



# LI Science & Engineering Fair, Inc.

Promoting Excellence in Scientific Inquiry and Discovery in LI Schools

## Junior Varsity 2016 Award Winners

	Award	Name	School	Title
	First	Isabella Marie DeCarlo	Half Hollow Hills High School West	<i>Optimizing Stem Cell Growth Using High Throughput Protein Arrays</i>
	First	Allison Hung	Syosset High School	<i>Incorporating multiple protein structure populations using sample enhanced molecular dynamics</i>
	First	Kayla Angelique Keriazes, Lazarus Theodore Ziozis	Manhasset High School	<i>The Effect of Graphene Coated Sand on the Filtration of Methylene Blue</i>
	First	Hamza Naeem Khilji, Andrew James Ardizzone, Kavan Singh Wadhwa	Syosset High School	<i>The Automatic Robotic Vacuum</i>
	First	Stephen John Lee, Fred Chu	Manhasset High School	<i>The Optimization of Dye-Sensitized Solar Cells Through the Co-Adsorption and Tri-Adsorption of Natural Dyes and the Application of a Conductive Copper Infrastructure with Their Effectiveness in the Electrotaxis of C.elegans in Single and Tandem Cells</i>
	First	Conner Jordan Muraglio	West Islip High School	<i>Comparing 7, 8-Dihydroxyflavone Hydrate and an SSRI to Reduce Anxiety in Nudibrach</i>
	First	Sabrina E Palacios, Nina	Huntington High School	<i>The correlation between pesticidal residuum of imidacloprid found in the</i>

		<b>Cartwright</b>		<i>regurgitate of Apis mellifera and colony collapse disorder</i>
	<b>First</b>	<b>Trevor Joseph Rosenlicht, Mike Guerino Delmonaco, Nicole Margaret La Reddola</b>	Commack High School	<i>Resolving the Primary Mechanism Causing Floor-Fractured Craters Using GRAIL and LOLA Data</i>
	<b>First</b>	<b>Julia Karen Ruskin</b>	Paul D. Schreiber High School	<i>Analyzing the Impact of Vaccination Rates on Measles Transmission</i>
	<b>First</b>	<b>Vanessa J Zhang, Elin C Hu</b>	Manhasset High School	<i>Investigating Vitamin E and Rapamycin as treatments for genetically and environmentally induced parkinsonism in Drosophila melanogaster and C. elegans</i>
	<b>Second</b>	<b>Yesha Sudhir Desai</b>	East Meadow High School	<i>The Effect of Different Stresses on the Emission of Biogenic Volatile Organic Compounds</i>
	<b>Second</b>	<b>Gareth Thomas Dwyer</b>	West Islip High School	<i>Analyzing Stevensâ€™ Hypothesis: Melatonin Functionality in Procambarus clarkii</i>
	<b>Second</b>	<b>Megan Auguste Kirschner, Ananya Bansal</b>	The Wheatley School	<i>The Effect of Coconut Oil on the Alzheimer's homologue gene, apl-1, in C. elegans</i>
	<b>Second</b>	<b>Robert Steven Kleyner</b>	Syosset High School	<i>Use of next generation sequencing to discover mutations contributing to idiopathic, rare seizure disorders</i>
	<b>Second</b>	<b>Ryan Frank Schaake</b>	West Islip High School	<i>The Presence of Mercury within High Fructose Corn Syrup</i>
	<b>Second</b>	<b>Maxwell Raphael Schulman</b>	Plainview Old Bethpage JFK High School	<i>The Effect of Effectance Motivation and General Anthropomorphism on Empathetic Capacity</i>
	<b>Second</b>	<b>Markella Elizabeth Tsalikis, Parker Van Roy</b>	Manhasset High School	<i>Fabrication of Semiconductor layer in Dye Sensitized Solar Cells Using Spin Coating</i>
	<b>Second</b>	<b>David K Wendt</b>	Island Trees High School	<i>Utilizing Mirrors to Enhance The Affordability of Photovoltaic</i>

Categories				<i>Energy Sources</i>
	Second	<b>Steve Ryh-Jong Yeh</b>	Huntington High School	<i>Alternative Methodology of Calculating Areas under Polynomial Functions with Minimal Implementation of Indefinite Integral Approximation</i>
	Third	<b>Andrew Burke, Delaney Buskard</b>	Manhasset High School	<i>Improving Energy and Power Density within Metal-Air Batteries</i>
	Third	<b>Jack Ethan Doughty</b>	East Meadow High School	<i>The Effect of Environmental Factors Related to the Growth and Remediation of Plumes Containing Trichloroethylene.</i>
	Third	<b>Marshall Brent Feingold</b>	Syosset High School	<i>The Trading of OTC Derivatives and Financial Instability</i>
	Third	<b>Daniel Jacob Foreman</b>	Syosset High School	<i>Multi-Phase Optimization of Trusses via Genetic Algorithm Considering Constructability</i>
	Third	<b>Daniel Garcia</b>	W. Tresper Clarke High School	<i>The Effect of the Molarity of the Liquid Electrolyte in a Dye Sensitized Solar Cell on the Drop in Efficiency at Temperature Extremes</i>
	Third	<b>Niv Skidan, Faisal Younus</b>	Syosset High School	<i>Quantifying spiral wave stability in a novel and physiologically relevant cardiac model through high performance GPU-based computing</i>
	Third	<b>Serena Tam</b>	Jericho High School	<i>The Loss of Thrombospondin-2 (TSP2) regulates extracellular matrix (ECM) assembly</i>
	Third	<b>Sara Wong, Soo Bynn Lee</b>	Manhasset High School	<i>Matrix Metalloproteinase Inhibitors and Anti-Angiogenic Drugs on the Metastasis of Tumors in Drosophila Melanogaster</i>
	Honorable Mention	<b>Jessica Devilla, Kiran Shetty</b>	Half Hollow Hills High School East	<i>Effect of Difluoromethylornithine on Cellular Proliferation in Lung Carcinoma Cells</i>
	Honorable Mention	<b>Andrew Fang, Eric Li</b>	Jericho High School	<i>4-NP and 4-MEI Combination in Caramel Beverages Invoke Inflammatory Responses that can Lead to Autoimmune</i>

				<i>Disease</i>
	<b>Honorable Mention</b>	<b>Nicholas Alexander Florio</b>	St. Dominic High School	<i>Exploring the Different Variables of the Hodgkin-Huxley Model</i>
	<b>Honorable Mention</b>	<b>Nathan M Gershengorin</b>	Oceanside High School	<i>Developing and interfacing with a kinase database to assess inhibitor selectivity using Perl</i>
	<b>Honorable Mention</b>	<b>Berlin T Jacob</b>	Plainview Old Bethpage JFK High School	<i>The Journey toward a Tailor-made Mesenchymal Stem Cell (MSC's) to treat Inflammatory Diseases.</i>
	<b>Honorable Mention</b>	<b>Nandini Jojode, Feyisayomi Tiffany Otegbade</b>	East Meadow High School	<i>The Effects of Lichens on Native and Non-native Species</i>
	<b>Honorable Mention</b>	<b>Shermeen Khan</b>	East Meadow High School	<i>Will Decomposers Break Down Phosphorescent Substances?</i>
	<b>Honorable Mention</b>	<b>Vani Kumar, Jessica Elizabeth Poomkudy, Emily Wang</b>	The Wheatley School	<i>The Use of the CRISPR/Cas9 System for Genetic Engineering in Escherichia coli</i>
	<b>Honorable Mention</b>	<b>Jennifer Lin</b>	Oceanside High School	<i>Using a SMN2 minigene construct to test the effects of HSPA8 gene on the alternative splicing patterns of SMN2</i>
	<b>Honorable Mention</b>	<b>Katherine Elizabeth Melkonian</b>	Paul D. Schreiber High School	<i>The Effect of Different Recovery Methods on Heart Rate and Rating of Perceived Exertion After an All Out Rowing Test</i>
	<b>Honorable Mention</b>	<b>Frederick William Nocella, Sneha Kumar</b>	Babylon Jr-Sr High School	<i>The use of clove and neem oil as a natural repellent against Acyrthosiphon pisum on Pisum sativum The use of clove and neem oil as a natural repellent against Acyrthosiphon pisum on Pisum sativum</i>
	<b>Honorable Mention</b>	<b>Samuel Ross Petruzzi</b>	Commack High School	<i>The Effect of Nicotine and Cigarette Waste on Regeneration in Planaria</i>
	<b>Honorable</b>	<b>Mara Danielle</b>	Plainview Old	<i>Clinical Comorbidities: One Piece of an Abdominal Aortic</i>

	<b>Mention</b>	<b>Robinson</b>	Bethpage JFK High School	<i>Aneurysm Classification System</i>
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