California Science & Engineering Fair, 2019

Special Awards

Cheryl Saban Self-Worth Foundation Scholar Prizes – For the top projects by a female scholar providing a positive impact to her community. Two Junior Division place awards of $1,500 and $1,250 and two Senior Division place awards of $2,000 and $1,500. Presented by the Cheryl Saban Self-Worth Foundation for Women and Girls.

Junior Division, First Place: J1019, Julia MacAvoy, Hillsborough, San Mateo County
Junior Division, Second Place: J1318, Allison S. Quan, Walnut Creek, Contra Costa County
Senior Division, First Place: S1111, Eshani Jha, San Jose, Santa Clara County
Senior Division, Second Place: S2201, Nadia Ansari, Newport Coast, Orange County

Herbalife Nutrition Award – For excellence in Microbiology. One $1,500 Senior Division award. Presented by Herbalife Nutrition.

Award: S1518, Abbie K. Maemoto, Palos Verdes Estates, Los Angeles County

LA BioMed Awards for Excellence in Biochemistry and Molecular Biology – For excellence in the fields of Biochemistry and Molecular Biology. Two $1,250 Senior Division awards. Presented by the Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center.

Award: S0507, Jessie L. Gan, San Diego, San Diego County
Award: S0525, Katherine A. Wedekind, Rolling Hills Estates, Los Angeles County

Math Teacher’s Awards for Achievement – For achievement in mathematics and computer science studies as a tribute and to show appreciation for all mathematics teaching professionals. Two $1,250 Senior Division awards. Presented anonymously by a generous donor.

Mathematical Sciences: S1408, Andrei Mendelshtam, Irvine, Orange County
Computational Systems & Analysis: S0807, Cynthia Chen, San Jose, Santa Clara County

Past Chairpersons’ Humanitarian Awards – For the projects with the highest potential for positive humanitarian impact. Two $1,250 Junior Division awards. Presented by past CSEF Co-Chairs, Liz Snyder, Keller Williams Realty, and Hal Snyder.

Award: J0420, Ainsley E. Savant, Encinitas, San Diego County
Award: J0422, Eden E. Stambaugh, Solana Beach, San Diego County

Southern California National BioGENEius Award – For outstanding original and independent research in the biosciences. One $1,250 Senior Division award and the opportunity to participate in the International BioGENEius Competition at the June Biotechnology Innovation Organization meeting. Presented by the Southern California Biomedical Council (SoCalBio).

Award: S2201, Nadia Ansari, Newport Coast, Orange County

SoCalGas Energy Awards – For outstanding scientific research and/or engineering in energy production. One $1,250 Junior Division Alternative Energy award and one $1,500 Senior Division Environmental Engineering award. Presented by the Southern California Gas Company (SoCalGas).

Junior Division, Alternative Energy: J0202, the team of Breann M. Amarante and Jacqueline D. Rocha, Fowler, Fresno County
Senior Division, Environmental Engineering: S1109, the team of Jonghyun Hong and Jad Soucar, La Crescenta, Los Angeles County
**South Coast AQMD Air Quality Awards** – For projects that explain measurement or reduction of air pollution and health effects thereof. Two $1,500 awards, one in each division. Presented by the South Coast Air Quality Management District.

**Junior Division**: J0904, Cameron J. Conner, Beaumont, Riverside County  
**Senior Division**: S0915, Yoonji A. Kwon, Fresno, Fresno County

**USC Center for Economic and Social Research Special Award** – For the best project in the social sciences. One $1,250 award. Presented by the USC Center for Economic and Social Research.

**Award**: S0408, the team of Brianna M. Camero and Bhjan Kaur, Bakersfield, Kern County
2019 CSEF Special and Recognition Awards

California Science & Engineering Fair, 2019

Recognition Awards

A&WMA Environmental Leadership Awards – For exceptional projects that enhance the knowledge and understanding of environmental issues. One $250 Junior Division award and two $250 Senior Division awards. Presented by the Air and Waste Management Association, West Coast Section.

**Junior Division, Environmental Engineering:** J1127, Landon T. Pretre, Woodside, San Mateo County
**Senior Division, Environmental Engineering:** S1108, Dimple Amita Garuadapuri, Eastvale, Riverside County
**Senior Division, Environmental Science:** S0906, James Y. Chen, Irvine, Orange County

AACC Clinical Chemistry Awards – For interesting and original projects that impact the future of clinical chemistry. Three $200 awards in each division. Presented by the Southern California Section of the American Association for Clinical Chemistry (AACC).

**Junior Division, Biochemistry/Molecular Biology:** J0612, Ingrid J. Feague, Santa Cruz, Santa Cruz County
**Junior Division, Chemistry:** J0501, Haya M. Belbese, San Diego, San Diego County
**Junior Division, Toxicology:** J2115, Noah J. Patterson, Fresno, Fresno County
**Senior Division, Biochemistry/Molecular Biology:** S0605, Anushree Chaudhuri, San Diego, San Diego County
**Senior Division, Chemistry:** S0510, Alexander Guh-Siesel, Los Altos, Santa Clara County
**Senior Division, Toxicology:** S2106, Adriana Golden, Ross, Marin County

AIPG Geoscience Awards – For excellence in geological science projects. Three place awards of $250, $150, and $100. Presented by the American Institute of Professional Geologists, California Section.

**First Place:** S0917, Ellery B. McQuilkin, Lee Vining, Mono County
**Second Place:** S0904, the team of Justin H. Cai and Iris X. Xia, San Jose and Cupertino, Santa Clara County
**Third Place:** J0921, Margherita F. Scussat, Goleta, Santa Barbara County

Biophysics Award – For the best biophysics-related project. One $100 Senior Division award. Presented by the Biophysical Society.

**Award:** S0501, Sabreen Alam, Irvine, Orange County

Biosero Innovation Award – For the most innovative project in the fields of robotics, biotech, and automation One $500 Senior Division award. Presented by the Biosero, Inc.

**Award:** S0829, Anish Singhani, Danville, Contra Costa County

Bone Clones Research Award – For the Junior Division project that best demonstrates the use of the scientific method in original research. One $200 Junior Division award. Presented by Bone Clones Osteological Reproductions.

**Award:** J1221, John C. Page, Carmel, Monterey County
2019 CSEF Special and Recognition Awards

CAPS Science Achievement Award – For the project that best illustrates good scientific methodology in physics, chemistry, biological sciences, biochemistry, environmental sciences, plant sciences, or energy resources. One $100 award for a student in grades 7-11. Presented by the California Association of Professional Scientists (CAPS).

Award: J0619, Alexis T. MacAvoy, Hillsborough, San Mateo County

Center for Plant Cell Biology Awards – For scientific achievement in the fields of cell and molecular biology, genomics, bioinformatics, or technology development that will impact our understanding of plant cell biology. Two Senior Division place awards of $500 and $100. Both awards include an invitation to the Annual CEPCEB Award Symposium at the University of California, Riverside. Presented by the Center for Plant Cell Biology (CEPCEB), UC, Riverside.

First Place: S1804, David L. He, San Diego, San Diego County
Second Place: S1506, Daniel Feng, Irvine, Orange County

CSBPA Best Coastal Science Awards – For achievement in coastal and ocean science. One $250 Junior Division award and one $500 Senior Division award. Both awards include student membership in the American Shore and Beach Preservation Association (ASBPA). Presented by the California Shore and Beach Preservation Association (CSBPA).

Junior Division: J2120, Nora C. Thompson, El Cerrito, Contra Costa County
Senior Division: S1123, Ayushi Srivastava, Union City, San Francisco County

Director’s Award for Most Innovative Alternative Energy Project – For the project that incorporates the most innovative alternative energy concept and usage. One $200 Junior Division award. Presented by Bob Anderson, CSEF Director of External Awards.

Award: J0205, the team of Catalina I. Interiano and Johanna F. Perez, Newark, Alameda County

Doctors Sushila and Chandi Charan Kar Award – For excellence in original ideas and scientific thinking, a passion for a career in the healthcare field, in-depth knowledge, and presentation of the science project. Two $500 Senior Division awards. Presented by the Sheila Kar Health Foundation.

Award: S0513, Shreya K. Kamra, Pebble Beach, Monterey County
Award: S1203, Adolat Beshimova, Los Angeles, Los Angeles County

Lemelson Early Inventor Prize – For the best young inventor creating a promising solution to real-world problems. One $100 Junior Division award. Presented by The Lemelson Foundation in partnership with the Society for Science and the Public.

Award: J1117, Katherine H. Humphrey, Los Angeles, Los Angeles County

Plug In America EV Excellence Awards – For the best projects demonstrating the benefits of plug-in vehicles or advancing the science of vehicle electrification or electric mobility. One $100 Junior Division award and two $100 Senior Division awards. Presented by Plug In America.

Junior Division: J1015, Braedyn D. Hutchison, Irvine, Orange County
Senior Division: S0809, Andrew K. Chu, San Mateo, San Mateo County
Senior Division: S1013, Arya P. Joshi, Cypress, Orange County

SoCalBio R&D Scholar Awards – For outstanding original and independent research in the biosciences. Presented by the Southern California Biomedical Council (SoCalBio).

Honorable Mention: S1523, Sasha L. Ronaghi, Newport Coast, Orange County
Honorable Mention: S1211, Elisha D. Johnson, Rolling Hills Estates, Los Angeles County
Honorable Mention: S0523, Asna Tabassum, Chino Hills, San Bernardino County
Honorable Mention: S0501, Sabreen Alam, Irvine, Orange County
South Coast AQMD Air Quality Awards – For projects that explain measurement or reduction of air pollution and health effects thereof. Presented by the South Coast Air Quality Management District.

   Honorable Mention: J1127, Landon T. Pretre, Woodside, San Mateo County
   Honorable Mention: S0909, Vivian S. Gerstein, Arcata, Humboldt County
   Honorable Mention: S0920, Mia A. Placencia, Santa Maria, Santa Barbara County

SPIE Optics and Photonics Recognition Awards – For the projects best demonstrating scientific research and engineering applications in optics, photonics, and related fields. Three Junior Division place awards of $350, $250, and $200 and three Senior Division place awards of $800, $500, and $400, and. Presented by SPIE, the International Society for Optics and Photonics.

   Junior Division, First Place: J1725, Dana A. Soibel, South Pasadena, Los Angeles County
   Junior Division, Second Place: J1719, Arsh Muhib, Mountain House, San Joaquin County
   Junior Division, Third Place: J1717, Roxy Luster, Auburn, Placer County
   Senior Division, First Place: S1705, Isaac A. Brody, Chula Vista, San Diego County
   Senior Division, Second Place: S1103, the team of Francisco C. Catanzaro and Isabella J. Catanzaro, San Diego, San Diego County
   Senior Division, Third Place: S0315, Andrew T. Land, Belmont, San Mateo County

STEM World Visionary Award – For demonstrating a distinctive and/or exceptional vision in science or technology for the future of mankind. One $250 Junior Division award. Presented by STEM World.

   Award: J1119, Shant Koutnouyan, Glendale, Los Angeles County

UCLA Brain Research Institute Awards – For research achievement, innovation, and interpretation in any area related to the brain in health and sickness. Three place awards in each division of $250, $150, and $100. Presented by the Brain Research Institute (BRI), University of California, Los Angeles.

   Junior Division, First Place: J0718, Ananya Vinay, Fresno, Fresno County
   Junior Division, Second Place: J0418, Ayla C. Richland, Los Angeles, Los Angeles County
   Junior Division, Third Place: J0714, Lydia M. Richards, Aptos, Santa Cruz County
   Senior Division, First Place: S0425, Rhitishah Yuva Raju, Sacramento, Sacramento County
   Senior Division, Second Place: S1003, the team of Om Anavekar, Tarun R. Chichili, and Arnav Gupta, Danville, Contra Costa County
   Senior Division, Third Place: S0401, Luke T. Anderson, Concord, Contra Costa County

USC Center for Economic and Social Research Recognition Award – For the best project in the social sciences. One $250 award. Presented by the USC Center for Economic and Social Research.

   Award: J0415, Rinoa J. Oliver, Santa Cruz, Santa Cruz County
ISEF Affiliate Awards

American Meteorological Society Awards
S0923, Joyce Hee Sung, Oxnard, Ventura County

American Meteorological Society Awards
S0915, Yoonji A. Kwon, Fresno, Fresno County

American Meteorological Society Awards
S0918, Tai L. Michaels, North Hollywood, Los Angeles County

American Psychological Association Award
S0412, Audrey Y. Ha, Atherton, San Mateo County

Association for Women Geoscientists Award
J1108, Melia P. Crimaldi, Solana Beach, San Diego County

NASA Earth System Science Award
S0904, the team of Justin H. Cai and Iris X. Xia, San Jose and Cupertino, Santa Clara County

NOAA’s 2019 Taking the Pulse of the Planet Award
S1020, Isabel Sperandio, Palo Alto, Santa Clara County

The Yale Science & Engineering Association Award
S0323, Tyler E. Robertson, Fresno, Fresno County