

2020 GGSF Special Awards

Project Number	Student	Title	Teacher	School, City
American Chemical Society Excellence in Application of a Principle				
P604	Jo Top, Issey Lancelot, Antoine Wellmann	Elephant's Toothpaste: the Catalyst in the Room	Gildas Guillaumet	Lycée Francais de San Francisco, San Francisco
American Meteorological Society Outstanding Achievement In Atmospheric Sciences				
E805	Michael Hassner	It's Tough to Make Predictions (especially about the future).	Jeff Nelson	Korematsu Middle School, El Cerrito
American Psychological Association Achievement in Psychological Sciences				
S605	Hudson Blechman	Get Wet, Get Cold, Get Gaming	Tim Evans	Mark Day School, San Rafael
Army Corps of Engineers Bay Model Museum Award				
C906	Ron Freeman	DisasterPi: A Novel Open-Source Adaptable Accessible Disaster Communications Platform	Rachel Richards	Menlo-Atherton High School, Atherton
ASM Materials Education Foundation Most Outstanding Exhibit in Materials Science				
P1003	Rupal Nimaiyar	Increasing the Quantum Yield of Quantum Dots to Improve the Efficiency of a Quantum Dot Solar Cell	David Nenon	Menlo School, Atherton
Association of Women Geoscientists Outstanding Project Award				
E705	Kathryn Simpson	Can Olivine Save the World?	Lynne Dowdy	St. Brendan School, San Francisco
Broadcom Lemelson Early Inventor Prize				
P802	Alexis Jenkins	Change is Hard to Swallow	Lynne Dowdy	St. Brendan School, San Francisco
Broadcom Masters Nominee				
B703	Roshan Belani	Health or Hype? As a consumer, what do you really know about the microbiology and the expiration date of pre-washed romaine compared to organic and inorganic?	Minna Leigh	Mark Day School, San Rafael
B701	Megan Castellano	Tiny But Mighty: How Bacteria Survive by Natural Selection	Mykel Gaspar	St. Patrick School, Rodeo
B601	Tallulah Moon	Fertile Garden, Sterile Pond	Laura Schooley	Madera Elementary, El Cerrito
B706	Sadie O'Leary	Sneaky Squirrels	Lynne Dowdy	St. Brendan School, San Francisco
S604	Kent Fruchtman	The Baby Looks Just Like You	Tim Evans	Mark Day School, San Rafael
S605	Hudson Blechman	Get Wet, Get Cold, Get Gaming	Tim Evans	Mark Day School, San Rafael
B709	Emma Wong	Got Milk? How a Small Amount of Lactase Can Make a Big Difference	Ritika Manohar	Stratford San Francisco, San Francisco
California Association of Professional Scientists Science Achievement Award				
E904	Eleanor Addison	A Trillion Little Things: Searching for a Microplastics Solution	Chris Tolentino	El Cerrito High School, El Cerrito
California Native Plant Society Biodiversity Research Achievement				
E901	Christopher Kwok, Nicholas Kwok	Diagnosing Early Stages of Metabolic Bone Disease and Kidney Stones in Reptiles With a Novel Urine Test	Jack West	Sequoia High School, Redwood City
E702	Maddie Polsky	Seafood With a Side of Plastic	Minna Leigh	Mark Day School, San Rafael
E701	Indigo Prasad	Virtual Frog Dissection	Minna Leigh	Mark Day School, San Rafael
E605	Isabel Merriman	Microplastics in San Francisco Bay is a Mega Problem!	Lynne Dowdy	St. Brendan School, San Francisco
B705	Mael Guillaumet	Plants vs Insects	Gildas Guillaumet	Lycée Francais de San Francisco, San Francisco
E609	Noella Tae	What Are the Effects of Microplastics in Water?	Ritika Manohar	Stratford San Francisco, San Francisco
E610	Alex Duecker	How to Stop Erosion	Ritika Manohar	Stratford San Francisco, San Francisco
E1003	Andre Giraldi	Usage of Man-made Water Sources by California Red-Legged Frogs	Millie Milstead	Drake High School, San Anselmo
Chevron Ingenuity Award				
C1103	Jihe He	Exploring Solutions to Assist Finger Rehabilitation with Flexibility	Mike Santos	St. Ignatius College Preparatory School, San Francisco
Chevron Innovation Award				
B1103	Daniel Hwang	New approaches to modeling global infectious disease challenges: Development of a novel agent-based stochastic network model of trachoma transmission	Francine Farouz	The Nueva School, San Mateo

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Chevron Integrity Award				
P839	David Freifeld	Analysis of Exomoon Detection Methods with Simulation	Barak Yedidia	The Nueva School, San Mateo
GGSTEM Fair Bill Tobin Memorial Award				
B1005	Anya Patel	Feeling Fragile: eIF4F Inhibition Sensitizes Non-Small Cell Lung Cancer Cells to a Topoisomerase II Inhibitor	Mark Hurwitz	The Nueva School, San Mateo
GGSTEM Fair Bob Rice Memorial Award				
E1003	Andre Giraldi	Usage of Man-made Water Sources by California Red-Legged Frogs	Millie Milstead	Drake High School, San Anselmo
GGSTEM Fair Paul Callahan Memorial Award				
C702	Kai Bachtiger	The Better Banknote	Minna Leigh	Mark Day School, San Rafael
GGSTEM Fair Ted Beck Memorial Award				
P1005	Amanda Hao	Stellar environments for habitable small or low-mass planet candidates	Jessica Valera	Aragon High School, San Mateo
Mu Alpha Theta Mathematics Project Award				
C1101	Dhruv Mangtani	BLUFFNet	William Cesarotti	Menlo School, Atherton
NASA Earth System Science Award				
B905	Alexis MacAvoy	A Second Year Study of Low-Cost, Bio-waste Activated Carbons: Synthesis, Biocompatibility, and Prototype Testing	Jimmy Ikeda	San Mateo High School, San Mateo
National Oceanic & Atmospheric Association Taking the Pulse of the Planet Award				
P841	Tyler Lowe-Thorpe	Harnessing the Power of the Wind Through Blade Design	Maria Gunter	Sts. Peter and Paul School, San Francisco
Northern California Institute of Food Technologists				
P901	Hannah Hsiao	Too Much on Your Plate? Reinventing Food Waste: A Sustainable Solution to Create Starch-based Bioplastics	Katherine Ward	Aragon High School, San Mateo
P840	Maeve Urban	Muffin Fluff: Evaluating Gluten-Free Flours for Muffin Density	Rinda Wardle	Korematsu Middle School, El Cerrito
Office of Naval Research				
P901	Hannah Hsiao	Too Much on Your Plate? Reinventing Food Waste: A Sustainable Solution to Create Starch-based Bioplastics	Katherine Ward	Aragon High School, San Mateo
B1201	Adriana Golden	Hormone Receptors: An Intersection Between Breast Cancer and Cellular Senescence	Carl Ma	Branson School, Ross
C902	Sarah Hansen	Passcode to a Pattern: Can a passcode entered to a song be more secure?	Ben Canning	Sequoia High School, Redwood City
C1001	Manya Goutam	Brain Buggy: A mind-controlled robotic wheelchair for paralyzed people	Peter Thrasher	San Mateo High School, San Mateo
M601	Christopher Salz	Wave of the Future	Anita Pisciotta	St. Anselm School, San Anselmo
E607	Inca Stienhans	Fluoride Water Filter	Aundrea Dolan	Adda Clevenger School, San Francisco
B605	Giana Castilyn	Aquaponics vs. Soil	Bryan Wasserman	Roosevelt Middle School, San Francisco
Ricoh Sustainable Development Award				
E903	Simon Luis, Julia Valdez	Will Ice Melting in the North or South Poles Cause Sea Levels to Rise?	Alvin Jumps	DeAnza High School, Richmond
Society for In Vitro Biology Outstanding 11th Grade Project				
B1102	Vienna Huang	Vascularization of Cerebral Organoids In Vitro	Sara Shayesteh	Carlmont High School, Belmont
Stockholm Junior Water Prize				
E1001	Aylin Salahifar	A Novel Solution to South Asia's Water Crisis: A Comprehensive Study on the Use of Moringa oleifera Seed Pods to Decontaminate Polluted Water	Leslie Burdon	Carlmont High School, Belmont
E902	Jeffrey Huang	Converting Ocean Water to Freshwater Through Cryo-desalination Using a Kitchen Freezer	Carl Ma	Branson School, Ross
US Agency for International Development Science Champion Award				
S1003	Audrey Ha	Fostering Racial Tolerance Phase 2, An International Study: Analyzing the Impact of Viewing Race-Related Statistical Data for Reducing Prejudices	Caitlyn Macrae	Menlo-Atherton High School, Atherton

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US Air Force Outstanding Engineering or Science Award				
P604	Jo Top, Issey Lancelot, Antoine Wellmann	Elephant's Toothpaste: the Catalyst in the Room	Gildas Guillaumet	Lycée Francais de San Francisco, San Francisco
B1008	Austin Vo	How Can Mushrooms Be Used to Produce Biofuels?	Kyle Collins	Quest Forward Academy, Santa Rosa
US Metric Association Award for the Best Use of SI				
C602	Austin Hetherington	What Effect Does the Throat to Diverging Section Ratio of a Rocket Nozzle Have on the Thrust Produced?	Tim Evans	Mark Day School, San Rafael
Yale Science & Engineering Association Most Outstanding 11th Grade Award				
C1103	Jihe He	Exploring Solutions to Assist Finger Rehabilitation with Flexibility	Mike Santos	St. Ignatius College Preparatory School, San Francisco