

Animal Science**1ST**

Seth Zachary Schwartz (Commack High School)

Commack High School

The Effects of Epinephrine on Early Onset Parkinson's Disease in Drosophila melanogaster

2ND

Sarah Ariana Kruger (Roslyn High School)

Roslyn High School

Surface characterization of the cuticular scales of guard hairs in the endangered salt marsh harvest mice and the effect of cuticular scales on wettability

3RD

Azra Zirhli (Garden City High School)

Garden City High School

Comparison of Food Dyes to Caffeine on Daphnia Activity and Heart Rate.

H.M

Salvatore LoBrutto (W.C. Mephram High School)

W.C. Mephram High School

An Investigation of the External and Internal Morphology and Trabecular Structural Differences Between Medial and Lateral Fabellae in Canis Domesticus

Behavioral/Social Science**1ST**

Mahiya Vira (North Shore High School)

North Shore High School

Social Misconceptions Surrounding Food Allergies

2ND

Jide Dominic Nwosu (Chaminade High School)

Chaminade High School

Gestures and Words: Exploring Memory Recall in Adults with Autism Spectrum Disorder.

3RD

Oliver Jackson Navo (Paul D. Schreiber High School), Leo Gabe Schwartz (Paul D. Schreiber High School)

Paul D. Schreiber High School

The Impact Of Artificial Intelligence on Academic Performance With Differences Among Gender and Academic Preferences

H.M

Carew Benjamin Davis (Oyster Bay High School)

Oyster Bay High School

Copper Sulfate Effecting the Lateral Line Hair Cells of Zebrafish and its Effects on Social Behavior

Cellular and Molecular Biology

1ST

Abigail Anna Thomas (Herricks High School)

Herricks High School

Visualizing the Behavior and Characterization of the Förster Resonance Energy Transfer (FRET) RhoG GTPase Biosensor

2ND

Justin Shane Zhao (Jericho High School)

Jericho High School

Molecular Architecture of Vibrio cholerae Virus Peru-2 Revealed by Cryo-EM

3RD

Sunny Mathys Kamadjeu (Jericho High School)

Jericho High School

Male Female Metabolic Differences During Acute Kidney Injury

H.M

Ming Xu (Roslyn High School)

Roslyn High School

Discovering Co-localization Patterns Between CAG110 and CLLD6 in Cellular Structures

Chemistry

1ST

Matthew Lin (Roslyn High School)

Roslyn High School

Discovery of Efficient Silica Scale Inhibitors by Utilizing Bottlebrush Polymers

2ND

Thomas Walter Mills (Connetquot High School)

Connetquot High School

Cyclic Voltammetry

3RD

Kevin Joseph Gierloff (Connetquot High School), Jaden Emerson McKay (Connetquot High School)

Connetquot High School

Detecting substances in bodily fluids using cyclic voltammetry.

Engineering and Physical Science

1ST

Emma Elise Su (Herricks High School)

Herricks High School

A Novel Decoupling Strategy for Radiofrequency Array Coils in Magnetic Resonance Imaging

2ND

John Peter Crouchley (Garden City High School)

Garden City High School

Frictionless air pressure powered flywheel

3RD

Alexander Janczyk (Cold Spring Harbor High School), Matthew Reford (Cold Spring Harbor High School)

Cold Spring Harbor High School

Piezoelectric Power: Exploring Temperature's Effect on Energy Output

H.M

Antonio James Savastano (Chaminade High School)

Chaminade High School

Novel Infrared Detector for Fuel Approximation Research Technology

Environmental Science

1ST

Belen Vazquez (Manhasset High School), Krisha Wadhwa (Manhasset High School)

Manhasset High School

Algae-Powered MFCs: Optimizing Ammonium Sulfate for Energy Output

2ND

Jack Vollmer (Walt Whitman HS)

Walt Whitman HS

Effect of Microplastics on the health of buttercrunch lettuce

3RD

Li Zhang (Manhasset High School), William Pereira (Manhasset High School)

Manhasset High School

A novel investigation on the filtration of pollutants through permeable bio-pavement

H.M

Joshua Chung (Manhasset High School), Bentley Lam (Manhasset High School)

Manhasset High School

Optimization of Copper Sulfate Removal from Wastewater Using Novel Hydrogel Systems and Brassica juncea for Bioremediation

Mathematics and Computer Sciences

1ST

Henry Zhang (Jericho High School)

Jericho High School

An Exponentially Faster Quantum Hilbert Transform

2ND

Hua Lin (Roslyn High School)

Roslyn High School

Enhanced EEG-Enabled Auditory Attention Detection Using Multimodal Contrastive Learning with Graph Structures

3RD

Safiya A. Bhuiyan (Roslyn High School)

Roslyn High School

Comparative Analysis of Machine Learning Models for Prognostic Prediction in Breast Cancer Outcomes

H.M

Michaela Mallin (Roslyn High School)

Roslyn High School

Evaluating The Impact Of Segmentation on Modified ResNet-18 Based Pancreatic Ductal Adenocarcinoma in CECT Scans

Medicine and Health Services

1ST

Anchita Agrawal (Jericho High School)

Jericho High School

Novelly Classifying Nottingham Grade in Breast Cancer with Dynamic Contrast-Enhanced MRI via Convolutional Neural Networks

2ND

Jeffrey Yu (Jericho High School)

Jericho High School

Multicolor Flow Cytometry to Identify Measurable Residual Disease in Acute Myeloid Leukemia

3RD

Shan Hsieh (Syosset High School)

Syosset High School

Increased axonal bouton dynamics of horizontal projections in de-efferented cortex during rehabilitation after Spinal Cord Injury

H.M

Angelina Liu (Herricks High School)

Herricks High School

Predictability of Peridialytic Blood Pressure, Intradialytic Blood Pressure, and Weight Gain on Hypertensive Burden in Hemodialysis Patients: A Prospective Study

Plant Sciences

1ST

Arjun Wanchoo (Manhasset High School), Nicolas Spencer Keyoung (Manhasset High School)

Manhasset High School

*Exposing Alfalfa (*Medicago sativa*) and Ryegrass (*Lolium perenne*) to Various Concentrations of Motor Oil to Assess their Phytoremediation Capabilities and Effects of Motor Oil on Root Architecture and Height*

2ND

Caleigh Liu (Jericho High School)

Jericho High School

Effect of Biochar on the Royal Burgundy Bean and Soil Properties

3RD

Griffin Richard Beckmann (East Hampton High School)

East Hampton High School

Examining the Impact of Beech Tree Leaf Disease on the Non-Structural Carbohydrate Storage, and Consequently, the Diameter at Breast Height (DBH), of Fagus grandifolia (American Beech).

H.M

Zhiye Liu (Babylon Junior Senior High School)

Babylon Junior Senior High School

The effect of ionic compounds on the production of voltage by Lemna minor