

California Science Center
CALIFORNIA SCIENCE & ENGINEERING FAIR
Major Fair Awards – 2021

Project of the Year Awards

\$5,000 in the Senior Division, \$2,500 in the Junior Division

Senior Division: Jacqueline Prawira

Grade 11, Mountain House High School, Mountain House, San Joaquin County

Project S1115: Cyclo.Plas 2: A Dual Focus Development as Alternative Materials to Plastic by Upcycling Fish Scale Waste Components

Junior Division: Ava Bhowmik

Grade 7, Harker School, San Jose, Santa Clara County

Project J1305: A Novel Home-Built Metrology to Visualize Oral Fluid Droplets and Quantify the Efficacy of Masks

California Science & Engineering Fair ISEF Finalists

Senior Division projects selected to participate as finalists in the 2021 Virtual Regeneron International Science and Engineering Fair

Harjaisal Brar, Grade 9, Stockdale High School, Bakersfield, Kern County

Project S1205, A Novel 3D Printed Ventilator for COVID-19

Roy Gross, Grade 10, Gunn (Henry M.) High School, Palo Alto, Santa Clara County

Project S1006, Designing and Building a Custom Phased Array Network Using Software-Defined Radio

Alexis MacAvoy, Grade 10, San Mateo High School, San Mateo, San Mateo County

Project S0602, Investigating the Efficiency of *Carpobrotus edulis*, Kelp, and Walnut Shell Bioethanol in Comparison to Corn Ethanol Using Percent Yield and Mass Fractionation

Pranav Moudgalya, Grade 11, University High School, Irvine, Orange County

Project S1522, Plasmids of *Curtobacterium*: A Nexus of Carbohydrate Utilization Genes

Aakarsh Vermani, Grade 11, Westview High School, San Diego, San Diego County

Project S0844, Using Machine Learning to Repurpose FDA-Approved Drugs to Treat Cancers and Inflammatory Diseases

Paulina Wodarz, Grade 10, University High School, Irvine, Orange County

Project S0423, Analyzing Text Corpora to Determine the Emotional State of Humans

Jessica Zhang, Grade 12, Proof School, San Francisco, San Francisco County

Project S1405, Classification of Tight Contact Structures on a Solid Torus

California Science & Engineering Fair Broadcom MASTERS Nominees

All Junior Division projects winning any level category award, including Honorable Mention, and which had not already been nominated by their county or multi-county affiliated science fair, were nominated to the 2021 Broadcom MASTERS competition.