

On January 16, 2020, the GA Sciences Education Foundation announced awards of \$38,000 in funding for improving K-12 STEM education to 10 institutions.

1. \$3,000 to Big Brothers Big Sisters of San Diego County for their Beyond School Walls – STEM program

Funding will support the Beyond School Walls – STEM program, an after-school program that brings youth from low-performing middle schools into a STEM corporation for twice-monthly workplace mentoring and exposure to STEM-related careers. Students are introduced to STEM concepts including circuitry, robotics, computer programming, coding, and engineering. Up to 60 children will be served at two Beyond School Walls STEM sites in the 2020-2021 school year.

2. \$5,000 to Depositing Empowerment Through Outreach and Urban Redevelopment (DETOUR) for their FANCY in STEAM initiative

Funding will support DETOUR's Focused and Naturally Confident Youth (FANCY) in Science Technology Engineering Art Math (STEAM) initiative to increase the number of girls of color in STEAM careers by exposing them to STEAM fields throughout the year. DETOUR has served over 1,000 girls since 2011. Funds support tours, event participation, and scholarships for girls at STEAM companies and events as well as educational opportunities such as the Elementary Institute of Science summer programs. The program will serve 60 middle school youth and the FANCY in STEAM Fair will serve 200 girls. The program serves girls ages 11-17 in the Diamond district of San Diego where demographics are 53% Hispanic, 21% African American with median household income 63% of the county value. Funds will allow more girls to participate and the hiring of a program manager by September 2020.

3. \$5,000 to the Greater San Diego Science and Engineering Fair

Funding will support the 2020 Greater San Diego Science and Engineering Fair. The event takes place March 10-15, 2020 and is open to grade 6-12 students.

4. \$6,000 to Innovations for Learning for the TutorMate Program

Funds will support GA participation in the TutorMate program for the 2019-2020 school year. About 25 GA employees tutor at risk first grade students in reading, which includes science stories, in the Santa Ana school district for 30 minutes weekly. This will be the third year GA&A employees are participating in the program. Funding provides Innovations for Learning with school support and the infrastructure needed to run TutorMate.

5. \$5,000 to Ocean Connectors for their Marine STEM program

Ocean Connectors has worked with every low-income, Title I school in the National City School District for 5 consecutive years (3rd-7th grades, totaling over 3,000 students every year), delivering free, in-class marine STEM education curricula with accompanying hands-on learning using habitat restoration and coastal field trips. Funding is for July 2020-June 2021. Funding will be used to support direct costs related to educational supplies, including science journals, wildlife field guides, outdoor microscopes and hand lenses, tools, water testing materials, biofacts, marine life models, acoustic tools, and tablets.

6. \$1,000 to the San Diego Supercomputer Center for the Pi Wars Robotics competition

San Diego Supercomputer Center is collaborating with Pi Wars UK to bring an innovative robotics competition to middle and high students across our San Diego community. UCSD is the first university in the country to host this event. Pi Wars is an international, challenge-based robotics competition in which teams build Raspberry Pi remote-controlled and autonomous robots and then compete in various

nondestructive challenges to earn points. Pi Wars will take place on April 4th and 5th at the San Diego Supercomputer Center at UCSD. Sponsorship will help cover expenses.

7. \$1,000 to Preuss School/UCSD for their FIRST Robotics program

Funding would support the FIRST robotics team at the Preuss School at UCSD. Typically the Foundation does not support robotics clubs, but this request was sufficiently unique and compelling due to the following: The school is a Title I, 6th-12th public charter school for low-income, first-generation students. Last year, with a total of 44 members on their team, there was a 3:2 female to male ratio with a quarter defining themselves as part of the LGBTQ+ community. All the students originate from various ethnic backgrounds (Asian, African American, Hispanic/Latino) and speak nine different languages. The team has won The Engineering Inspiration Award for demonstrated success in advancing respect for engineering in their community, and the Chairman's award for the team that best serves as a model for other teams to emulate, and is considered the most prestigious FIRST award.

8. \$5,000 to San Diego Children's Discovery Museum for STEM workshop scholarships

Funding will support the Access for All scholarship program and provide approximately 500 children from low-income schools throughout San Diego County with interactive, educational STEM workshops either at the Museum or off-site at their school through our Mobile Children's Museum. These workshops focus on Science, Technology, Engineering, and Math principals for Preschool – Grade 3 through on-site field trip workshops and Preschool – Grade 5 through mobile workshops. The Museum is the only hands-on, educational children's museum in North San Diego County.

9. \$5,000 to FIRST Robotics to support San Diego regional competitions

The 2020 FIRST Robotics Competition (FRC) Del Mar Regional will take place March 5-8 and the San Diego Regional will take place March 12-15 at the Del Mar Arena, Del Mar Fairgrounds. Funding will support the growth and operations of the 2020 FRC Del Mar & San Diego Regionals. The funds will be used to put on a high quality and impactful competition that serves as the culminating experience for these high school students to show their dedication and enthusiasm as they showcase their robots. The FRC is the culmination of a year of academic education and transferring this knowledge to a practical application with the building of a robot for competing in the FRC San Diego Regional. Under strict rules, limited resources, and time limits, teams of 25 or more high school students, led by mentors, are challenged to raise funds, design a team "brand," hone teamwork skills, and build and program robots to perform prescribed tasks against a field of competitors.

10. \$2,000 to Expanding Your Horizons of San Diego

Funding will support the 2020 EYH Conference on Saturday, March 14th. EYH is estimating attendance of 325 girls for 2020 and are anticipating the need to accommodate 60% of that total with waivers for attendance. Funding would be used to support 34% of anticipated waivers. Each group of 15-20 participants is mentored by 2-3 female STEM undergraduate students, providing role models that research indicates is vital to inspiring to 6-10th grade females. These elements are designed to increase the girls' interest in STEM careers by providing exciting STEM experiences and interactions.