

Category	Placement	Student Name(s)	School	Project Title
General Biology	1st	Amelia Abell	Paul D. Schreiber High School	Dietary supplementation of betaine hydrochloride's effects on respiratory and metabolic rates in <i>Grylodes sigillatus</i>
		Siddharth Gilra	Great Neck South High School	Modeling RNA-Binding Protein Regulatory Interactions and Expression Networks within Retinoblastoma Single Cell RNA Sequencing (scRNA) Datasets
		Nehan Hoque	Herricks High School	The Abundance of EMT-like Cells in the Diabetic Pancreas is Dependent on Duration of Diabetes
		Andrew Lee	Jericho High School	A Cell-type-specific Expression and Protein Interaction Approach to Identify Autism Risk Genes
		Vivek Turakhia	Syosset High School	Aluminum Hydroxide induced Dopaminergic Neuron Degeneration and α -synuclein aggregation in the <i>Caenorhabditis Elegans</i> Model of Parkinson's Disease
		Hanah Youn & Aasiya Zaidi	Roslyn High School	The Effect of Dichroic Optical Filters on the Emission of Blue Light Radiation and Plant Photomorphogenesis
		Kevin Zhu	Jericho High School	Recurrent Repeat Contractions: Investigating a Novel Genomic Factor of Polymorphism in 10 Human Cancers
	2nd	Brayden Chien & Harvey Long	Great Neck South High School	The effect of downregulation of PI3K signaling pathway by XL147 on amyloid-beta concentration in <i>Drosophila melanogaster</i>
		Danielle Seidman	Paul D. Schreiber High School	Measurements of Circadian Rhythm in <i>Drosophila Melanogaster</i>
		Richard Zhuang	Great Neck South High School	Using planarian regeneration and molecular docking to assess the effect of aminomethylphosphonic acid on the Wnt signaling pathway
	Honorable Mention	Stephany Barbu	Great Neck North High School	The Dependency of <i>Odontotaenius disjunctus</i> - Bess Beetle - on its Group in Order to Make Path Related Decisions
		Emily Bersin & Samantha Friedler	Paul D. Schreiber High School	The Effect of White Light - Caffeine - and the 528 Hz Solfeggio Frequency on <i>Caenorhabditis Elegans</i>
		Bianca Cinquemani and Anna Limb	Manhasset High School	L-Ascorbic Acid Reduces Amyloid-Beta Plaques associated with Alzheimer's disease in <i>C. elegans</i>
		Saia Kalash	Great Neck North High School	The Effect of <i>Medicago sativa</i> Grown with Different Plant Species on its Allelopathic Strength
		Addison Klebanov	Great Neck North High School	Bioluminescent Bacteria: The Effect of Oxygen on the Luminosity of <i>Vibrio Fischeri</i>
		Hannah Lee	Paul D. Schreiber High School	Antimicrobial Effects of Varying Mechanisms of Action against gram-positive bacteria - <i>Bacillus subtilis</i>
		Allison Lulov and Sophia Zouak	Manhasset High School	The Effect of Chronic Oxidative Stress on the Pathology of SOD-1 Induced Familial ALS and Alzheimer's Disease - and Li ⁺ as a Therapeutic Agent
		Melina Nicou	Commack High School	The Effects of Zinc Chloride on the Progression and Development of Cognitive Decline in Alzheimer's Disease in <i>Drosophila melanogaster</i>
		Jonathan Sanders	Great Neck North High School	The effect of 1-naphthaleneacetic acid on the growth of <i>Agaricus bisporus</i>

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Biochemistry	1st	Lakxshanna Raveendran	Commack High School	Characterizing the Secretion of the Francisella Protein FTL_1123
		Lucas Sher	Jericho High School	Identifying Biomarkers in the Conversion of Pancreatic Ductal Adenocarcinoma (PDAC) Subtype
		Melody Song and Zoe Zhang	Great Neck South High School	P1 Consumption of Polyethylene Microplastics Effects on F1 Drosophila Melanogaster
	2nd			
	Honorable Mention	Julia Moosikasuwan & Victoria Yang	Manhasset High School	The Remediation of Amyotrophic Lateral Sclerosis With Trehalose in C. elegans
		Pooja Patel	Herricks High School	Implementing a Novel In Vitro 3D System to Mimic the Human Bone Marrow Microenvironment in Acute Myeloid Leukemia
		Ethan Wang	Jericho High School	Gut microbiota and Alzheimer's disease: Investigating the role of copper and CCL11 dysregulation
		Leo Zhang	Jericho High School	Investigation of Rutin on Benzene-treated U937: A Focus on TNF- α and Superoxides

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Medicine and Health	1st	Emily Benson-Tyler	Paul D. Schreiber High School	Analyzing sentence content and nature of paragrammatic errors in bilingual patients with aphasia
		Griffin Hon	Syosset High School	Repurposed Cephalaxin Causes Multifaceted Pro-cancer Effects by Way of Wnt Signaling Pathway
		Natalia Pahlavan	Jericho High School	Automatic Diagnosis of the 12-lead Electrocardiogram: Cardiac Arrhythmia Detection Using a Deep Learning Approach
		Tiffany Zhang & Yida Pan	Great Neck South High School	Treating Dilated Cardiomyopathy with Methylene Blue Using the Drosophila melanogaster Heart Model
	2nd	Nicole Gabriel	Southside High School	Investigating the Mechanism Through Which COVID-19 Induces Microthrombosis on Endothelial Cells
		Vivien Huang	Syosset High School	Clinical Assay Using Immunoglobulin Gene Rearrangement for the Detection of Multiple Myeloma Relapse
		Jeylin Lee	Herricks High School	The Effect of Prophylactically Prescribed Anticoagulants and Dose Regimen on Prevalence of Venous Thromboembolism After COVID-19 Diagnosis
		Camryn Neches	Paul D. Schreiber High School	Quantifying the Structural and Biochemical Differences in p53 Mutations to Assess Impact on Oncogenesis
		Janice Rateshwar	Jericho High School	Novel Small Molecule IT-848* Treatment of Hematological Malignancies: IT-848 Direct Inhibition of NF-κB and Combination Treatments
		Chloe Zhang	Jericho High School	Predictive Identification of Major Depressive Disorder using segmented sMRIs: CNNs with Transfer Learning
	Honorable Mention	Alyssa Bhagan	The Wheatley School	Memory: How It Works and How It Can Be Improved
		Brandon Kim & Eleanor Gau	Great Neck South High School	Effect of Homogeneous vs Heterogeneous Combination Dual Beta-lactam Antibiotic Therapy on Antibiotic Resistance in Pseudomonas fluorescens
		Belinda Lin	Roslyn High School	The Effects of Meat Consumption on the Risk of Esophageal and Gastric Cancer
		Lucas Milgrim	Paul D. Schreiber High School	Effect of different wavelengths of light on the reaction time of Planaria
		Liam Regan	Paul D. Schreiber High School	Effects of Vitamins B12 - E - and K on Freshwater Planarian Regeneration
		Rushil Saini	Herricks High School	Statistical Advancements on the Relationship Between Fat and the Gut Microbiome
		Amber Sun	Great Neck South High School	Evaluation of Raspberry Powder to ameliorate symptoms in a Transgenic Drosophila Model of Alzheimer's Disease
		Maxx Yung	Roslyn High School	Activation of the Mu-Opioid Receptor on the Renin-Angiotensin System and Its Role COVID-19 Treatment and Pathology
		Ishaan Zaveri	Great Neck South High School	Evaluating Gene Expression of Mice Caused by Traumatic Brain Injury Resulting in an Immuno-Deficient Response and Analyzing Differences Between the Implications in Different Partitions of the Mice Brain

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Behavioral/Social Science	1st	Dana Kagan and Emma Maliar	Great Neck South High School	Exploiting machine learning to evaluate the differential effects of categories of social support on health-related quality of life in individuals with food allergies
		Alexandra Kanner & Madeline Skopicki	Roslyn High School	Perceptions of Individuals with Autism
		Jake Konigsberg	Roslyn High School	The Effect of Note Taking on Memory Retention
		Natasha Kulviwat	Jericho High School	Neurocognitive Tasks: Novel Markers to Predict and Prevent Adolescent Suicidal Behavior
		Nikita Soleymani	Great Neck North High School	The Effect of Social Media Validation & Time Spent on Social Media on User Self-Perception
	2nd	Kenneth Chang	Great Neck South High School	Determining Relationships Between Multidimensional Perfectionism - Student Engagement - and Procrastination in High School Students
		Megan Cheng	Herricks High School	A study on sex differences in episodic memories over time
		Elle Kaplan	Roslyn High School	Player or "Player": The Effect of Pose and Uniform on Perceptions of Female Athletes
		Arya Sinha	Roslyn High School	The Effect of Different User Interface Designs on Reaction Times and Stress
		Blake Sohmer and Evalia Koumpourlis	Roslyn High School	The Salience of PPP; The Effect of the Placement of a Price per Pill on Perceived Value and Likelihood to Purchase
		Sue Zhang	Great Neck North High School	The Correlation Between Negative Implicit Attitudes Against Asians And Stereotyping Chinese-Sounding Words
	Honorable Mention	Shayla Ali	Roslyn High School	Gender and Age Differences in Financial Traits and Investment Behavior
		Brian Asnadi	Great Neck North High School	Distance From Home vs. Performance: A Study of the Effect of an NBA Team's Distance Away From Their Home Arena on Their Statistical Performance
		Ethan Berkowitz, Sophia Glass, and Justin Marguilles	Roslyn High School	Unmasking Masks
		Rachel Kwon	Roslyn High School	Investigating Bias Against Interracial Asian-White Couples
		Daphne Lin & Stephanie Yeh	Roslyn High School	The Effect of Emojis in Advertisements on Consumer Purchase Intentions
		Annie Marcus, Jessica Zucker, Mallory Sorkin	Roslyn High School	The Concerning Effects of Distracted Driving
		Julia Oh	Great Neck South High School	The effect of smartphone salience and dependency on cognitive capacity in adolescents
		Sara Rosenbaum	Roslyn High School	Effect of Photoshop and Number of Likes on Self Esteem - Body Satisfaction - and Social Comparison

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Chemistry	1st	Alex Wang	Syosset High School	Computational Assessment of Macrocyclic Host-Guest Ion-Dipole Interactions with Negatively Charged Pores
	2nd	Nicole Yeroushalmi	Great Neck North High School	The Effect of Electric Currents on Chemical Clock Reactions
	Honorable Mention	Sahaj Pandey	Commack High School	Prototype of a Carbon Dioxide Separation and Capture System from Flue Gas in an Industrial Setting with the Use of Nanoporous Materials

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Earth and Environmental Science	1st	Rebecca Cho	Jericho High School	Reconstruction modeling using tectonics and climate of western North America
		Emily Kim	Jericho High School	Synergistic removal of RB5 by activated carbon under UV irradiation
		Ashley Lam	Herricks High School	Nassau County - New York's Drinking Water Quality: Using StoryMap as an Educational Tool to Reduce Bottled Water Consumption
		Emily Theodoscopoulos and Adam De Leeuw	Manhasset High School	Engineering dye-sensitized solar cells through various optimization techniques
	2nd	Prableen Kaur	Herricks High School	Legacy Effects of a Defoliating Spring Frost Event on Species-Specific Growth - Leaf Level Photosynthesis and Water Use Efficiency
		Janna Kothe	Paul D. Schreiber High School	The effectiveness of Biochar and Stropharia rugosoannulata enriched mycofiltration for the removal of nitrate and ammonia in stormwater
		Eliana Linder	Manhasset High School	Which type of cool roof is most effective for maximizing the amount of heat reflected and therefore minimizing energy use?
		Kira Nguyen	Great Neck South High School	Bio-Adsorption of Safranin (Basic Red 2) from Aqueous Solutions Using Sulfuric Acid Modified Citrullus lanatus Rind as an Effective Low-Cost Adsorbent
		Grace Punzalan	Manhasset High School	The Effect of Lemna minor on Copper-induced Neurodegeneration in Daphnia Magna
	Honorable Mention	Jonah Casey	Manhasset High School	The Removal Efficiency of Various Methods of Bentonite Clay Fumigation on Removing Karenia Brevis from the environment.
		Kiera Darnell	Paul D. Schreiber High School	Modelling potential coastal erosion using historical hurricane scenarios
		Mitchel Ghermezian	Commack High School	Measuring CO2 Content in Classrooms
		Madeline Rong	The Wheatley School	The Use of Pseudomonas fluorescens to Biodegrade Spilled Motor Oil
		Matthew Shao and Jordan Li	Manhasset High School	Moringa oleifera as a Successful Treatment for Remediation of Methylene Blue Contaminated Water
		Olivia Teng	Herricks High School	The Effect of Exogenous and Temporal Factors and Climate Events on Long Island Tree Ring Growth and Resiliency: A Comparison Study
		William Tsay	Manhasset High School	Effect of calcium carbonate and sodium hydroxide on Raphanus sativus height - maximum leaf length - root size - and germination rate to assess salt remediation

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Physics & Astronomy	1st	William Wesson and Zachary Rho	Manhasset High School	Effects of Recyclable Composites on Soundproofing Ability
	2nd	Melvin Thu	Great Neck North High School	Badminton Shuttlecock Aerodynamics: Analysis of differences between feather shuttles and synthetic plastic shuttles
	Honorable Mention	Chloe Andersen	Paul D. Schreiber High School	Characterizing MicroBooNE Muon Neutrino Interaction Events
		Ashwin Narayanan	Jericho High School	One Millimeter Array For Astronomy (OMaA): A Characterization of Superconducting Tunnel Junction Thermal Noise Contributions

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Engineering	1st	Maddox Nesterczuk and Paul Park	Manhasset High School	Pumped Hydro Energy Storage Applications: Assessing Optimal Blade Count and Length on Pelton Turbines
	2nd	Krishiv Dhupar	Syosset High School	Developing a versatile biosensor using graphene sensor
	Honorable Mention	William Kim-Shoemaker	Jericho High School	A Solution to Improve the Energy Density and Cycle Life of Lithium-Sulfur Batteries
		Marcus Wu	Manhasset High School	The effect of different viscosities of liquid on its effectiveness at capturing the pollen of Populus Tremuloides

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Computer Science	1st	Samay Lakhani	Jericho High School	Applying Spatiotemporal Attention to Identify Distracted and Drowsy Driving with Vision Transformers
		Brian Song	Roslyn High School	Detection of Northern Corn Leaf Blight in Natural Environment Using Optimized YOLOv3
	2nd	Alex Lu	Manhasset High School	Testing the Effects of Artificially Generated Depth Maps in Convolutional Neural Network Input on Scene Recognition Accuracy
		Shaan Merchant	Great Neck South High School	Machine Learning and Deep Learning Approach to Lung Cancer and Stroke Prediction
		Amit Saha	Great Neck South High School	Developing a Physics-Informed Fourier Neural Operator for Magnetohydrodynamics
	Honorable Mention	Arda Alptekin and Ayan Sheikh	Commack High School	Modified Computer Coolant for Higher Heat Dissipation and Lower Central Processor Temperatures
		Justin Belle	The Wheatley School	The Value of AI Automation in Cyber Security
		Tyler Brechner and Taikary Jiang	Great Neck North High School	Using a long short term memory network to predict sea level and atmospheric CO2 concentration changes
		Kyle Cheng	Syosset High School	The Effect of the NBA Combine on the NBA Draft
		Ankit Karnam	Great Neck South High School	HComp: Generating a More Efficient Protocol To Display Webpages Using Native Binaries
		Wafiq Khondkar	Herricks High School	A Novel Framework for Evaluation and Parameter Tuning of Missing Value Imputation
		Helen Tang and Bryan Liu	Great Neck South High School	The Identification of Fake News With a CNN-RNN Hybrid Model and a URL Classifier