June 16, 2022, the General Atomics Sciences Education Foundation announced awards of \$76,100 in funding to 9 organizations and programs to improve K-12 STEM education.**

**1. \$10,000 to [Boys and Girls Clubs of Greater San Diego for their STEM curricula and programs](#)**

Funding will support STEM curriculum modules such as Engineering, Chemistry, Solar Systems, and other focused STEM topics and STEM Summer Camps. Funding will support the greater San Diego community, in particular disadvantaged kids. The purpose of the funding request is to continue support to get kids involved and interested in the science field at an early age. Science should be easily accessible to everyone. This request would go to help support STEM programs that are offered at all 19 club locations serving 1,000 children daily. Over 3000 children ages 5-12 participated in STEM programs in 2021.

**2. \$10,000 to [Boys and Girls Clubs of Oceanside \(BGCO\) for their STREAM program](#)**

BGCO STREAM Education - Thriving in a Changing World - funding will provide captivating and proven STREAM education platforms at all 5 of their locations. With STREAM programming, BGCO Youth explore the world alongside peers and program leaders and find new areas of study that excite them. This project will address the need for context connection by aligning STREAM topics with field trips, project-based small group projects, assemblies, or hands-on experiences. The funds for the STREAM – Thriving in a Changing World - program will enable five sites to have hands-on standards-aligned lessons for an expected 1,385 youth. The funds cover the cost of STREAM supplies, curriculum, teaching staff, staff training, assemblies, and STREAM speakers. The audience served is 59% Hispanic, 17% Two or More races, 13% white, 8% Black, 1% Asian, 1% Native Hawaiian or Pacific Islander, 1% other; 81% of the Youth are socioeconomically disadvantaged. The STREAM program is provided at no cost to the vulnerable K-8 socio-disadvantaged students. Research has documented this group as the most negatively impacted group from COVID-19 pandemic responses. Since its inception in 2012, the STREAMing Ahead program has served over 20,000 youth. During BGCO STREAM programming Youth learn robotic programming, hydroponics gardening, physical science, environmental science, and biology through hands-on learn-by-doing projects.

**3. \$5,000 to [San Diego Natural History Museum for environmental education and outreach programs](#)**

Funding is for environmental science outreach and engagement programs at the San Diego Natural History Museum (The Nat) to be expended within one calendar year. For schools designated as Title I, they can register for school programs at no cost to the students, family, or the school. Funds will advance their blended model of education engagement and outreach for students that continue to take advantage of mixed mediums, provide experiences unique to The Nat, and remain committed to removing any financial barrier that may deter some schools from participating. Funds will help the Museum achieve their goals of ensuring that environmental science education programs remain free and accessible to all students. Through the commissioned program assessment conducted by the University of San Diego's Nonprofit Institute, their team learned the greatest need in the education community is offering greater engagement with the sciences and pathways to science careers. Their Career Spotlights showcased various careers in science and a natural history museum including Animal Care & Engagement Associate, Paleontologist, Collections Managers, and many more. Live virtual programs have quickly gained popularity reaching 108 Title I schools, 88 non-Title I schools, and have served over 6,300 participants.

**4. \$5,000 to [Girls Rising to incorporate STEM activities and events](#)**

Funding will support efforts to incorporate STEM into the mentorship program for at-risk girls in San Diego between the ages of 8-17 for calendar year 2022. The program provides each girl with a positive and consistent mentor in their life, who meet a minimum of 2 – 4 times per month. The organization

provides 6-8 events per year centered around three initiatives to help lead girls to being strong members of the next-gen workforce: health and wellness, STEM, and art and music. This funding will provide enriching STEM activities and events for the girls, who come from historically underserved communities and their exposure to STEM is typically very limited. The program strives to show girls the endless possibilities they have and build their impressive talent. The program currently serves 30 girls who are 49% Black, 49% Hispanic, and 1% White. The girls all come from households living under the federal poverty level, attend Title 1 schools, and live in a single guardian household. This award will provide funding to focus on STEM events and activities including bringing in professionals in the field representative of their demographic to show the girls that STEM is a field they can be a part of. They have initiated efforts with a crime lab, engineer, tide pool event, UV protection, outdoor wilderness skills, SDG&E, pickling/environmental waste reduction.

**5. \$2,600 to American Society of Naval Engineers (ASNE) for STEM video game (FLEET) support**

ASNE manages the growing FLEET (Future Leaders of Engineering Experiential learning & Teaching) program that centers on a free video game that ASNE developed with industry partners, which includes engaging educational lessons. Expected Population: 100 students, 90% African American, 5% Latino/Latina. ASNE has signed educational relationships with Fairfax County Public Schools and Carderock STEM and supports schools throughout Virginia, Maryland, and Delaware. They will mail the user guide and curriculum resources so that teachers feel secure in delivering these educational experiences. Funding will improve the experience families have downloading this game at home by creating updated and more explicit introductory videos. ASNE expects to add another 200 families and 225 students to FLEET during Fall 2022.

**6. \$3,500 to Asian Culture and Media Alliance to support the TAKE ONE media arts and sciences program**

Funding will support the TAKE ONE media arts & sciences program. Although TAKE ONE focuses on under-represented, Asian American and Native Hawaiian/Pacific Islander (AANHPI) high school youth, the program is inclusive to all races, genders, identities, and abilities from other underserved communities. TAKE ONE is provided free of charge to underserved youth ages 16-25, in offering opportunities to receive essential skills training and self-development attributes in pursuing non-traditional careers in the media arts industry. Funding will primarily compensate key media instructors and mentors of Take One. TAKE ONE offers an immersive 6-month program annually consisting of an academic curriculum and applied learning elements to catalyze valuable learning opportunities including leadership, teamwork, communication, and self-development skills while gaining real world experience as film, television, and new media creators in learning the science and technologies that are applied in media arts, including the principles of light and sound, as well as electronics, sensors, computers, and software. Since 2016, 220 youth participants have enrolled in Take One, where 20% have been high school students. ACMA recently established a new partnership with Del Lago Academy, where high school students can enroll in a 6-week mentoring and vocational media internship program at ACMA prior to participating in the TAKE ONE program. 2022 anticipates a total of 60 youth participants, with 20-30% high school students.

**7. \$5,000 to Ocean Discovery Institute to support in-school programs**

Funding will support in-school programs for the 2022-2023 school year, which provide early, continued exposure to science for underserved students through hands-on classroom and field-based activities. The program design uses ocean science and local resources as a platform to teach science, technology, engineering, and math (STEM). Students learn what science is, how it works, its essential principles, and its relevance to their lives. The In-School Programs are implemented for 6,000 K-7th grade students

annually in 11 elementary schools and 2 middle schools. Each grade-level unit follows the same design structure, with all students receiving the following 3 program experiences: A classroom lesson in the students' classroom to build community and science identity; A field trip to explore a coastal habitat such as wetlands, kelp forests, and the rocky seashore; A field trip to Ocean Discovery's Living Lab where students take action to make a difference. The community we work in is City Heights, which is one of the most ethnically and racially diverse communities in the country: 53% Hispanic/Latino, 16% Asian/Pacific Islander, 13% Black, 14% white, 2% multiracial and 2% other. 91% of students are eligible for federal free or reduced meal programs. Ocean Discovery Institute's unique approach and exceptional outcomes earned national recognition in 2010 when they were awarded The White House's Presidential Award for Science, Mathematics, and Engineering Mentoring.

**8. \$10,000 to A Step Beyond (ASB) for their World of Work Career program**

Funding will support the ASB World of Work Career Simulation program. ASB is an after-school Youth Development organization serving the most underserved students in Escondido and San Marcos so they can become college and career ready. Students participate in ASB for 9 to 10 years, through high school graduation, at no cost to students. ASB serves about 300 3rd-12th graders. Average family income is \$25,000. Participants are 95% Latinx, 63% are girls, and 37% are boys. The program includes dance education, academic support, college and career readiness, mentoring and enrichment, and family services. This program starts with students as young as 3rd grade, providing them opportunities to explore firsthand potential career pathways via role play exercises and experiences. High school students have a career simulation experience following the work of a theme park engineer during a week-long camp, learning about various engineering concepts and what it takes to pursue a career in roller coaster/theme park ride design using programs like Disney's Imagineering in a Box through Khan Academy and Parkitect, a business simulation game that charges participants with the construction and management of theme parks. They then visit Sea World where they apply their learning by analyzing the design of each roller coaster/theme park ride. The average cumulative GPA for our oldest cohort increased from 2.73 in Year One to 3.5 in Year 5 and 85% have shown significant gains in academic motivation, perseverance, and learning interest.

**9. \$25,000 to Science Spark/USA Science and Engineering Festival to support the 2023 X-STEM San Diego event**

Support the [2023 San Diego X-STEM event](#). It will tentatively be held at the San Diego convention center on April 18th, 2023. Funding will support venue and Convention Center staffing costs.