

LISEF 2013 Grand Award Winners

	Award	Name	School	Title
Animal Sciences	First	Trinity Russell	Commack High School	<i>A Study of Transposition Events of the gypsy Retrotransposon in the Neural Cells of Drosophila melanogaster and its Relation to Neuronal Decline</i>
	Second	Curran Boyce	Sayville High School	<i>A Molecular Ecology Approach to Assess Site Fidelity of Limulus polyphemus at Pike's Beach in Westhampton, New York</i>
	Second	Matthew Schwartz	W. T. Clarke High School	<i>The Behavior of Juvenile Atlantic Bay Scallops in a Green Macroalga, Codium fragile, Environment</i>
	Third	Jasmin Feliciano	Brentwood High School	<i>The efficacy of a newly developed staging system for the regeneration of N. vectensis (Starlet sea anemone) as a model for assessing drug assays</i>
	Third	Kavita Jain	Smithtown High School West	<i>Demonstrating Relationships between the Morphology of the Trigeminal System and Feeding Performance in the American Alligator: A New Tool for Understanding Feeding Evolution</i>
	Third	Brigid Maloney	Sanford H Calhoun High School	<i>Analysis of Bay Scallop Color Morphs: Shell Strength and Rates of Predation by Mud Crabs</i>
	Honorable Mention	MaryAnn Boyce	South Side High School	<i>The Difference between Light & Dark Pigments in Bacterial Degradation of Bird Feathers</i>
	Honorable Mention	Emma Gugerty, Stephanie Bousleiman	Locust Valley High School	<i>A Comparison of the Diel Vertical Migration Patterns of the Oceanic Whitetip Shark, Carcharhinus longimanus, to Those of Other Species.</i>

	Honorable Mention	Emily Lipstein	Paul D Schreiber High School	<i>An Analysis of the Genetic Variation of Monachus monachus and its Implications for Conservation</i>
	Honorable Mention	Maham Naviwala, Sarah Wong, Rachel Rock	Brentwood High School	<i>The effect of graphene oxide nanoribbons (GNRs) on regeneration rate of Nematostella vectensis (The starlet sea anemone)</i>
Behavioral and	First	Arshia Aalami Harandi	Roslyn High School	<i>My Paper Is Fantastic! Gender Differences in Self-Promotion and Their Effects on Perceptions of a College Essay</i>
	First	Sonia Joshi	Jericho High School	<i>Concomitant Protease Inhibitor Administration: Saquinavir and Ritonavir Reduce Septic Complications Minus Cognition</i>
	Second	Ye Rin Eileen Koh	Plainview Old Bethpage JFK HS	<i>The Impact of Parenting Style and Authoritativeness on Adolescent Emotional Intelligence: a Cross Cultural Study</i>
	Second	Mallory Lindell	Plainview Old Bethpage JFK HS	<i>The Potential "Effectiveness" of Teacher Evaluation Policies on the Educational Process</i>
	Second	Emma McNamara	Sanford H Calhoun High School	<i>Female Dominance Hierarchies as a Predictor of Relative Canine Size Dimorphism in the Macaca Genus</i>
	Second	Daniel Wasserman	Roslyn High School	<i>Smart or Sexy: Do Women Have To Choose? The Impact of College Selectivity on Evaluations of Women's Attractiveness and Likability</i>
	Third	Taylor Denara	West Islip High School	<i>Evaluation of Cognitive Abilities of Adult Multiple Sclerosis Patients with Previous Pediatric Cognitive Neuropsychological Evaluation</i>
				<i>Studying the Potential Transgenerational Effects of</i>

Social Sciences	Third	Chris Giuliano	Hauppauge High School	<i>Antidepressants as Acquired by Means of Epigenetic Inheritance Under a Behavioral Paradigm in C. elegans, a Model Organism.</i>
	Third	Kevin Mohabir	Roslyn High School	<i>A Rose by Any Other Name: The Impact of First Names and Nicknames on First Impressions</i>
	Third	Kenan Mutlu	Kings Park High School	<i>The Effects of Shifting The Subject of Suspense During Cognitive Appraisal in Relation to Suggestibility and Cued Recall Capacity</i>
	Third	Alain Sherman	Roslyn High School	<i>Doctor Who? Factors Related to the Selection of the Primary Care Physician</i>
	Honorable Mention	Matthew Borin	Roslyn High School	<i>Keeping up with the Joneses: The Use of Social Norms and Anchors in Creating Appeals for Charity</i>
	Honorable Mention	Natalie Borowski	Plainview Old Bethpage JFK HS	<i>The Effects of Communication Medium and Synchronicity on Corporate-Social Decision Making and Productivity</i>
	Honorable Mention	John Coacci	Plainedge High School	<i>"This Is My Winning Side": An analysis of the impact of angle on perceived personality traits</i>
	Honorable Mention	Makenzie Drukker	Paul D Schreiber High School	<i>Consonant Cluster Production in Typically-Developing English Language Learners</i>
	Honorable Mention	Sehar Laljee, Samantha Muellers	Smithtown High School West	<i>The Effect of Personalized Music Therapy on Dementia Patients</i>
	Honorable Mention	Megan Wallace	Oceanside High School	<i>The effect of physical activity on the onset of puberty</i>
	First	Minah Kim	Paul D Schreiber High School	<i>Inhibition of the FabI enoyl-ACP reductase from Burkholderia pseudomallei</i>
	Second	Daniel Wang	W. T. Clarke High School	<i>Insights into All-Atom Protein Structure Prediction via in silico Simulations</i>
				<i>FTO and RPGRIP1L Regulate</i>

Biochemistry	Third	Michael Shen	Jericho High School	<i>Proliferation in 3T3-L1 Adipocytes and OXPHOS Gene Expression in HepG2 Hepatocytes</i>
	Third	Sanjula Singhal	Ward Melville High School	<i>Novel Technology for Brand Protection and Anti-Counterfeiting Measures using DNA</i>
	Honorable Mention	Josh Fisher	Sanford H Calhoun High School	<i>Redox Modification of HMGB1 and its Effects on Cytokine Release: A Step Toward a Treatment for Sepsis</i>
	Honorable Mention	Tess Lewin-Jacus	Lynbrook High School	<i>Validation of a Dual-Luciferase Assay for Studying Ligand-Biased Agonism in HEK-293 Cells</i>

	First	Aakash Jhaveri	The Wheatley School	<i>Hyperglycemia Increases Probability of HIV Entry in Jurkat T Cells via ROS Generation</i>
	First	Aneri Kinariwalla, Evan Chernack	Sayville High School	<i>A Study of the Role of the ROCK Kinase Pathway in Dental Pulp Stem Cell Differentiation and Mineralization</i>
	Second	Preeti Kakani	Jericho High School	<i>Retinal wave-dependent gene expression prior to eye opening in the mouse superior colliculus</i>
	Second	Patricia Lin, Samuel Lam	Manhasset	<i>Detection of Genomic Imbalances in Clear Cell Renal Cell Carcinoma via Array Comparative Genomic Hybridization (aCGH)</i>
	Second	James Shamul	Plainview Old Bethpage JFK HS	<i>Role of MicroRNAs in IQGAP2 Silencing During Hepatocellular Carcinoma Development, Phases II and III</i>
	Third	Ken Aizawa	Jericho High School	<i>Nucleocytoplasmic shuttling of the signal scaffolding protein JLP</i>
	Third	Meenakshi Krishna	Herricks High School	<i>Hypoxia and Nitric Oxide Regulate Angiogenesis Inhibitors in Injury and Disease</i>

Cellular and Molecular Biology	Third	Anthony Lobko	Syosset High School	<i>Novel Mutant p53 gain of function activity augments heat shock response in cancer cells through modulation of HSF1 activity and expression</i>
	Third	Zachary Naglieri	Garden City High School	<i>Bone Marrow Macrophage Cells from Apolipoprotein-E Knockout Mice are a Novel Model for Detecting Cholesterol Receptor Abnormalities in Atherosclerosis</i>
	Honorable Mention	Priya Alagesan, Georgia Xenophontos	Manhasset	<i>DNA Amplification and Sequencing of the 16S Microbial rRNA Gene</i>
	Honorable Mention	Rebecca Anderson, Anmol Gupta	Smithtown High School West	<i>The Analysis of Cancer Treating and Wound Healing Properties of Curcumin and Chemically-Modified-Curcumin 2.24 (CMC 2.24) in-vitro</i>
	Honorable Mention	Rohan Goyal	Half Hollow Hills High School East	<i>HIV-INDUCED DEDIFFERENTIATION IN HUMAN PODOCYTES IS MEDIATED BY EPIGENETIC FACTORS THROUGH EPITHELIAL MESENCHYMAL TRANSITION</i>
	Honorable Mention	Jonathan Irom	Oceanside High School	<i>Regulation of the cohesive properties of Dictyostelium discoideum</i>
	Honorable Mention	Stephanie Mertz	Lynbrook High School	<i>An Investigation into Potential Biomarkers for Renal Cell Carcinoma</i>
	Honorable Mention	Nicholas Spiezio	Smithtown High School East	<i>Cellular Delivery of Gene-Silencing Products</i>
	First	Shilpa Iyer, Shweta Iyer	Comsewogue High School	<i>Hydrogen Production Using Ultra Low-Cost Soybean-Molybdenum Catalysts</i>
	Second	Aron Coraor	Huntington Union Free School	<i>Spinel-induced non-ideality in melts of the Mg_2SiO_4-$NaAlSi_3O_8$-$CaAl_2Si_2O_8$ system?</i>

Chemistry			District	
	Third	Joseph Cappadona	Lynbrook High School	<i>Investigating Rotational Barriers in Organic Molecules by C13 Relaxation Time Measurements</i>
	Honorable Mention	Allison Chowdhury	The Wheatley School	<i>Improving Yields of Diels-Alder Reactions Using Microwave Assisted Organic Synthesis</i>
	Honorable Mention	Sylvie Rubin-Budick, Katherine Lee	John L. Miller Great Neck North High School	<i>Safer alternatives to can linings containing BPA: an attempt to decrease the constant exposure to carcinogenic polymer-coated cans</i>
Computer Science	First	Joshua Zweig	Commack High School	<i>Wireless Coordination of a Multi-Robot System via Fuzzy Logic Control</i>
	Second	Mustafa Ansari, Kevin Huang	Plainview Old Bethpage JFK HS	<i>A Heuristic Method for Determining Distance-Optimal Supercomputer Interconnection Networks</i>
	Third	Alexander Bertrand	Syosset High School	<i>Optimal Specialization of Inherently Skilled Agents in Blind Multi-Agent Systems</i>
	Third	Paul Rogofsky	Roslyn High School	<i>On Efficiently Defining the Pancake Network</i>
	Honorable Mention	Simon Shapiro	Paul D Schreiber High School	<i>Automation, Optimization and Enhanced Quantification of Cerebral Aqueductal Flow</i>
	Honorable Mention	Tamer Wahba	John F Kennedy	<i>Face Recognition Using Line Edge Mapping and Color Detection</i>
	First	Benjamin Pleat	Herricks High School	<i>A Novel Approach to Locating Geothermal Systems in Relation to Geodetic Crustal Deformation and Strain Rate Tensors</i>
	Second	Kush Dave	Syosset High School	<i>Correlations between Atmospheric Conditions in West Africa and the Frequency of Intense Atlantic Tropical Cyclones</i>

Earth & Planetary Science	Third	Julia Zhuang	John L. Miller Great Neck North High School	<i>Analysis of Cascadia Episodic Tremor and Slip Using Time-Dependent Displacement and Strain Fields Derived from GPS Data</i>
	Honorable Mention	Kevin Chaves	Kings Park High School	<i>The Determination of the Effect of Atmospheric and Celestial Cycles on Both the Flux and Trajectories of Cosmic Rays and the Resulting Affect on the Production of Cosmic Showers</i>
	Honorable Mention	Stephanie Fischer	Walter G. O'Connell Copiague High School	<i>Finding the Mg/Ca ratio in brachiopod shells in effort to reason the Late Ordovician glaciation event</i>
Energy & Transportation	First	Benjamin Akhavan	Rambam Mesivta High School	<i>Enhancing the Efficiency of a PEM Hydrogen Fuel Cell with Synthesized Metal-Nanoparticle/Graphene Composites Synergy</i>
	Second	Hiral Doshi	Half Hollow Hills High School East	<i>Evaluating the Suitability of Nanostructured Samarium Strontium Oxide Solid Solution for the Recovery of Waste Heat through Thermoelectric Power Generation</i>
	Third	Robert Tannenbaum	Half Hollow Hills High School East	<i>Enhancement of Graphene-based Supercapacitor Devices in Both Symmetric and Asymmetric Electrochemical Cell Environments</i>
	Honorable Mention	Andrew Chen, Sneha Chittabathini, Alexandra Tse	Lawrence High School	<i>Incorporating Reduced Graphene Oxide into Components of Organic Polymer Solar Cells</i>
	Honorable Mention	Sai Senthilkumar, Owen Grimm	Manhasset	<i>Optimization of the Copper Zinc Alumina (CZA) Catalyst for the Water Gas Shift (WGS) Reaction in a Packed Bed Reactor</i>
	First	Anthony Bisulco	Commack High School	<i>A Practical Notification System to Identify Incoming Sudden Ionospheric Disturbances</i>

Engineering: Electrical & Mechanical	Second	Benjamin Sorkin	Half Hollow Hills High School East	<i>Design, Construction and Function of a Boundary Layer Development Wind Tunnel</i>
	Third	Christopher McAvoy	West Hempstead HS	<i>Biomimetic Wind Turbine Blade Power, Speed; Flow Analysis: Leading Edge Morphology</i>
	Honorable Mention	Alexander Evangelatos	W. T. Clarke High School	<i>Novel Programming of Microcontrollers for Prevention of Automobile Collisions Caused by Wrong-Way Drivers</i>
	Honorable Mention	Lauren Perry	The Wheatley School	<i>Improvements in Compressed Audio Quality Evaluation Techniques</i>

Engineering: Materials & Bioengineering	First	Shamoon Rizvi, Shujat Khan	East Meadow High School	<i>The Rate of Lead (II) Hydroxide Deposition in a Concrete Water Holding Tank: An Investigation of Water Distribution Systems in Third World Countries</i>
	Second	Alexa Aseel-Fine	Jericho High School	<i>Endodontic evaluation of gutta percha: A comparative study of composition and mechanical properties</i>
	Second	Puja Bansal	Half Hollow Hills High School East	<i>Three Dimensional Molecular Imprinting for the Detection of Viral Pathogens</i>
	Third	Justin Cheung	Commack High School	<i>Imaging Self-Assembled Monolayers of Trimesic Acid at the Liquid-Solid Interface Using Scanning Tunneling Microscopy</i>
	Third	Rohan Savargaonkar	Half Hollow Hills High School West	<i>Effects of Scaffold Fiber Properties on Macrophage Migration: Applications to Minimize Scar Tissue Formation Following Neural Injury</i>
	Third	Rachel Yang, Greta Huang	Commack High School	<i>Breast Cancer Detection and Treatment: Membrane Mechanics and Receptor Mediated Endocytosis of Platinum Folate Nanoparticles</i>

	Honorable Mention	Bhavani Ananthabhotla	Kings Park High School	<i>The Effect of Mechanical Stimulation on the Vertebral Bone of a Diet-induced Obesity Model Using Micro-Computed Tomography and Histomorphometry</i>
	Honorable Mention	Matthew Chun	Jericho High School	<i>Laser-Induced Breakdown Spectroscopy (LIBS) for simple and cost effective production of ceramic YAG</i>
	Honorable Mention	Christopher DiPreta	Manhasset	<i>Evolution of Self-reinforced Structures During Stretching Characterized by in situ Synchrotron X-ray Scattering</i>
	Honorable Mention	Steven Krim	Lawrence High School	<i>Creating a Thermally Conductive, Flame-Retardant Polypropylene Composite through the Incorporation of Graphene, Carbon Nanotubes, and Carbon Black</i>
	Honorable Mention	Michelle Long	Syosset High School	<i>Elucidation of Qualitative and Quantitative Design Parameters of Synthetic Morphogenetic Gene Circuits for Cohesive, Patterned Microtissues</i>

Environmental Management	First	Arthur Wang, Archie Kong, Randy Tung	Manhasset	<i>The Effect of Single Walled Carbon Nanotubes on Regeneration and Activity of Planarian, Growth and Photosynthesis Rate of Chlorella Vulgaris, and Embryonic Development of Lytechinus variegatus</i>
	Second	Michael Kusnierek, Patrick Fahey	Manhasset	<i>Engineering a Biosensor Using the Bioluminescent Algae Pyrocystis Fusiformis to Detect Heavy Metal Toxicity in Water</i>
	Second	Chandler McMillan	Long Beach High School	<i>A natural approach in wastewater remediation: use of hydrogels as regenerative adsorbents to assist in the adsorption of heavy metals</i>
	Third	Kavin Sanghavi	Syosset High School	<i>Influence of Succinic Acid on the Hydroxide Precipitation Process</i>

	Third	Kristin Wong	Jericho High School	<i>Revolutionizing oil spill remediation via modified <i>Luffa cylindrica</i></i>
	Honorable Mention	Theo Gibbs	Ward Melville High School	<i>A Purely Cellulose Nanocomposite Membrane with Adsorption Properties for Water Purification</i>
	Honorable Mention	Brock Lownes, Laura Gundersen	East Hampton High School	<i>Phytofiltration of Zinc and Fly Ash Contaminated Water</i>
	Honorable Mention	Sunny Zheng, Reva Butensky	Plainview Old Bethpage JFK HS	<i>Cellulose Nanowhiskers: Enzymatic Hydrolysis and Incorporation in Epoxidized Polymers</i>

Environmental Sciences	First	Albert Kim, ByeongHo Jung	Manhasset	<i>A Novel Model for Inflammatory Bowel Disease: Using U937 and COLO320DM Cell Lines, to Propose a Pathway by which Environmental Toxin, 4-Nonylphenol, May Promote an Inflammatory Response</i>
	Second	Jessica Dewey	West Islip High School	<i>Finding a Correlation between Naval Sonar Activity, Legislation, and Cetacean Strandings</i>
	Second	Priyanka Wadgaonkar, JiaWen Pei, Zainab Mahmood	GW Hewlett High School	<i>The Isolation and Characterization of an Ozone Responsive Stress Related Protein in <i>Ceratopteris richardii</i></i>
	Third	Ashley Crespo, Samuel Lederer, Kevin Marino	Brentwood High School	<i>The Effect of Oil Dispersants on Marine Aggregates and the Development of a Novel System for their Study</i>
	Third	Bailey McLaughlin	West Islip High School	<i>Analysis of Metal Levels in Bay Bottom Sediment Using Synchrotron Radiation</i>
	Third	Christian Tucci	Sanford H Calhoun High School	<i>Quantitative X-ray Fluorescence Analysis of Heavy Metals in South Shore Estuary Tributary Sediments</i>

	Honorable Mention	Conor Boyle	Paul D Schreiber High School	<i>concentration, and overall productivity and functionality of ecosystems in the New York City Metropolitan Area</i>
	Honorable Mention	Cassidy Freudenberg	Oceanside High School	<i>Measuring DNA Damage in Acropora formosa using Phosphorylated-H2AX</i>
	Honorable Mention	Kaitlyn Lomuto, Emily Dinkelacker, Margaret Vecchione	South Side High School	<i>An Evolutionary Link Between Paralytic Shellfish Toxins and Mya arenaria</i>
	Honorable Mention	Bianca Wyman	Smithtown High School West	<i>The Phytotoxic Effects of Zinc Oxide Nanoparticles on Brassica rapa</i>

Mathematical Sciences	First	Daniel Hanover	John L. Miller Great Neck North High School	<i>Kaprekar's Constant: A Journey to New Bases</i>
	Second	Jake DiCicco	Half Hollow Hills High School West	<i>Patterns of Intersections of Two Curves on the Punctured Torus</i>
	Third	Bailey Liao	Half Hollow Hills High School West	<i>Implementing Graph Theory in a Novel Program for Predicting Carbon Nanostructures</i>
	Honorable Mention	Jamie Brensilber	The Wheatley School	<i>The Candy Problem and Iterations</i>
	Honorable Mention	Abhinaba Chatterjee	Syosset High School	<i>Algorithmic Methods in a Novel Spatial-Temporal Framework that Predicts the Effects of Parasite Diversity on the Spread and Prevention of Malaria</i>

	First	Natalie Giovino	John F Kennedy	<i>Resistance to the MEK Inhibitor Selumetinib (AZD6244) in Uveal Melanoma is Mediated by the Activation of AKT through KRAS: Implications for Clinical Trial Development</i>
	First	Olivia Novick	Jericho High	<i>LPS/BSA contamination: Rethinking fatty acid dietary</i>

Medicine & Health Sciences			School	<i>supplementation's role in oxidative stress production</i>
	Second	Jasper Du	Jericho High School	<i>A Novel Methodology for Defining the Structural Characterization of AR-MDV3100 Antagonism</i>
	Second	Connor Garett	W.C. Mepham High School	<i>Abnormalities in Resting Intracranial EEG Oscillations as a Biomarker for the Ictal Onset Zone</i>
	Second	Karalyn Pappas, Stephanie Ying	Manhasset	<i>The Effects of Monosodium Glutamate on ALS C. elegans Treated With Riluzole and Superoxide Dismutase</i>
	Second	Jillian Udell	Half Hollow Hills High School East	<i>The Combined Effect of Liraglutide and Growth Hormone on Delaying the Onset of Type II Diabetes</i>
	Third	Ryan Dong	William A. Shine Great Neck South High School	<i>The Effectiveness of B-FAHF 2 Fractions on Inhibiting IgE and β-hexosaminidase Release</i>
	Third	Sarah Han	Half Hollow Hills High School West	<i>Hsa-miR-X as a promising biomarker for the early diagnosis and prognosis of multiple sclerosis</i>
	Third	Rekha Korlipara	Half Hollow Hills High School East	<i>Creation of Uniform Sized Microparticles and Study of Aligned Nanofiber Scaffolds to Direct Neuronal Regrowth for Future Applications of Spinal Cord Injury Therapeutics</i>
	Third	Syed Rahmam	Herricks High School	<i>ALOX5 as a Potential Therapeutic Target in the Treatment of Leukemias</i>
	Third	Timothy Saeli	Garden City High School	<i>Pilot Compound Screen to Evaluate High Throughput Assay for Correcting F508del-Facilitated Aggregation of hCFTR NBD1</i>
	Honorable Mention	Shaina Ailawadi	Smithtown High School East	<i>Impact of BMI on Radiation Burden in Patients with STEMI Undergoing PCI</i>
	Honorable		Half Hollow	<i>Exogenous Electrical Stimulation of Neurons with</i>

	Mention	Paige Botie	Hills High School West	<i>Recovery Period Promotes Neurite Outgrowth with Anodal Bias</i>
	Honorable Mention	Gabriella Haghghi	John L. Miller Great Neck North High School	<i>A Role for Dopamine D2 Receptors in Antipsychotic Drug-Mediated Metabolic Effects</i>
	Honorable Mention	Xingan Hua	Jericho High School	<i>Detection of gene expression changes in Spinal Muscular Atrophy mice using deep-sequencing</i>
	Honorable Mention	Michelle Kohansieh	North Shore Hebrew Academy High School	<i>Women vs. Men: How Gender Differences in Coronary Calcification May Impact Cardiovascular Therapeutic Regimens</i>
	Honorable Mention	Caroline Walsh	Long Beach High School	<i>Employing global DNA methylation analysis to identify parathyroid adenomas</i>
	Honorable Mention	Gloria Zheng	Ward Melville High School	<i>The Potentiation of Human Glycine Receptor Channels in HEK-293 Cells By Sevoflurane</i>
	Honorable Mention	Cyrus Zhou	William A. Shine Great Neck South High School	<i>Accelerated Lateral Ventricle Growth in Cognitive Normals and Cognitive Decliners</i>

Microbiology	First	Amy Xu	Jericho High School	<i>Genetic and molecular characterization of a novel staphylococcal clumping factor B homolog</i>
	Second	Susan Jao	Commack High School	<i>Monitoring the Expression and Virulence Roles of Chaperone/Usher Pathways in Yersinia pestis</i>
	Third	Anand Bradley, Reva Abrol	W.C. Mephram High School	<i>The Effect of HAT Activator and HDAC Inhibitors on Pink-1 and Pdr-1 Gene Expression in C. elegans</i>
	Third	Christina Cabana	Commack High School	<i>The Effects of Sub-therapeutic Antibiotic Treatment on Spatial and Temporal Variation of the Mouse Gut Microbiome As Determined Through Colon and Fecal Samples</i>

	Honorable Mention	Ally Hart, Elizabeth Arenare	Manhasset	<i>The Use of Vibrio fischeri and Other Bacteria as Biosensors to Detect Heavy Metal Solutions</i>
	Honorable Mention	Sherry Simkovic	North Shore Hebrew Academy High School	<i>The Evaluation of the Methodology of His-tagged Protein Expression in Transfected Escherichia Coli</i>
Physics and Astronomy	First	Ganesh Ravichandran	W. T. Clarke High School	<i>Close Companions to Kepler Objects of Interest: Results From a Large Adaptive Optics Survey</i>
	Second	Yong Wun Lee	Plainview Old Bethpage JFK HS	<i>Discovery of New Wide Binary Star Systems Within 150 Parsecs of the Sun Using the Hubble Legacy Archive</i>
	Third	Sandhiya Kannan	Half Hollow Hills High School West	<i>The Exposure Timeâ€™Sensitivity Dependence of the High-Contrast Imaging Method for the Detection of Extrasolar Planets</i>
	Honorable Mention	William Chan, Hunter Dong	Syosset High School	<i>A Determination of Limits on Mass, Orbital Radius, and Eccentricity for a Potential Exomoon Orbiting Exoplanet Orbiting Kepler-8b</i>
	Honorable Mention	Deriam Chirinos	John L. Miller Great Neck North High School	<i>A Look at the Quantum World Using Random Matrices to study the QCD Hadron Spectrum</i>
Plant Sciences	First	Samantha DiSalvo, Ryan Kenny, Amy Vitha	GW Hewlett High School	<i>The Characterization of the LPS-Induced Hypersensitive Response in Ceratopteris richardii</i>
	Second	David Velez, Brandon Levokove	Long Beach High School	<i>Sustaining Plant & Soil Quality III: The application of mycorrhizae inoculation in mitigating stress caused by salt intoxication and degraded soils on Triticum aestivum</i>
	Third	Michael Cassano	Garden City High School	<i>DNA Barcoding of Agalinis acuta Host Species in the Hempstead Plains</i>

	Third	Sumaiya Chowdhury, Reyna Guzman	Brentwood High School	<i>The Effect of Zinc Oxide on the Phytotoxicity of Brassica rapa</i>
	Honorable Mention	Robert Myrick	Sewanhaka High School	<i>Pine Sap as an Alternative Heat Source</i>
	Honorable Mention	Mahesh Tiwari	Floral Park Memorial High School	<i>Detoxifying Cyanogenic Glycosides in the Root of M. esculenta Through Practical Processing Methods</i>