2015 Los Angeles Cou	nty Science Fair Catego	ory Winners	Page 1
ANIMAL BIOLOGY (JR)	J01		
Mahnur Bharucha	Institute of Knowledge	<b>Third Place</b> J0106 Split group: –	CAT VS CAT: Prevalence Of Intestinal Parasites In Shelter And Domestic Cats
Benjamin Liu	Dana Middle School	<b>Second Place</b> J0115 Split group: –	Novel Spiral Microfluidic Devices Using the Elasto- Inertial Effect for Urinalysis Year 2
Liam Sherman	Milken Community Schools	<b>First Place</b> J0120 Split group: –	Analyzing the behaviors of Petrogale xanthopus in the Los Angeles Zoo

2015 Los Angeles Cou	nty Science Fair Catego	ory Winners	Page 2
<b>ANIMAL BIOLOGY (SR</b>	) S01		
Jessica Hui	Viewpoint School	<b>Third Place</b> S0103 Split group: –	Modulation of Mitochondrial DNA Mutation Frequency & Accumulation by Rapamycin and Caloric Restriction in Aging Mouse Muscle
Dustin Hartuv	Palos Verdes High School	<b>Second Place</b> S0102 Split group: –	Correlation between Habitat Quality and Abundance/Diversity of California Birds
Vick Liu	Flintridge Preparatory School (High School)	<b>First Place</b> S0105 Split group: –	An Acoustic Enhanced Blood Smear Device

2015 Los Angeles County Science Fair Category Winners			Page 3
ANIMAL PHYSIOLC	)GY (JR) J02		
Joshua Lewis	Pressman Academy	Second Place J0209 Split group: –	Daphnia: Under the Influence
Zoraiz Hashmi	Al-Huda School	<b>First Place</b> J0207 Split group: –	The Battle of Wits

2015 Los Angeles Co	Page 4		
ANIMAL PHYSIOLOG	iY (SR) S02		
Cheyenne Newallis	San Pedro High School - Olguin Campus	<b>Third Place</b> S0203 Split group: –	An Examination of the Factors that Contribute to Egg-laying of Pacific Swell Shark (Cephaloscyllium ventriosum)
Caleb Smith	Palos Verdes Peninsula High School	Second Place S0204 Split group: –	<i>Utilizing a Fluorescent Hsp22 Pathway to Discover Lifespan- Increasing Genes in the Drosophila Melanogaster</i>
Mirna El-khalily	Francisco Bravo Medical Magnet High School	<b>First Place</b> S0201 Split group: –	Abscisic Acid Effects on Cell Proliferation

2015 Los Angeles County Science Fair Category Winners			Page 5
BEHAVIORAL SCIEN	ICES - NON-HUMAN (JR)	J03	
Timothy Lindsey	Village Christian Middle School	Second Place J0308 Split group: –	<i>How do Different Colors Affect a Turtle's Movement Throughout a Maze?</i>
Benjamin Hewitt	Portola Middle School & HGM	<b>First Place</b> J0306 Split group: –	Retention of Larval Stage Conditioning in Post- Metamorphic Pieris Rapae Butterflies; Can Butterflies Remember Being a Caterpillar?

2015 Los Angeles County Science Fair Category Winners				
BEHAVIORAL/SOCI	AL SCIENCES - HUMAN (J	IR) J04		
Joshua Richland	Pressman Academy	<b>Third Place</b> J0431 Split group: –	P vs. No	
Justine Encontro	John Muir Middle School	<b>Second Place</b> J0411 Split group: –	Money and the Mind	
Manaal Sayed	Institute of Knowledge	<b>First Place</b> J0433 Split group: –	Eating Disorders Comorbid with Depression	

2015 Los Angeles Co	unty Science Fair Categ	ory Winners	Page 7
BEHAVIORAL/SOCIAL	SCIENCES (SR) S03		
Ruwanthi Ekanayake	Palos Verdes Peninsula High School	<b>Third Place</b> S0305 Split group: –	Effects of Avatar-Based Virtual Reality on Veracity Perception and Kinetosis
Sam LeFevre	Crescenta Valley High School	<b>Second Place</b> S0311 Split group: –	<i>The Effects of Video Games on Cognitive Function</i>
Alexandra Garcia	Francisco Bravo Medical Magnet High School	<b>First Place</b> S0307 Split group: –	The Neural Limitations of Small Invertebrates: Effects of Electrical Shocks on the Behavior of Brine Shrimp

2015 Los Angeles Co	Page 8		
<b>BIOCHEMISTRY &amp; MO</b>			
Jad Soucar	New Horizon School Pasadena	<b>Second Place</b> J0521 Split group: –	It's More than a Weed, it's Sunscreen
Elisha Johnston	Youth Science Center	<b>First Place</b> J0511 Split group: –	Organic and Conventional Chicken under the Microscope: A Pilot Study Comparing Protein Quality

2015 Los Angeles County Science Fair Category Winners			Page 9
<b>BIOCHEMISTRY &amp; M</b>	OLECULAR BIOLOGY (S	R) S04	
Braeden Benedict	Palos Verdes Peninsula High School	<b>Third Place</b> S0402 Split group: –	Pathology and Chemistry of the Brain in Sanfilippo Syndrome Type B
Emily Kim	Palos Verdes Peninsula High School	<b>Second Place</b> S0407 Split group: –	Electrophysiology-based Screen to Discover Genes Involved in Synaptic Homeostasis
Cody Lim	Francisco Bravo Medical Magnet High School	<b>First Place</b> S0408 Split group: –	<i>Optimizing Viral Vectors for Site-Specific Gene Therapy in Hematopoietic Stem Cells</i>

2015 Los Angeles Co	Page 10		
<b>CHEMISTRY - APPLIE</b>	D (JR) J06		
Liam FitzGerald	St. John Fisher School	<b>Third Place</b> J0602 Split group: –	More Water, Please
Chloë Blue Steckart	St. Timothy School	Second Place J0611 Split group: –	The Degradation of Ascorbic Acid: Effects of Electromagnetic Radiation, Convection Currents, and Time (Oh Say Can You SeeVitamin C!)
Faatima Zahra Motala	Institute of Knowledge	<b>First Place</b> J0619 Split group: –	Got Biodiesel?

	ounty Science Fair Catego	ory Winners	Page 11
<b>CHEMISTRY - GENEF</b>	RAL (JR) J07		
Larisa Assadourian	St. Gregory A&M Hovsepian School	<b>Third Place</b> J0706 Split group: A	The Effect of Moisturizers on Skin Moisture Retention
Mia Pardo	Ribét Academy Middle School	<b>Third Place</b> J0740 Split group: B	Examination of Tartrate
Sophie Carter Cameron Gomez	Sierra Madre Middle School	<b>Second Place</b> J0714 Split group: B	Kinetics of the Inversion of Sucrose
Erik Mercado	Our Lady of Refuge Catholic School	<b>Second Place</b> J0735 Split group: A	<i>How Does Time Affect the Amount of Vitamin C in Oranges?</i>
Sarah Danon Nicole Dersahakian	Porter Ranch Community School	<b>First Place</b> J0715 Split group: B	Which Blond is Best?
Jessie Ellico Franks	Sierra Madre Middle School	<b>First Place</b> J0717 Split group: A	Anthocyanins as Color Changing Acid Indicators

2015 Los Angeles Cour	2015 Los Angeles County Science Fair Category Winners		
CHEMISTRY (SR) S05			
Diana Palma	Saint Anthony High School	Second Place S0518 Split group: –	Polystyrene and its Effectiveness of Removing Calcium and Magnesium from Water
Taniel Keosseian	Rose and Alex Pilibos Armenian School- High School	<b>First Place</b> S0512 Split group: –	<i>Make Cellphone Spectrophotometer to See Light</i>

2015 Los Angeles County Science Fair Category Winners			Page 13
EARTH/SPACE SCIEN	ICES (JR) J08		
Matas Kulikauskas	South Pasadena Middle School	<b>Second Place</b> J0814 Split group: –	A Puzzling Parallax Perspective
George Khouri	Sierra Canyon School	<b>First Place</b> J0813 Split group: –	Put Your Soil To The Test!

2015 Los Angeles County Science Fair Category Winners			Page 14
EARTH/SPACE SCIE	NCES (SR) S06		
Zoe Zawol	Pasadena High School	<b>Third Place</b> S0609 Split group: –	The Effect of Strong Magnetic Fields Caused by Broadcast Antennas on the Local Cosmic Ray Flux
Kaitlyn Arst	Daniel Pearl Magnet High School	<b>Second Place</b> S0602 Split group: –	<i>Use of Starch and Biopolymers Aqueous Solutions to Reduce Soil Erosion</i>
Ethan Uetrecht	Palos Verdes Peninsula High School	<b>First Place</b> S0606 Split group: –	Assessing the Practicality of Asteroid Deflection Strategies Using Simulation

2015 Los Angeles County Science Fair Category Winners			Page 15
ECOLOGY (JR) J09			
Samantha Morris Christina Lee Angela Lee	Mirman School	<b>Third Place</b> J0913 Split group: –	H2O: Hope to Others
Logan Dalton	Portola Middle School & HGM	<b>Second Place</b> J0906 Split group: –	Examining Potential Well Water Contamination
Caroline Choi	South Pasadena Middle School	<b>First Place</b> J0905 Split group: –	Drugs in Our Waters Make Daphnia's Hearts Flutter

2015 Los Angeles County Science Fair Category Winners			Page 16
ECOLOGY (SR) S07			
Lilit Danelyan Siranush Martirosyan Bianca Mirza	Herbert Hoover High School	Second Place S0701 Split group: –	Effect of Plastic on Laysan Albatross
Michael McFarland	Palos Verdes Peninsula High School	First Place S0704 Split group: –	The Potential Impact of Hyperion Treatment Plant's Chlorinated Effluent and West Basin Brine on Marine Organisms

2015 Los Angeles Co ENGINEERING APPL	ounty Science Fair Catego ICATIONS (JR) J10	ory Winners	Page 17
Jonathan Abrams	Milken Community Schools	Second Place J1002 Split group: B	The Claw Cane; A Cane with a Claw Mechanism for Picking up Dropped Items
Alessandro Villain Jae Won Kwak	Ridgecrest Intermediate School	Second Place J1048 Split group: A	<i>Comparing the Versatility of an Aftermarket Controller from its Standard Counterpart</i>
Heaven Williams	Crawford Academy	<b>Second Place</b> J1049 Split group: A	<i>Solar Water Collector: Effect of Collector Diameter, Tilt, and Cover Material on Efficiency</i>
Grady Morrissey	Flintridge Preparatory School (Middle School)	First Place J1034 Split group: A	<i>How the Shape of a Telescope's Mirror Affects the Size of Image Produced</i>
Jahan Razavi	Mirman School	<b>First Place</b> J1037 Split group: B	<i>PyroVision: A Detection</i> <i>System for Wildfires</i>

2015 Los Angeles County Science Fair Category Winners			Page 18
ENGINEERING APPLIC	CATIONS (SR) S08		
Shannon Chen	Palos Verdes Peninsula High School	<b>Third Place</b> S0803 Split group: –	Design and Construction of a Miniature Helium Airship
Christopher Isozaki	Palos Verdes High School	Second Place S0810 Split group: –	Reducing the Amount of Electricity Used by Computers Utilizing Green Technologies
Rei Landsberger	Palos Verdes Peninsula High School	<b>First Place</b> S0812 Split group: –	Effects of a Fluid-Tracking Design on Solar Panel's Efficiency

2015 Los Angeles County Science Fair Category Winners ENGINEERING RESEARCH (JR) J11			Page 19
Jeanie Benedict	St. John Fisher School	<b>Third Place</b> J1103 Split group: –	The Chinchiller - For the Coolest Pet on the Block: Effect of Air Flow Restriction on Evaporative Cooling
Donald MacArthur	American Martyrs School	<b>Second Place</b> J1128 Split group: –	The Effect of a Cooler Condenser in Distilling Freshwater from Saltwater
Max Froch	Milken Community Schools	<b>First Place</b> J1116 Split group: –	<i>Creating Images that Represent both Monocular and Binocular Vision of an Averaged Sized Clydesdale Horse</i>

2015 Los Angeles Co	2015 Los Angeles County Science Fair Category Winners		
ENGINEERING RESE	ARCH (SR) S09		
Jasmine Cha	Village Christian High School	Second Place S0902 Split group: –	The Snitch on the Stitch
Raymond Gilmartin	South Pasadena High School	<b>First Place</b> S0904 Split group: –	Characterization of Magnetic Tunnel Junctions to Improve Tunnel Magnetoresistance for Next-Generation Memory Technologies

2015 Los Angeles Co	2015 Los Angeles County Science Fair Category Winners		
ENVIRONMENTAL MA	NAGEMENT (JR) J12		
Emily Banno	Portola Middle School & HGM	<b>Second Place</b> J1206 Split group: –	What is the Best Mulch Material to Prevent Soil Water Evaporation?
Katherine Matsukawa	San Gabriel Christian School	<b>First Place</b> J1222 Split group: –	Photobioreactors vs. Raceway Ponds

2015 Los Angeles County Science Fair Category Winners			Page 22
ENVIRONMENTAL MA	NAGEMENT (SR) S10		
Huws Landsberger	Palos Verdes Peninsula High School	Second Place S1008 Split group: –	The Effect of Temperature on Salt Marsh Plant Growth
Martin Liu Kimberly Fuentes Zoe Parcells	Santa Monica High School	First Place S1011 Split group: –	<i>Cigarette Butt Pollution</i> <i>Abundance Study</i>

2015 Los Angeles County Science Fair Category Winners			Page 23
MATERIALS SCIE			
Jennifer Hritz	Portola Middle School & HGM	<b>Second Place</b> J1312 Split group: –	How do Various Materials and Methods for Creating Static Electricity Affect the Ability to Generate and Store Static Electricity?
So-Jung An	Walter Reed Middle School	<b>First Place</b> J1304 Split group: –	Playing With Pencils

2015 Los Angeles County Science Fair Category Winners			Page 24
<b>MATHEMATICS &amp; CO</b>	OMPUTER SCIENCES (JF	R) J14	
Evan Vail	St. Joseph Long Beach	<b>Third Place</b> J1410 Split group: –	The Groovy Gratings Experiment: Using Diffraction Patterns to Measure Data Track Spacing on CDs and DVDs
Kaylen Ng	Ridgecrest Intermediate School	<b>Second Place</b> J1407 Split group: –	Experimental Theory of Using Bubbles as a Sustainable Source of Air Underwater
Andrew Shaheen	St. Joseph Long Beach	<b>First Place</b> J1409 Split group: –	Basketball: The Geometry of Banking a Basket

2015 Los Angeles Co	2015 Los Angeles County Science Fair Category Winners		
<b>MATHEMATICS &amp; CO</b>	MPUTER SCIENCES (SF	R) S11	
Raam Tambe	Palos Verdes Peninsula High School	<b>Third Place</b> S1108 Split group: –	The Effects of Neutral Agents on the Expansion of Ideology in a Hypothetical Social Space
George Hou	Arcadia High School	<b>Second Place</b> S1103 Split group: –	Separating Mixed Signals in a Noisy Environment Using Global Optimization
Sanath Devalapurkar	West High School	<b>First Place</b> S1101 Split group: –	The K-Theory of Symmetric Monoidal ∞- Categories of Modules

2015 Los Angeles Co	2015 Los Angeles County Science Fair Category Winners		
MICROBIOLOGY (JR)			
James Bowden	Portola Middle School & HGM	<b>Second Place</b> J1502 Split group: –	Antibiotic Resistance By Repeated Exposure
Tai Michaels	Portola Middle School & HGM	<b>First Place</b> J1512 Split group: –	Which Virus is Better at Killing Bacteria?

2015 Los Angeles County Science Fair Category Winners			Page 27
MICROBIOLOGY (SR)	S12		
Sophia Hewitt	North Hollywood High School	Second Place S1203 Split group: –	<i>Optimizing Chromosomal Exposure for Florescence In Situ Hybridization in Tetrohymena thermophila</i>
Elan Filler	Palos Verdes High School	First Place S1202 Split group: –	<i>Transcriptional Regulators as Drug Targets for Treatment of C. glabrata Infection</i>

2015 Los Angeles County Science Fair Category Winners			Page 28
PHARMACOLOGY (JI	R) J16		
Aliyah Dost	Institute of Knowledge	<b>Second Place</b> J1602 Split group: –	Operation Combat Cholesterol
Aiman Soomro	Institute of Knowledge	<b>First Place</b> J1605 Split group: –	Constant Constipation

2015 Los Angeles Cou	Inty Science Fair Catego	ory Winners	Page 29
PHARMACOLOGY (SR	) S13		
Eunice Padilla	Francisco Bravo Medical Magnet High School	<b>Third Place</b> S1302 Split group: –	The Effect of Pseudoephedrine on the Cardiovascular System of the California Blackworms
Rebecca Sine	Francisco Bravo Medical Magnet High School	<b>Second Place</b> S1303 Split group: –	Allopregnanolone Site of Action for Promoting Regeneration of Human Neural Stem Cells: Uncovering the Path for the Detection of Neurogenesis
Edward Park	Larchmont Charter School	<b>First Place</b> S1398 Split group: –	<i>Hybrid Biosensor Capable of Early Diagnosis and Rapidly Monitoring Breast Cancer</i>

2015 Los Angeles Co	ounty Science Fair Categ	ory Winners	Page 30
<b>PHYSICS - AERODYN</b>	PHYSICS - AERODYNAMICS/HYDRODYNAMICS (JR) J17		
Ethan Kita	San Gabriel Christian School	<b>Third Place</b> J1719 Split group: –	Tangle of the Flight Angles
Nicholas Tan	Mayfield Junior School of the Holy Child Jesus	<b>Second Place</b> J1732 Split group: –	Planes, Birds and V- Shapes
Dylan Lee	Portola Middle School & HGM	<b>First Place</b> J1721 Split group: –	What is the Most Efficient Angle of Attack of an Airplane's Wing?

2015 Los Angeles Co	ounty Science Fair Catego	ory Winners	Page 31
PHYSICS - ELECTRICITY & MAGNETISM (JR) J18			
Samuel Wentzel	St. Mel School	<b>Third Place</b> J1829 Split group: –	The Utilization of Thermal Couplers
lliana Kleiner	Millikan Science Academy School	<b>Second Place</b> J1814 Split group: –	Power of Shields
Matthew Prata Jacob Passalaqua	Holy Name of Mary School	<b>First Place</b> J1819 Split group: –	Just Charge It

2015 Los Angeles County Science Fair Category Winners PHYSICS - GENERAL (JR) J19			Page 32
Drew Quishenberry	Aveson Global Leadership Academy	Second Place J1971 Split group: A	The Visualization of Sound
Nicholas Sercel	St. Bede The Venerable	<b>Second Place</b> J1976 Split group: B	A Ballistic Pendulum Study of How Clothing Fabric Properties Effect Momentum and Energy Transfer of Paintballs to Simulated Human Flesh
Chloe Brandon	Sierra Madre Middle School	<b>First Place</b> J1911 Split group: A	What is the Effect of Color on Solar Water Heating?
Neil Hoffmann	St. John Fisher School	<b>First Place</b> J1938 Split group: B	The Tarzan Problem

2015 Los Angeles County Science Fair Category Winners		Page 33
St. Monica Academy - High School	Second Place S1404 Split group: –	Comparing Quantum and Classical Explanations for the Non-Interference of Orthogonally-Polarized Light Waves
Flintridge Preparatory School (High School)	First Place S1408 Split group: –	Biological Electron- Transfer Dynamics in Multiheme Cytochrome Complexes
	St. Monica Academy - High School Flintridge Preparatory	St. Monica Academy - High Second Place   School S1404   Split group: –   Flintridge Preparatory First Place   School (High School) S1408

	unty Science Fair Catego	ory Winners	Page 34
PLANT BIOLOGY (JR)	J20		
Sadie Huntley	Arroyo Seco Museum Science Magnet School	<b>Third Place</b> J2025 Split group: B	Water From Its Roots
Raquel Kaufman	New Los Angeles Charter School	<b>Second Place</b> J2029 Split group: B	What Type of Grass Has the Largest Amount of Biomass?
Johan Thuen	Sierra Madre Middle School	<b>Second Place</b> J2050 Split group: A	Lights From The Sea: How Do Light/Dark Cycles Affect Bioluminescence?
Anthony Castillo	Our Lady of Refuge Catholic School	First Place J2012 Split group: A	<i>Is Less More?: The Effect of Fertilizer Microdosing on Non-GMO Diploid Yemeni Watermelon Seeds</i>
Megan Kohanarieh	Milken Community Schools	First Place J2031 Split group: B	<i>Germinating a mixture of Lolium perenne and Poa pratensis L.: Grey Water vs. Tap Water</i>

2015 Los Angeles County Science Fair Category Winners		Page 35	
PLANT BIOLOGY (SR)	S15		
Adaeze Oduma	King/Drew Magnet High School of Medicine & Science	<b>Second Place</b> S1506 Split group: –	The Effect of Wind Speed on Seed Dispersal
Heather Robinson Amelia Dibbo	Palos Verdes High School	<b>First Place</b> S1508 Split group: –	Effects of Temperature Manipulation on Vitamin C Levels

2015 Los Angeles Co	unty Science Fair Categ	ory Winners	Page 36
PLANT PHYSIOLOGY	(JR) J21		
Muhammad Abd-Allah	New Dimensions Middle School	<b>Third Place</b> J2101 Split group: –	The Impact of Vitamins in Negating Hydrogen Peroxide Oxidant Effects on Seed Germination
Safiyah Lakhany	Institute of Knowledge	<b>Second Place</b> J2109 Split group: –	Holy Spinach
Isaiah O'Neal	Portola Middle School & HGM	<b>First Place</b> J2112 Split group: –	Plant Electrophysiology - How Does the Stimulation of Trigger Hairs Affect the Generation of Action Potentials in a B52 Venus Flytrap?

2015 Los Angeles County Science Fair Category Winners			Page 37
PRODUCT SCIENCE	(JR) J22		
William Labrador	Chandler School	Second Place J2218 Split group: –	How Quickly do Tortilla Chips Become Stale?
Annaliese Rupp	Holy Trinity Catholic School	<b>First Place</b> J2233 Split group: –	"Mom, Do I Have to Rinse/Scrub The Plates Before I Put Them in The Dishwasher?"