

San Mateo County's STEM Fair winners announced

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From public drinking water to planetary orbits and typography to forest fire retardants, a diverse array of subjects were the focus of student projects selected as winners in San Mateo County's STEM Fair.

“I am proud of all of our students who participated in this year's STEM Fair,” County Superintendent Nancy Magee said in a press release. “It takes commitment, grit and courage to develop and submit a project for judging. These young scientists show great promise as problem solvers and innovators. I am inspired by their passion and talent.”

Standing for science, technology, engineering and mathematics, the county's STEM Fair challenges students in grades five to eight to design and engineer prototypes for managing real-world problems in eight categories — chemistry; physics; materials science; biological systems; behavioral sciences; earth, space and environmental science; engineering; and math and software.



Nancy Magee

Of the 220 projects submitted for review virtually this year, more than 100 have moved forward into the final interview phase in which students were given a first, second or honorable mention award.

Following the review, 20 winning students have been entered into the California Science and Engineering Fair and an additional 10 will participate in the national Broadcom MASTERS STEM Fair.

First-place projects moving onto the next two fairs include sixth graders Rebecca Goldberg from Ronald C. Wornick Jewish Day School with “First to Fizzle Out;” Akira Nakamura from Burlingame Intermediate School with “Mathematically Modeling Planetary Orbits;” Yuisho Kawane from Parkside Intermediate School with “Filtering Water for Cheap;” Mariella Cusing from Crocker Middle School with “Masked Singers;” and Natalia Juno from Crocker Middle School with “Flying Far.”

Seventh graders also selected were Liam Stemmler from St. Matthew’s Episcopal Day School with “Masked Faces;” Yanzi He from Sacred Heart Schools with “Food: A World Full of Microbiomes;” Ela Viswanathan from Sacred Heart with “Enzymatic Browning in Avocado;” Veronica Howard from Stanford Online High School with “Pesticide Residue On Organic Versus Conventional Produce and the Effect of Simple Washing Techniques;” Jasmine Kaur from Sandpiper Elementary with “Smart Garbage Sorter;” Violet MacAvoy from Crocker Middle School, for a project titled “Save Our Forest: Engineering a Cost-Effective, Environmentally Friendly Forest Fire Retardant;” and Tessa Cuchelkar from Terra Linda Middle School with “How Well Does Your Sunscreen Protect You.”

Among eighth grade winners are Korynna Lau from Lipman Middle School with “Legibility in Typography;” Victoria Harding Bradley from Nativity Catholic School with “GREEN EARS – A study of ultrasonic acoustic emissions in response to environmental stressors in plants;” Andrew Hide from Cunha Intermediate School with “How Pure is Public Drinking Fountain Water?;” Juhi Bantwal from Ronald C. Wornick Jewish Day School with “Hydroponics and Types of Water;” Isaac Chuang from La Entrada Middle School with “Tornado recognition;” Aidyn Eglington from Hilldale School with “Dirty to Clean: The Effectiveness of Natural Soil Filters;” Colin Chu from The Nueva School with “Identifying miRNA Biomarkers Differentially Expressed in Liver Cancer Patients;” and Ian Bass from Hilldale School with “Refraction Action.”

The 10 additional students who placed second and will attend the MASTERS STEM Fair include sixth graders Adeya Hanes from Corte Madera School; Elisabeth Schor from The Nueva School; and Alexander Zwaanstra from Woodside Elementary; seventh graders Armaan Mishra from Crocker Middle School; Neethika Vijay from Synapse School; and Ethan Yan from Burlingame Middle School; and eighth graders Raeya Wohlmorantz from Ronald. C. Wornick Jewish Day School; Suhani Pahuja from Sandpiper Elementary; Tyler Droutsas from Nesbit Elementary; and Matthew Coward from Woodland School.

“I would like to give a special thank you to the teachers who supported their students’ passions and interests from idea to completed project and to all the judges who volunteered their time to support the youth of San Mateo County,” Magee said. “You are all making a difference in the lives of our students and the future of our county.”

