

	Mention		School	<i>Biotas on Apoidea Diversity</i>
		Lauren Reisig	Massapequa High School	<i>The Effect of EXL-1 and DBL-1 in Thermotolerance in Caenorhabditis elegans</i>
		Anuja Shah	Jericho High School	<i>Deficiency Mapping of J1927 EMS Mutant to Identify Novel Role in Epithelial Tube Morphogenesis in Drosophila melanogaster</i>
Behavior and Social Sciences	Award	Name	School	Title
	First	Sarah Pak	Roslyn High School	<i>Factors Involved in the Prediction of Intergenerational Preferences</i>
		Samantha Phillips	William A. Shine Great Neck South High School	<i>Strategies utilized by people with autism and neuro-typical individuals to determine emotion in faces</i>
	Second	Zachary Goodman	William A. Shine Great Neck South High School	<i>Noninvasive Modulation Of Cognitive Abilities With Transcranial Ultrasound: Implications For Future Brain Machine Interfaces</i>
		Japbani Nanda	W. T. Clarke High School	<i>The Effect of Various Substances on the Expression of APL-1 in Caenorhabditis elegans</i>
		Caroline Trezza	W. T. Clarke High School	<i>The Effect of Various Substances on the Expression of APL-1 in Caenorhabditis elegans</i>
	Third	Robert Guber	Jericho High School	<i>Novel use of extinction training as a treatment for cocaine dependence</i>
		Katelyn Fletcher	Half Hollow Hills High School East	<i>The Romantic Beliefs of Adolescents and their potential correlates</i>
		Michelle Hackman	John L. Miller Great Neck North High School	<i>Communication Underload: Validating the Existence of Disconnect Anxiety</i>
		Amanda Lindner	Bellmore John F Kennedy High School	<i>Exploring the Function of the Posterior Parietal Cortex During an Auditory Discrimination task</i>

	Honorable Mention	Taylor Trentadue	Smithtown High School East	<i>The Correlation between the Frequency of Cell Phone Text Messaging and the Occurrence of Symptoms of Orthopedic Trauma to the Joints of the Hand</i>
		Ross Dispenza	William A. Shine Great Neck South High School	<i>Mind Over Mind: Neuropsychological Executive Functions and Reading Comprehension</i>
		Michelle Feldman	Roslyn High School	<i>Which Name Unlocks the Door? The Effect of a Tenant's Race/Ethnicity and Gender on Landlord Response</i>
		Zakiya Jamal	Valley Stream North High School	<i>The Effect of Sibling Relationships on Altruistic Behavior</i>
		Alexander Kusher	Plainview Old Bethpage JFK High School	<i>Combating Teacher Turnover Through the Understanding of Teachers</i>
		Alexandra McHale	Smithtown High School East	<i>The Effects of Increased Availability of Cell Phone Technology on Behavioral Dependence</i>
		Elizabeth Oh	Plainview Old Bethpage JFK High School	<i>perceptions on undocumented immigration: effects of SB1070</i>
		Samantha Palmer	Paul D. Schreiber High School	<i>Teenagers' Entitlement Beliefs about Automobiles</i>
		Lindsay Pearlman	Syosset High School	<i>"Global Warming Is A Scam": An Investigation Of Perception</i>
		Nicole Sayles	Oceanside High School	<i>The effect of hair product use on age at menarche and its relation to breast cancer</i>
		Raazia Syedda and Kelly Taveras	Sachem High School East	<i>Monitoring the Influence of Subliminal Print Advertising Using an Electroencephalogram</i>
		Biochemistry	Award	Name
First	Jan Gong		Garden City High School	<i>All-Atom Molecular Dynamics Simulations</i>

				<i>of Staped p53/hDM2 Interactions: Modeling a Novel Cancer Therapeutic Agent</i>	
		Dianna Hu	Half Hollow Hills High School West	<i>Computational Analysis of Specific Missense Mutations in the SMN Tudor Domain</i>	
	Second	Ruchi Shah	Sachem High School North	<i>Mosquitoes Be Gone!</i>	
	Third	Brian Miranda	William A. Shine Great Neck South High School	<i>Molecular dynamics simulations suggest a structural basis for the slow-onset inhibition of KasA by thiolactomycin and provide insights for TB drug discovery</i>	
		April Pun	Jericho High School	<i>The Effects of Von-Hippel Lindau (VHL) and Phosphatase and Tensin Homolog Tumor Suppressor Gene Expressions on Autophagy and Apoptosis Levels</i>	
	Honorable Mention	Zachary Zeller	Oceanside High School	<i>Optimization of Purification and Crystallization of the Repair Polymerases eta, iota, and lambda</i>	
		Deanna Zhu	Syosset High School	<i>Activation and Assembly of the Human Apoptosome</i>	
	Cellular and Molecular Biology	Award	Name	School	Title
		First	Savina Kim and Neil Mehta	Commack High School/ Jericho High School	<i>Impaired Localization of AChRs in Neurons by a Novel Missense Mutation in Type III Nrg1</i>
			Blake Smith	Oceanside High School	<i>Correcting dysregulated splicing of the KLF6 gene in pancreatic cancer using modified antisense oligonucleotides</i>
Second		Juliana Coraor and Lina Lin	Huntington High School/ Plainview Old Bethpage JFK High School	<i>Retention of Osteoblastic Characteristics in Differentiated Dental Pulp Stem Cells: Can Stem Cells Learn and Remember?</i>	

	Third	Angela Kim	William A. Shine Great Neck South High School	<i>Genetic Screens to Uncover Genes Affecting Left/Right Asymmetry in C. elegans</i>
		Ashley Chapin	Lawrence High School	<i>The effect of GABAA receptors in invadopodia production and migration of MCF-7 breast cancer cells</i>
		Jeremy Sacks	Hebrew Academy Of The Five Towns And The Rockaways	<i>Comparing the Effects of Micropatterning on Osteoblasts and Osteosarcoma Cells</i>
		Sarah Toledano	North Shore Hebrew Academy High School	<i>Strychnine Distinguishes Between Two Populations of a1 Glycine Receptors in HEK Cells</i>
	Honorable Mention	Sahil Doshi	Paul D. Schreiber High School	<i>The role of the Klf6 Gene Family in ovarian cancer chemoresistance</i>
		Jonathan Edelstein	HALB DRS Yeshiva High School For Boys	<i>Znp-1 Stains A New Cell Population in Rabbit Retina</i>
		Michael Graf	Paul D. Schreiber High School	<i>Developement of an Ultra Sensitive Protein Assay To Quantify Human Leptin Concentrations</i>
		Abaham Killanin and Evan Schneider	Lawrence High School	<i>Gold and Platinum Nanoparticles</i>
		Maria Passarelli	South Side High School	<i>Optimizing Expression of Chemokine CCL3 for Use in Tests of Cross- Reactivity and in Humanized Mice</i>
	Chemistry	Award	Name	School
First		Neil Pathak	Herricks High School	<i>Polyfunctionalized Single-Walled Carbon Nanotubes as Novel Scaffolds for Multimodal Tumor-Targeted Therapy and Biological Imaging</i>
Second		Jenny Wu	Sanford H. Calhoun High School	<i>Synthesis, Biological Evaluation, and Potential Synergism of Taxoid SB-T-1214 and</i>

				<i>Topotecan in Tumor-Targeting Drug Conjugates</i>
	Third	Sarah Chapin	Herricks High School	<i>Factors that Affect Aluminum Corrosion: Investigation of Chloride Acceleration of the Copper-Aluminum Redox Reaction</i>
	Honorable Mention	Sukjin Jang	Commack High School	<i>Developing a Novel Phototrigger for Drug Delivery</i>
		Christopher Murphy	Sanford H. Calhoun High School	<i>Evaluating Dibenzoylfuroxans as Nitric Oxide Releasing Agents</i>
Computer Science	Award	Name	School	Title
	First	Gregory Manis	Bellmore John F Kennedy High School	<i>The Design and Implementation of a Dialect of Scheme on the GPU for Parallel Processing</i>
	Second	Sagar Rambhia	Jericho High School	<i>Risk Assessment of Abdominal Aortic Aneurysm Rupture via Fluid-Structure Interaction Simulations</i>
	Third	Quan Zhou	Half Hollow Hills High School West	<i>Monte Carlo Simulations of Unbound High-Mannose Oligosaccharides Found on the HIV gp120 Envelope Protein</i>
	Honorable Mention	Taha Ahmad	Half Hollow Hills High School West	<i>Spike Sorting From Multiple Microwire Electrodes: Maintaining a High Neuron Yield with Minimal Overcounts</i>
		Benjamin Hawriluk	South Side High School	<i>Leveraging Genome-Wide Association Studies: A Novel Pancreatic Cancer Pathway Analysis through an Original and Integrative Multi-Variable Algorithm</i>
Earth & Planetary Sciences	Award	Name	School	Title
	First	Marni Wasserman	Commack High School	<i>Investigating Climate Change: Analysis of Colonial and Modern Weather Data</i>

	Second	John Tyler Blank	West Islip High School	<i>The Effect of Climate Variations on Parabolic Dune Formation: Insights from a Dendrochronologic Study in the Walking Dune Field, Napeague, NY</i>
	Third	Nickolas Boroda	Massapequa High School	<i>Hurricane Signatures within Tree Ring Records, Fire Island New York</i>
	Honorable Mention	Shira Polan	Syosset High School	<i>Evaluation of Grain Size, grain color, presence of organic material, and dryness on the usefulness of the spectrophotometer in characterizing sediment core samples</i>
		Austin Rutcofsky	Plainview Old Bethpage JFK High School	<i>Temperature anomalies in the Pine Barrens of Eastern Long Island</i>
Engineering: Electrical & Mechanical	Award	Name	School	Title
	First	Ishwarya Ananthabhotla	Kings Park High School	<i>A Robotic Assistant for the Visually Impaired (RAVI): A Novel Autonomous System Employing Digital Image Tracking and Sonar Range Detection</i>
	Second	Isaac Doustar and Ethan Zisholtz	North Shore Hebrew Academy High School	<i>Fundamental Studies of Factors Affecting Ash Accumulation and Packing in Diesel Particulate Filters – Implications for improved Fuel Economy and Reduced Emissions.</i>
	Third	Thomas McCune	Half Hollow Hills High School East	<i>Dynamic Measurement of Electrical Properties of Vertically Aligned Carbon Nanotube (VACNT) Arrays as a Function of Compression</i>
	Honorable Mention	Christopher Chu Cheong	General Douglas Macarthur High School	<i>Testing the Effects of Various Electrolyte Strengths and Separator Thickness upon Ultracapacitor</i>

				<i>Performance</i>
		Daniel Cykman and Michael Emerson	Smithtown High School West	<i>Invention of a Portable Solar Tracking Device for Rural Areas in Developing Countries</i>
		Eugene Lee	Manhasset High School	<i>Rectenna Circuit Design for Wireless Power Transmission</i>
Engineering: Materials & Bioengineering	Award	Name	School	Title
	First	Shyam Venkateswaran	Herricks High School	<i>Synthesis, Characterization, and Biological Evaluation of a Novel Biomaterial for Post-Lumpectomy Breast Reconstruction</i>
		Second	Julie Chang	Herricks High School
	Joel Thomas		Syosset High School	<i>The Bi-frame Shingle: An Effective Method to Mitigate The Green House Effect by Means of Radiative Forcing</i>
	Third	Elie Flatow	North Shore Hebrew Academy High School	<i>Cell Migration: The effects of fiber spacing, diameter and angle of PMMA electrospun fibers, on the migration velocity and distance of dermal fibroblasts and rat osteosarcoma cells</i>
		Shujat Khan	East Meadow High School	<i>The effect of additives on the strength of concrete</i>
		Shamoon Rizvi	East Meadow High School	<i>The effect of additives on the strength of concrete</i>
	Honorable Mention	Holly Flores and Neha Kinariwalla	Huntington High School/Sayville High School	<i>Dental Pulp Stem Cell Growth and Differentiation on Various Polystyrene, Polybutadiene, Poly(4-vinylpyridine) Copolymer Substrates</i>
		Matthew Gallitto	Bellmore John F Kennedy High School	<i>The Impact of System Pressure and Performance on Gradient Delay Volume</i>

				<i>in HPLC Pumps</i>
		Andrew Ren	Plainview Old Bethpage JFK High School	<i>Novel Deposition and Location of Single Layer Graphene on Ferroelectric Substrates</i>
Energy & Transportation	Award	Name	School	Title
	First	Nathan Akhavan and Benjamin Goldman	Rambam Mesivta High School	<i>Incorporating Graphene and Graphene Oxide into Organic Polymer Solar Cells to Increase Efficiency</i>
	Second	Karan Sikka and Gurpreet Singh	Syosset High School/ Half Hollow Hills High School West	<i>A Temperature Investigation of Au/Pd Nanoparticle Catalysis for Applications in a PEM Fuel Cell</i>
	Third	Anthony Albanese	H. Frank Carey High School	<i>The Effect of Graphene Production and Placement on the Efficiency of PEM Fuel Cells</i>
	Honorable Mention	Michael Ho	Sewanhaka High School	<i>Utilizing piezoelectric transducers to harvest wave energy as an alternative energy source</i>
		Benjamin Sorkin	Half Hollow Hills High School East	<i>Effects of Variant Propeller Pitch on Marine Craft Performance and Fuel Efficiency</i>
	Environmental Management	Award	Name	School
First		Hannah Berkowitz and Jacqueline Bokor	Long Beach High School	<i>Enhancing Biofilters III: The impact of abscisic acid on the sequestration of heavy metals by Euglena gracilis</i>
Second		Akhil Sharma and Michael Zhou	Herricks High School/ Jericho High School	<i>Finding Biodegradable Alternatives for Petroleum-Based Polymers</i>
Third		Matthew Kim	Commack High School	<i>Improving Pure Water Availability: Optimizing Flux in Reverse Osmosis Membranes</i>
Honorable Mention		Peter Connell	Oceanside High School	<i>The Environmental Impact Of Andean Coca Cultivation: Past, Present, And Future</i>
		Jeremy Kline, Alan Mohr and	Sachem High School East/	<i>Microbial Biofilm As A Remediation Tool For</i>

		Daniela Plunkett	Sachem High School East/ Elwood-John H. Glenn High School	<i>Copper Contaminated Freshwater</i>
Environmental Sciences	Award	Name	School	Title
	First	Elan Heller and Eric Rubin	Long Beach High School	<i>Allelopathy: A potential method for invasive plant species control</i>
		Arienne Papa and Jane Smyth	Long Beach High School	<i>Mussels, a natural approach to sewage treatment: Evaluating Geukensia demissa as biofilters of local bay pollution</i>
	Second	Ijeamaka Anyene, William Genova and Lauren Herrera	Brentwood High School	<i>The Encapsulation of Microbes and Their Efficacy at the Degradation of a Crude Oil</i>
		Nirmita Doshi and Fahmida Rashid	Herricks High School	<i>Microfiltration for the Removal of Bacteria and Viruses</i>
	Third	Ali Foote	West Islip High School	<i>Microcystis HABs: Environmentally Induced Toxicity</i>
		Caroline Hsiao	Manhasset High School	<i>Effects of Opiate on Gene Expressions of Healthy and Cancerous Human Cells-its Implication with Malathion Contamination</i>
		Nidhi Mann and Danielle Scarano	Plainview Old Bethpage JFK High School	<i>Emulsification of Crude Oil by Modified Sophorolipid Analogs</i>
	Honorable Mention	Michelle Chipetine	West Hempstead High School	<i>Environmentally Conscientious Method of Using Copernicia Cerifera Wax and Apis Mellifera Wax to Create Biodegradable Plastic</i>
		Robert Cornacchia	Long Beach High School	<i>Optimizing Carbon Dioxide Uptake by Phytoplankton Biomass</i>
		Ruby Escalera-nater	Freeport High School	<i>PCR Used to Delineate the Effects of the Herbicide Weed-B-Gone on Drosophila melanogaster</i>
		Ari Turkiewicz	Plainview Old Bethpage JFK	<i>Preparation and Characterization of</i>

			High School	<i>PEGDA-Methacryl POSS and PEGDA-CNF Hydrogels as Nanofiltration Coating Materials</i>
Mathematical Sciences	Award	Name	School	Title
	First	Elise Meade	Sanford H. Calhoun High School	<i>The Mathematics of Breast Cancer: A Comparison of the Gompertz and Logistic Equations in Terms of Tumor Carrying Capacity</i>
	Second	Hilary Mogul	Paul D. Schreiber High School	<i>Some Consequences of Dumas' Theorem of Irreducibility</i>
	Third	York Kitajima	Paul D. Schreiber High School	<i>New Lower Bound for the Effective Differential Nullstellensatz</i>
Medicine & Health Sciences	Award	Name	School	Title
	First	Shaunak Bakshi	Manhasset High School	<i>Characterization of Tyrphostin AG879 as a Novel Selective Modulator of Amyloid Precursor Protein Gamma-Secretase: Towards Safe Neuroprotective Therapy for Alzheimer's Disease</i>
		Alan Czemerinski, Kelsey McKenna and Tom Wang	The Wheatley School/ South Side High School/ The Wheatley School	<i>3-Dimensional Bio-Imprinting and Potentiometric Detection of Proteins and Viruses</i>
	Second	Nawal Ahmed	Valley Stream South High School	<i>Immunotherapy for Type ii diabetes</i>
		Jake Cohen	Half Hollow Hills High School East	<i>Investigation of Neurite Outgrowth in Nanomaterial Laden Biomaterials</i>
		Rana Ibrahim	Half Hollow Hills High School West	<i>Morphological Evidence that a TGF-Beta Receptor Inhibitor Reverts a Metastatic Breast Cancer Cell Line into a Less Invasive Ductal Carcinoma</i>
	Third	Jeffrey Caso	Sanford H. Calhoun High School	<i>Diagnostic Duplicity: An Eye-Track Study to Evaluate the Differentiability of</i>

				<i>Auditory Processing Disorder and Specific-Language Impairment</i>
		Matthew Katz	Commack High School	<i>The Effect of Race/Ethnicity on the Age of Colorectal Cancer Diagnosis</i>
		Nicole Knudsen and Nicole Seitter	Northport High School	<i>Transplantation-Based Replacement of Astrocyte Glutamate Transporters: Neuroprotective Treatment Strategies for ALS and Spinal Cord Injury.</i>
		Chrisite Wang	Roslyn High School	<i>A Novel Role of Cold Shock Protein in Mediating Hypoxia-induced Inflammation in Microglia: Implications in Alzheimer's Disease</i>
	Honorable Mention	Bethanne Bartscherer	Mineola High School	<i>Comparing Novel Cholinergic Agonists</i>
		Madona Gadalla	Elmont Memorial High School	<i>The Surface Decoration of Red Blood Cells: Masking Blood Group Antigens to Create Universal Blood Cells</i>
		Dorothy Kim	Paul D. Schreiber High School	<i>Correlations between Chronic Lymphocytic Leukemia and Activation-Induced Cytidine Deaminase</i>
		Grace Kim	Jericho High School	<i>A Novel Approach For The Development Cell-Based Malaria Vaccine:Artificial Fusion Between Dendritic Cells And Parasitized Rbcs</i>
		Rebecca Klahr and Angelina Seffens	Hebrew Academy Of The Five Towns And The Rockaways/ Smithtown High School West	<i>Single Cell Detection of Cancer and Ultraviolet Radiation</i>
		Yifan Li	William A. Shine Great Neck South High School	<i>Decreased density of NOS interneurons in the striatum of individuals with Tourette Syndrome</i>
Sam Sussman	Lawrence High School	<i>Coffee Each Day Keeps the Alzheimer's at Bay: Cytokine Modulation</i>		

				<i>Effects of Coffee</i>		
		Award	Name	School	Title	
Microbiology	First	Erica Portnoy	Commack High School	<i>A Novel Approach to Mapping Protein Interactions During Pilus Biogenesis by Using in vivo Photocrosslinking</i>		
		Bilal Siddiqui	W. C. Mephram High School	<i>The Effects of Indoleamine 2, 3-dioxygenase Expression on Tumor-Induced Immunosuppression</i>		
	Second	Louis Dietchweiler and James Hwang	Plainview Old Bethpage JFK High School	<i>Isolation and Identification of Anti-Tuberculosis Active Fungal Metabolites</i>		
		David Miao and Amir Rashed	Sachem High School North	<i>The genesis of capsaicin based soap and its inhibitory effects of S. Mutans</i>		
	Third	Brittany Ciesluk	West Islip High School	<i>The effectiveness of bacteriophage T4 and amoxicillin on cessation of biofilm formed by E. coli</i>		
		Zakaria Seghrouchni and Griffin Shapiro	Long Beach High School	<i>The synergistic effects of ultrasound on the breakdown of oil using alcanivorax borkumensis</i>		
	Honorable Mention	Kristina Hendel	Oceanside High School	<i>The role of protein kinase C (PKC) in Dictyostelium discoideum cytoskeletal function</i>		
		Harris Weber	Syosset High School	<i>The inhibitory capacity of Coomassie G-250 and role of P2X receptors within Dictyostelium discoideum for bulk-fluid transport, chemotaxis, and mechanical stress response.</i>		
			Award	Name	School	Title
	Physics and Astronomy	First	Alina Ranjbaran and Andrew Rosen	Garden City High School/ Half Hollow Hills High School West	<i>Optimizing the Data Collection of the Proton Electric Dipole Moment Experiment</i>	
Second		Sahir Raouf	Jericho High	<i>Isolation and</i>		

			School	<i>Optimization of the Radial Electric Field for the Proton Electric Dipole Moment Experiment</i>
	Third	Harry Chiang	John L. Miller Great Neck North High School	<i>New determinations of the transport and thermodynamic coefficients of the quark gluon plasma</i>
		David Kaufman	John L. Miller Great Neck North High School	<i>Searching for Signal: Statistical Analysis of High Energy Particle Collisions</i>
	Honorable Mention	Mark Hamilton	South Side High School	<i>Frequency Selective Filters for Broad Band Applications in Solar Cells</i>
		Ashley Peter	Manhasset High School	<i>Establishing Parameters to Identify Earth-like Exoplanets in Kepler Mission Data</i>
		Kevin Schmid	North Babylon High School	<i>A Revolutionary Application of a Particle Detector: Using a Tracker to Detect and Analyze Cosmic Rays</i>
Plant Sciences	Award	Name	School	Title
	First	Justine Li and Serife Uzun	Jericho High School	<i>Analysis of bornyl cinnamate (Liquidambar formosana Hance exudate) anti-inflammatory effect on RAW 264.7 murine macrophage cells</i>
		Brandon Levokove and David Velez	Long Beach High School	<i>The effects of mycorrhizae inoculation and its ability to mitigate stress induced by pollution on Poa pratensis</i>
	Third	Adam Getzler	Plainview Old Bethpage JFK High School	<i>The Effect of Boron Deficiency on Gene Expression and Boron Compartmentalization in Betas vulgaris Subspecies Sugarbeet</i>
		John Nolan	East Hampton High School	<i>The Effects of Vertical Rotation on Corn Seed Root Hair Development</i>
	Honorable Mention	Andrew Hurst and Zachary	Long Beach High School	<i>The utilization of gluconobacter oxydans</i>

		Klein		<i>in the production of ascorbic acid in glycine max.</i>
		Godwin Sotome	Uniondale High School	<i>A Case for Soil Amendments: The Use of Animal and Plant Products to Enhance and Enrich the Soil without the use of Fertilizers</i>