

ANIMAL BIOLOGY - JR J01

Lacey Thompson	Archer School for Girls	First Place 232	<i>Hypertrophic Cardiomyopathy Passed Through Fruit Flies To Their Offspring</i>
Zyg Ramsay Boheng Cao	The Science Academy STEM Magnet	Second Place 176	<i>The Butterfly Effect: The correlation between the population of the butterfly <i>Danaus plexippus</i> and California wildfires</i>
Serj Petrossian	Gaspar de Portola Charter AIAT	Third Place 493	<i>Magnetic Healing?</i>
Abril Rivas	South Gate Middle School	Honorable Mention 656	<i>Effect of Salinity Level on <i>Isochrysis Galbana</i> Population Growth</i>
Marissa Cerda	South Gate Middle School	Recognition 521	<i>Warming Brine</i>
Alma Nanny	South Gate Middle School	Recognition 474	<i>Sea Urchins Reproduction Rate in Different pH</i>
Nanar Shahinian	Chamlan Armenian School	Recognition 391	<i>The Effect of Temperature on the Eating Habits of <i>Drosophila Melanogaster</i></i>

ANIMAL BIOLOGY - SR S01

Gavin Peters	Palos Verdes High School	First Place 561	<i>Improving Captive Management Strategies for Conservation of Dendrobates auratus</i>
Stanley Liu	Arcadia High School	Second Place 112	<i>A Fully Integrated Microfluidic Device for Blood Plasma Separation and Biomarker Detection</i>
Julia Marquez	Cabrillo Marine Aquarium	Third Place 580	<i>The Impact of Fertilizer on Sea Urchin Zygote Developemnt</i>
Cecilia Alves	California School of the Arts - San Gabriel Valley	Honorable Mention 162	<i>The Effect of Different Types of Pesticides on the Death Rate of Bees</i>
Nareh Almassian	Rose and Alex Pilibos Armenian School	Recognition 190	<i>The Effect of Fruit and Color Stimulants on the reaction of Drosophila melanogaster</i>
Jessica Bahny	Palos Verdes High School	Recognition 524	<i>Reprogramming Thresher Shark (Alopias vulpinus) Cells into Induced Pluripotent Stem Cells</i>
Anne-Sophie Corry	Palos Verdes High School	Recognition 452	<i>A Study of the Grey Fox and Red Fox Populations on the Palos Verdes Peninsula</i>
Rhanya Cruz	PVNet Education & Technology Center	Recognition 536	<i>A preliminary study for bioprinting an octopus heart</i>
Sophia Huevo	Cabrillo Marine Aquarium	Recognition 581	<i>The Impact of Varying pH Levels on Purple Sea Urchin Zygote Development</i>
Ryan Ngo	Crescenta Valley High School	Recognition 214	<i>Physical Effects of Elevated Dissolved Oxygen Levels on Trout</i>
Tejas Shivkumar	Brentwood High School	Recognition 53	<i>Neural Control of Cardiac Relaxation in Giraffes</i>
Camryn Whitmore	Lawndale High School	Recognition 668	<i>Hatching Brine Shrimp eggs in Salt Water</i>
Malia Weiss Sasha Wintersteller Isabelle Townley	Flintridge Preparatory School	Recognition 269	<i>Salty Shrimp: The Effect of Salinity on Brine Shrimp Hatch Rate</i>

ANIMAL PHYSIOLOGY - JR J02

Maddy Pieronek	American Martyrs School	First Place 380	<i>U'V Got Me Feeling Blue</i>
Amaanah Ali	Institute of Knowledge	Second Place 632	<i>Winning Worms</i>
Scott Smith Luke Metcalf	St. Bede The Venerable School	Third Place 679	<i>The Effect of Exercise on the Sleep Patterns and Weight Loss of Mice</i>
Maayan Mazar	Pressman Academy	Honorable Mention 60	<i>Under Pressure ... I Can Hardly See</i>
Shreya Bhargava	Blair High School	Recognition 408	<i>Are Fingerprint Patterns Inherited?</i>
elsy galvez	Hollenbeck Middle School	Recognition 418	<i>Can Children Under 18 Years Old Have Cancer? What Are The Most Common Types/Symptoms?</i>
Jessica Garth	Saint John Fisher	Recognition 307	<i>How does age and gender affect taste?</i>
Sarah Hafez	New Dimensions	Recognition 201	<i>Keep it Down! The Effect of Noise Pollution on Blood Pressure and Pulse Rate in Adults</i>
Caroline Kboudi	Pressman Academy	Recognition 83	<i>Newton's Fall</i>
Marco Melika Christian Mueller	American Martyrs School	Recognition 371	<i>Parkinson's Disease Treatments On Brown Planaria</i>
Michelle Rhee	The Science Academy STEM Magnet	Recognition 184	<i>Knee Pain: The Study of the Angle that Puts the Most Amount of Strain on the Knee</i>

ANIMAL PHYSIOLOGY - SR S02

Mia Moran	Garey High School	First Place 333	<i>The synergistic activity of Betalain and Trehalose on the reduction of Fat lipid deposits to induce a healthier life</i>
Junhee Lee	California Academy of Mathematics and Science	Second Place 396	<i>Effect of Water Soluble Fractions of Diesel on Fertilization and Embryonic Development of Pacific Sand Dollars, Dendraster excentricus</i>
Janet Higareda Rosario Rangel Annmarie Ponce	Garey High School	Third Place 18	<i>Jamaica (hibiscus flowers) a popular drink among Latinos an easy source of Betalain to extend the Lifespan of C.Elegans.</i>
Hilary Ly	California School of the Arts - San Gabriel Valley	Honorable Mention 173	<i>Effect of Glucose in Vegetables on Blood Glucose Levels in Humans</i>
John Han Darius Esfahani	Diamond Bar High School	Recognition 491	<i>Is the CCR5 Mutation that confers HIV resistance really Adaptive?</i>
Aidan Hyman Liza Tabachnik	The Buckley School	Recognition 9	<i>An Optogenetic Study of Neural Response Enhancement Correction using Physarum Polycephalum</i>

BEHAVIORAL SCIENCE - NON-HUMAN - JR J03

Eden Golden-Krasner	Weizmann Day School	First Place 104	<i>Mirror Mirror on the Wall: Do Spiders Have Self- Recognition?</i>
Dylan Kelley	Saint John Fisher	Second Place 330	<i>Which Treat Does My Dog Like Best?</i>
Sienna Anderson	Royal Oak Middle School	Recognition 241	<i>Are Dogs Right or Left Pawed?</i>
Andrea Arce	South Gate Middle School	Recognition 480	<i>Coloring Algae</i>
Isabella Shpall Miranda Diaz Fuchs	St. Timothy School	Recognition 221	<i>Light vs. Heat</i>
Taylor Viducic	Rudecinda Sepulveda Dodson Gifted/HA Magnet MS	Recognition 411	<i>Which Treat is Best?</i>

BEHAVIORAL/SOCIAL SCIENCES - HUMAN - JR J04

Nadia Alamad Jasmine Hassan	Al-Huda Islamic School	First Place 96	<i>Sound Sound Go Away! A Study on the Effect of Decreased Background Noise on the Reaction Time of Special Needs Children Suffering from Hyperacusis</i>
Katherine Humphrey	Saint Martin of Tours School	Second Place 197	<i>Serif or Sans Serif? The Quest for Improved Reading</i>
Ayla Richland	Pressman Academy	Third Place 59	<i>Catchy Memory</i>
Benjamin Elbaz	Pressman Academy	Honorable Mention 58	<i>Political Campaigns: Go Negative?</i>
Michael Isayan	Portola Highly Gifted Magnet	Honorable Mention 115	<i>Homework: Does it Help or Harm?</i>
Scar Lutz	Arroyo Seco Museum Science Magnet	Honorable Mention 585	<i>Chromebooks or Sketchbooks? Comparing off-task behavior</i>
Emily Avila Evelyn Loza	Lennox Middle School	Recognition 729	<i>Music vs. Stress</i>
Isabella Guglielmetti	St. Timothy School	Recognition 239	<i>First Impressions</i>
Evelyn Mahoney Andrea Alfaro Kimberly Olmedo	Mt. Gleason Middle School	Recognition 433	<i>Subliminal Messages in Running</i>
Suzuko Ohshima	Walter Reed Middle School	Recognition 154	<i>Shootings, Hurricanes, Earthquakes, and your Social Status</i>
Ponciano Rubio	Arroyo Seco Museum Science Magnet	Recognition 587	<i>A Look at Generational Logical Reasoning</i>
Nicole Timour	Chamlian Armenian School	Recognition 281	<i>Is Your Mind Playing Tricks On You?</i>
Keren Tizabi	Pressman Academy	Recognition 88	<i>He or She?</i>

BEHAVIORAL/SOCIAL SCIENCES - SR S03

Diego Borgsdorf Sarah Shapiro Sarah Tran	Granada Hills Charter High School	First Place 597	<i>La Gente de MaAz: A Story of (De)Colonization, Food, and Transnationalism among Latinx Youth in Los Angeles</i>
Alec Guthrie	Flintridge Preparatory School	Second Place 209	<i>Fairness and Altruism Among High School Students - A Global Study in Behavioral Economics</i>
Timmy Park Aditya Sehgal	La Canada High School	Third Place 600	<i>Muscle Music</i>
Ellen Chen	Bonita High School	Honorable Mention 533	<i>A Meta-analysis of the Causes of Autism</i>
Maeve Humphrey	Palisades Charter High School	Recognition 1	<i>The Effect of Stress and Meditation on Blood Glucose in Students During Finals Week</i>
Sofia Mathews	California School of the Arts - San Gabriel Valley	Recognition 179	<i>The possible correlation between reading time before sleep and P.S.Q.I score</i>
Angelica Agahsi Rana Mehai Lilian Tahmasian	Crescenta Valley High School	Recognition 244	<i>The Role of Football in Increasing Concussion Risk</i>
Anika (Hyojin) Park	California School of the Arts - San Gabriel Valley	Recognition 167	<i>The Reason Why Parents Don't Want Their Children to Pursue Art Careers</i>
Charlotte Tight	Palos Verdes High School	Recognition 504	<i>The Effect of Family Groups on Non-Verbal Communication in Humans</i>
Ruby Wu Elise Kwon	Diamond Bar High School	Recognition 502	<i>What are the Major Causes of Suicide in Children?</i>
Maya Wurtemberg Julian Moser	California School of the Arts - San Gabriel Valley	Recognition 203	<i>The Correlation Between Horror-Related Adjectives in Stephen King's Novels and the Sales of His Novels</i>
Luke Zhou	Diamond Bar High School	Recognition 14	<i>Climate Change in the Classroom</i>

BIOCHEMISTRY & MOLECULAR BIOLOGY - JR J05

Manav Desai	Portola Highly Gifted Magnet	First Place 142	<i>Effects Of Omega-3 Fatty Acids On Neuronal Regeneration</i>
Alana Baumgartner	Saint John Fisher	Second Place 247	<i>Flour 101: How different flours affect weight, density, and volume of muffins</i>
Brooklin Baylor	Royal Oak Middle School	Honorable Mention 404	<i>Soda, Energy, Juice. Comparing Leftover Abundance of Sugar</i>
Jordan Fleischman	Blair High School	Honorable Mention 671	<i>Pretty Please with sugar ON top, but how much is IN what we eat? How much "hidden sugars" are in our food?</i>
Jana Hafez	New Dimensions	Honorable Mention 465	<i>iron Rich foods</i>
Zeena Hajhamid	Institute of Knowledge	Honorable Mention 641	<i>finding the C in oj</i>
Anaiis Marcarian	Saint Martin of Tours School	Honorable Mention 138	<i>Regular chips V.S. Baked chips</i>
Monica Steinbeck	American Martyrs School	Honorable Mention 441	<i>Infusing Plants With Vitamin C</i>
Mark Wood	American Martyrs School	Honorable Mention 369	<i>Iron: How to Get the Most</i>
Stephanie Harrison	Archer School for Girls	Recognition 448	<i>Testing Heat v. Electricity on the Coagulation of Blood</i>
Tess Hubbard	Archer School for Girls	Recognition 437	<i>Testing for GMO</i>
Skye Inal	New Horizon School	Recognition 309	<i>Comparing the Amount of Vitamin C in Home-grown Oranges and Store-bought Oranges</i>
AMBROSE LUO Zhou Long	La Canada Preparatory Private School	Recognition 346	<i>Stopping Cancer from Spreading, with Information from Genes</i>

Layan Mustafa	Institute of Knowledge	Recognition 626	<i>Insulin Enduring Enzymes</i>
Alina Naranjo Isabella Milliken	Sarah Ross Science Fair Junior Division	Recognition 49	<i>The Brownie Experiment</i>
Reef Santos	Saint John Fisher	Recognition 390	<i>The Edible Bubble: How Spherification Is Achieved with Various Liquids</i>

BIOCHEMISTRY & MOLECULAR BIOLOGY - SR S04

Jaya Hamkins	Crescenta Valley High School	First Place 301	<i>Investigation of Adhesion Peptide Interactions with Hydroxyapatite Through Computational Molecular Dynamics</i>
Sudi Feng	La Canada High School	Second Place 602	<i>Tau Phosphorylation by HSV Protein US3 in Alzheimer's Disease</i>
Katherine Wedekind	Palos Verdes Peninsula High School	Third Place 348	<i>Correction of MPS IIIA Induced Pluripotent Stem Cells Using CRISPR-Cas9</i>
Abigail Maemoto	Palos Verdes High School	Honorable Mention 335	<i>Effect of TKS4 Inhibition on Invadopodia Growth and Activity Rate of Head and Neck Carcinomas</i>
Jiyoun Roh	Crescenta Valley High School	Honorable Mention 131	<i>Quinacrine Induces Lysosomal Membrane Permeabilization (LMP) and Enhances Sensitivity for TRAIL, an Anti-Tumor Agent</i>
Ana Gonzalez	The Buckley School	Recognition 6	<i>Stop Stressing Out! A study of the Epigenetic Aspect on Vertebrates and Invertebrates</i>
Jackson Karlitz	Palos Verdes High School	Recognition 658	<i>A Novel In Vitro Comparative Study on the Effects of TNF-α Inhibitors on HLA-B27 Cells</i>
Keghon Kasparian	Rose and Alex Pilibos Armenian School	Recognition 464	<i>Is Your Favorite Food Genetically Modified?</i>
Jordan Lay Artis Phillips	La Canada High School	Recognition 583	<i>Studying the Mechanisms of a Chaperone Protein</i>
Paris Pappas	Crespi Carmelite High School	Recognition 150	<i>Organic vs Inorganic: The Effect of Various Catalases on the Decomposition of the Toxin Hydrogen Peroxide</i>
Jingyu Yan	La Canada High School	Recognition 265	<i>3D Structural Investigation of an Anti-viral Antibody</i>
Stella Zilberberg	The Buckley School	Recognition 3	<i>Protecting The Skin From Within</i>

CHEMISTRY - APPLIED - JR J06

Aleen Kojikian	St Gregory A. & M. Hovsepien School	First Place 324	<i>Toxic Metals in Baby Food</i>
Molly Gelino	Royal Oak Middle School	Second Place 484	<i>Which method of desalination and dirt extraction from an impurity filled water source works the best?</i>
Zalea Nunes	Sierra Madre Middle School	Third Place 689	<i>How do the expiration dates of hyaluronic acid gel fillers affect the fillers in terms of sterility, and response to hyaluronidase?</i>
Rafael Enfiadjian	Chamlan Armenian School	Honorable Mention 378	<i>Lungs vs. Aerosols</i>
Nicole Hacopians	Chamlan Armenian School	Honorable Mention 245	<i>Fire Resistant House</i>
Grace Petoyan	St Gregory A. & M. Hovsepien School	Honorable Mention 290	<i>Cold Pack Chemistry: Where Does the Heat Go?</i>
Ava Almand	St. Cyril of Jeruselem School	Recognition 651	<i>Fueling the Future with Fuel Cells</i>
Brooke Chopiuk	Saint Martin of Tours School	Recognition 145	<i>Which Brand of Water Bottle Will Keep Your Drinks Cold for the Longest Amount of Time?</i>
Max Coleman	Saint Martin of Tours School	Recognition 246	<i>Does A Carbon Water Filter Really Work?</i>
Beatrix Khachaturian	Sierra Madre Middle School	Recognition 688	<i>what is the most effective amount of acid to remove gelatin out of hair</i>
William Zheng	Portola Highly Gifted Magnet	Recognition 146	<i>How does the voltage of the electrical power (battery) affect how much hydrogen is produced?</i>

CHEMISTRY - GENERAL - JR J07

Christian Ramirez	Royal Oak Middle School	First Place 496	<i>The Science of Baking: Do Different Ingredients Impact the Size & Texture of Chocolate Chip Cookies?</i>
Michael Shamoyan Vincent Hovsepien	Rose and Alex Pilibos Armenian Middle School	Second Place 426	<i>Analysis of Alum</i>
Daniela Gutierrez	Hale Charter Academy STEAM Magnet	Third Place 294	<i>How do different amounts of exercise affect blood sugar levels</i>
Leah Bacigalupi	Blair High School	Honorable Mention 537	<i>Water Filtration: Which filter works best for clean drinking water, Natural or Synthetic?</i>
Ella Lesnever Corinne Moreno	Blair High School	Honorable Mention 362	<i>How do different liquids affect the health of teeth?</i>
Cecilia Alfaro Joselyn Soto	Lennox Middle School	Recognition 466	<i>Vitamin C</i>
Nicole Gorbacheva	Beverly Vista Middle School	Recognition 618	<i>What happens when you mix and acid and a base?</i>
charlotte hargrove	Saint John Fisher	Recognition 568	<i>Water evaporation</i>
Hera Hovsepien	St Gregory A. & M. Hovsepien School	Recognition 295	<i>Electrolytes For The Win</i>
Mallory Louie	Sarah Ross Science Fair Junior Division	Recognition 680	<i>Sweet as Sugar</i>
Adara Martin-Mur	Blair High School	Recognition 337	<i>Does Xanthan Gum Contribute to Flammability in Food?</i>
Jeremy Sanchez	Hollenbeck Middle School	Recognition 526	<i>Using Known Substances From A Light Spectrum To Identify Unknown Substances</i>
Zayd Syed	New Horizon School	Recognition 302	<i>Producing Energy from Hydrogen Fuel Cell</i>

Chloe Vuong

Sierra Madre Middle
School

Recognition
673

*How does the environment
affect the pigment in a
plant?*

CHEMISTRY - SR S05

Aaron Zhao	Harvard-Westlake School	First Place 151	<i>Pancreatic Cancer Therapy (PCT) using MOF</i>
Lydia Neguse	California Academy of Mathematics and Science	Second Place 399	<i>Characterization of Lattice Distortion in SrTiO₃ Grown on LSAT Substrate through Quantitative STEM Analysis</i>
Jonathan Brahim Vishal Ravi	Crespi Carmelite High School	Third Place 462	<i>Investigation of Solid State Electrolytes for Lithium Ion Batteries</i>
Jacob Hageman Carter Harrigian	Palos Verdes High School	Recognition 389	<i>The Effects of Energy Drinks on Lumbriculus variegatus</i>
Martin Leung	Temple City High School	Recognition 65	<i>Filtration of Ammonia using Oxidation Techniques</i>
Miriam Meraz	Compton Unified School District	Recognition 709	<i>Plop Plop, Fizz Fizz</i>

EARTH / SPACE SCIENCES - JR J08

Emily Hattenbach Gianna Nixon	St. Timothy School	First Place 224	<i>Sunscreen: The Secret Killer</i>
Alex Muradian	St Gregory A. & M. Hovsepian School	Second Place 388	<i>Martian Mission</i>
Julia Huffstutter	Saint John Fisher	Third Place 296	<i>Which Surface Materials Can Reduce the Greenhouse Effect?</i>
Emily Johnson	Blair High School	Honorable Mention 347	<i>How do you capture the power of heat?</i>
Jake Mu	Royal Oak Middle School	Honorable Mention 249	<i>Discovering Sodium Chloride Levels of Southern California Beaches Through the Process of Desalination</i>
Deepika Sharma	Hale Charter Academy STEAM Magnet	Honorable Mention 278	<i>How do different groundwater levels impact building shaking during earthquakes?</i>
Luca Gaglio Edin Kapetanovic	Incarnation Parish School	Recognition 325	<i>The Dangers of UV Light: Are You Protected?</i>
Eshal Saif	Institute of Knowledge	Recognition 629	<i>Erosion in Motion</i>
Binyam Sisay	Saint Joseph Long Beach	Recognition 98	<i>Understanding Landslides</i>
Mark Wang	Sarah Ross Science Fair Junior Division	Recognition 37	<i>How Do I Measure The Size of the Earth</i>
Logan Weinstein	Hale Charter Academy STEAM Magnet	Recognition 102	<i>Is the Intensity of Tornadoes Dependent on Climate Change?</i>

EARTH / SPACE SCIENCES - SR S06

Jason Wang	Walnut High School	First Place 258	<i>Climate Change and "Stuck" Weather Patterns: Longer Rainstorms, Drought, Heat Waves, and Extreme Cold</i>
Amyrah Doty	Palos Verdes High School	Second Place 564	<i>Classifying Geomagnetic Storms through Total Electron Content Modeling</i>
Hillary Giang	Lawndale High School	Third Place 661	<i>Amount of Salt at Different Beaches</i>
Adhila Akbar Manasvi Chandra	Arcadia High School	Recognition 608	<i>Correlation of Coronal Mass Ejections with the Solar Sunspot Cycle</i>

ECOLOGY - JR J09

Una Mclain	Portola Highly Gifted Magnet	First Place 317	<i>Public Drinking Water: Comparing Lead Exposure</i>
Annika Anderson June Zamora	St. Timothy School	Second Place 220	<i>Plants Vs. Polymers</i>
Noah Kupferwasser	Pressman Academy	Third Place 93	<i>The Impact of Temperature, Extreme Weather and Milkweed on the Development of the Monarch Butterfly</i>
Rachel Chung Addie Myers Gigi Appelbaum-Schwartz	Archer School for Girls	Honorable Mention 228	<i>Does Climate Change Make Marigold Growth Strange?</i>
LUDOVICO CORDARA	La Canada Preparatory Private School	Honorable Mention 420	<i>Nanosilver: A Gigantic Problem?</i>
Morgan Gaskell	Sierra Madre Middle School	Honorable Mention 141	<i>How Can Aquatic Macroinvertebrates be Used to Help Determine Water Quality?</i>
Maya Itani	New Horizon School	Honorable Mention 313	<i>The Effects of Different Amounts of Phosphate on Elodea dense and Melanoides tuberculata</i>
Kyra Nakamura	Hale Charter Academy STEAM Magnet	Honorable Mention 291	<i>Should Aquaponics be the Future for Agriculture?</i>
Claire Wang	Archer School for Girls	Honorable Mention 230	<i>Effects of Olivine on Growth of Glass Anemone (aiptasia) and pH</i>
Chiara Ayuste	St. Timothy School	Recognition 222	<i>A Temperature's Effect On Trash</i>
Gilbert Banuelos	Hollenbeck Middle School	Recognition 416	<i>A Comparison Of CO2 From An Intact Plant And When Burned</i>
Adeeb Dawabi	New Dimensions	Recognition 455	<i>Purifying Water With Activated Charcoal Powder</i>
Jolie Diep	All Souls World Language Catholic School	Recognition 667	<i>Project Misty</i>

Michael Espinoza	Royal Oak Middle School	Recognition 376	<i>Which Soils Can Absorb And Preserve Water in Different Conditions?</i>
Sophia Gallivan	Saint Martin of Tours School	Recognition 100	<i>Plants Vs. Plastic</i>
David Khachatourian Daren Stepanians	Chamlan Armenian School	Recognition 375	<i>Up in the Air: Measuring Pollution in a Weather Balloon</i>
Karina Kruger Chloe Nejad	Beverly Vista Middle School	Recognition 617	<i>Will the Dead Sea die? How rising salinity may save the Dead Sea</i>
Aarush Pillai	Oak Hills Elementary School	Recognition 298	<i>Particulate Matter</i>
Summer Quistgaard	Walter Reed Middle School	Recognition 177	<i>From Bad To Worse</i>
Edwin Romero	Royal Oak Middle School	Recognition 734	<i>Water Sample Testing: Ten Different Cities in the San Gabriel Valley vs. City Water Quality Reports</i>
Alishba Salman	Institute of Knowledge	Recognition 627	<i>Eat Lead and Your Dead</i>
Aakash Senthilnathan	Hale Charter Academy STEAM Magnet	Recognition 277	<i>How Does a Wildfire Affect Future Plant Growth?</i>

ECOLOGY - SR S07

Ashwin Sivakumar	Flintridge Preparatory School	First Place 95	<i>Fossil-Augmented Species Distribution Models Reveal the Shifted Baselines of California Avifauna under Climate Change</i>
David Kwon	Palos Verdes Peninsula High School	Second Place 320	<i>Modeling and statistical analysis of the habitat distribution of <i>Macrocystis pyrifera</i> and <i>Sargassum horneri</i> off the Palos Verdes Peninsula coastline</i>
Sabrina Li	Walnut High School	Third Place 213	<i>Effects of Baycrete Texture and Tidal Elevation on Recruitment of <i>Ostrea Lurida</i> and <i>Amphibalanus Amphitrite</i> in San Diego Bay, CA</i>
Patrick Kim	North Hollywood High School	Honorable Mention 621	<i>Comparing Protected Habitat of Threatened Species in High Carbon Stock Concessions and Protected Areas in Indonesia</i>
Sofia Gutierrez	California School of the Arts - San Gabriel Valley	Recognition 168	<i>The Effect of Pollution on every Species of Turtles in Florida</i>
Elyse Hwang Hailey Chee	La Canada High School	Recognition 11	<i>Air Quality Monitor</i>
Aman Kumar	Don Bosco Technical Institute	Recognition 401	<i>Silver the Killer: The Green Synthesis and Characterization of Silver Nanoparticles</i>
Camilla Martinez	North Hollywood High School	Recognition 16	<i>Genetic Factors in the Evolution of Ostracod Mating Displays</i>
Crystal Yang	Cabrillo Marine Aquarium	Recognition 622	<i>Which Carbon Sink Reigns Supreme: Microalgae, Macroalgae, or Limestone?</i>

ENGINEERING APPLICATIONS - JR J10

Julian Olschwang	Pressman Academy	First Place 61	<i>Talk To The Hand</i>
Quinn Donoghue	Saint Joseph Long Beach	Second Place 57	<i>Echo Assist Travel Buddy</i>
Shai Lang Van Brunelle	The Science Academy STEM Magnet	Third Place 186	<i>Designing An Ultrasonic Glove For Visually Impaired People</i>
Lauren Weldon	Saint Joseph Long Beach	Third Place 56	<i>Robotic Glove</i>
Rosabelle Dunlap	Mark Twain Middle School	Honorable Mention 515	<i>Did You Stop?</i>
Malik Husaini	New Horizon School	Honorable Mention 218	<i>Building a Handheld Vacuum Cleaner Using a Plastic Bottle</i>
Jasper Mejia	The Science Academy STEM Magnet	Honorable Mention 200	<i>Solar Mini Fridge</i>
Jacie Salonga	Rudecinda Sepulveda Dodson MS	Honorable Mention 86	<i>Creating a robot that can follow through a maze.</i>
Gavin Sarmiento	Rudecinda Sepulveda Dodson MS	Honorable Mention 237	<i>R.C. Tennis Ball Collector</i>
Sasha Kutner Lila Shimansky Eli Stoff	Pressman Academy	Honorable Mention 152	<i>Engineering Building Structures to Adapt to Rising Sea Levels</i>
Thom Slijper Luke Muir	Portola Highly Gifted Magnet	Honorable Mention 552	<i>Creating a Homemade Ion Engine</i>
Isabella Alcala	Saint Joseph Long Beach	Recognition 94	<i>Skate-N-Stop</i>
Kaiden Chin	Rudecinda Sepulveda Dodson MS	Recognition 80	<i>Automatic Cutting Board</i>
Dean Cornett	Saint Joseph Long Beach	Recognition 99	<i>4 in 1 Plant Sitter</i>

Lilly Dembo	Archer School for Girls	Recognition 610	<i>Oil Spill Solutions</i>
Jonathan Diaz Saul Perez Emanuel Garcia	James A. Foshay Learning Center	Recognition 445	<i>Solar Energy Oven</i>
Hengrui Hu	Chandler School	Recognition 208	<i>A microscope that will change the world.</i>
Erik Johnson	Blair High School	Recognition 287	<i>Heat Powered Desalination</i>
Rabeeah Khan	Al-Huda Islamic School	Recognition 332	<i>Increasing Wi-Fi Signal Strength and Speed with Homemade Boosters</i>
Gion Mandia	Rudecinda Sepulveda Dodson MS	Recognition 697	<i>Ping pong ball shooter</i>
Peter Monev	Hale Charter Academy STEAM Magnet	Recognition 319	<i>Are Hydraulically Amplified Electrostatic Actuators Better Than Electromagnetic Actuators?</i>
Diego Pa	All Souls World Language Catholic School	Recognition 648	<i>Which Weight is Wright?</i>
Erinne Park	Rudecinda Sepulveda Dodson Gifted/HA Magnet MS	Recognition 718	<i>Solar Powered Wireless Charger</i>
Richard Renteria	Lennox Middle School	Recognition 451	<i>The Paper Airplane Launcher</i>
Jeffrey Smithwick	Sierra Madre Middle School	Recognition 431	<i>How does Tire Pressure affect Rolling Resistance?</i>
Ian Turalva	Rudecinda Sepulveda Dodson MS	Recognition 699	<i>I Will Create A Hovercraft That I Will Be Able To Maneuver</i>
Heather Yang	Walter Reed Middle School	Recognition 155	<i>Charge it Up</i>

ENGINEERING APPLICATIONS - SR S08

Jennifer Lew	Palos Verdes Peninsula High School	First Place 256	<i>SafeBuild: A Structural Engineering Program for Designing Safer Utility Poles</i>
Katie Champion	Vistamar School	Second Place 657	<i>Semi-autonomous Collision Avoidance System for Electric Wheelchairs</i>
Aaron Lee	Flintridge Preparatory School	Third Place 216	<i>Novel Mobile-Device Application for Early Stroke Detection Using Machine Learning</i>
Rachel Bai	The Webb Schools in Claremont CA	Honorable Mention 605	<i>Low Cost Sleep Tracking using Arduino</i>
Victor Acuna	Marco Antonio Firebaugh High School	Recognition 297	<i>S.H.I.N.E. 2.0</i>
Jonah Greenbaum	California School of the Arts - San Gabriel Valley	Recognition 439	<i>Can drones be used for call slip delivery at the CSArts-SGV Campus?</i>
Megha Jain	Granada Hills Charter High School	Recognition 613	<i>Baby SOS: A Raspberry Pi and Arduino Alarm System to Prevent Infant Abandonment and Heatstroke in Vehicles</i>
Taylor Kubisen	California School of the Arts - San Gabriel Valley	Recognition 170	<i>Benefit of Aircraft Landing Wheels That Spin at Ground Speed at Touchdown on Tire Longevity</i>
Kaddie Le	Lawndale High School	Recognition 669	<i>Sturdiest Bridges</i>
Hovhannes Nercessian Hambik Madanyan Christopher Ghazarian	Rose and Alex Pilibos Armenian School	Recognition 117	<i>FWEC (Floating Water Energy Converter)</i>
Carlo Miranda	Lawndale High School	Recognition 672	<i>Fan Blade Differences</i>
Phuong Nguyen	Lawndale High School	Recognition 663	<i>Catapult Volleyball</i>
Alex Nikolian	Armenian General Benevolent Union-Vatche & Tamar Association	Recognition 702	<i>Makon: oceanographic research device</i>

Amber Orellana Melany Ramirez Nayeli Rincon	Bell Gardens High School	Recognition 160	<i>Vertical Gardens Save Space and Time</i>
Clarice Pranyoto	Flintridge Preparatory School	Recognition 212	<i>BinBot: Increasing Environmental Awareness Through a Closed Automated Disposal System</i>
Ariana Sandoval	Lawndale High School	Recognition 693	<i>Efficient Rain Shelters</i>
Katherine Tan	Temple City High School	Recognition 405	<i>Quadrupedal Locomotion: Which Leg Configuration Maximizes Efficiency?</i>

ENGINEERING RESEARCH - JR J11

Alan Yoon	Portola Highly Gifted Magnet	First Place 379	<i>Tsunamis v. Seawalls: Comparing Different Seawalls to Find Out Which is Most Efficient</i>
Patrick Andrianopoulos John Andrianopoulos	Sierra Madre Middle School	Second Place 690	<i>Research of the amount of blue light emitted by different electronic devices and settings that can minimize it</i>
Leila Nafarrete	Blair High School	Third Place 647	<i>Suspension vs Cable Stayed</i>
Erik Aragon Jose Ramirez Nathan Andon	Montebello Intermediate	Honorable Mention 21	<i>Mag Force 1</i>
Emely Cruz	Montebello Intermediate	Recognition 30	<i>The Hover Craft</i>
Linda Esparza	Montebello Intermediate	Recognition 26	<i>Go Green Drink Clean</i>
Yaroslav Kutepov	Beverly Vista Middle School	Recognition 609	<i>Which Bridge is Stronger?</i>
Abisai Padilla	Hale Charter Academy STEAM Magnet	Recognition 266	<i>Homemade vs Store Bought Solar Panel</i>
Goryune Papazian	Rose and Alex Pilibos Armenian Middle School	Recognition 73	<i>Motorized Sifter</i>
Giovanni Rodriguez	La Merced Intermediate	Recognition 193	<i>How Wings Affect a Plane's Flight</i>
Dylan Rodriguez-Romero	Sarah Ross Science Fair Junior Division	Recognition 48	<i>Hybrid vs. Battery Car</i>
Lauren Smith Kyla Mohnani	Incarnation Parish School	Recognition 386	<i>Operation Build A Bridge And Get Over It</i>

ENGINEERING RESEARCH - SR S09

Aksh Garg	Palos Verdes Peninsula High School	First Place 273	<i>Machine Learning Coupled Trajectory and Communication Design for UAV Facilitated Wireless Networks</i>
Ethan Wong	Arcadia High School	Second Place 91	<i>Proverse Yaw Characteristics of a Powered Flying Wing of Novel Design and Manufacture</i>
Maximillian Bhatti	Temple City High School	Third Place 385	<i>Evaluation of Transient Flow Propulsion in a Novel Biomimetic MultiMode Aerial-Aquatic ROV</i>
Akash Anand	Palos Verdes Peninsula High School	Honorable Mention 268	<i>3D Optimization of Unmanned Aerial Vehicles for 5G Cellular Network Systems in Rural and Urban Areas</i>
Sean Fleming	Loyola High School	Recognition 13	<i>Crossroads: Safety Proposals for Grade-School Adjacent Roads in Los Angeles Based on Traffic-Patterns Analysis</i>
Kimberly May	Temple City High School	Recognition 382	<i>An Exploration of Piezoelectric Generator Schemes</i>
Kai Mohl	Palos Verdes High School	Recognition 607	<i>Understanding the Utility of Visual, Haptic and Auditory Stimuli for Use in VR and AR Technology</i>
Vale Rasmussen	The Buckley School	Recognition 10	<i>Winglets: Gateway to Flight Efficiency</i>
Grace Weilbacher	Quartz Hill High School	Recognition 355	<i>Laminar Flow Wind Tunnel Demonstration: How Different Airfoils Affect the Production or Disturbance of Laminar Flow</i>
Yudong (Tim) Zhang	Flintridge Preparatory School	Recognition 70	<i>Genetically engineering a novel red fluorescent biosensor for the imaging of deep brain glutamate transmission</i>

ENVIRONMENTAL MANAGEMENT - JR J12

Caleb Kodama	Sierra Madre Middle School	First Place 206	<i>Can We Harness the Mechanical Energy of Cars to Power our Cities</i>
Kyla Marie Daez Danica Madamba Kassandra Robledo	Rudecinda Sepulveda Dodson Gifted/HA Magnet MS	Second Place 429	<i>How Aquatic Plants Affect pH Levels in Seawater?</i>
Kawthar Hemdan	New Horizon School	Third Place 321	<i>Testing Different Barriers to Prevent Soil Erosion</i>
Yusuf Alnajjar	Institute of Knowledge	Honorable Mention 628	<i>Cleaner Water</i>
Javeria Kashif	Institute of Knowledge	Honorable Mention 640	<i>The War of Paper Fibers</i>
Audrey Mantong Lazuli Gentile	Saint Joseph Long Beach	Honorable Mention 352	<i>Bio-Bowl</i>
Katherine Ting	St. Timothy School	Honorable Mention 370	<i>Disposable ≠ Degradable</i>
Elvin Yang	Monterey Highlands	Honorable Mention 686	<i>RecyclaBall</i>
Athena Abrera Lillian Richardson	Saint Joseph Long Beach	Recognition 520	<i>Fire Flighter Drone</i>
Maia Alvarez	Archer School for Girls	Recognition 279	<i>A Gassy Situation: BioGas Production</i>
Rehya Arora	Gaspar de Portola Charter AIAT	Recognition 505	<i>Can Plants Stop Soil Erosion</i>
Kianet Badal	Hale Charter Academy STEAM Magnet	Recognition 259	<i>Is the Future Bright with the UV Light?</i>
Kabir Bindra	Chandler School	Recognition 377	<i>Piezoelectricity - An Efficient Way To Generate Electricity From Wind and Noise</i>
Raffi Boghossian	Chamlian Armenian School	Recognition 364	<i>How To Make Nature-Friendly Or Biodegradable Plastic?</i>

Jonah Delson Arieh Elad Hannah Carr	Pressman Academy	Recognition 85	<i>Waste Not Want Not</i>
Christopher Deng	Huntington Middle School	Recognition 267	<i>Purify water naturally for developing countries</i>
Zara Edler	St. Timothy School	Recognition 250	<i>California Dreamin': How the Weather Affects Solar & Wind Power</i>
Omar Hamdan	Al-Huda Islamic School	Recognition 227	<i>Drink This Not That!</i>
Natalie Huang Francesca Horton Anya Stutz	Archer School for Girls	Recognition 123	<i>Shining a Light on Particulate Matter</i>
Daron Kasparian	Chamlian Armenian School	Recognition 211	<i>The Fuel of the Future - Recycling Cooking Oils to produce Biodiesel</i>
San Ko	Rudecinda Sepulveda Dodson MS	Recognition 82	<i>Electric Water Recycling Sink</i>
Skylar Li	Sierra Madre Middle School	Recognition 423	<i>Which Fertilizer Results in the Most Nitrate-rich Runoff?</i>
Roberto Llamas	South Gate Middle School	Recognition 645	<i>Water Purification</i>
Aalyah Martinez	South Gate Middle School	Recognition 606	<i>Substitute Straws</i>
Addison Pressnall	Blair High School	Recognition 410	<i>Can we purify water using plants</i>
Alexandra Reisner	Walter Reed Middle School	Recognition 199	<i>Magnetic Plants</i>
Nour Saad	New Horizon School	Recognition 275	<i>Testing how effective Water lilies, Water irises, Watercress, and Water lettuce are in preventing algae blooms in freshwater ecosystem</i>
Vani Tatouljian	St Gregory A. & M. Hovsepian School	Recognition 282	<i>Is School Drinking Fountain Water Clean?</i>

Carys Thompson	Saint Martin of Tours School	Recognition 205	<i>The Effect of Microplastics On Diatoms (Cyclotella and Thalassiosira)</i>
Alayna van de Ven Hattie Wildes	American Martyrs School	Recognition 331	<i>pHysically clean</i>
Ellen Vartanyan	St Gregory A. & M. Hovsepian School	Recognition 354	<i>Water Filter vs. Boiling</i>
Treana Witek	American Martyrs School	Recognition 342	<i>Renewable Energy is our Destiny!</i>

ENVIRONMENTAL MANAGEMENT - SR S10

Jasper Cerone Mason Lee Forest Pineo-Cavanaugh	The Buckley School	First Place 8	<i>Methanotrophic Bioremediation for the Degradation of Oceanic Methane</i>
Diana Michaelson	Cabrillo Marine Aquarium	Second Place 358	<i>Concrete Surface Structure Influence on Marine Settlement</i>
Candace Baik	Palos Verdes Peninsula High School	Third Place 359	<i>Thermoelectric Generator as a Green Energy Alternative</i>
Serah Park	Cabrillo Marine Aquarium	Honorable Mention 365	<i>The Effect of Microalgae Growth on Oil-Degrading Properties of Bacteria</i>
Christopher Grushka	California School of the Arts - San Gabriel Valley	Recognition 210	<i>Using Natural Compost to Increase the Nutritional Value of Crops</i>
Isabel Li	Temple City High School	Recognition 344	<i>The Development of a Novel Density-Separation Method of Sands</i>
Adam Lonstein	Delphi Academy - Senior Division	Recognition 111	<i>How Does Temperature Affect CO2 Uptake from Plants?</i>
Sophia Novo	California School of the Arts - San Gabriel Valley	Recognition 174	<i>Effect of household plantae on humans when completing the same math task</i>
Caroline Pack	Palos Verdes High School	Recognition 327	<i>How Varying Oceanic Nitrate Concentrations Affect the Growth of Ulva lactuca and Dissolved Oxygen Levels</i>
Brayden Stark	The Buckley School	Recognition 7	<i>A Systematic Method to Combat Harmful Algal Blooms</i>
Jacqueline Yang	Cabrillo Marine Aquarium	Recognition 623	<i>Which is the Best Nitrate Detoxifier: Phytoremediation, Bioremediation, or Hybrid?</i>

MATERIALS SCIENCE - JR J13

Lori Khemichian	Chamlian Armenian School	First Place 360	<i>The Effect of Glycerin on the Strength of Bioplastic</i>
Aram Kenderian	Ribet Academy (Junior Division)	Second Place 338	<i>Force, Energy and Work Done by Shape Memory Alloys</i>
Declan Laney	Walter Reed Middle School	Third Place 158	<i>Stuck On You</i>
Caleb Ivison	Walter Reed Middle School	Honorable Mention 172	<i>Breaking the Brickwork</i>
Jonas Nissanoff	Pressman Academy	Honorable Mention 74	<i>May The Force Be With You</i>
Tyler Brockermeier	Saint Martin of Tours School	Recognition 144	<i>To see which helmet brand is best to keep you safe.</i>
David Chau	Hale Charter Academy STEAM Magnet	Recognition 217	<i>How Does Temperature Affect Rust in Metals?</i>
Moniba Derakhshani	New Horizon School	Recognition 409	<i>Comparing the Amount of Ultraviolet Absorption Between Cotton, Polyester, and Polyester/Cotton Fabric</i>
Maryam Zahid Reeam Elokour	Al-Huda Islamic School	Recognition 191	<i>Smile for Slime!</i>
Allison Pacheco Jazmine Chavez Martinez Ashley Camacho	James A. Foshay Learning Center	Recognition 424	<i>Cell Phone Electromagnetic Radiation</i>
Sophie Perez	Hale Charter Academy STEAM Magnet	Recognition 292	<i>Which Power Source to Use?</i>
Phoebe Prentice	Sierra Madre Middle School	Recognition 683	<i>Which Brand of Plastic Wrap Can Best Prevent Enzymatic Browning in Fruit?</i>
Odelia Shofet Leila Kashani Sophia Manavi	Beverly Vista Middle School	Recognition 619	<i>Soluble Balloons</i>
Sebastian Teves	St. Timothy School	Recognition 566	<i>Boom! Boom! Bop!</i>

MATHEMATICS & COMPUTER SCIENCES - JR J14

Aeneas Wood	Portola Highly Gifted Magnet	First Place 392	<i>Neural Network Classification of J.K. Rowling's Harry Potter Passages: Effect of Activation Function and Input Type</i>
Eric Lind	Gaspar de Portola Charter AIAT	Second Place 681	<i>The Mockulus Project: Making Virtual Reality Low Cost</i>
Maia Rocha	American Martyrs School	Third Place 351	<i>The Effect of Search Depth on the Percentage of Wins in Connect 4</i>
Jerry Yang	Walter Reed Middle School	Honorable Mention 153	<i>Cracking and Hacking</i>
Dohyun Kim	Western Christian School	Recognition 548	<i>Galaxy type classification by machine learning.</i>
Elijah Kopp	Oak Hills Elementary School	Recognition 406	<i>Emotion Commotion</i>
Dhruv Kulkarni	Oak Hills Elementary School	Recognition 254	<i>Geometric Model for Easy Learning</i>
Luke Laychak	American Martyrs School	Recognition 503	<i>Do Indoor Stadiums Affect Baseball Players Stats?</i>
Hriday Meka	Gaspar de Portola Charter AIAT	Recognition 308	<i>What Is The Best Possible Basketball Team For The Last Five Years and How Does Budget Tie Into It?</i>
Michael Wong	Walter Reed Middle School	Recognition 189	<i>All Net</i>

MATHEMATICS & COMPUTER SCIENCES - SR S11

Suraj Anand	Palos Verdes Peninsula High School	First Place 270	<i>MedBrain: A Novel Deep Learning Tool for Holistic Patient Data Interpretation and Clinical Event Prediction</i>
Shuwen Zhang	The Webb Schools in Claremont CA	Second Place 545	<i>Mining Common Structural Features of Aggregating Proteins in Neurodegenerative Diseases</i>
Junseo Park	The Webb Schools in Claremont CA	Third Place 257	<i>Automated Acute Lymphoblastic Leukemia Detection using Image Processing and Machine Learning</i>
Jiaju Liu	Palos Verdes Peninsula High School	Honorable Mention 357	<i>Autocorrelation-Based Diffusion Maps for Identifying High-Frequency Oscillations: A Translational Study in Detecting Epileptogenesis</i>
Garbo Chung	The Webb Schools in Claremont CA	Recognition 215	<i>The Robust and Low-cost Diagnosis of Cataract Based on Deep Residual Learning</i>
Sarina Fereydooni Trisha Devchoudhury Yashvi Agrawal	Granada Hills Charter High School	Recognition 563	<i>Robotic Hand</i>
Nathan Kim	Granada Hills Charter High School	Recognition 732	<i>Utilizing Machine Learning in Order to Characterize Different Rates of Progression of Idiopathic Pulmonary Fibrosis</i>
Ellen Kozlov	The Science Academy STEM Magnet High School	Recognition 421	<i>Early Identification of Cancer</i>
Matvei Popov	Ribet Academy (Senior Division)	Recognition 128	<i>Artificial Intelligence Territorial Surveillance System</i>
Xin (Anna) Wang Alina Li	Ribet Academy (Senior Division)	Recognition 329	<i>Algorithms for Autonomous Robot Navigation</i>
Angela Xie	The Webb Schools in Claremont CA	Recognition 304	<i>A Novel Method of Music Generation Based on Three Different Recurrent Neural Networks</i>

Heather Young	North Hollywood High School	Recognition 589	<i>Improving the Quantum Computer Simulator: Optimizing for Noisy Intermediate-Scale Quantum Algorithm Design</i>
Chunyuan Zheng	The Webb Schools in Claremont CA	Recognition 236	<i>Automation of Political Bias Detection in News using Machine Learning</i>

MICROBIOLOGY - JR J15

Max Norden	The Science Academy STEM Magnet	First Place 180	<i>Totally Photosynthetic! A study of the effects of pollution on phytoplankton</i>
Mahesh Arunachalam	Rosemont Middle School	Second Place 343	<i>Effects of Chemicals on Aquatic Life</i>
Nicole Alvarado	Arroyo Seco Museum Science Magnet	Third Place 611	<i>The Horrors of Hand Drying</i>
Arman Ghasemi	Portola Highly Gifted Magnet	Third Place 139	<i>Impacts of Concentrated Disinfectants on Bacteria</i>
Micaela De Leon	Hollenbeck Middle School	Recognition 453	<i>Which Will Grow More Mold? Incubator Or Refrigerator Storage Methods?</i>
Remy Kushner	Portola Highly Gifted Magnet	Recognition 289	<i>What Role Does the Flagellum Protein Flagellin Play in Bacterial Resistance to Silver Nanoparticles?</i>
Ghino Lee Haily Kang	Gaspar de Portola Charter AIAT	Recognition 674	<i>The Effect of Oxygen in the Production of Electricity in Microbial Fuel Cells</i>
Sebastian Martinez	Royal Oak Middle School	Recognition 523	<i>Biomining in Space: Can the Bacteria Acidithiobacillus Ferrooxidans Survive in Extraterrestrial Planets with High Atmospheric pressures?</i>
Olivia Petlak	Pressman Academy	Recognition 68	<i>Just spit on it! Can Bubba's saliva kill bacteria?</i>
Shruthi Sathya Narayanan	Portola Highly Gifted Magnet	Recognition 198	<i>Mission to Mars</i>
Sabrina Walker	Saint Martin of Tours School	Recognition 149	<i>Wash It!</i>
Laia Yanez Annette Suleymanyan Natalie Dominguez	Mt. Gleason Middle School	Recognition 481	<i>Pumpkin Decomposition</i>

MICROBIOLOGY - SR S12

Yeonji Choi	Cabrillo Marine Aquarium	First Place 248	<i>The effect of pH on fucoxanthin concentration of Isochrysis Galbana</i>
Nolan Brandt Phillipe Wiederkehr	Palos Verdes High School	Second Place 400	<i>Dependency of Exiguobacterium St. Y2 on Larvae Microbiome for Polystyrene Degradation</i>
Victoria Marquez	Cabrillo Marine Aquarium	Honorable Mention 586	<i>The Effect of pH on Rhodomonas Population</i>
Melissa Qin	Palos Verdes Peninsula High School	Honorable Mention 361	<i>The Effect of Volumetric Ratios on Genotyping the Sox9 Gene for Type 1 Diabetes</i>
Emma Lotts Devon Frank	The Buckley School	Recognition 4	<i>CRISPR CAS-9 and Histone Regulation: A Process Working Hand in Hand to Destroy Cancer</i>
Sophia Norouzi	The Buckley School	Recognition 5	<i>Unraveling Stress: the effects of MECP2 on Anxiety Disorders</i>
Rebekah Tkach	California School of the Arts - San Gabriel Valley	Recognition 181	<i>Effect of Plastic on the pH of Bacteria's Ocean Environment</i>

PHARMACOLOGY - JR J16

Simra Mirza	Institute of Knowledge	First Place 631	<i>It's More Than a Weed, It's Sunscreen</i>
Kaitlyn Baghdassarian	Chamlan Armenian School	Second Place 373	<i>The Effect of Green Tea on the Heart Rate of Daphnia</i>
Natalie Jeronimo	Hollenbeck Middle School	Honorable Mention 417	<i>Which Brand Of Ibuprofen Dissolves The Quickest?</i>
Christine Safri	Gaspar de Portola Charter AIAT	Honorable Mention 264	<i>How does the pH Level of our Stomach Acid Affect the Amount of Time Different Pills Dissolve into the Bloodstream?</i>
Thomas Kim Daniel Bang Jonathan Kim	The Science Academy STEM Magnet	Recognition 456	<i>D-α-tocopheryl polyethylene glycol succinate LC50 - Utilizing Artemia to Research the Limit of Substitution of THC Vaping Oils with Vitamin E</i>
Christa Kudaverdian	La Canada Preparatory Private School	Recognition 510	<i>Are Stem Cells the Future?</i>
Natalie Ramirez Juanpablo Baez	Hollenbeck Middle School	Recognition 127	<i>The Affects of Children's Medicine On Activity Of Crickets</i>

PHARMACOLOGY - SR S13

Elisha Johnston	Palos Verdes Peninsula High School	First Place 558	<i>Pharmacodynamics of Dextrose-Based Cartilage Regeneration: A Microscopic Approach</i>
Amy Huang	Palos Verdes Peninsula High School	Honorable Mention 310	<i>Mitochondrial-Derived Peptide SHLP2 as a Therapeutic Potential in Parkinson's Disease</i>
Eileen Stiles	Crescenta Valley High School	Honorable Mention 345	<i>Developing a Model for Studying the Role of Triple Negative Breast Cancer Cells Under Arginine Starvation</i>

PHYSICS - AERODYNAMICS/HYDRODYNAMICS - JR J17

Jack Wood	American Martyrs School	First Place 366	<i>Laminar Flow</i>
Elan Lonstein	Delphi Academy - Junior Division	Second Place 55	<i>Vibrations of Rocketry</i>
Abiya Hasan	Al-Huda Islamic School	Third Place 124	<i>Right Flight</i>
Trisha Buranabul	Monterey Highlands	Honorable Mention 691	<i>Measuring Motion in Tennis Serves</i>
Andrew Maalouf	Incarnation Parish School	Honorable Mention 316	<i>Powerful Windmill</i>
Menal Abdikarim	Al-Huda Islamic School	Recognition 194	<i>Can Water Float on Water?</i>
Jack Amerine	Holy Angels School	Recognition 592	<i>Rocket Fin Test</i>
Nola Foran	Walter Reed Middle School	Recognition 283	<i>Waterpower? I'm a Big Fan!</i>
Daniel Matthew	St. Cyril of Jerusalem School	Recognition 367	<i>Exploring Air Rockets</i>
Nicolas Tenorio Isaac Mgaluyan Gabriel Benoit	Holy Angels School	Recognition 528	<i>Up Up and Away</i>
Claire Wu	Gaspar de Portola Charter AIAT	Recognition 414	<i>What's the Hydrodynamics of an Object?</i>
Sarah Zhang Aviv Pilipski	Beverly Vista Middle School	Recognition 551	<i>Age of wood compared to sound quality</i>

PHYSICS - ELECTRICITY & MAGNETISM - JR J18

Ella Baghdassarian	Chamlan Armenian School	First Place 487	<i>The Spectra of Different Light Sources: Are LEDs Harmful to your health?</i>
Sophie Sexton	Portola Highly Gifted Magnet	Second Place 253	<i>Measuring and Comparing Electromagnetic Fields in Varying Locations in Los Angeles</i>
Marian Delfin	St. Timothy School	Third Place 271	<i>All Aboard The Maglev Train!</i>
William Pearce	Saint Joseph Long Beach	Honorable Mention 108	<i>Why the Attraction? A Study of How Temperature Affects Magnet Strength</i>
Harrison Reisner	The Science Academy STEM Magnet	Honorable Mention 183	<i>Dueling Magnets; A New Invention To Prevent Damage To Your Car</i>
Yusuf Syed	New Horizon School	Honorable Mention 323	<i>Comparing the Amount of EMR given off by Nintendo Switch, 3DS XL, and Playstation 4 at different durations of playing</i>
Natalie Chavez Alondra Ceja-Galvez	La Merced Intermediate	Recognition 196	<i>How Much Glare Does a Light Bulb Produce?</i>
Zavien Demirjian	St Gregory A. & M. Hovsepian School	Recognition 595	<i>Can We Make Free Electricity?</i>
Lauren Espanola	Rudecinda Sepulveda Dodson Gifted/HA Magnet MS	Recognition 715	<i>Will fusing two energy sources together generate more energy than they generate alone?</i>
Yalda Khazaieli Lubna Simjee	Al-Huda Islamic School	Recognition 219	<i>Light It Up!</i>
Madeline Kim	Rudecinda Sepulveda Dodson MS	Recognition 675	<i>Hydroelectric Generated Lightbulb</i>
Joseph Knepper	St. Cyril of Jerusalem School	Recognition 350	<i>Magnetic Fruit</i>
Yuha Lim	Rudecinda Sepulveda Dodson MS	Recognition 87	<i>How Does The Different Type Of Food Battery Affect The Length of How Long An Electronic Clock Lasts?</i>

Myles Luciano	Walter Reed Middle School	Recognition 202	<i>Maglev Trains: The Real "Polar" Express</i>
Daron Simitian	Rose and Alex Pilibos Armenian Middle School	Recognition 75	<i>Defying Gravity using Lenz's Law</i>
Hamish Welte	American Martyrs School	Recognition 305	<i>Are We Cooked?</i>
William Wetzel	Saint John Fisher	Recognition 341	<i>Can a Banana Produce More Electricity Than a Potato</i>
Leanna Yeressian	St Gregory A. & M. Hovsepian School	Recognition 293	<i>The Effect of Temperature on Magnet Velocity</i>

PHYSICS - GENERAL - JR J19

Angus Norden	The Science Academy STEM Magnet	First Place 235	<i>How pressure affects the energy usage of desalination</i>
Jett Do	Mark Twain Middle School	Second Place 591	<i>Proving Conservation of Energy</i>
Daniel Stefanini	St. Monica Academy	Second Place 684	<i>Science of Suction</i>
Alexandra Seres	Oak Hills Elementary School	Honorable Mention 284	<i>Tale Of Two Bows</i>
Hamza Dajani	Al-Huda Islamic School	Recognition 233	<i>Let Gravity Take Over!</i>
Tali Goldkorn	Beverly Vista Middle School	Recognition 615	<i>Heating a pool without using too much energy, using different materials.</i>
Ariel Hoffman	Hale Charter Academy STEAM Magnet	Recognition 105	<i>The Secret Combos of Batting</i>
August Medrano	Saint John Fisher	Recognition 440	<i>Angleic Marshmallows</i>
Viola O'Beirne	Incarnation Parish School	Recognition 340	<i>Endless Energy</i>
Shelby Velandia	St. Cyril of Jerusalem School	Recognition 653	<i>Air Pressure Affects the Distance a Soccer Ball Travels</i>

PHYSICS - SR S14

Jasmine Li	Harvard-Westlake School	First Place 395	<i>High Performance Nanocomposite Electrical Conductors for Energy Sustainability</i>
Klara Matuszewska Jhony Ye	Ribet Academy (Senior Division)	Second Place 116	<i>Projectile motion and range equation</i>
Brian Malkan	Crespi Carmelite High School	Third Place 336	<i>The Photoelectric Effect</i>
Daniel Belzberg Kapil Dheeriya Beom Joon (John) Kim	Palos Verdes High School	Honorable Mention 300	<i>Feasibility of Using a Spatially Varying Magnetic Field to Ascertain the Muon's Magnetic Moment</i>
Alec Mnatzakanian	Armenian Engineers and Scientists of America	Honorable Mention 322	<i>Which Airfoil Produces the Greatest Lift?</i>
Candy Gao Isabella Shi	The Webb Schools in Claremont CA	Honorable Mention 644	<i>Metal Property: Analysis of magnetoresistance through temperature yield</i>
Aimee Zhou	Ribet Academy (Senior Division)	Honorable Mention 129	<i>Wave</i>
Lena Hernandez	Huntington Park High School	Recognition 471	<i>Cans and Sounds</i>
Ryan Jung	Cathedral High School	Recognition 733	<i>Ramp/Lift Installation for Wheelchairs</i>
Luke Mercado	California School of the Arts - San Gabriel Valley	Recognition 175	<i>The Effect of the Ball Core on How a Bowling Ball Reacts on a Lane</i>
Samantha Reyes	Compton Unified School District	Recognition 704	<i>UV Radiation</i>
Suraj Shah	Temple City High School	Recognition 299	<i>3D Printing in the real world</i>
Jack Sheehan	California School of the Arts - San Gabriel Valley	Recognition 195	<i>Paper Airplane Aerodynamics</i>

PLANT BIOLOGY & PHYSIOLOGY - JR J20

Abby Liebrecht	Portola Highly Gifted Magnet	First Place 137	<i>Comparing the Effects of Fish Waste and Tiger Bloom Plant Fertilizer on Husky Cherry Red Tomatoes</i>
Nolan Cheng	La Canada Preparatory Private School	Second Place 334	<i>PharmaKarma</i>
Mariam Owainat	New Horizon School	Third Place 274	<i>Comparing The Moisture Content of Soil and Growth of Pisum Sativum (Snap Peas) Using an Ancient Watering Method (Olla) to Regular Watering</i>
Sumaiya Bawany	Institute of Knowledge	Honorable Mention 594	<i>Can Plants Be Used to Purify the Air of Total Volatile Organic Compounds?</i>
Jacob Caldwell	Royal Oak Middle School	Honorable Mention 326	<i>Does Caffeine have an effect on the Growth and Production of Capsicum Annuum</i>
Aisha Kharaeva	New Horizon School	Honorable Mention 312	<i>The Effects of Antioxidants (Vitamin A, E, and C) and pH (alkaline, acidic and neutral) on radish seed germination</i>
Maggie Stepanek	Walter Reed Middle School	Honorable Mention 234	<i>Defying Gravity</i>
Xian Au	Our Lady of Refuge School	Recognition 575	<i>What Insulations and Roofings can Pansies Benefit From?</i>
Adrianna Baumle Devin Baumle	Blair High School	Recognition 463	<i>Can changing the light source increase photosynthesis?</i>
Jeanie Chua	Lennox Middle School	Recognition 730	<i>Tomatoes vs. The Environment</i>
Rashad Entabi	New Horizon School	Recognition 207	<i>Comparing Whether Tomato Food, Compost, or Cow Manure Grows Snap Peas the Tallest.</i>
Mathias Gutierrez	Saint John Fisher	Recognition 328	<i>Does Sound Affect Plant Growth?</i>

Khalid Ibrahim	New Dimensions	Recognition 314	<i>Does Fertilizer Actually Help Plants Grow</i>
Ariela Jomsky	Gaspar de Portola Charter AIAT	Recognition 242	<i>Magnesium's Effect on Aquatic Philodendron Plants</i>
Sufyan Khan	Al-Huda Islamic School	Recognition 285	<i>Let's Sprout Out!</i>
Bailee Kim	Walter Reed Middle School	Recognition 156	<i>Shady Plants</i>
Olivia Kim	The Science Academy STEM Magnet	Recognition 187	<i>The Measurement of the Growth of Mung Beans Supported by Varying Types of Irrigation</i>
Pateel Krikorian	St Gregory A. & M. Hovsepian School	Recognition 280	<i>Which Vitamins affect plants?</i>
Isabel Laezman	Weizmann Day School	Recognition 349	<i>Hydroponics or soil?</i>
Shelby Mancia	Rudecinda Sepulveda Dodson Gifted/HA Magnet MS	Recognition 438	<i>Green Onion Project</i>
Kaylani Parker	Sierra Madre Middle School	Recognition 422	<i>What Effects do Phosphates have on Aquatic Plants?</i>
usman salman	Institute of Knowledge	Recognition 635	<i>Oil in the Soil</i>
Sophia Shin Lucia Williams August Kohn	Archer School for Girls	Recognition 225	<i>The Effects of Ocean Acidification on Algae</i>
Savanna Villa	Our Lady of Refuge School	Recognition 434	<i>What Is The Best Substitute for Soil in Seed Germination?</i>
Jay Vizzie	Saint Martin of Tours School	Recognition 106	<i>A Burning Problem: Plants, Fire, and the Future of Vegetation in California</i>
Angelina Waluszko	Sierra Madre Middle School	Recognition 381	<i>What is the Effect of Increased UV Radiation Exposure on Plant Germination and Growth?</i>

Lara Yeghiayan

St Gregory A. & M.
Hovsepian School

Recognition
495

Tea Time!

PLANT BIOLOGY & PHYSIOLOGY - SR S15

Cameron Ito	California Academy of Mathematics and Science	First Place 402	<i>Effect of Artemia (brine shrimp) waste on the growth rate of Chaetomorpha (green macroalgae) for aquaponic gardening</i>
Melanie Khachatryan	Crescenta Valley High School	Second Place 318	<i>Utilizing Silica Powder to Improve and Enhance Plant Growth</i>
Gary Shirikchian	Rose and Alex Pilibos Armenian School	Third Place 134	<i>The Effect of Hydroponics Agriculture Methods on Plants</i>
Amrutha Srivatsav	Palos Verdes Peninsula High School	Honorable Mention 356	<i>How Can the Ethanol Yield of Lemna minor Duckweed Be Maximized?</i>
Steven Cao	Temple City High School	Recognition 67	<i>The Response of Auxins and Gibberellins in Plants</i>
Sarah Cao	Palos Verdes Peninsula High School	Recognition 303	<i>Invasive vs. Native: Comparison of NaCl and Fe tolerances of L. peploides and P. amphibia</i>
Shua Cho	California Academy of Mathematics and Science	Recognition 514	<i>Effect of Bisphenol A on growth rate of Isochrysis galbana</i>
Steven Chung	Lawndale High School	Recognition 664	<i>Tomato Speed Growth</i>
Gabriela Jimenez Jorge Roman Eduardo Ventura	Garey High School	Recognition 19	<i>Plant Xperiment</i>
Kevin Tan	Temple City High School	Recognition 383	<i>An Evaluation and Optimization of Aeroponic Growing Solutions and Techniques</i>
Emily Victor	Garey High School	Recognition 708	<i>Photosynthesis Rates</i>

PRODUCT SCIENCE - JR J22

Ross Goldberg	Pressman Academy	First Place 69	<i>Get A Grip</i>
Amelia Hines	Archer School for Girls	Second Place 231	<i>Brew-tiful Biofuels: Finding the Best Method for Creating an Alternative to Firewood Using Coffee Grounds</i>
Connor Barrett	Saint Joseph Long Beach	Third Place 107	<i>Do Concussion Guards Really Work?</i>
Abira Dost	Institute of Knowledge	Honorable Mention 638	<i>Ouch! What a burn!</i>
Celine Gharapetian	Chamlan Armenian School	Honorable Mention 485	<i>Heat Dissipation Effectiveness of Different Laptop Cooling Mats</i>
Sierra Alva	Sierra Madre Middle School	Recognition 251	<i>Do Green Bags Extend the Shelf Life of Produce?</i>
Rehem Arviv	Pressman Academy	Recognition 140	<i>Unveiling the Standards of Sticky Bumps Surf Wax</i>
Chloe Bae	Rudecinda Sepulveda Dodson MS	Recognition 642	<i>How Does the Temperature Affect How Well Hair Color Dyes Hair?</i>
Danica Bondoc	Saint Joseph Long Beach	Recognition 97	<i>Helmet Protection</i>
Arek Boynerian	Chamlan Armenian School	Recognition 368	<i>Is There Bisphenol A (BPA) In Store-Bought Canned Foods?</i>
Chloe Capalad AnaLucia Romero	Holy Angels School	Recognition 490	<i>Bleach</i>
Hiwot Fasika Angela Karanja	Saint Joseph Long Beach	Recognition 72	<i>Porta-Filter</i>
Emily Flores	Saint Joseph Long Beach	Recognition 62	<i>Eco-friendly watercolors</i>
Ruqayyah Hossain	Institute of Knowledge	Recognition 630	<i>Uncovering Hidden Sugar In Your Foods</i>

Ahmad Kandil	New Horizon School	Recognition 315	<i>Comparing the Efficiency of 29 Anti-Malware Cybersecurity Programs in Removing 1,054 Malicious Files</i>
Ava Larson	American Martyrs School	Recognition 276	<i>How Dirty Are Your Retainers?</i>
Andy Lasso	Saint John Fisher	Recognition 306	<i>Which Baseball Bat Can Hit a Ball the Farthest - Aluminum, Wood, or Composite?</i>
Hajin Lee	Walter Reed Middle School	Recognition 164	<i>Could Your Phone Be Bad For Your Health</i>
Alice Mardanian	Portola Highly Gifted Magnet	Recognition 92	<i>Studying the Effects of Vitamin C on Iron Absorption</i>
Elie Netzah	The Science Academy STEM Magnet	Recognition 178	<i>Skate Shoe Durability: Which Skate Shoe Lasts The Longest</i>
Gerald Po	Holy Angels School	Recognition 339	<i>Ice in Your Favorite Drink</i>
Ashley Prudencio Samantha Delgadillo	Montebello Intermediate	Recognition 50	<i>Crazy Sugar!?</i>
Gwen Rodriguez	Montebello Intermediate	Recognition 25	<i>Pops</i>
Saishriya Sathya Narayanan	Gaspar de Portola Charter AIAT	Recognition 260	<i>Comparative Study of Shelf Life and Nutritional Effect of Iron, Non-Stick, and Earthen Mud Pots</i>
Natalie Simonian	Saint Martin of Tours School	Recognition 101	<i>What Type of Climate can Protect a House from a Wet Climate</i>
Gabriella Tarpay Maile Naito	Brentwood School	Recognition 84	<i>How baking soda affects the physical properties and taste of cookies</i>
ariannah torres	Montebello Intermediate	Recognition 52	<i>What candle burns faster colored or white</i>
Alina Valencia Vanessa Llanes	Montebello Intermediate	Recognition 22	<i>Sugar</i>