Place		Project Title	Grade	School	Teacher/Advisor
SENIOR D	DIVISION	ANIMAL SCIENCES			
1st	Aaron Huang	Anxiety Hierarchy: Testing the Priority of Genes in C. Elegans	11	Canyon Crest Academy	A. Haas
3rd	Asael Garcia	What Genre of Music Affects a Mammal's Productivity the Best?	11	Central Union High School	L. Rueda
UNIOR E	DIVISION	ANIMAL SCIENCES			
1st	Mele Barton	Investigating Plastic Contaminants Present in the Alimentary Tracts of Fish	8	The Rhoades School	R. Hunker
1st	Preston Bove Carlie Burns	Dog Saliva vs. Human Saliva	7 7	St. John School - Encinitas	G. Heins
2nd	Karissa Carlson	Worms Compost	8	St. Didacus Parish School	R. Blickenstaff
2nd	Emiko Hina Angelina Staines	Incubating Chicks: Will EO Water and UV Light Affect Hatchability?	8	St. Rita's Catholic School	A. Rice
2nd	Daneya Hudgins	Dogs vs. Humans: Who Can See Better in the Dark?	8	Farb Middle School	P. Huntington
2nd	Ria Rizo	Chicken Language Analysis Over Time and Frequency	8	Mt. Everest Academy	N. Negus
3rd	Aidan Cook	Magnetic Regeneration for Planaria	8	St. Didacus Parish School	R. Blickenstaff
3rd	Cassara Cummins	Oil Removed from Feathers	8	St. Didacus Parish School	R. Blickenstaff
3rd	Sophie Lawler- Ehr	Horse Heart Beats	7	St. Peter the Apostle Catholic School	T. Fantano
3rd	Jessica Nunez Vazquez	Marine Environmental Change	8	Farb Middle School	P. Huntington
3rd	Robbie Patterson	Paw Dominance in Dogs	7	St. Didacus Parish School	R. Blickenstaff
3rd	Emmanuel Penalosa	What Foods Do Dogs Prefer?	7	St. Michael Academy San Diego	M. Escalante
3rd	Kaia Prince	Most Popular Bird Seed	8	St. Didacus Parish School	R. Blickenstaff
3rd	Cianna Quintero	Worm Growth and Kitchen Wastes	8	Chula Vista Middle School	G. Saclauso-Caro
4th	Emmanuel Hernandez	How Does Temperature Affect the Work of Ants?	8	Our Lady of Mount Carmel	J. Pereyra, SJS
SENIOR D	DIVISION	BEHAVIORAL & SOCIAL SCIENCES			
1st	Hari Krishnamurthy	AsylumIndicator.AI - Predictive Behavioral Modeling of United States Asylum Adjudication to	9	Canyon Crest Academy	A. Haas

Help Refugees

Place		Project Title	Grade	School	Teacher/Advisor
1st	Anjana Shriram	Prepotent Response Inhibition in ASL vs. non-ASL Multilinguals- A Correlative Study	10	Canyon Crest Academy	A. Haas
2nd	Abdullahi Ismail	The Gym or the Field?	10	Bright Horizon Academy	N. Naserelddin
2nd	Abdirahman Kariye	Repetition Makes Perfect	9	Bright Horizon Academy	N. Naserelddin
2nd	Sean Kim	Gender Roles and Portrait Values in Relation to the Progression of Gender Equality	11	The Bishop's School	L. Keller
2nd	Mustafa Mohamed	Will Brain Games Increase IQ	10	Bright Horizon Academy	N. Naserelddin
3rd	Brian Lee	How Age and Social Experience Dictate Beliefs on Ease of Social Mobility	11	Scripps Ranch High School	P. Fowler
3rd	Grace Li Albert Liu	What Affects the Probability of School Shootings?	9 9	Scripps Ranch High School	P. Fowler
3rd	Priscila Munoz	Correlation Between Recurring Dream Themes and Anxiety Disorders	10	Central Union High School	L. Rueda
3rd	Daniella Padilla Kayla Stallworth	The Effect of Talking Versus Texting on Human Reaction Time	10 11	Central Union High School	L. Rueda
3rd	Anaid Perez	The Environmental Factors That Triggers the Development of Persistent Asthma	11	Central Union High School	L. Rueda
3rd	Miriam Quijada	Effect of Organization on Short-Term	10	Central Union High School	L. Rueda
JUNIOR D	IVISION	BEHAVIORAL & SOCIAL SCIENCES			
JUNIOR D	IVISION Gabriela Alfaro	BEHAVIORAL & SOCIAL SCIENCES Do People Prefer/Use E-Books or Print Books for Leisure Reading?	7	Nazareth School	M. Reed
		Do People Prefer/Use E-Books or Print Books for	7	Nazareth School The Rhoades School	M. Reed R. Hunker
1st	Gabriela Alfaro	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to			
1st 1st	Gabriela Alfaro Zara Bannister	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to Physical Displacement	8	The Rhoades School	R. Hunker
1st 1st 1st	Gabriela Alfaro Zara Bannister Maya Bateman Taylor Belanich	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to Physical Displacement The Effect of Your Age on How Scared You Are	8 8 7	The Rhoades School The Children's School	R. Hunker T. Brown
1st 1st 1st	Gabriela Alfaro Zara Bannister Maya Bateman Taylor Belanich Grace Howard	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to Physical Displacement The Effect of Your Age on How Scared You Are Who Follows the Rules? Testing the Effectiveness of the Flipped	8 8 7 7	The Rhoades School The Children's School The Rhoades School	R. Hunker T. Brown R. Hunker
1st 1st 1st 1st 1st	Gabriela Alfaro Zara Bannister Maya Bateman Taylor Belanich Grace Howard Leila Elasaad	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to Physical Displacement The Effect of Your Age on How Scared You Are Who Follows the Rules? Testing the Effectiveness of the Flipped Classroom Model on Student Recall	8 8 7 7 8	The Rhoades School The Children's School The Rhoades School The Rhoades School	R. Hunker T. Brown R. Hunker R. Hunker
1st 1st 1st 1st 1st	Gabriela Alfaro Zara Bannister Maya Bateman Taylor Belanich Grace Howard Leila Elasaad Sophia Frank	Do People Prefer/Use E-Books or Print Books for Leisure Reading? Correlation of Psychological Flexibility Traits to Physical Displacement The Effect of Your Age on How Scared You Are Who Follows the Rules? Testing the Effectiveness of the Flipped Classroom Model on Student Recall Does Color Have an Effect on Our Memory?	8 8 7 7 8	The Rhoades School The Children's School The Rhoades School The Rhoades School St. John School - Encinitas	R. Hunker T. Brown R. Hunker R. Hunker G. Heins

Place		Project Title	Grade	School	Teacher/Advisor
1st	Lily Masi	Investigating Anxiety Levels In Preadolescent Vs. Adolescent Children	7	The Rhoades School	R. Hunker
1st	Zelma Maya	The Effect of Clutter on Productivity	8	Soille San Diego Hebrew Day School	M. Bessler
1st	Shane Montal	The Effect of Teaching Nonverbal Communication on Nonverbal Communication Knowledge	7	The Children's School	D. Quincannon
1st	Denisse Podolsky	Who Has Better Memory Introverts or Extroverts?	8	Soille San Diego Hebrew Day School	M. Bessler
1st	Adriana Quezada	It's All In Your Head: Inside a Stutterer's Brain	8	St. John School - Encinitas	G. Heins
1st	Patrick Rooney	The Effect of Country of Origin on Employment Opportunities	8	The Children's School	T. Brown
1st	Sammy Ross	When Time Flies	8	San Diego Jewish Academy	L. Deveau
1st	Leia Ryan	The Empathy Mechanism: Using a Quotient To Evaluate the Effects of Gender and Age	8	The Rhoades School	R. Hunker
1st	Ellie Sipper	How Does the Color of the Logo Affect Kids' Emotions?	7	Nazareth School	M. Reed
1st	Agastya Sridharan	Quantifying the Impact of Search-Order Bias on Voting Preferences using a Simulated Web Environment	8	Thurgood Marshall Middle School	E. Schumacher
1st	Evelyn Sugapong	News: Believably False, or Unbelievably True?	7	Bonita Vista Middle School	C. Cardenas
1st	Jamie Jane Weston Mehar Thaper	Exploring Effects of Transient Emotions on Short Term vs Long Term Recall	8 8	The Rhoades School	R. Hunker
2nd	Jorielle Nyla Bettinger	Which Affects Adolescents' Mental Health More? Social Media vs. School	8	St. Michael Academy San Diego	M. Escalante
2nd	Abigail Shaull Noa Burrows	Effects of Emotion on Vocal Volume	8 8	The Rhoades School	R. Hunker
2nd	Cooper Chapman	How Will Gender Effect Financial Bias?	7	The Children's School	D. Quincannon
2nd	Payslie Childress	Can You Outsmart a 6th Grader	8	Carlton Hills Middle School	K. Ducharme
2nd	Mikayla Crowe	The Effect of Gender on Participation in Sports	8	The Children's School	T. Brown
2nd	Jeremy De Las Alas	Does the Awareness of a Positive Consequence Affect the Way You Work?	8	St. Michael Academy San Diego	M. Escalante
2nd	Vivian Doan	Color and Preference	8	Farb Middle School	P. Huntington
2nd	Mariam Eldegwy	The Effect of Gender on Short-Term Memory	7	Bright Horizon Academy	N. Naserleddin

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Michelle Goldwasser	Which Sex Trusts Themselves More Than Others?	8	San Diego Jewish Academy	L. Deveau
2nd	James Gonzalez	Audiobooks & Literacy	8	St. John of the Cross Catholic School	G. Krumm
2nd	Marc Jinich	Decision Making Biases: Nature vs. Nurture	8	San Diego Jewish Academy	L. Deveau
2nd	Alana Kelly	The Effect of Varying Reading Speeds on Reading Comprehension for Dyslexics	8	The Children's School	T. Brown
2nd	Christopher Lindgren	Reaction Time	7	St. Didacus Parish School	R. Blickenstaff
2nd	Ashley Montiel	What Do You See?	8	St. Michael Academy San Diego	M. Escalante
2nd	Jenan Muzaini Arissa Usmani	How Likely are People to Conform into Groups?	7 8	Bright Horizon Academy	N. Naserleddin
2nd	Wesley Nesbitt	The Effects of Roris Marini on Recall in Adolescent Test Subjects	8	The Rhoades School	R. Hunker
2nd	Annabella Nguyen Isabel Sanchez	How Different Scenarios Affect Us	8 8	Farb Middle School	P. Huntington
2nd	Luke Palmer Trey Telfer	Running at the Speed of Music	8 8	The Rhoades School	R. Hunker
2nd	Maya Pastuszko	The Effect of Colors on People with in Different Ages	8	The Children's School	D. Quincannon
2nd	Sonali Pathria	The Affect of the Similarity of Appearance on How Attractive and Persuasive You Find That Person	8	The Children's School	T. Brown
2nd	Qudsia Qarar	Comparing Paper and Computer	7	Bright Horizon Academy	N. Naserelddin
2nd	Aairah Usmani	Do Different Colored Walls Make You Focus More?	7	Bright Horizon Academy	N. Naserelddin
2nd	Nicole Vosburgh	The Stroop Effect in Action	8	St. John School - Encinitas	G. Heins
2nd	Henry Wilson	The Most Eye Catching Color	8	St. Didacus Parish School	R. Blickenstaff
2nd	Calvin Yaruss	Which Facial Expression Can Be Most Easily Be Detected and Why?	8	The Children's School	T. Brown
3rd	Piper Baes	Personal Personality	8	St. Peter the Apostle Catholic School	T. Fantano
3rd	Sabrina Calderon Shaelan Myhra	InCreativity	7 7	St. Michael's School - Poway	J. Poling
3rd	Griffin Cappiello	Effects of Positive Vocalizations On Athletic Performance	8	The Rhoades School	R. Hunker

Place		Project Title	Grade	School	Teacher/Advisor
3rd	George Carr	Does Where You Sit Affect Your Test Scores?	8	The Children's School	T. Brown
3rd	Olivia Degodoy	Gamers vs Non-gamers Reaction Times	7	Bonita Vista Middle School	C. Shimasaki
3rd	Gerrel Dela Cruz	Autism's Bizarre Adventure	8	Farb Middle School	P. Huntington
3rd	Rebecca Dolin	Perception: Positive or Negative Space	8	Carlton Hills Middle School	K. Ducharme
3rd	Andrea Galicot	Which Ages Have Better Teamwork	8	San Diego Jewish Academy	L. Deveau
3rd	Ian Housden	The Effect of Sound on Heart Rate	8	The Children's School	T. Brown
3rd	Mayela Lopez	Accuracy of Eyewitness Testimony	8	St. Didacus Parish School	R. Blickenstaff
3rd	Ava Maudal	Aptitude on Attitude	8	St. John School - Encinitas	G. Heins
3rd	Kelsie McNamara	Social Media	7	St. John School - Encinitas	G. Heins
3rd	Paul Montal	Does The Type of Group You Work with Affect Math Test Scores?	8	The Children's School	T. Brown
3rd	Grace Mulvey	Real or Fake Smile	7	St. Didacus Parish School	R. Blickenstaff
3rd	John Pascual	Music as aTool	8	St. Michael Academy San Diego	M. Escalante
3rd	Emma Persichilli	How Colored Packaging Affects Children's Food Choices	8	St. Didacus Parish School	R. Blickenstaff
3rd	Matthew Savage Sean Savage	The Stroop Effect	8 8	St. Didacus Parish School	R. Blickenstaff
3rd	Wegahta Tadesse	Reaction Time and Ages	8	St. Didacus Parish School	R. Blickenstaff
4th	Tea Ballew Isabella Joyce Mercado	What Causes Us to Take Longer When Making a Decision at a Concession Stand?	7 7	St. Michael's School - Poway	J. Poling
4th	Isabel Jones	Random Numbers	8	St. Didacus Parish School	R. Blickenstaff
4th	Jemma Jones	Text Color and Readability	7	St. Didacus Parish School	R. Blickenstaff
4th	Sara Mattsson	Color for Memory	8	Carlton Hills Middle School	K. Ducharme
4th	Jaden Ocampo	What is the Effect of Net or No Net on Free Throw Percentage?	8	Wangenheim Middle School	T. Mendibles

Place		Project Title	Grade	School	Teacher/Advisor
4th	Frank Ray Occhialini	Effectiveness of Lie Detector Tests	7	St. Didacus Parish School	R. Blickenstaff
4th	Elias O'Hollaren	The Effect of Video Games on Heart Rate	7	St. Didacus Parish School	R. Blickenstaff
4th	Asha Postins	Do We Base Who We Trust on Clothing	8	The Children's School	D. Quincannon
SENIOR D	IVISION	BIOCHEMISTRY			
1st	Jessie Gan	Application of a Novel Cell-Adhesion Force Quantification Technique to Predict Metastasis	11	San Diego Jewish Academy	C. Eisen
1st	Daniel Wang	Lock Them Up: Capture Proteins in Action Using Covalent Bonds	10	Torrey Pines High School	B. Belyea
1st	Kate Wang	Machine Learning and Pharmacophore- Based Drug Discovery for Treating Duchenne Muscular Dystrophy	11	Canyon Crest Academy	A. Haas
1st	Kyra Wu	Identification of Natural and Synthetic Inhibitors of E. Coli fabl through Virtual Screening	11	Canyon Crest Academy	A. Haas
2nd	Juyoung Han	Genome Editing For All Students	11	Canyon Crest Academy	A. Haas
2nd	Aditya Hegde	The Effects of Carbon Nanomaterials on the Effectiveness of Phage Therapy	10	Canyon Crest Academy	A. Haas
3rd	Vivian Li	The Impact of Diet Upon Metabolism in Fish	10	La Jolla Country Day School	D. Padgett
JUNIOR D	IVISION	BIOCHEMISTRY			
1st	Hafsah Kazi	Turmeric: The Effect on Metals in Healthy Cells	7	Bright Horizon Academy	N. Naserelddin
2nd	Kai Do	How Does L-ascorbic Acid Affect the Ph Levels of Tilapia Skin	8	Wangenheim Middle School	M. Silva
2nd	Samantha Gail Tawatao	Does the Amount of Detergent Affect the Amount of DNA Extracted from a Banana?	8	Wangenheim Middle School	T. Mendibles
2nd	Vincent Venverloh	Does Amount of Water Within a Substance Effect Energy Obtainable	8	The Children's School	T. Brown
3rd	Jaren Kishimoto	Electricity in Fruits and Vegetables	7	St. Michael's School - Poway	J. Poling
3rd	Isabella Matias	Which Apple Will Win?	7	Bonita Vista Middle School	C. Shimasaki
3rd	Kevin Vogel	Effect of Plastic Source on the Rate of Biodegradability	8	Chula Vista Middle School	G. Saclauso Caro
4th	Elenore Cannon	Organic vs Non-Organic Bananas Investigation	8	Chula Vista Middle School	G. Saclauso-Caro

Place		Project Title	Grade	School	Teacher/Advisor
4th	Naija Coles	Looking Deeper Into the Results of Gel Electrophoresis	8	Wangenheim Middle School	T. Mendibles
4th	Lisa Echoku	How Would the Fat in Milk Affect It Spoiling?	8	Chula Vista Middle School	T. Tom
SENIOR D	DIVISION	CHEMISTRY			
2nd	Audrey Vargas	Photocatalytic Treatment of Wastewater and Hydrogen Production	11	Sweetwater High School	J. Chase
2nd	lan Xu	The Detection and Discrimination of Volatile Organic Vapors in a Thermally Cycled Porous Silicon Photonic Crystal Nanosensor	11	Del Norte High School	F. Liao
2nd	Kane Xu	Copper Catalyzed Hydroboration of Benzylidenecyclobutanes	11	Del Norte High School	F. Liao
4th	Jasmine Magana	How a Decrease in Temperature Affects an Oscillating Reaction	10	Central Union High School	L. Rueda
JUNIOR D	DIVISION	CHEMISTRY			
1st	Jenevie Bella	What Fabric is Most Absorbent of Water	8	Chula Vista Middle School	T. Tom
1st	Samuel Figueroa	Instant Drinks	7	Corfman School	I. Leon
1st	Alexis Green	Types of Paint and Temperature vs Drying Time	7	St. Michael Academy San Diego	M. Escalante
1st	Jasmine Killion	Does Soda Ash Make Tie Dye Brighter?	8	Mt. Helix Academy	J. Hudson
1st	Racel Ligeralde	More Than Just A Drink: Fuel Power At Peak	8	Good Shepherd Catholic School	Mary A. McNeil
1st	Maya Zagursky	What Recipe for Bath Bombs Makes the Fizziest Bath Bomb?	8	San Diego Jewish Academy	L. Deveau
2nd	Harris Azhand	How Does the Type of Carbon Affect the Clarity of Filtered Colored Water?	8	Wangenheim Middle School	T. Mendibles
2nd	Christina Cornejo	Separating Hydrogen and Oxygen from Water	8	St. Rita's Catholic School	A. Rice
2nd	Sam Fries	Water and Nitrates	8	St. Didacus Parish School	R. Blickenstaff
2nd	Mila Gruber	Which Natural Ingredient Can Make Homemade Litmus Paper Work as Well as Store-bought Litmus Paper?	6	St. Mary Star of the Sea School	J. Alonso
2nd	Lorelei Jackson	Vitmain C Levels at Different Ripening Stages of a Bell Peper	8	St. Mary Star of the Sea School	J. Alonso
2nd	Eliyahu Lapp	Get Your Oils Ready	8	Soille San Diego Hebrew Day School	M. Bessler

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Catherine Singer	What Wrapping Material Preserves Apples the Best: Ziploc Bags, Reynolds Wrap, or Glad Cling Wrap?	8	Mt. Helix Academy	J. Hudson
2nd	Yi Sun	Do Different Salt Types, Kosher, Sea Salt, and Pink Salt Have the Same Effect on the Time It Takes Ice to Melt?	8	Wangenheim Middle School	T. Mendibles
2nd	Jocelyn Sweeney	Does Copper Ionization Work Better than Chemicals in Killing Algae?	7	Nazareth School	M. Reed
3rd	Lukky De Guzman	Preventing Condensation on Eyeglasses	8	Chula Vista Middle School	T. Tom
3rd	Nathan Do	Acid Attack	8	Farb Middle School	P. Huntington
3rd	Victoria Dyakova	Glycerin and Soap Bubbles	8	Wangenheim Middle School	T. Mendibles
3rd	Annalee Haim	Holy Crap!	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Eitan Maman	Is Your H2O the Way to Go	8	San Diego Jewish Academy	L. Deveau
3rd	Evangeline Mayne	Slime Stretchiness	8	The Cambridge School High School	M. Mayne
3rd	Daniela Szajkowski	Marshmallow Density	8	St. Mary Star of the Sea School	J. Alonso
4th	Jonathan Flietstra	The Effect of Length of Cloth with Naphtha Lighter Fluid on Flame Duration	8	City Tree Christian School	M. Lee
4th			8	City Tree Christian School	M. Lee
		Lighter Fluid on Flame Duration	10	City Tree Christian School Canyon Crest Academy	M. Lee A. Haas
SENIOR DI	IVISION	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural			
SENIOR DI 1st	IVISION Andrew Kuang	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural Networks DNA Storage - Novel, Cloud-Based Solution to	10	Canyon Crest Academy	A. Haas
SENIOR DI 1st 1st	IVISION Andrew Kuang Raj Pabari	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural Networks DNA Storage - Novel, Cloud-Based Solution to Archive Digital Data Using Synthetic Nucleotides Improving Complexity of Grover's Algorithm Using Qutrits Manipulation and a Novel Two-	10	Canyon Crest Academy Classical Academy High School	A. Haas D. Bower
1st 1st 1st	Andrew Kuang Raj Pabari Christopher Um	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural Networks DNA Storage - Novel, Cloud-Based Solution to Archive Digital Data Using Synthetic Nucleotides Improving Complexity of Grover's Algorithm Using Qutrits Manipulation and a Novel Two-Dimensional System of the Oracle	10 10 11	Canyon Crest Academy Classical Academy High School Torrey Pines High School	A. Haas D. Bower B. Belyea
1st 1st 1st 1st	Andrew Kuang Raj Pabari Christopher Um Dustin Wu	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural Networks DNA Storage - Novel, Cloud-Based Solution to Archive Digital Data Using Synthetic Nucleotides Improving Complexity of Grover's Algorithm Using Qutrits Manipulation and a Novel Two-Dimensional System of the Oracle Deep Learning Jazz Ensemble Artificial Intelligence Based Kawasaki Disease	10 10 11	Canyon Crest Academy Classical Academy High School Torrey Pines High School Pacific Ridge High School	A. Haas D. Bower B. Belyea R. Mudaliar
1st 1st 1st 1st 1st	Andrew Kuang Raj Pabari Christopher Um Dustin Wu Ellen Xu Nolan Bowyer	COMPUTER SCIENCE Simplified Asthma Diagnosis Through Neural Networks DNA Storage - Novel, Cloud-Based Solution to Archive Digital Data Using Synthetic Nucleotides Improving Complexity of Grover's Algorithm Using Qutrits Manipulation and a Novel Two-Dimensional System of the Oracle Deep Learning Jazz Ensemble Artificial Intelligence Based Kawasaki Disease Early Diagnosis An Application to Calculate Individual Percent	10 10 11 12 9	Canyon Crest Academy Classical Academy High School Torrey Pines High School Pacific Ridge High School Del Norte High School	A. Haas D. Bower B. Belyea R. Mudaliar A. Callicott

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Livia Liu	No Texting While Driving App	9	Olympian High School	M. Claudio
3rd	Kayla Stevenson Aditi Telang	SocialCue : Breaking Down Communication Barriers	10 10	Olympian High School	M. Claudio
4th	Jose Arias	Password Security	9	Gompers Preparatory Academy	J. Ullyott
JUNIOR E	DIVISION	COMPUTER SCIENCE			
1st	Arjun Chatha David Samy	Fall Detection: Using Artificial Intelligence to Help the Elderly	8 8	The Rhoades School	R. Hunker
1st	Kai Goodsell	Forecasting Stock Market Values Using Machine Learning	8	The Rhoades School	R. Hunker
1st	Andrew Martinez	What Materials Can Reduce A WiFi Signal	6	St. Mary Star of the Sea School	J. Alonso
1st	Rahul Rao Rikhil Rao	Al-Based Obstacle Detection and Notification for the Visually Impaired	8 8	Pacific Trails Middle School	S. Thacker
1st	Aleister Steadman	Using a Neural Network to Determine Emotion in Music	8	Wangenheim Middle School	M. Silva
2nd	Ashton Anderson	Using Machine Learning to Detect and Identify Food Products for the Sight Impaired	8	Correia Middle School	J. Flosky
2nd	Emilio Gandara	Coding a Game	8	St. John of the Cross Catholic School	G. Krumm
2nd	Oscar Plasencia	N-Gram Fitness!	7	Nazareth School	M. Reed
3rd	Logan Benintend Koe Goodsell	Generating Color Through Coding an Infinity Mirror	7 7	The Rhoades School	R. Hunker
3rd	Liora Berg	Look Away: Vision App	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Emilio Cisneros	What Materials Block WiFi Signal	7	Bonita Vista Middle School	C. Cardenas
3rd	Diego Cruz	At What Angle Does Light Show Up the Clearest in a Spectrometer?	8	Wangenheim Middle School	M. Silva
3rd	Mateo Gamboa Jacob Gracias	Programming a Tic-Tac-Toe Game	8 8	St. John of the Cross Catholic School	G. Krumm
JUNIOR E	DIVISION	EARTH & PLANETARY SCIENCE			
1st	Marcus Catanzaro	Percolation: Quantifying the Movement of Water Through Soil	8	Pacific Beach Middle School	G. Greenberg
1st	Sophia Tamashiro	The Effect of Different Types of Sunscreens on Brine Shrimp	8	City Tree Christian School	M. Lee
2nd	Morgan Brady	Why is there Extra Light in our Skies?	8	Stella Maris Academy	A. Jones

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Alecsandra Inocentes	The Effect of Salt Level on Plant Growth	8	St. Michael Academy San Diego	M. Escalante
2nd	Gabriela Serena	Wave Runup and Ocean Floor Composition	7	St. Michael's School - Poway	J. Poling
3rd	Kalani Adolpho	Is the Size of the Tornado Affected by Water Temperature ?	7	Nativity School	T. Lunn
3rd	Julia Kaplan	Which Oil Makes the Best Rainbow?	8	San Diego Jewish Academy	L. Deveau
3rd	Emily Tran Kaia Lam	How Does Temperature Affect the Mineral Amount In Different Types of Water?	8 8	Wangenheim Middle School	M. Silva
3rd	Joe Rascon	Plants & Colors	7	St. Didacus Parish School	R. Blickenstaff
3rd	Kandice Alvarado	The Impact of Light Pollution	7	Corfman School	I. Leon
4th	Valentina Castro Isabella Perez	Which Biodegradable Method Works the Best	8 8	Our Lady of Mount Carmel	J. Pererya, SJS
4th	Danae Santana-Oikawa Estefania Valencia	Preventing Forest Fires	8 8	Our Lady of Mount Carmel	J. Pereyra, SJS
SENIOR D	DIVISION	ENGINEERING: ELECTRICAL & MECHANICAL			
	Chairtean han Calliniani	Novel Stimulation of Stem-Cell Derived Brains to	11	Canyon Crest Academy	A. Haas
1st	Christopher Caligiuri	Model Neurodevelopmental and Neurodegenerative Diseases	11	curryon elesericademy	7. 11003
1st 1st	Marc Kuo	Model Neurodevelopmental and	10	La Jolla High School	J. Coggan
		Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By		,	
1st	Marc Kuo	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of	10	La Jolla High School	J. Coggan
1st	Marc Kuo Michael Zeng	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality	10 10	La Jolla High School The Bishop's School	J. Coggan B. Heldt
1st 1st 2nd	Marc Kuo Michael Zeng Solaiman Alwazir	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality Alzheimer's Aid	10 10 9	La Jolla High School The Bishop's School Bright Horizon Academy	J. Coggan B. Heldt N. Naserelddin
1st 1st 2nd 3rd	Marc Kuo Michael Zeng Solaiman Alwazir Eva Garcia	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality Alzheimer's Aid Renewable Energy Produced by Solar Tracking A Low Cost Motion Detector Using Modern	10 10 9	La Jolla High School The Bishop's School Bright Horizon Academy Central Union High School	J. Coggan B. Heldt N. Naserelddin L. Rueda
1st 1st 2nd 3rd	Marc Kuo Michael Zeng Solaiman Alwazir Eva Garcia Adrian Isabelle	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality Alzheimer's Aid Renewable Energy Produced by Solar Tracking A Low Cost Motion Detector Using Modern Engineering Technologies	10 10 9 10	La Jolla High School The Bishop's School Bright Horizon Academy Central Union High School Olympian High School Vincent Memorial Catholic	J. Coggan B. Heldt N. Naserelddin L. Rueda M. Claudio
1st 1st 2nd 3rd 3rd 3rd	Marc Kuo Michael Zeng Solaiman Alwazir Eva Garcia Adrian Isabelle Diego Monroy Ziyad Soliman	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality Alzheimer's Aid Renewable Energy Produced by Solar Tracking A Low Cost Motion Detector Using Modern Engineering Technologies Winds of Change	10 10 9 10 12	La Jolla High School The Bishop's School Bright Horizon Academy Central Union High School Olympian High School Vincent Memorial Catholic High School	J. Coggan B. Heldt N. Naserelddin L. Rueda M. Claudio R. Lizarraga
1st 1st 2nd 3rd 3rd 3rd 3rd	Marc Kuo Michael Zeng Solaiman Alwazir Eva Garcia Adrian Isabelle Diego Monroy Ziyad Soliman	Model Neurodevelopmental and Neurodegenerative Diseases Read My Mind: Morse Code Communication By Measuring Electrical Activity From Eye Blinking For the Deaf to "Hear" - An Experimentation of Augmented Reality Alzheimer's Aid Renewable Energy Produced by Solar Tracking A Low Cost Motion Detector Using Modern Engineering Technologies Winds of Change Stop That Car!	10 10 9 10 12	La Jolla High School The Bishop's School Bright Horizon Academy Central Union High School Olympian High School Vincent Memorial Catholic High School	J. Coggan B. Heldt N. Naserelddin L. Rueda M. Claudio R. Lizarraga

Place		Project Title	Grade	School	Teacher/Advisor
1st	Jennine Manalo	Generating Energy from Sewage Water Flow	8	St. Rita's Catholic School	A. Rice
1st	Cecilia Moxley	Motor's Role in Robot Mobility	8	De Portola Middle School	M. Bridges
1st	Orion Tamayo	Hand Motion Controlled Light	8	Farb Middle School	P. Huntington
1st	Kyle Tianshi	Raspberry Pi Powered Microscopic Particle Detector Using Image Processing	8	The Cambridge School High School	M. Mayne
2nd	Kareem Bassyouni	Shakeless Structures	7	Bright Horizon Academy	N. Naserelddin
2nd	Nathan McKinney	Mapping the Field of an Electromagnet	8	Good Shepherd Catholic School	Mary A. McNeil
2nd	Leanne Murray	Which Dome Should Be Your Home?	8	Wangenheim Middle School	M. Silva
2nd	Thomas Recalde	Can a Stirling Engine Run with a Cold Source?	7	St. Mary Star of the Sea School	J. Alonso
2nd	Jaime Santos	Electromagnetism and Speakers	8	Corfman School	C. Butler
2nd	Lorenzo Valenzuela	Engineering a Hand	7	Corfman School	I. Leon
3rd	Michael Apalatea Brendan Cordaro	The Memory Metal	8 8	St. John School - Encinitas	G. Heins
3rd	Abigail Bayot Ashley Sanchez	What They Can't See May Hurt Them	8 8	St. Rita's Catholic School	A. Rice
3rd	Gavin Britt	Which Angle of a Solar Panel Creates the Most Electricity?	8	De Portola Middle School	L. Yepiz
3rd	Katherine Celestino	Which Turbine Propeller Design Produces the Most Amount of Voltage?	8	St. John of the Cross Catholic School	G. Krumm
3rd	Anderson Escudero	Does the Amount of Salt in Water Affect Electrical Conductivity?	6	St. Mary Star of the Sea School	J. Alonso
3rd	Isabella Garcia	How do Photovoltaic Modules React to Temperature?	7	Bonita Vista Middle School	C. Shimasaki
3rd	Andres Knoll Miguel Morales	Is It More Beneficial to Build Your Own Drone Versus Buying One?	8 8	St. John of the Cross Catholic School	G. Krumm
3rd	Christopher Meyer	Hammering Force for Different Types of Wood	6	St. Mary Star of the Sea School	J. Alonso
3rd	Wesley Newton	The Comparative Noise-Eliminating Effects of Several Materials	8	St. Didacus Parish School	R. Blickenstaff
3rd	Luke Norin	The Effect of Angles on Catapult Launch	6	City Tree Christian School	M. Lee

Place		Project Title	Grade	School	Teacher/Advisor
4th	Noah Pritsker	The Real Way to Open a Coconut	8	Soille San Diego Hebrew Day School	M. Bessler
SENIOR D	IVISION	ENGINEERING: ENERGY & TRANSPORT			
1st	Bella Rose Schremmer	Powered Piers and Beaches by the Rise and Fall of Waves A Novel Wave Energy Conversion Application	9	University City High School	M. Quessenberry
3rd	Jose Vallejo	Aerodynamics & Bridge Design	9	Gompers Preparatory Academy	J. Ulloytt
JUNIOR D	DIVISION	ENGINEERING: ENERGY & TRANSPORT			
1st	Asher Duben	Energy Shoe	8	Soille San Diego Hebrew Day School	M. Bessler
1st	Kyle Estep	Soaring Through the Science of Rockets	8	Farb Middle School	P. Huntington
1st	Jaeyoung Jeon Ryan Kim	Experimental System Designs to Improve Energy Efficiency of Vehicle in Real World Road Conditions	8 8	Mesa Verde Middle School	R. Bird
1st	Nicholas Usher	Superconductors: The Future of Transportation?	8	Classical Academy Middle School	J. Morrow
1st	Kashifa Vellore	Harvesting Piezoelectricity from Commonly Used Devices	7	Bernardo Heights Middle School	L. Cao
2nd	Cameron Brooks	Why Does a Wind Turbine Need to Have a Good Aerodynamic Design	7	Bonita Vista Middle School	C. Shimasaki
2nd	Shane Garcia	Aero - Potato	8	St. John School - Encinitas	G. Heins
2nd	Ronit Munshi	Robotic Insect	7	Carmel Valley Middle School	Siobhan C. Kelly
2nd	Luke O'Leary	Effects of Temperature on Hydroelectric Energy	7	St. Gregory the Great Catholic School	S. Dasgupta
2nd	Alondra Villa	What's the Best Cooking Pot Material?	8	Chula Vista Middle School	G. Saclauso-Caro
3rd	Brenda Cervantes Mya Navarro	Parachutes: Does Size Matter?	8 8	National City Middle School	K. Langel
3rd	Max Colucci Evan Humphrey	Rocket Cars	8 8	St. John School - Encinitas	G. Heins
3rd	Evan King	The Test Track	8	Wangenheim Middle School	T. Mendibles
3rd	Janina Kosol	How Does the Shape of a Skateboard Affect Speed	8	Wangenheim Middle School	T. Mendibles
3rd	Jose Lopez	Energy in the Sky	8	Our Lady of Guadalupe Academy	J. Patton

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Isaac Reyes	Light and Action	8	Southwest Middle	E. Barron
3rd	Daniel Slinsky	Rocket Models	7	Our Lady of Mount Carmel	J. Pereyra, SJS
4th	Isabella Lugo	Water=Electricity?	8	Good Shepherd Catholic School	M. McNeil
4th	Leonardo Perez	What Makes a Helicopter Fly?	8	Our Lady of Mount Carmel	J. Pereyra, SJS
4th	Tony Pham	How Does the Length of a Catapult Arm Affect the Distance a Ball is Launched?	8	Wangenheim Middle School	T. Mendibles
4th	Jorge Razo	DIY Potato Charger vs DIY Dill Pickle Charger	8	Chula Vista Middle School	G. Saclauso-Caro
4th	Frederic Riaza	Gas Mileage Put to the Test	8	St. Peter the Apostle Catholic School	T. Fantano
SENIOR D	DIVISION	ENGINEERING: MATERIALS & BIOENGINEERIN	NG		
1st	Aurora Czajkowski	Engineering an Affordable and Sustainable Water Filtration Device	12	Bonita Vista High School	M. Mardahl-Dumesnil
1st	Emily Tianshi	Atmospheric Moisture Harvesting Device: Biomimicking Torrey Pine Needles	11	The Cambridge School High School	M. Mayne
2nd	Issael Montoya	The Effect of Salt and Sugar on a Microbial Fuel Cell	10	Central Union High School	L. Rueda
2nd	Ann Palayur	Saving Habitats and Water Via Controlled Plant Environments	12	St. Joseph Academy	R. Sjogren
3rd	Mohammad Khan	Finding an Effective, Self-Cleaning Water Treatment Solution	9	Bright Horizon Academy	N. Naserelddin
3rd	Shaun Konganda	Comparing SSVEP & P300 in BCI Brain-Computer Interface	11	Canyon Crest Academy	A. Haas
3rd	Cecilia Ymaz	Desalinate-It-Yourself: Desalinating Salt Water Using A DIY Filter	9	Chula Vista High School	G. Saclauso-Caro
	JUNIOR DIVISION	ENGINEERING: MATERIALS & BIOENGINEE	RING		
1st	Lilian Englund	Bioplastics: Cleaning Up Our Oceans	8	St. Mary Star of the Sea School	J. Alonso
1st	Veronica Griger	Is It Possible to Make a Biodegradable Straw Out of Casein Plastic?	7	Coastal Academy	B. Biernacki
1st	Marcos McKone-Sweet Colten Tretinjak	Paper Airplanes	7 7	St. Michael's School - Poway	J. Poling
1st	Vincent Vu	Which Type of Inexpensive Soundproofing	8	Wangenheim Middle School	T. Mendibles
		Produces Effective Soundproofing?			

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Sofia Ayesta-Hollstein	The New Water Solution	8	Stella Maris Academy	A. Jones
2nd	Ethan Copon	Can You Trust Your Truss?	7	Bonita Vista Middle School	J. Stell
2nd	Philip Knapton	What Material of Baseball Bats Have the Higher Exit Velocity	7	Nazareth School	M. Reed
2nd	Cooper Lynch	Why It Breaks	8	San Diego Jewish Academy	L. Deveau
2nd	Daniela Teran	Heat Resistance of Concrete	8	St. Didacus Parish School	R. Blickenstaff
2nd	Alexandra Toth Christabella Wilson	Phone Holder	7 7	St. Michael's School - Poway	J. Poling
3rd	Dayna Coates	Raise The Roof-Top Gardens	8	Rancho del Rey Middle School	D. Castillo
3rd	Vincent Michael Cruz	How Does the Amount of Fins Affect a Submarine's Speed?	8	Wangenheim Middle School	T. Mendibles
3rd	Samantha Dagdag	The Comparison of Different Bridge Supports Before Breaking	8	Wangenheim Middle School	T. Mendibles
3rd	Brevan Johnson	How Can Adding Filling to a Cardstock Cylinder Affect Its Stability?	8	Wangenheim Middle School	T. Mendibles
3rd	Nina Maya	Ocean Pollution Solution	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Liam Patterson	Structures that Reduce Tsunami Damage	7	St. Didacus Parish School	R. Blickenstaff
3rd	Tiffany Pham	How Temperature of Materials Affects Sound	8	Wangenheim Middle School	M. Silva
SENIOR DI	VISION	ENVIRONMENTAL SCIENCES & MANAGEMENT			
1st	Rina Cao	Effect of Cities on Normalized Differences of Land	11	University City High School	S. Stevenson
1st	Kavya Gupta Dagny Whall	A Device to Detect GenX Contaminated Water Using Chemical Indication and Colorimetry	9 10	Westview High School La Jolla High School	H. Eaton
1st	Sanjana Gurram	Optimizing Plant Cellulose for Cost-effective and Environmentally Benign Oil Spill Mitigation	11	Westview High School	My-N. Ingram
2nd	Mason Holmes	Fluorescent Reporter Under MerR-like Receptors for Metallic Ion Contaminant Recognition	10	Canyon Crest Academy	A. Haas
2nd	Grace Oualline	Determining the Efficacy of Mycelium Water Filtration Systems	11	La Jolla Country Day School	D. Padgett
2nd	Sabrina Sanchez	One Man's Trash Is Another Worm's Treasure	12	Bonita Vista High School	M. Mardahl-Dumesnil

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Anika Krutzik	Exploring the Biodiversity of the New River Using Molecular Six Techniques Techniques	9	Vincent Memorial Catholic High School	R. Lizarraga
JUNIOR DIVISION ENVIRONMENTAL SCIENCES & MANAGEMENT					
1st	Adam Esch Grace Millikin	Quantifying the Effectiveness of P. ostreatus in Mycoremediartion of Heavy Metals	8	The Rhoades School	R. Hunker
1st	Rohan Keswani Elias Samady	Documenting the Prevalence of Invasive Species at the Batiquitos Lagoon	7 7	The Rhoades School	R. Hunker
1st	Willa Norvell	Woolsey Fire Burnt Soil: Analyzing Factors for Native Plant Regrowth	8	The Rhoades School	R. Hunker
2nd	Korina Apostol	Which Form of Insulation is Most Effective in Retaining the Temperature of Hot Green Tea at 0 Degrees Fahrenheit?	8	St. Michael Academy San Diego	M. Escalante
2nd	Kelly Bordine Kaitlyn Podlich	Exploring Water Quality at the Buena Vista Lagoon	8 8	The Rhoades School	R. Hunker
2nd	Fatuma Ismail	Can Bacteria Break Down Engine Oil?	8	Bright Horizon Academy	N. Naserelddin
2nd	Tanner Kamencik	Would a Black Solar Tube Filled with Water Gain More Energy Than a White Solar Tube Filled with Water?	7	All Hallows Academy	J. Meza
2nd	Kyla Lay	Flowers and Erosion	8	St. Didacus Parish School	R. Blickenstaff
2nd	Emely Larios	Constructing Bio-Plastic as a Replacement for the Traditional Petoleum Based Plastic	8	Chula Vista Middle School	T. Tom
2nd	Kayla Leung	How Much Carbon Dioxide is Produced by Different Gas Sources?	8	St. Michael Academy San Diego	M. Escalante
2nd	Alyssa Ortega	Air Pollutants In Our Environment	8	Corfman School	C. Butler
2nd	Valeria Teran	Soil Bearing Capacity	8	St. Didacus Parish School	R. Blickenstaff
3rd	Jacob Antonio Brando Banco	How Does the Presence of Heavy Metals Affect Aquatic Environments?	8	Wangenheim Middle School	M. Silva
3rd	Hector Camarena	Can I Make It Rain For Cheap?	8	Farb Middle School	P. Huntington
3rd	Karol Carbajal Osdanna Robledo	Recycling Greenhouse	8 8	Our Lady of Mount Carmel	J. Pereyra, SJS
3rd	Sebastian Dailey Jacob MacNab	Which Interior is Most Economical?	7 7	St. Michael's School - Poway	K. McHale
3rd	Ryan De Guzman	H2 Oh No! Which San Diego Public Parks Have the Cleanest Drinking Water?	8	Good Shepherd Catholic School	Mary A. McNeil
3rd	Raquel Delgado	How Much Air Pollution is There in Places Visited Every Day	7	All Hallows Academy	J. Meza

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Savanna Grodeman	Can San Diego's Freshwater pH Sustain Rainbow Trout Population?	8	Chula Vista Middle School	T. Tom
3rd	Alayda Guerrero	Oceans Without Border	8	Chula Vista Middle School	G. Saclauso-Caro
3rd	Emilie Lindsey	The Effect of Acidification on Beam Clam Shell Mass and Seagrass Length	8	City Tree Christian School	M. Lee
3rd	Alex Rotunda	Raise the Roof	7	St. Peter the Apostle Catholic School	T. Fantano
3rd	William Sheldon	Humidity Hotspot	8	St. Joseph Academy	R. Hanson
3rd	Gretchen Silva	Where is the Bacteria in Your Faucet?	8	Chula Vista Middle School	G. Saclauso-Caro
4th	Ana Banda Carrillo	How Does Diet affect Red Earthworms Population and Soil?	6	Our Lady of Guadalupe Academy	J. Patton
4th	Celeste Bernal Sofia Esguerra	How to Clean Up an Oil Spill	7 7	Our Lady of Mount Carmel	J. Pereyra, SJS
4th	Eoin Buechs Alex Burkart	Light Pollution	8 8	St. John School - Encinitas	G. Heins
4th	Colin Dionne	Reach for the Stars	7	St. Peter the Apostle Catholic School	T. Fantano
4th	Marcos Hernandez	Temperature and Beach Water pH	8	St. Didacus Parish School	R. Blickenstaff
4th	Joseph Lambert	The Stirling Engine	7	Nativity School	T. Lunn
4th	Stephanie Liang	Water Filters: The Future of Helping Nature?	7	Bonita Vista Middle School	C. Cardenas
4th	Tyler Petersen	Microbial Fuel Cell - A New Energy Source	8	De Portola Middle School	M. Bridges
4th	Ethan Rhee	Cooking with the Sun	7	St. Didacus Parish School	R. Blickenstaff
4th	Peyton Slinkard	Effectiveness of Homemade Desalinators	7	St. Didacus Parish School	R. Blickenstaff
SENIOR D	IVISION	MATHEMATICAL SCIENCES			
1st	Benjamin Faktor	Mathematical Analysis of A Fluid in a Polyhedral Domain	11	Canyon Crest Academy	A. Haas
2nd	Lou Fowler	A User-Friendly Statistics Calculator Including Regression Analysis and 14 Statistical Tests	10	Academy of Our Lady of Peace	T. Paluso
2nd	Siddhant Ranka	Measurement of Correlation and Randomness in Irrational Numbers	11	Del Norte High School	A. Callicott
JUNIOR D	IVISION	MATHEMATICAL SCIENCES			

Place		Project Title	Grade	School	Teacher/Advisor
1st	Nandana Madhukara	Mathematical Origami Models for Space Structures Based on the Axial Compressibility of Cones	7	Pacific Trails Middle School	K. Freeman
2nd	Levi Katriel	Analyzing NFL Statistics To Determine Impacts of Injuries on Team Performance	8	The Rhoades School	R. Hunker
SENIOR D	IVISION	MEDICINE & HEALTH SCIENCES			
1st	Andrew Gao	Scan, Sequence, Save: Early Lung Cancer Detection via Novel DNA Methylation Liquid Biopsy and Deep Learning Assisted Imaging Analysis	10	Canyon Crest Academy	A. Haas
1st	Ryan Huang	Manipulation of Gut Microbiome by Prebiotic to Combat Alcoholic Liver Diseases	10	Canyon Crest Academy	A. Haas
1st	Atulya Mandyam	SCH 23390 Inhibits Cell-Death Produced by Methamphetamine in Human Neuronal Progenitor Cells	10	Westview High School	My-N. Ingram
1st	Alexis Negrete	ADHD in a Stratified Pediatric Sample: A Study of Prevalence, Comorbid Conditions, & Impairments	12	Central Union High School	L. Rueda
1st	Jason Tang	Understanding the Function of Novel Tumor Suppression Gene UBE1L in Melanoma	11	Canyon Crest Academy	A. Haas
1st	Jeffrey Wang	Multiple Factor Analysis Methods Elucidate Genome Expression Changes Across Cell Types	11	The Bishop's School	A. Pelletier
1st	Lynne Xu	Develop a Human Brain Organoid Model to Investigate Neuroinflammation in Neurological Diseases	11	Torrey Pines High School	B. Belyea
1st	Wanyi Zhu	Molecular Mechanisms of an HTLV Infection	11	Canyon Crest Academy	A. Haas
2nd	Pranav Bantval Rishi Chiniga	The Efficacy of Topical Curcumin 5% Gel for Knee Osteoarthritis: A Pilot Study	9 10	Canyon Crest Academy Francis Parker School	A. Haas
2nd	Emily Feldstein	Oxidized Metabolites of Dietary Fats Induce Liver Cell Death	11	Canyon Crest Academy	A. Haas
2nd	Morgan Feng	A New Efficient Approach to Monitor Cell Response to Viral Infection	10	Westview High School	M. Christopher
2nd	Irene Huang	Assessing Tennis Players' Physiological Responses Using Wearable Devices Under Different Score Scenarios	11	Canyon Crest Academy	A. Haas
2nd	Kainath Kamil	Analyzing Protein Production and Gene Expression of Neurostimulant-addicted Drosophila Melanogaster	10	Mission Vista High School	N. German
2nd	Maxwell Yao	Effect of a Combinatory RNAi Transfection on Kras-mutant Colorectal Cancer	11	Canyon Crest Academy	A. Haas
3rd	Dylan Feldstein	Do Induced Pluripotent Stem Cell-Derived Extracellular Vesicles Reduce Macrophage Activation and Induce Anti-Inflammatory Effects?	11	Canyon Crest Academy	A. Haas

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Briana Gonzales	The Effect of Age on the Ability to Hear High Frequencies	11	Central Union High School	L. Rueda
3rd	Nanditha Krishnan	Optimization of UV nm Spectroscopy for Protein Concentration for Therapeutic Applications	10	Torrey Pines High School	B. Belyea
3rd	Sebastian Mendoza	Sleep Deprivation on Human Deep Tendon Reflexes	12	Bonita Vista High School	M. Mardahl-Dumesnil
3rd	Andres Morales	Fast Food VS Homemade Food	9	Gompers Preparatory Academy	J. Ullyott
3rd	Jadyn Ramirez	NSAIDs: The Fastest Pain Relief	10	Central Union High School	L. Rueda
JUNIOR D	IVISION	MEDICINE & HEALTH SCIENCES			
1st	Reem Hmoud	One Step Closer to Ending Diabetes by Choosing the Right Variety of Rice	7	Bright Horizon Academy	N. Naserelddin
1st	Daanya Hussain	Are Probiotics Beneficial for Brain Health?	8	Bright Horizon Academy	N. Naserelddin
1st	Isabel Lehmann	Climber's Chalk: Quantifying Exposure to Magnesium Carbonate Coarse and Fine Particulates	8	The Rhoades School	R. Hunker
1st	Krishna Nagarajan	The Effect of Simple Sugars on Adolescent Heart Rate	8	The Rhoades School	R. Hunker
1st	Bhadra Rupesh	Evaluating Single Nucleotide Polymorphisms in the Correlation of Phenotypes to Type 2 Diabetes	8	The Rhoades School	R. Hunker
1st	Melissa Soberanes	How Pollution is Affecting Children in the Imperial/Mexicali Valley	6	Our Lady of Guadalupe Academy	J. Patton
1st	Sarah Youssef	Will Organic Really Make a Difference?	7	Bright Horizon Academy	N. Naserelddin
1st	Sydney Zhang	Designing A Low-cost, High-sensitivity Method For Early Diagnosis Of Dry Eye Diseases	7	Mesa Verde Middle School	C. Cochran
2nd	Patrick Dockery Gustavo Serena	Hearing Loss When You Use Headphones, Earbuds, and Airpods	7 7	St. Michael's School - Poway	K. McHale
2nd	Sameer Goswami	Investigating Lead Contamination in Children's Consumer Products	8	The Rhoades School	R. Hunker
2nd	Eljen Lacibal	The Effect of Different Liquids on a Liver	8	Wangenheim Middle School	M. Silva
2nd	Audrey Link Divya Sharma	Investigating Antimicrobial Properties of Eco- Friendly Herbal Disinfectants	7 7	The Rhoades School	R. Hunker
2nd	Samantha Meram	Can Your Phone Really Kill You?	8	Corfman School	C. Butler
2nd	Sofia Meyers	Does Being on Your Phone Make You Blink More?	8	St. John School - Encinitas	G. Heins

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Moshe Shaked	Protecting Screens	8	Soille San Diego Hebrew Day School	M. Bessler
2nd	Alek Singer	Does BMX Improve Balance	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Ella Azzeh Evan Dodds	Are Fingerprint Patterns Inherited	7 7	St. John School - Encinitas	G. Heins
3rd	Ethan Bertellotti Tyler Duong	A Study of Padding	7 7	St. Michael's School - Poway	K. McHale
3rd	Sania Dogra	Indirect Assessment of Solanine Levels in Potatoes Over Time	8	The Rhoades School	R. Hunker
3rd	Robin Jayco	Studying and Performing Bioinformatics Using Influenza	8	St. Rita's Catholic School	A. Rice
3rd	Alan Luu	Absorbing Alveoli	8	Farb Middle School	P. Huntington
3rd	Marianna Marasigan	Does Gender Affect How Often Arched Fingerprints Occur?	7	Wangenheim Middle School	T. Mendibles
3rd	Ruthie McElfresh	Does Ballet Experience Affect Reaction Time?	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Orin Mizan	Crybaby	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Max Namazy	Does Age Affect Olfactory Fatigue?	8	Mt. Helix Academy	J. Hudson
3rd	Aaron Jonathan Palma	Myocardial Infarction Representation Experiment	8	St. Rita's Catholic School	A. Rice
3rd	Ivan Valadez	Feel the Burn	7	Barbara Worth Junior High School	C. Calip
SENIOR D	IVISION	MICROBIOLOGY			
1st	Haya Belbese	The Road to the Cure of Alzheimer's	9	Bright Horizon Academy	N. Naserelddin
1st	Kara Fan	Antibacterial Polymer: Aloe Vera Synthesis of Nano-silver Polymer and its Application	9	Westview High School	M. Christopher
1st	Eleanor Jung	A Novel Approach to Killing Klebsiella Pneumoniae Using Endolysins and Polycationic Peptides	9	Mt. Carmel High School	A. Klingborg
1st	Edward Liu	Pathogenic Bacteria Disrupts Skin Barrier in Atopic Dermatitis	11	Canyon Crest Academy	A. Haas
1st	Shukriya Osman	Antioxidants: A Potential Key In Preventing Radiotherapy Cell Toxicity	9	Bright Horizon Academy	N. Naserelddin
2nd	Ryan Clairmont	Proteus Mirabilis Exhibits Increased Susceptibility to Erythromycin During Swarming	10	Canyon Crest Academy	A. Haas

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Samuel Dimmock	Does Capsaicin Decrease Quorum Sensing in Important Human Pathogen Pseudomonas aerugionsa?	11	Canyon Crest Academy	A. Haas
2nd	Raymond Li	Sensitivity of Bacteria to Metals During Lag Phase VS Growth Phase	10	Canyon Crest Academy	A. Haas
2nd	Sidharth Udata	Phage Phases: How Stress Affects Bacteriophage Transition from Lysogenic to Lytic Pathways	10	Canyon Crest Academy	A. Haas
2nd	Yashasvi Vangala	Investigation Into the Rate of Development of Phage Resistance in E.coli	11	Canyon Crest Academy	A. Haas
2nd	Justin Vaughn	Effect of Different Media on Synthesis of Silver Nanoparticles by Aspergillus niger	10	Canyon Crest Academy	A. Haas
3rd	Adhithi Narayana Murthy	Identification, Cloning, and Expression of Desaturase Enzyme in E.coli Bacteria	10	Del Norte High School	A. Callicott
3rd	Nicholas Unpingco	How Does Stress Affect Bacterial Susceptibility to Bacteriophage Infection in E. Coli?	11	Canyon Crest Academy	A. Haas
3rd	Grace Yardley	Phage Stability		Canyon Crest Academy	A. Haas
4th	Daud Abdinasir	The Effect of Vaping on Lung Cells	10	Bright Horizon Academy	N. Naserelddin
JUNIOR D	IVISION	MICROBIOLOGY			
JUNIOR D 1st	Abigail Arnold	MICROBIOLOGY The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value	8	Mt. Helix Academy	J. Hudson
		The Antibacterial Properties of Manuka Honey in	8	Mt. Helix Academy The Rhoades School	J. Hudson R. Hunker
1st	Abigail Arnold	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food			
1st 1st	Abigail Arnold Jonah Berman	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red	7	The Rhoades School	R. Hunker
1st 1st	Abigail Arnold Jonah Berman Leanne Fan	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red and Blue Lights Is a Washed or Unwashed Egg Better at	7	The Rhoades School Mesa Verde Middle School	R. Hunker D. Fice
1st 1st 1st	Abigail Arnold Jonah Berman Leanne Fan Josh Kozak	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red and Blue Lights Is a Washed or Unwashed Egg Better at Protecting Against Bacteria Child and Adult Medical Clinic Waiting Rooms:	7 6 7	The Rhoades School Mesa Verde Middle School All Hallows Academy	R. Hunker D. Fice J. Meza
1st 1st 1st 1st	Abigail Arnold Jonah Berman Leanne Fan Josh Kozak Shannon Stroup	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red and Blue Lights Is a Washed or Unwashed Egg Better at Protecting Against Bacteria Child and Adult Medical Clinic Waiting Rooms: Which Has More Bacteria?	7 6 7	The Rhoades School Mesa Verde Middle School All Hallows Academy Nazareth School	R. Hunker D. Fice J. Meza M. Reed
1st 1st 1st 1st 2nd	Abigail Arnold Jonah Berman Leanne Fan Josh Kozak Shannon Stroup Ema Escobar	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red and Blue Lights Is a Washed or Unwashed Egg Better at Protecting Against Bacteria Child and Adult Medical Clinic Waiting Rooms: Which Has More Bacteria? The Five Second Rule	7 6 7 7	The Rhoades School Mesa Verde Middle School All Hallows Academy Nazareth School St. Didacus Parish School	R. Hunker D. Fice J. Meza M. Reed R. Blickenstaff
1st 1st 1st 2nd 2nd	Abigail Arnold Jonah Berman Leanne Fan Josh Kozak Shannon Stroup Ema Escobar Sophie Howard	The Antibacterial Properties of Manuka Honey in Relation to Its UMF Value Comparing Bacteria Levels at Fast Food Restaurants Power of Light: The Antibacterial Effect of Red and Blue Lights Is a Washed or Unwashed Egg Better at Protecting Against Bacteria Child and Adult Medical Clinic Waiting Rooms: Which Has More Bacteria? The Five Second Rule How Much Bacteria is Really on Your Toothbrush? Time to Glow: The Effect of Agitation on	7 6 7 7 8	The Rhoades School Mesa Verde Middle School All Hallows Academy Nazareth School St. Didacus Parish School St. John School - Encinitas	R. Hunker D. Fice J. Meza M. Reed R. Blickenstaff G. Heins

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Ella Yerushalmi	SCOBY-doo. Where Are You? A Scientific Kombucha Experiment	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Meryem Al-Delaimy	UV Rays Vs UV Light on Bacteria	8	Bright Horizon Academy	N. Nasereddin
3rd	Farah Aswad	Which Works Best?? Alcohol vs. Homemade Sanitizers	8	Bright Horizon Academy	N. Naserelddin
3rd	America Barron	Bacteria in USD Currency	8	Chula Vista Middle School	G. Saclauso-Caro
3rd	Dominic Berona Sydney Polish	Sweet Sensation: What Sugar Substitute Works Best Compared to Basic Sugar?	8 8	Wangenheim Middle School	M. Silva
3rd	Sofia Calatroni	What Prevents Germ Growth the Most - Cold Temperatures, Copper, or Disinfecting wipes	7	All Hallows Academy	J. Meza
3rd	Magnolia Olin	Bacteria in Public Pools	8	Chula Vista Middle School	G. Saclauso-Caro
3rd	Melanni Sandoval	The Effect of Filtration Methods on River Water	8	The Children's School	D. Quincannon
3rd	Jaelynn Tiong	The Greatest Elimination	8	St. Michael Academy San Diego	M. Escalante
SENIOR D	IVISION	PHYSICS & ASTRONOMY			
1st	Francisco Catanzaro	Determining Plastics with a Grating Spectrometer	11	Cathedral Catholic High School	M. Rafie
1st 1st	Francisco Catanzaro Vivek Vijayakumar	Determining Plastics with a Grating Spectrometer Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet	11 11	Cathedral Catholic High School San Marcos High School	M. Ratie R. Terrill
		Characterizing the Pulsations of Delta Scuti Stars			
1st	Vivek Vijayakumar Efrain Tanori	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using	11	San Marcos High School	R. Terrill
1st 3rd	Vivek Vijayakumar Efrain Tanori	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan	11	San Marcos High School	R. Terrill
1st 3rd JUNIOR D	Vivek Vijayakumar Efrain Tanori DIVISION	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan PHYSICS & ASTRONOMY	11	San Marcos High School Central Union High School	R. Terrill L. Rueda
1st 3rd JUNIOR D 1st	Vivek Vijayakumar Efrain Tanori DIVISION Jayden Bamba Sawyer Benedict	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan PHYSICS & ASTRONOMY Wooden Secret Power Vs. Speed Evaluating the Effectiveness of Light Shields	11 11 8 7	San Marcos High School Central Union High School Farb Middle School	R. Terrill L. Rueda P. Huntington
1st 3rd JUNIOR D 1st	Vivek Vijayakumar Efrain Tanori VIVISION Jayden Bamba Sawyer Benedict Jake Streitman Vikramaditya Sidharth	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan PHYSICS & ASTRONOMY Wooden Secret Power Vs. Speed Evaluating the Effectiveness of Light Shields Against Skyglow	11 11 8 7 7	San Marcos High School Central Union High School Farb Middle School The Rhoades School	R. Terrill L. Rueda P. Huntington R. Hunker
1st 3rd JUNIOR D 1st 1st	Vivek Vijayakumar Efrain Tanori DIVISION Jayden Bamba Sawyer Benedict Jake Streitman Vikramaditya Sidharth Chandra	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan PHYSICS & ASTRONOMY Wooden Secret Power Vs. Speed Evaluating the Effectiveness of Light Shields Against Skyglow Why the Moon Appears Larger Occasionally	11 11 8 7 7	San Marcos High School Central Union High School Farb Middle School The Rhoades School San Elijo Middle School	R. Terrill L. Rueda P. Huntington R. Hunker S. Bireddy
1st 3rd JUNIOR D 1st 1st 1st	Vivek Vijayakumar Efrain Tanori DIVISION Jayden Bamba Sawyer Benedict Jake Streitman Vikramaditya Sidharth Chandra Micah Hall	Characterizing the Pulsations of Delta Scuti Stars Using the Mg I b Triplet Effect of Down Force of the Best Beyblades using a MainStays Fan PHYSICS & ASTRONOMY Wooden Secret Power Vs. Speed Evaluating the Effectiveness of Light Shields Against Skyglow Why the Moon Appears Larger Occasionally Model Rocket Aerodynamics	11 11 8 7 7 7	San Marcos High School Central Union High School Farb Middle School The Rhoades School San Elijo Middle School Mt. Helix Academy	R. Terrill L. Rueda P. Huntington R. Hunker S. Bireddy J. Hudson

Place		Project Title	Grade	School	Teacher/Advisor
1st	Kylie Reyes	Determining if Helium Filled Latex Balloons Lose Buoyancy at a Linear or Non-Constant Rate	8	Chula Vista Middle School	T. Tom
2nd	Jacques Allende	What Tennis String Produces the Most Spin and Power	7	Nazareth School	M. Reed
2nd	Margherita Buratti	How to Get Out of Quicksand	8	The Children's School	D. Quincannon
2nd	Ayann Diones	Which Color Absorbs the Greatest Amount of Radiant Energy?	7	St. Michael Academy San Diego	M. Escalante
2nd	Jackson Faust	Light Pollution	7	St. John School - Encinitas	G. Heins
2nd	Lucas Fouch	Make A Hit Chart Like A Pro	7	Bonita Vista Middle School	C. Shimasaki
2nd	Ty Gagielo	Non-Newtonian Fluids vs. Projectile	8	St. Didacus Parish School	R. Blickenstaff
2nd	Breanna Machuca	Does the Size of a Parachute Alter It's Landing Speed	8	Chula Vista Middle School	T. Tom
2nd	Andreina Ortiz	Rolling Friction	8	St. Didacus Parish School	R. Blickenstaff
2nd	Matthew Pullman	The Parachute Predicament	8	St. Joseph Academy	R. Hanson
2nd	Samantha Ryan	How Does the Shape of a Paper Airplane Affect Its Ability to Fly?	8	St. Mary Star of the Sea School	J. Alonso
2nd	Aiden Tirabassi	Solar Powered Car	6	St. Mary Star of the Sea School	J. Alonso
3rd	Nico Cantore	Golf Balls and Price Ranges	8	St. Didacus Parish School	R. Blickenstaff
3rd	Hayden Hinds	Fluid Thickness and its Effects on Coil Efficiency	7	Nativity School	T. Lunn
3rd	Ronald Krajewski	Project Catapult	7	St. Michael's School - Poway	J. Poling
3rd	Eitan Lugasi	Ready For Take-Off	8	Soille San Diego Hebrew Day School	M. Bessler
3rd	Haegan McGarry Elijah White	Foooooling Gravity	6 6	St. Peter the Apostle Catholic School	T. Fantano
3rd	Diego Sanchez Santiago Vidal	Does the Shape of a Parachute Affect Its Speed and Distance?	7 7	Our Lady of Mount Carmel	J. Pereyra, SJS
3rd	Jacob Tabalon	The Phenomenon of Naruto Running	8	St. Michael Academy San Diego	M. Escalante
3rd	Leah Wilson	May the FORCE Be with You	8	Soille San Diego Hebrew Day School	M. Bessler

Place		Project Title	Grade	School	Teacher/Advisor
SENIOR D	IVISION	PLANT SCIENCES			
1st	Malvyn Lai	Effects of Mycorrhizal Networks on Carbon Flow Between Plants	9	Mt. Everest Academy	R. Pachon
1st	Skyler Williams	The Role of Increased Flavonoid Accumulation in Protection of Pollen from Ultraviolet Radiation B	11	Canyon Crest Academy	A. Haas
3rd	Noah Nafarrete	The Effect of Ferrous Iron Gluconate on Chloroplast Biosynthesis and Anthocyanin Regulation in Rotala rotundifolia	12	Bonita Vista High School	M. Mardahl-Dumesnil
3rd	Sarah Palayur	Why Do Seeds Germinate at Different Paces?	9	St. Joseph Academy	R. Sjogren
4th	Shaun Li	Effects of the Combination of Endomycorrhizal and Cyanobacterial Symbioses on Nitrogen Uptake in Hornworts	10	Canyon Crest Academy	A. Haas
JUNIOR D	IVISION	PLANT SCIENCES			
1st	Ryanne Marcy Christina Walley	Pesky Pesticides	8 8	Coastal Academy	B. Biernacki
1st	Gizcel Mendoza	Water Propagation vs Soil Propagation for Succulents	8	Wangenheim Middle School	M. Silva
1st	Felicity Shallan	An EGG-celent Fertilizer	8	Mt. Helix Academy	J. Hudson
1st	Rebecca Venger	The Effect of Extra Water on Closely Spaced Plants	8	Soille San Diego Hebrew Day School	M. Bessler
2nd	Jodie Marie Cagayao	Wifi the Death to Plants?	7	St. Michael Academy San Diego	M. Escalante
2nd	Ashley Hurd	Does Highlighter Ink or Tonic Water Produce a More Luminescent Carnation?	8	Wangenheim Middle School	T. Mendibles
2nd	Jedrick Kantala	The Effects of Powder Metal on Grass	8	Wangenheim Middle School	T. Mendibles
2nd	Rozita Kareem	Effect of Elements on Plants	8	Bright Horizon Academy	N. Naserelddin
2nd	Arielle Timtiman	The Effect of Aloe Vera Gel on Tomatoes	8	Wangenheim Middle School	T. Mendibles
2nd	Noor ValeCruz	The Effect of DIY Liquid Fertilizer on the Growth of Squash Plants	8	Chula Vista Middle School	G. Saclauso-Caro
3rd	Alexis Hamel	How Does Attention Affect a Plant's Growth?	7	Mt. Helix Academy	J. Hudson
3rd	Hunter Haynes	Comparing the Number of Stomata on Leaves of Bushes and Succulents	7	Eastlake Middle School	R. Martinez
3rd	Gregory Leong	Coffee Grounds in Action	7	St. Pius X School	R. Doyle

Place		Project Title	Grade	School	Teacher/Advisor
3rd	Hayden Marquez	Hydroponic Growing Methods vs Traditional Growing Methods	7	Bonita Vista Middle School	C. Shimasaki
3rd	Joaqui Miranda	Fertilizer's Effect on Pea Plant Apperance	8	Wangenheim Middle School	M. Silva
3rd	Emma Morin	The Effect of pH of Water on Cress Seed Growth	6	City Tree Christian School	M. Lee
3rd	Dorcas Ndume	The Effect of Music (Classical and Pop) on Growth of Okra Seeds	8	City Tree Christian School	M. Lee
3rd	Gabrielle Rafii	Extracting DNA from Strawberries	8	San Diego Jewish Academy	L. Deveau
3rd	Larianna Riel	Growth of Bush Bean Plants Inside of Box with Different Passageways	8	Wangenheim Middle School	T. Mendibles
3rd	Maria Serra-Fernandez	How is Plastic Pollution Affecting Our Plants?	8	Wangenheim Middle School	M. Silva
4th	Seth Bucholtz	Does Depth of Hole Effect Size of Plant?	8	The Children's School	D. Quincannon
4th	Carlo Castrejon Omar Castro	Which Ferrtilizer is Best for Plant Growth?	7 7	Our Lady of Mount Carmel	J. Pereyra, SJS
4th	Stefania Garcia	What Type of Plants are More Flammable?	7	Bonita Vista Middle School	C. Cardenas
4th	Emilio Morineau	What Factor is Most Important for a Plant's Growth?	8	Our Lady of Mount Carmel	J. Pereyra, SJS
4th	Sofia Ortiz	Do Potted Plants Grow Taller Indoors or Outdoors?	7	St. Pius X School	R. Doyle
4th	Morgyn Stack Chloe Thomas	Plant vs. Fire	7 7	St. Peter the Apostle Catholic School	T. Fantano
4th	Sylvie Taylor	Do Plants Grow the Fastest in Sandy or Clay Soil?	7	Mt. Helix Academy	K. Mac Donald
JUNIOR DI	IVISION	PRODUCT TESTING/CONSUMER SCIENCE (Juni	or Divis	ion Only)	
1st	Siena Bateman	Gender Bias by Color in Kids Clothing Stores	7	The Children's School	D. Quincannon
1st	James Blue Neelan Patel	Beat the Heat: Comparing the Effectiveness of Blacktop Coatings	8 8	The Rhoades School	R. Hunker
1st	Nicole Chamberlin	The Best Type of Sunscreen	8	St. Didacus Parish School	R. Blickenstaff
1st	Anusha Chatha	Harvesting Water: Testing the Effectiveness of Various Sized Mesh in Fog Nets	8	The Rhoades School	R. Hunker
1st	Cameron Do	Comparing the Effectiveness of Various Face Masks in Blocking Coarse and Fine Particulates	8	The Rhoades School	R. Hunker

Place		Project Title	Grade	School	Teacher/Advisor
1st	Abdullahi Gelle	Plastic in Rice	7	Bright Horizon Academy	N. Naserelddin
1st	Daniel Hotz	Think Before You Drink: Testing the Effectiveness of Various Electrolyte Solutions	8	Mt. Helix Academy	J. Hudson
1st	Jacob Hotz	Skintastic Sunscreen	8	Mt. Helix Academy	J. Hudson
1st	Marcelo Jaber	Testing Different Glues in Different Temperatures	7	St. Didacus Parish School	R. Blickenstaff
1st	Valentino Jimenez Jackson Ritterbeck	The Effect of Shoe Type on Jumping	7 7	City Tree Christian School	M. Lee
1st	James Leos	Synthetic vs Conventional	7	St. Didacus Parish School	R. Blickenstaff
1st	Killian McGinnis	Football Helmet Safety	7	St. Didacus Parish School	R. Blickenstaff
1st	Rosy Montejo Margaret Nasry	Bottle of the Brands	8 8	St. Peter the Apostle Catholic School	T. Fantano
1st	Alynna Oquendo	The Effect of Isopropyl Alcohol vs Lysol Disinfectant	8	Chula Vista Middle School	G. Saclauso-Caro
1st	Jackson Pawl	Best Bottle Brand	7	All Hallows Academy	J. Meza
2nd	Finley Alford	Effects of Heat on Fishing Line	7	All Hallows Academy	J. Meza
2nd	Andrew Barsoumian	Swimming Suit Speed	8	St. Joseph Academy	R. Hanson
2nd	Maddox Brandenburg Carter Halenza	Documenting Ball Pressure Changes and Subsequent Effects on Performance	8 8	The Rhoades School	R. Hunker
2nd	Andalyn Bray Annie Mara	The Effects of Ultra Violet Light on Printer Ink	7 7	St. Michael's School - Poway	J. Poling
2nd	Nicolas DeSouza	Which Helmet is Safer - Hockey or Football Helmet?	7	All Hallows Academy	J. Meza
2nd	Elisheva Ertel	Straws for a Cause	8	Soille San Diego Hebrew Day School	M. Bessler
2nd	Sarai Gonzalez Romina Sierra	Toilet Paper Breaking Point	8 8	Our Lady of Mount Carmel	J. Pereyra, SJS
2nd	Melania Gorou	What Is In Your Water	7	Nazareth School	M. Reed
2nd	Noelle Gray	Which Baking Method Works Best for Cheesecakes?	8	Carlton Hills Middle School	K. Ducharme
2nd	Katie Hayek	Soaking Up the Sun	8	St. Peter the Apostle Catholic School	T. Fantano

Place		Project Title	Grade	School	Teacher/Advisor
2nd	Alexandria Hulse	Testing Pointe Shoe Pads	7	Nazareth School	M. Reed
2nd	Avery Lay	Biodegradable Straws	7	St. Didacus Parish School	R. Blickenstaff
2nd	Yacob Serawit	Pulp or No Pulp?	8	St. Didacus Parish School	R. Blickenstaff
2nd	Katie Tran	Gloss and Glimmer: Which Will Be the Last Shimmer	8	Carlton Hills Middle School	K. Ducharme
2nd	Quynh Tran	How Effective are Household Items on Removing Permanent Marker on Plastic?	8	Wangenheim Middle School	T. Mendibles
2nd	Jonah Villafana	Steak Out: What Works Best to Tenderize Steak	7	St. Pius X School	R. Doyle
3rd	Camila Alatorre	Removing Permanent Marker Stains	8	Chula Vista Middle School	T. Tom
3rd	Alexa Castro Valeria Castro	Which Wood is More Sustainable for Heavy Objects?	6 6	Our Lady of Mount Carmel	J. Pereyra, SJS
3rd	Hector Coronel-Villarreal	Thermal Schock	8	Corfman School	C. Butler
3rd	Dylan Dullano	Coke versus Pepsi Blind Taste Test	7	St. Michael Academy San Diego	M. Escalante
3rd	Joshua Duong	Will Polish Prevent Wood From Absorbing Water	8	Chula Vista Middle School	T. Tom
3rd	Daniel Figueroa-Valdez Vicente Perez-Maytorna	Measuring pH levels in Different Water Products to Find Out Which is Healthier (In terms of pH Levels)	6 6	Our Lady of Mount Carmel	J. Pereyra, SJS
3rd	Trinity Hoang	How Do Different Marker Brands Determine Whether Ink Fades Away Faster?	8	Wangenheim Middle School	M. Silva
3rd	Alayna Maake	Generic Versus Name Brand Cereals: Absorbability	7	St. Didacus Parish School	R. Blickenstaff
3rd	Nicholas Miranda	Got Apples?	7	St. Michael Academy San Diego	M. Escalante
3rd	Cassie Nguyen	The Pigmentation of Paint in Sunlight	7	St. Didacus Parish School	R. Blickenstaff
3rd	Jayce Tortona	How Does Temperature Affect Batteries	7	Bonita Vista Middle School	J. Stell
3rd	Christopher Tran	How Does the Number of Bananas in a Bunch Affect the Time They Take to Ripen?	8	Wangenheim Middle School	T. Mendibles
4th	Brandon Lau	Fast Fizz: What Liquid Dissolves Alka-Seltzer Fastest?	8	Mt. Helix Academy	J. Hudson