

## 2014 New York City Science and Engineering Fair - COMPLETE PARTICIPANT LIST

The New York City Science and Engineering Fair (NYCSEF), sponsored by the New York City Department of Education (NYCDOE) and the City University of New York (CUNY) / Office of Academic Affairs, is the city's largest high school research competition. Approximately 700 students from around the city submitted applications to the 2014 NYCSEF for a chance to compete for a variety of cash and prizes including an all-expense trip to Pittsburgh, PA representing New York City at the Intel International Science and Engineering Fair (ISEF). This year's Preliminary Round was held on Sunday, March 2, 2014 at The City College of New York (Manhattan). The top 20 -25 percent of student researchers from each subject category were selected to participate in the Finals Round on March 25, 2014 at the American Museum of Natural History. All award winners, including the names of the seventeen students selected to represent NYC at the International Science and Engineering Fair in May in Los Angeles, CA as well as approximately 200 other award winners were announced at the NYCSEF Awards Ceremony on March 27, 2014 at The Kaye Playhouse at Hunter College. The names of all of this year's participants are listed below. Congratulations to all of this year's participants and award recipients.

For more information about NYCSEF, please visit [collegenow.cuny.edu/sciencefair](http://collegenow.cuny.edu/sciencefair).

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### Bronx

#### Bronx Academy of Health Careers

##### Renee McGaw

*Project Title: Arsenic transport and accumulation in rice*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

#### Bronx Center for Science & Mathematics, The

##### Lawrence Abu-Hammour

*Project Title: Energy Efficiency in Autonomous Vehicles*

NYCSEF Preliminary Round Participant

##### Kenrick Alfred

*Project Title: The Effect of Phosphorylation of Wiskott-Aldrich Syndrome protein (WASp) on Podosome Formation*

NYCSEF Preliminary Round Participant

##### Yesenia Castelan

*Project Title: Study the mechanism of the anti-cancer activity of an IL-10-related cytokine, IL-24.*

NYCSEF Preliminary Round Participant

##### Jennifer Hernandez

*Project Title: Energy Efficiency in Autonomous Vehicles*

NYCSEF Preliminary Round Participant

##### Anjelica Mulero

*Project Title: How to become a card player?*

NYCSEF Preliminary Round Participant

##### Gabriel Quinones

*Project Title: The Effect of Phosphorylation of Wiskott-Aldrich Syndrome protein (WASp) on Podosome Formation*

NYCSEF Preliminary Round Participant

##### Marliana Ramos

*Project Title: The Effect of Phosphorylation of Wiskott-Aldrich Syndrome protein (WASp) on Podosome Formation*

NYCSEF Preliminary Round Participant

##### Karla Romero

*Project Title: Energy Efficiency in Autonomous Vehicles*

NYCSEF Preliminary Round Participant

**Saadjo Sow**

*Project Title: the effect of french colonization on colonial Senegal, present day Senegal and Senegalese Immigrants.*

NYCSEF Preliminary Round Participant

**Sarah Tapia**

*Project Title: BSF - Role of the Medial Dorsal Nucleus in Apical Dendritic Development in the Prefrontal Cortex*

NYCSEF Preliminary Round Participant

**Djamila Tcheifa**

*Project Title: BSF - Role of the Medial Dorsal Nucleus in Apical Dendritic Development in the Prefrontal Cortex*

NYCSEF Preliminary Round Participant

**Nicole Terc**

*Project Title: Effects of Racism on Psychological Well-Being*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Department of Health and Human Services

NYCSEF Third Award

**Raychell Velez**

*Project Title: A Study of the Effect of Acidity and Salinity on Plant Growth*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Bronx High School of Science****Siddharth Ahsan**

*Project Title: The Importance of Skin Color in Facial Recognition*

NYCSEF Preliminary Round Participant

**Raisa Alam**

*Project Title: Assessment of Multiphoton Microscopy in Photodynamic Diagnostics and Therapy for Theranostic Treatment of Cancer*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Regina Catague**

*Project Title: Identifying the Association Between the Common Variants of MACROD2 and Autism Spectrum Disorder*

NYCSEF Preliminary Round Participant

**Andrew Cha**

*Project Title: What is the EPAC-1/2's signaling pathway's role in the inhibition of Osteoclast Differentiation by the A2A Receptor?*

NYCSEF Preliminary Round Participant

**Matthew Chan**

*Project Title: Novel Anatomic Architecture of the Cancer Stem Cell (CSC) Niche and Plating Efficiency & Radiation Sensitivity of CSCs*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

US Navy and Marine Corps

**Ahrisue Choi**

*Project Title: Statistical Analysis of Stock Prices: Proof that Mean Reversion Exists & Whether Profit/Loss is Guaranteed*

NYCSEF Preliminary Round Participant

**Ruby Chung**

*Project Title: Effectiveness of Perioperative Antibiotics for Prevention of Breast Infections Following Mastectomy with Breast Reconstructive Surgery*

NYCSEF Preliminary Round Participant

**Lily Coad**

*Project Title: The Relationship Between Adolescent Eating Disorders and Emotional, Social, and Environmental Factors*

NYCSEF Preliminary Round Participant

**Jacqueline Cortez**

*Project Title: The apolipoprotein-e2 allele in cognitively intact elderly probands and familial protection against dementia*

NYCSEF Preliminary Round Participant

**Epshita Das**

*Project Title: Relationship Between Notch Signaling Receptors and Lymphatic Malformations*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**George Friedlander**

*Project Title: Computing The Groups Of Automorphisms Of Ring Extensions Of The Rationals That Fix Exactly Q*

NYCSEF Preliminary Round Participant

**Sanya Goswami**

*Project Title: Genetics Analysis of IgA Nephropathy by Sanger Sequencing*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

The City University of New York Scholarship - City College of New York

**Alexander Gould**

*Project Title: A New Foundational Approach for Analysis and Prediction of Endemic Processes in Social Networks*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

The City University of New York Scholarship - City College of New York

**Yiwen Huang**

*Project Title: Reworking the Problem: ESR Dating Tooth Enamel in Pesturina, Serbia*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Association for Women Geoscientists

NYCSEF Third Award

**Tanzeela Islam**

*Project Title: Tooth-colored Fillings and Neuropsychological Function in Adults*

NYCSEF Preliminary Round Participant

**Akshay Jain**

*Project Title: The Effects of *Phytoplasma* Infection on the Leaf Morphology of *Juniperus chinensis**

NYCSEF Preliminary Round Participant

**Pratima Jurakhan**

*Project Title: Gene Expression Patterns Determined by RNA FISH to improve predictive accuracy for breast cancer prognosis.*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Alice Kallman**

*Project Title: The Effect of Stigma on Acceptance into Social Roles*

NYCSEF Preliminary Round Participant

**Alexandra LaGrassa**

*Project Title: Using Ligands to Control the Growth Kinetics of Cadmium Selenide Clusters*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Darien Lin**

*Project Title: Method to produce overexpressing of CSK in A20 cells*

NYCSEF Preliminary Round Participant

**Luther Lu**

*Project Title: Palladium-based catalysts for the methane to methanol conversion as a new energy source*

NYCSEF Preliminary Round Participant

**Sam Maeglin**

*Project Title: Assessing the Predictive Value of 18FDG-PET Using Tumor-Based Optimized Number of Iterations*

NYCSEF Preliminary Round Participant

**Mansi Maini**

*Project Title: Retrospective analysis of the effects of ionic vs. non-ionic contrast media on CKMB levels*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Samuel Minick**

*Project Title: The Role of Acetaminophen Metabolites on Glioma Cell Growth*

NYCSEF Preliminary Round Participant

**Cecilia Moog**

*Project Title: Two Routes to Stem Cell Formation in Plants*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Michael Moore**

*Project Title: Improvements in the efficiency of mitochondrial biofuels through modeling of thermodynamic efficiency of the electron transport chain*

NYCSEF Preliminary Round Participant

**Tahina Mukit**

*Project Title: Detection of Malaria in Previously Collected Blood Samples*

NYCSEF Preliminary Round Participant

Sarah and Morris Wiesenthal Science Awards

**Brian Nan**

*Project Title: The Effect of Tau Aggregation on the Autophagy-Lysosome System*

NYCSEF Preliminary Round Participant

**Meghna Narayan**

*Project Title: A Novel Analysis and Predictive Risk Model of Chronic Diseases: A Markov Chain Monte Carlo Simulated Study on the Rising Incidence of Type II Diabetes Mellitus in the Youth*

NYCSEF Preliminary Round Participant

**Monisa Nayim**

*Project Title: Effect of antiepileptic drugs on efficacy of seizures generated by mutations in the sodium channel SCN1A gene.*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Joey Pan**

*Project Title: Tactile and Audio Games for the Visually Impaired*

NYCSEF Preliminary Round Participant

**Kelly Pellegrino**

*Project Title: The Effect of Varying Methods of Recall on the Accuracy of Memories*

NYCSEF Preliminary Round Participant

**Michael Raevsky**

*Project Title: Soddy Sphere Packings'™ Construction Theorems and evidence of their Curvatures'™ Log-normality under the Local-to-Global Theorem*

NYCSEF Preliminary Round Participant

**Cidny Ramirez**

*Project Title: Mathematical Modeling and Ninety Years Forecast of Midwest Precipitation Changes Due to the Greenhouse Effect and Dramatic Agricultural Implications*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Meteorological Society

NYCSEF Third Award

**Praveen Rammohan**

*Project Title: The Role of Serotonin in Impulsivity in Mice*

NYCSEF Preliminary Round Participant

**Felix Rozenberg**

*Project Title: Mitochondrial Dysfunction Caused by Cholesterol-Induced Cytochrome C Damage is Attenuated by Mitochondrial Protective Peptides*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Violetta Rucinski**

*Project Title: The effect of perinatal lesioning of the medial dorsal nucleus on the CA3 region of the hippocampus on young adults*

NYCSEF Preliminary Round Participant

**Sumit Saha**

*Project Title: Possible Role of His-133 Phosphorylation on G-Actin Regulation*

NYCSEF Preliminary Round Participant

**Hoi Seo**

*Project Title: Enumerating Acyclically Oriented Subgraphs*

NYCSEF Preliminary Round Participant

**Spencer Shapiro**

*Project Title: The Economic Assimilation of Cuban Immigrants and its Impact on Future Immigration in the United States*

NYCSEF Preliminary Round Participant

**Dachi Tan**

*Project Title: Violation of Heisenberg Limit with Nonlinear Phase Shifts*

NYCSEF Preliminary Round Participant

**Evan Tatnall**

*Project Title: Tests of Accuracy, Omission Error, and Response Time in Children Ages 7-15 with and without ADHD*

NYCSEF Preliminary Round Participant

**Maharshi Thakker**

*Project Title: Discovering the Mechanism Through which TGFB Works: Fibroblast Activated Protein and Cancer Associated Fibroblast Analysis*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Gabriela Thorne**

*Project Title: Mouse Micro-Organ Lung Tissue Culture Model for Long-Term Cell Viability and Function*

NYCSEF Preliminary Round Participant

**Vivek Trivedi**

*Project Title: Stabilizing Nature of Intrinsically Bursting Neurons Suggests Novel Method to Treating Refractory Epilepsy*

NYCSEF Preliminary Round Participant

**Anna Trott-Herdrich**

*Project Title: Water Water Everywhere: new methodology and quantitative model for environmental conservation and water conservation*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Julia Vinagolu-Baur**

*Project Title: The Effect of Different Solvents and Fluorescent Molecules on the Stability of PLGA-PE Nanoparticles*

NYCSEF Preliminary Round Participant

**Yuhong Wang**

*Project Title: The Effect of Sensory Deprivation on the Mouse Barrel Cortex*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Yuqing Wang**

*Project Title: New Quantitative Methodology for Identification of Drug Abuse Based on Feature-Based Context-Free Grammar*

NYCSEF Preliminary Round Participant

**Byron Wasti**

*Project Title: Mobility Measurements of MoS2 on CNO*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Jingyu Yao**

*Project Title: Empirical modeling of fault regions with natural erosion and fault uplift*

NYCSEF Preliminary Round Participant

**Anthea Ye**

*Project Title: Benchmark Proof of Sensitivity to Temporal Order of Events under Masked Stimuli*

NYCSEF Preliminary Round Participant

**Andrew Zhang**

*Project Title: Novel Anatomic Architecture of the Cancer Stem Cell (CSC) Niche and Plating Efficiency & Radiation Sensitivity of CSCs*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

US Navy and Marine Corps

**Yu Zheng**

*Project Title: Observation of CHOP and XBP1 Expression in mRNA after Treatment of DU145 cells with NSC100nM for Different Time Periods*

NYCSEF Preliminary Round Participant

**Bronx Latin School, The****Nenekade Bah**

*Project Title: BSF Evaluation of the action of chemical pollutants upon the surface of different materials used in the electronic industry - Proof of concept*

NYCSEF Preliminary Round Participant

**Aicha Fofana**

*Project Title: Possible Dendritic Alterations on Cortical Pyramidal Neurons in Area 9 of Schizophrenic Patients*

NYCSEF Preliminary Round Participant

**Yaneska Mejia**

*Project Title: BSF Evaluation of the action of chemical pollutants upon the surface of different materials used in the electronic industry - Proof of concept*

NYCSEF Preliminary Round Participant

**Jose Ramirez**

*Project Title: BSF Evaluation of the action of chemical pollutants upon the surface of different materials used in the electronic industry - Proof of concept*

NYCSEF Preliminary Round Participant

**Bronxwood Preparatory Academy****Jahnelle Martin-Howe**

*Project Title: Arsenic transport and accumulation in rice*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Columbus Institute of Math and Science****Abeera Nadeem**

*Project Title: Bioinformatics approach leads to putative identification of carotene hydroxylase enzyme in the green alga Chlamydomonas reinhardtii*

NYCSEF Preliminary Round Participant

**DeWitt Clinton High School****Jonathan Dalloo**

*Project Title: The Potential Decomposition of Organic Matter in Soil and its Impact on the Atmospheric Carbon Pool*

NYCSEF Preliminary Round Participant

**Herbert H. Lehman High School****Noor Fatima**

*Project Title: Study the mechanism of the anti-cancer activity of an IL-10-related cytokine, IL-24.*

NYCSEF Preliminary Round Participant

**High School of Computers and Technology****Romina Burger**

*Project Title: Educators' Perceptions of the Inclusion of DMT in a Classroom Setting*

NYCSEF Preliminary Round Participant

**Horace Mann High School****Julie Aaron**

*Project Title: Conserving Art by Determining the Most Durable Chemically Combined Paint*

NYCSEF Preliminary Round Participant

**Sahil Gupta**

*Project Title: A Study of Quantum Locking*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ASM Materials Education Foundation

NYCSEF Second Award

**Jeffrey Weiner**

*Project Title: Granular Flow*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**In-Tech Academy (M.S./ High School 368)****Kevin Narine**

*Project Title: Possible Dendritic Alterations on Cortical Pyramidal Neurons in Area 9 of Schizophrenic Patients*

NYCSEF Preliminary Round Participant

**International Community High School****Michael Herrera**

*Project Title: The Effect of Vitamin C on the Seed Germination of Vigna radiata*

NYCSEF Preliminary Round Participant

**Michael Reyes**

*Project Title: The Effect of Vitamin C on the Seed Germination of Vigna radiata*

NYCSEF Preliminary Round Participant

**International Leadership Charter School****Chandani Jagmohan**

*Project Title: Stability of Molecular Hydrogen Inside Fullerenes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Leslee Ramos**

*Project Title: Stability of Molecular Hydrogen Inside Fullerenes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Marble Hill High School for International Studies****Tiffany Addo**

*Project Title: Using different salinities to predict the effect of global warming on organisms, particularly Artemia hatch rates*

NYCSEF Preliminary Round Participant

**Turiana Mantuano**

*Project Title: Using different salinities to predict the effect of global warming on organisms, particularly Artemia hatch rates*

NYCSEF Preliminary Round Participant

**Pelham Preparatory Academy****Joy George**

*Project Title: Bioinformatics approach leads to putative identification of carotene hydroxylase enzyme in the green alga Chlamydomonas reinhardtii*

NYCSEF Preliminary Round Participant

**Riverdale Country School****Rebecca Flowers**

*Project Title: Underwater observation of the quantity of Echeineis naucrates on male and female Carcharhinus leucas*

NYCSEF Preliminary Round Participant

**SAR High School****Aaron Liberman**

*Project Title: Characterizing novel HPV types through the techniques of Rolling Circle Amplification and Polymerase Chain Reaction*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Olivia Rosenzweig**

*Project Title: Stereotactic Body Radiation Therapy for Hepatocellular Carcinoma Prior to Liver Transplantation*

NYCSEF Preliminary Round Participant

**Women's Academy of Excellence****Ashleigh Francis**

*Project Title: Bioinformatics approach leads to putative identification of carotene hydroxylase enzyme in the green alga Chlamydomonas reinhardtii*

NYCSEF Preliminary Round Participant

**Brooklyn****Abraham Lincoln High School****Onur Calikusu**

*Project Title: How do "smart phones" and their use before sleep affect the quality of sleep?*

NYCSEF Preliminary Round Participant

**Sikandar Cheema**

*Project Title: Does hemispheric dominance and handedness affect academic success?*

NYCSEF Preliminary Round Participant

**Neal Dolzhanskiy**

*Project Title: How do "smart phones" and their use before sleep affect the quality of sleep?*

NYCSEF Preliminary Round Participant

**Huma Kazi**

*Project Title: Does the use of colored paper improve concentration or retention?*

NYCSEF Preliminary Round Participant

**Mehriniso Khaydarova**

*Project Title: Can using mnemonics improve our memory*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Orlando Leech**

*Project Title: Does scarcity affect decision making?*

NYCSEF Preliminary Round Participant

**Calvin Li**

*Project Title: Does hemispheric dominance and handedness affect academic success?*

NYCSEF Preliminary Round Participant

**Mohammad Mahmud**

*Project Title: Does hemispheric dominance and handedness affect academic success?*

NYCSEF Preliminary Round Participant

**Azra Malik**

*Project Title: Fecundity in the drosophila melanogaster under sexually isolated conditions.*

NYCSEF Preliminary Round Participant

**Mikiann McIntosh**

*Project Title: Can using mnemonics improve our memory*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Malika Nasriddinova**

*Project Title: Does the use of colored paper improve concentration or retention?*

NYCSEF Preliminary Round Participant

**Trung Phan**

*Project Title: The Effect of Photo-Shopped Images of Idealized Bodies in Advertisements on the Self-Esteem of Adults*

NYCSEF Preliminary Round Participant

**Darhan Rzaev**

*Project Title: Does scarcity affect decision making?*

NYCSEF Preliminary Round Participant

**Ahmad Usman**

*Project Title: The Effect of Photo-Shopped Images of Idealized Bodies in Advertisements on the Self-Esteem of Adults*

NYCSEF Preliminary Round Participant

**Brooklyn Amity School****Bilge Felek**

*Project Title: Antibiotic delivery to local infection sites by using liposome encoded magnetic nanoparticles*

NYCSEF Preliminary Round Participant

**Brooklyn Technical High School****Tameem Ahmed**

*Project Title: An Evaluation Of Toxic Emissions In Solid Oxide Fuel Cells.*

NYCSEF Preliminary Round Participant

**Jonathan Cheng**

*Project Title: Two Speed Shifting Transmission*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Frank W. and Jan J. Stahl Memorial Award for Technical Excellence

NYCSEF First Award

Sarah and Morris Wiesenhal Science Awards

**Alexander Chong**

*Project Title: Investigation of Bacterial Levels in NYC Waterways Following Hurricane Sandy*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Meteorological Society

NYCSEF Third Award

Stockholm Junior Water Prize

**Eva Justo**

*Project Title: Investigation of Bacterial Levels in NYC Waterways Following Hurricane Sandy*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Meteorological Society

NYCSEF Third Award

Stockholm Junior Water Prize

**Aamnah Khan**

*Project Title: The Development and Testing of an Aniphibous Tranquillizing Dart Rifle.*

NYCSEF Preliminary Round Participant

**Arjun Krishna**

*Project Title: The Development and Testing of a Drone Solar Hydrogen Electric Rocket Plane*

NYCSEF Preliminary Round Participant

**Elaine Wong**

*Project Title: Investigation of Bacterial Levels in NYC Waterways Following Hurricane Sandy*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Meteorological Society

NYCSEF Third Award



Stockholm Junior Water Prize

## **Edward R. Murrow High School**

### **Minhazur Bhuiyan**

*Project Title: The Use of Photoresistors as an Alternative to Accelerometers for Wrist Movement Detection in a Glove Controller*

NYCSEF Preliminary Round Participant

### **Henry Blazer**

*Project Title: Bad Habits and Their Fat Friends: The Effects of Adolescent Procrastination and Time Management on Sugar and Fat Consumption*

NYCSEF Preliminary Round Participant

### **Mya Brady**

*Project Title: The antibacterial and antifungal effect of Cocos nucifera and coconut water on Staphylococcus epidermidis, Escherichia coli and Aspergillus niger*

NYCSEF Preliminary Round Participant

### **Samantha Brown**

*Project Title: Adolescent Attitude and Preschool Perception*

NYCSEF Preliminary Round Participant

### **Brian Chen**

*Project Title: The Effect of UV-radiation on Diet, Mortality, and anhydrobiosis on Hypsibius dujardini*

NYCSEF Preliminary Round Participant

### **Maggie Chen**

*Project Title: The Effect of water quality from Coney Island Beach and Caesars Bay Bazaar on the development and mortality of Artemia salina*

NYCSEF Preliminary Round Participant

### **Sherry Cheung**

*Project Title: Removal of Iron and Copper ions from Aqueous Solutions with Laminariales saccharina by Biosorption*

NYCSEF Preliminary Round Participant

### **Lila Cohen**

*Project Title: The Effect of Thymus Vulgarus Essential Oil on Staphylococcus epidermidis and Escherichia coli*

NYCSEF Preliminary Round Participant

### **Charlotte Fenton**

*Project Title: The Effectiveness of Liliun in Reducing Hard Water*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

US Navy and Marine Corps

### **George Gandy**

*Project Title: The effect of Ficus Carica leaf extract on the survival rate of E coli*

NYCSEF Preliminary Round Participant

### **Briana Gibaldi**

*Project Title: The Effects of methanol Chrysanthemum morifolium Extract on Gram Negative Escherichia coli and Gram Positive Bacillus subtilis*

NYCSEF Preliminary Round Participant

### **Kallista Gonzalez**

*Project Title: Effects of Chromium Cr(III) on the Germination, Growth, and Development of the Rapid-Cycling Brassica*

NYCSEF Preliminary Round Participant

### **Hanaa Habboub**

*Project Title: The Stability and Effectiveness of Hair Dye on Human Hair*

NYCSEF Preliminary Round Participant

### **Simon Horowitz**

*Project Title: The effect of ozone air pollutant on the growth, germination, chlorophyll levels of Ipomoea indica and Papaver comutatum*

NYCSEF Preliminary Round Participant

### **Enis Husejnovic**

*Project Title: Can we extract lipids from Pandorina Morum to create biodiesel fuel?*

NYCSEF Preliminary Round Participant

### **Shaina Juarez**

*Project Title: The Effect of Different Concentrations of Carbon dioxide on the Growth and Luminous Intensity of Vibrio fischeri*

NYCSEF Preliminary Round Participant

**Suzan Khavkin**

*Project Title: The antibacterial and antifungal effect of Cocos nucifera and coconut water on Staphylococcus epidermidis, Escherichia coli and Aspergillus niger*

NYCSEF Preliminary Round Participant

**Michelle Lam**

*Project Title: Comparison of the effectiveness between a homemade repellent consisting of Cinnamomum cassia oil, Mentha arvensis oil and Taraxacum officinale extracts and the commercial Flying Insect Killer as repellent for Hippodamia convergens*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Jacob Lester**

*Project Title: The Effects of HNO<sub>3</sub> Treated Pollen on Hippodamia convergens*

NYCSEF Preliminary Round Participant

**Sally Li**

*Project Title: The Production of Antifungal and Antibacterial activities of Nitella subspicata sp. Extract on Staphylococcus epidermidis, Bacillus subtilis and Penicillium italicum*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Ricoh Americas Corporation

**Yee Man Li**

*Project Title: Understanding How the Learning Experience Impacts Memory: Suggestions from Three Mice*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**ZiQi Liang**

*Project Title: Removal of Iron and Copper ions from Aqueous Solutions with Laminariales saccharina by Biosorption*

NYCSEF Preliminary Round Participant

**Ruoxin Lin**

*Project Title: The Effect of Mg on the Inhibiting Actions of Abscisic Acid on the Growth, Cellular Respiration, and Chlorophyll Level of Glycine*

NYCSEF Preliminary Round Participant

**Kimberly Louisor**

*Project Title: The Effect of Nitric Acid on Chlorophyll and Carotenoids on Brassica Rapa Rapa Leaves*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Sofia Malmoli**

*Project Title: The Effect Of Nitrate and Phosphate in Fresh Water Ponds in Prospect Park*

NYCSEF Preliminary Round Participant

Environmental Education Advisory Council

**Eliana Marzullo**

*Project Title: Digital Natives, Digital Newcomers: The Effects of Adolescents'™ Perceptions of Parental Technological Intelligence on Perceptions of Parental Authority*

NYCSEF Preliminary Round Participant

**Francesca Matias**

*Project Title: The Effects of methanol Chrysanthemum morifolium Extract on Gram Negative Escherichia coli and Gram Positive Bacillus subtilis*

NYCSEF Preliminary Round Participant

**Londeen McEachron**

*Project Title: The Effect of Mg on the Inhibiting Actions of Abscisic Acid on the Growth, Cellular Respiration, and Chlorophyll Level of Glycine*

NYCSEF Preliminary Round Participant

**Julia Moore**

*Project Title: The Effects of Erythromycin on the Germination Rate and Growth and Arabidopsis thaliana*

NYCSEF Preliminary Round Participant

**Crystal Ng**

*Project Title: The Effect of L- Lysine on mortality and heart beat of Daphnia Magna*

NYCSEF Preliminary Round Participant

**Margaret O'Neil**

*Project Title: The inhibition action of oral tetracycline on Staphylococcus Epidermidis and Corynebacterium xerosis*

NYCSEF Preliminary Round Participant

**Mathena Ortiz**

*Project Title: The Antifungal Effect of Balsamic vinegar and Red wine vinegar on Aspergillus niger*

NYCSEF Preliminary Round Participant

**Taylor Owen**

*Project Title: The effect of copper sulfate on oxygen stressed Escherichia Coli*

NYCSEF Preliminary Round Participant

**Amber Puglisi**

*Project Title: The effect of copper sulfate on oxygen stressed Escherichia Coli*

NYCSEF Preliminary Round Participant

**Whitney Situ**

*Project Title: The Production of Antifungal and Antibacterial activities of Nitella subspicata sp. Extract on Staphylococcus epidermidis, Bacillus subtilis and Penicillium italicum*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Ricoh Americas Corporation

**Nuriya Sohnis**

*Project Title: The Effects of Ocean Acidification and Fe contamination on the Feeding Habits of Aiptasia pallida Using Brachionus plicatilis*

NYCSEF Preliminary Round Participant

**Tasfia Tabassum**

*Project Title: The Process and Efficiency of Phytoremediation by Hydroponically Grown Ipomoea tricolor and Lobularia maritima Plants in Copper-Contaminated Water and Their Tolerance of Excess Copper*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Ruoyu Wang**

*Project Title: Comparison of the effectiveness between a homemade repellent consisting of Cinnamomum cassia oil, Mentha arvensis oil and Taraxacum officinale extracts and the commercial Flying Insect Killer as repellent for Hippodamia convergens*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Tomasz Wiercioch**

*Project Title: The effect of flame on the dimensions created on cloth with Modified Boric Acid, Monoammonium Phosphate and Dioammonium or sodium chloride (NaCl) H<sub>2</sub>O applied*

NYCSEF Preliminary Round Participant

**Julie Yaish**

*Project Title: The Effects of substrates on Emission Rates of CO<sub>2</sub> in New York City soils*

NYCSEF Preliminary Round Participant

**Mario Yi**

*Project Title: The Effects of UVB Radiation and Phosphorous on Volvox globator*

NYCSEF Preliminary Round Participant

**James Madison High School****Daniel He**

*Project Title: A Novel Approach for Determining Earthquake Loss Using a New Mathematic Model*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Mu Alpha Theta

NYCSEF Second Award

**Airin Kashem**

*Project Title: The Effects of Particular Extracts on Termite Behavior*

NYCSEF Preliminary Round Participant

**Mateen Yousaf**

*Project Title: CAN THE COMPRESSION AND FLEXION OF RECYCLED AGGREGATE CONCRETE BE IMPROVED?*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Michael G. Mann Award

NYCSEF Third Award

**Lenura Ziyadinova**

*Project Title: Exploring motor neuron diversity in Caenorhabditis elegans worms*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Magen David Yeshiva High School**

**Albert Antar**

*Project Title: Maximum Speed Limit*

NYCSEF Preliminary Round Participant

**David Hedaya**

*Project Title: Can Optical Lenses Improve the Performance of an Argon Blue-Dot Laser?*

NYCSEF Preliminary Round Participant

**Jake Sutton**

*Project Title: THE PREVALENCE OF MYOPIA IN ORTHODOX JEWISH HIGH SCHOOL POPULATIONS: ASHKENAZI VS SEPHARDIC*

NYCSEF Preliminary Round Participant

**Midwood High School @ Brooklyn College****Allen Barbarovich**

*Project Title: Link Between Systemic Cobalamin Deficiency and CNS Demyelination in a CD320/TCb1R KO Mouse Model*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist - First Alternate

NYCSEF First Award

**Yasmine Brown-Williams**

*Project Title: The Effect of a High-Fat Diet on Whole-Body and Muscle Insulin Resistance*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Society for In Vitro Biology

**Varvara Budetti**

*Project Title: The Effects of Macroalgae on Benthic Biodiversity in Jamaica Bay*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Stockholm Junior Water Prize

**Alisha Bunting**

*Project Title: The Effects of Macroalgae on Benthic Biodiversity in Jamaica Bay*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Stockholm Junior Water Prize

**Amy Cao**

*Project Title: Synthesis of iron triisopropylsilylated vinylketene complexes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Jelissa Castro**

*Project Title: Barbie Dolls and Fire Trucks*

NYCSEF Preliminary Round Participant

Sarah and Morris Woesenthal Science Awards

**Ariel Chan**

*Project Title: The Differences Between Video Gamers and Non-Video Gamers: Multitasking and Memorization*

NYCSEF Preliminary Round Participant

**Bryan Chan**

*Project Title: Tumor-Targeted T Cells Enhanced with Costimulatory Signaling are an Effective Treatment for Cancer*

NYCSEF Preliminary Round Participant

**Xin Yi Chen**

*Project Title: Fermented Food Waste and Plant Growth: A Greenhouse Study*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Association for Women Geoscientists

NYCSEF Third Award

The City University of New York Scholarship - Hunter College

**Sammi Chung**

*Project Title: Electrode Size Effect on Microbial Fuel Cell*

NYCSEF Preliminary Round Participant

**Irisa Cisternino**

*Project Title: Gender Roles and Emotional Support*

NYCSEF Preliminary Round Participant

**Ruth Dameus**

*Project Title: Religions impact on prosocial behavior*

NYCSEF Preliminary Round Participant

**Emira Dervishi**

*Project Title: Sleep and Academic Performance*

NYCSEF Preliminary Round Participant

**Leonidas Eracleous**

*Project Title: Durability of Amalgams and Composites*

NYCSEF Preliminary Round Participant

**Samuel Genchikmakher**

*Project Title: Effect of an Audience on the Calling Behavior of Monk Parakeets*

NYCSEF Preliminary Round Participant

Sarah and Morris Wiesenthal Science Awards

**Kharene Gittens**

*Project Title: Removing Lead and Arsenic from Contaminated Soil*

NYCSEF Preliminary Round Participant

**Yekaterina Goncharova**

*Project Title: Parental Effect on Juvenile Smoking*

NYCSEF Preliminary Round Participant

**Ying Tong Guo**

*Project Title: Synthesis of iron triisopropylsilylated vinylketene complexes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Alec Gurevich**

*Project Title: Read, Lead, Succeed: A Study of Reading Disparities Between Generations*

NYCSEF Preliminary Round Participant

**Julietta Gurgova**

*Project Title: Diverse Activities Prevent Memory Loss in Senior Citizens*

NYCSEF Preliminary Round Participant

**Tasnim Halim**

*Project Title: Myiopsitta Monachus, the monk parakeet, prefers Rosaceae, fruit tree wood, for the construction of nests*

NYCSEF Preliminary Round Participant

**Nora Hassan**

*Project Title: Influence of peer pressure on academic dishonesty amongst high school students*

NYCSEF Preliminary Round Participant

**Remi Henry**

*Project Title: Removing Lead and Arsenic from Contaminated Soil*

NYCSEF Preliminary Round Participant

**Stefanie Henry**

*Project Title: Promoting Repair of Damaged Corticospinal Tract*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Raquel Hosein**

*Project Title: Application of a Wireless Electrical Device for the Detection of Epilepsy*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Frank W. and Jan J. Stahl Memorial Award for Technical Excellence

ISEF Finalist - Second Alternate

NYCSEF First Award

**Shadika Jahan**

*Project Title: Computer Vision Syndrome: A study on blink rates*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Joel Jose**

*Project Title: Mud Battery*

NYCSEF Preliminary Round Participant

**Mosammed Kabir**

*Project Title: Anti-cancer peptide PNC-27 associates with Mitochondria in Cancer Cells*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Taulant Kastrati**

*Project Title: Als5 and Flo11 adhesins in functional cell assays*

NYCSEF Preliminary Round Participant

**Jasmin Kim**

*Project Title: Electrode Size Effect on Microbial Fuel Cell*

NYCSEF Preliminary Round Participant

**Tommy Lam**

*Project Title: The Effects of Procrastination on Academic Success*

NYCSEF Preliminary Round Participant

**ROSANNE LEI**

*Project Title: Differences in the decision-making process between males and females*

NYCSEF Preliminary Round Participant

**Michelle Leung**

*Project Title: The Negative Effects of Standardized Testing on Students*

NYCSEF Preliminary Round Participant

**Cindy Li**

*Project Title: Can Effective Microorganism (EM) Suppress pathogens in Wastewater?*

NYCSEF Preliminary Round Participant

**Karen Li**

*Project Title: Procrastination and Self-Regulation*

NYCSEF Preliminary Round Participant

**Gloria Liang**

*Project Title: The Bystander Effect*

NYCSEF Preliminary Round Participant

**Jessica Liang**

*Project Title: The Preparation of an iron cyclooctenyl ketene complex for use in organic synthesis*

NYCSEF Preliminary Round Participant

**Mei Mei Liu**

*Project Title: Negative Influences on Long-Term Relationships*

NYCSEF Preliminary Round Participant

**Cynthia Lliguichuzhca**

*Project Title: Stereotypes of Immigrants Based on Skin Tone*

NYCSEF Preliminary Round Participant

**Ellysa Magloire**

*Project Title: Sodium Hypochlorite and Hydralazine*

NYCSEF Preliminary Round Participant

**Tiffany Mai**

*Project Title: Mammalian Cell Expression of M2e-HA1 Conserved Sequences of H5N1 Influenza Virus*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kiara Nunez**

*Project Title: Computer Vision Syndrome: A study on blink rates*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Chukwunonso Nwasike**

*Project Title: Autophagy in Macrophages*

NYCSEF Preliminary Round Participant

**Fionne Pham**

*Project Title: Will Salt Accumulate in Bioswale Soil?*

NYCSEF Preliminary Round Participant

**Akeem Pinnock**

*Project Title: Iron's Involvement in the Diagnosis of Lupus*

NYCSEF Preliminary Round Participant

**Vanessa Salvador**

*Project Title: Racial Identification and Preference in Children*

NYCSEF Preliminary Round Participant

**Alex Shields-Weber**

*Project Title: Parental influence on teen political views and participation*

NYCSEF Preliminary Round Participant

**Ruth-Ann Small**

*Project Title: The Affect of Parent Education and Employment Class on the Assimilation of First Generation Immigrant Students*

NYCSEF Preliminary Round Participant

**Adam Soliman**

*Project Title: Promoting Regeneration of RLN using Li+ Administration*

NYCSEF Preliminary Round Participant

**Anastasiya Tomusyak**

*Project Title: Ukrainian Nationalism*

NYCSEF Preliminary Round Participant

**Hector Torres**

*Project Title: Friendships and Self-Esteem*

NYCSEF Preliminary Round Participant

**Jeffrey Tsui**

*Project Title: Brooklyn Monk Parakeet Respond to Recorded Alarm Calls From Florida, Uruguay, and Brazil*

NYCSEF Preliminary Round Participant

**Chrystal Wong**

*Project Title: Dating Preferences among Female Chinese Teenagers*

NYCSEF Preliminary Round Participant

**Ashley Yip**

*Project Title: A Simple Design to Help Soil Retain Water on Greenroofs*

NYCSEF Preliminary Round Participant

**Jonathan Yuen**

*Project Title: Mud Battery*

NYCSEF Preliminary Round Participant

**Yi Zhang**

*Project Title: Peer Pressure has a Negative Affect on Academic Performances in Teens*

NYCSEF Preliminary Round Participant

**Packer Collegiate Institute**

**Anna-Serena Baum**

*Project Title: Advanced Paternal Age and Dementia: A Family History Study*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Psychological Association

NYCSEF Third Award

**Raphael Santore**

*Project Title: The Role of PakD on the Adhesion of Dictyostelium Discoideum to a Substrate*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Polytech Preparatory Country Day School**

**Eva Philips**

*Project Title: The Genotoxicity Potential of Nutraceuticals*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Emma Rodney**

*Project Title: Slow Learning of Unfamiliar Letters Predicts Slow Reading of English Letters*

NYCSEF Preliminary Round Participant

**Gabriella Shpilsky**

*Project Title: The Detection of Prostate Cancer Through Protein Biomarkers*

NYCSEF Preliminary Round Participant

**School for Classics: An Academy of Thinkers, Writers and Performers**

**JaziahBrittney Henriquez-Richie**

*Project Title: Qualitative Analysis of Water Samples from Fresh Creek Nature Preserve and Spring Creek Park*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Andrea Rose**

*Project Title: Qualitative Analysis of Water Samples from Fresh Creek Nature Preserve and Spring Creek Park*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**John Vasquez**

*Project Title: Qualitative Analysis of Water Samples from Fresh Creek Nature Preserve and Spring Creek Park*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Urban Assembly New York Harbor High School**

**Pablo Jimenez**

*Project Title: Can Crassostrea Virginica Filter Enterococcus Faecalis?*

NYCSEF Preliminary Round Participant

**Manhattan**

**Abraham Joshua Heschel School****Alexis Engel**

*Project Title: Iron Response Element Conformation Changes Induced By Manganese Ion*

NYCSEF Preliminary Round Participant

**Emma Fruchtman**

*Project Title: The Pathomechanism of Endometriosis*

NYCSEF Preliminary Round Participant

**Maxwell Goldberg**

*Project Title: Nano Particle Encapsulation of Human Hemoglobin*

NYCSEF Preliminary Round Participant

**Daniella Nevid**

*Project Title: Cell Tolerance in DNA-Reactive B Cells*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Yuval Pearl**

*Project Title: Implications for Paleoeological Reconstruction of n-Acid and n-Alcohol Concentrations in Arctic Plant Leaf Waxes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**David Polovets**

*Project Title: CBV f-MRI, A New Diagnostic Tool for AD?*

NYCSEF Preliminary Round Participant

**Heila Prechel**

*Project Title: The Neuroimaging of Disgust-Related Olfaction in Contamination Subtype OCD*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Psychological Association

NYCSEF First Award

**Sylvie Rosen**

*Project Title: Comparing the Effectiveness of Piermont marsh in New York to Constructed Marshes on Degrading PPCPs*

NYCSEF Preliminary Round Participant

**Jonathan Safdie**

*Project Title: Can Osteoprotegerin Protect  $I^2$  Cells Against Genotoxic and Endoplasmic Reticulum Stress-Induced Cell Death?*

NYCSEF Preliminary Round Participant

**Zachary Stein**

*Project Title: Analyzing the BRCA1 Complex in Relation to Breast Cancer Through the Co-Immunoprecipitation Method*

NYCSEF Preliminary Round Participant

**Michael Steinberg**

*Project Title: The Effect of Being Identifiable in Groups on Helping and the Bystander Effect*

NYCSEF Preliminary Round Participant

**Arielle Tannin**

*Project Title: Studying the Effects of Integration on Memory Retrieval*

NYCSEF Preliminary Round Participant

**Fanny Wolfowitz**

*Project Title: Curcumin Decreases Viability of U87 Human Glioblastoma Cell Line*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Brearley School****Sara Sakowitz**

*Project Title: A Novel Approach for Metastatic Breast Cancer Therapy: Pharmacological Inhibition of EZH2 Histone Methyl Transferase Activity Suppresses Cancer Stem Cells and Induces Epithelial Phenotype*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Dalton School****Leighton Braunstein**

*Project Title: Adolescent Loss of Lis1 Results in Defective Hippocampal Morphology and Distinct Behavioral Deficits Resembling a Schizophrenic-like Phenotype*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist



NYCSEF First Award

### **Yinge Zhao**

*Project Title: Cardiolipin-targeted Peptides Inhibit Alzheimer's Beta-Amyloid Oligomer Toxicity through a Two-hit Approach: Fibril Formation and Reduction of Newly Characterized Oxygenase Activity*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

### **Dwight School, The**

#### **SeiMi Chu**

*Project Title: Reworking the Problem: ESR Dating Tooth Enamel in Pesturina, Serbia*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Association for Women Geoscientists

NYCSEF Third Award

### **High School for Environmental Studies**

#### **Dong Yi Chen**

*Project Title: EXPERIMENTAL STUDY OF THE STRESS-STRAIN BEHAVIORS OF UNSATURATED AND SATURATED SANDS UNDER LOW STRAIN RATE LOADING*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **High School for Health Professions & Human Services**

#### **Selena Brazley**

*Project Title: Solving Issues in Pharmacies: How Pharmacists and Doctors Can Prevent Prescription Errors*

NYCSEF Preliminary Round Participant

#### **Fiona Chen**

*Project Title: Adequacy of Traditional Verbal Informed Consent versus Patient-Directed Standardized Written Consent: Are non-English speaking patients being cared for adequately?*

NYCSEF Preliminary Round Participant

#### **Lisset Duran**

*Project Title: Correlation Between Environmental Effects & Canine Intelligence*

NYCSEF Preliminary Round Participant

### **Gurjeet Johal**

*Project Title: Does Gender Influence Outcomes? - A sex-based analysis of a migraine clinical trial.*

NYCSEF Preliminary Round Participant

### **Sanjay Mahadeo**

*Project Title: The Effect of Music on Concentration and Memory*

NYCSEF Preliminary Round Participant

### **Tawanna McPherson**

*Project Title: the effect of physiological psychology and memory on the effect of witness cognition recall*

NYCSEF Preliminary Round Participant

### **High School for Mathematics, Science and Engineering @ CCNY**

#### **Juan Castaneda**

*Project Title: Morpholino Knockdown of Galectin-9 in Zebrafish Larvae: Impact on Kidney Morphology and Function*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

#### **Kharizza-Alleth Empedrado**

*Project Title: Effects of Growth Factors on Wounded Corneal Cells*

NYCSEF Preliminary Round Participant

#### **Jenny Gao**

*Project Title: Changes in Induced Pluripotent Stem Cell Reprogramming With and Without microRNAs*

NYCSEF Preliminary Round Participant

#### **Andrea Guerrero**

*Project Title: Effects of Growth Factors on Wounded Corneal Cells*

NYCSEF Preliminary Round Participant

#### **Thaiyeba Jalil**

*Project Title: Probing Isoforms of an Eicosanoid Clearance Enzyme for Functions in Humans*

NYCSEF Preliminary Round Participant

**Vaishvi Jhaveri**

*Project Title: Defining the Frequency and Mechanism of Dysregulated MTAP Splice Variant Expression in Osteosarcoma*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Joan Lee**

*Project Title: Tracking CDC42 in mammary tissue as a possible biomarker for metastasis following HMTV infection in vitro*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Society for In Vitro Biology

**Austin Lomax**

*Project Title: Growth of Antibiotic Resistance in E. Coli from Patient Negligence of Dosage Regimens*

NYCSEF Preliminary Round Participant

**William Pan**

*Project Title: Regulation of LRRK2 Through PIRB: An Insight into Brain Inflammation and Parkinson's Disease*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Byung Min Park**

*Project Title: Next-Generation Sequencing for the Detection of Mutations Associated with Rare Mendelian Disorders in Patients Meeting Diagnostic Criteria for Primary Progressive Multiple Sclerosis (PPMS)*

NYCSEF Preliminary Round Participant

**Jin Park**

*Project Title: Defining the Frequency and Mechanism of Dysregulated MTAP Splice Variant Expression in Osteosarcoma*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Kaylah-Marie Tomlinson**

*Project Title: Using qPCR to Validate the Upregulation of Glutamate Related Genes in Heroin Users*

NYCSEF Preliminary Round Participant

**Taisa Vasilkova**

*Project Title: Tissue Oxygenation Properties in Patients with Sickle Cell Anemia*

NYCSEF Preliminary Round Participant

**Hunter College High School****Alexander Chan**

*Project Title: Touchpad Input as a Biometric Identifier*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

Yale Science and Engineering Association

**Stefan Colton**

*Project Title: Helping the Blind Perceive Their Surroundings Through Sound Localization*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

US Navy and Marine Corps

**Axel Feldmann**

*Project Title: Search Engine to Map FDA Approved Drugs to Diseases based on Microarray Data Mined from GEO*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Intel Excellence in Computer Science

ISEF Finalist

NYCSEF First Award

Yale Science and Engineering Association

**Julian Glowacz**

*Project Title: Novel Iterative Methodologies in the Search for a Universally-Functional DNA Barcode for Plants*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Jaison Jain**

*Project Title: Novel Iterative Methodologies in the Search for a Universally-Functional DNA Barcode for Plants*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Christopher Lee**

*Project Title: Detecting the Prostate Cancer Biomarker uPA with Carbon Nanotube Fluorescence*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Society for In Vitro Biology

**Stephen Leong**

*Project Title: Correlation Networking of Speech Production: Examining the Brain With Comparative Graph Analysis*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Erica Lin**

*Project Title: Epithelial Mesenchymal Transition Contributes to Perineural Invasion in Pancreatic Adenocarcinoma*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

Society for In Vitro Biology

**Noah Miller**

*Project Title: Helping the Blind Perceive Their Surroundings Through Sound Localization*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

US Navy and Marine Corps

**Margarita Ren**

*Project Title: Cardiolipin-targeted Peptides Inhibit Alzheimer's Beta-Amyloid Oligomer Toxicity through a Two-hit Approach: Fibril Formation and Reduction of Newly Characterized Oxygenase Activity*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Selina Wang**

*Project Title: Wounded Potatoes: War of the Antagonistic Antioxidants*

NYCSEF Preliminary Round Participant

**Karina Xie**

*Project Title: Overcoming a Novel Resistance Mechanism in Sarcomas: Positive Feedback Activation of PDGFR $\beta$  after MEK inhibition in Malignant Peripheral Nerve Sheath Tumor (MPNST)*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Glenn Yu**

*Project Title: Spectroscopic Characterization of Polar Metabolites in Potato Tuber Periderms*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

US Metric Association

Yale Science and Engineering Association

**Alison Zhao**

*Project Title: Transcriptional silencing in Saccharomyces cerevisiae is influenced by promoter strength and chromatin architecture*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kelley Zhao**

*Project Title: Glia-Mediated Neurodegeneration in the Drosophila melanogaster CNS*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Institute for Collaborative Education****Sabrina Armesto**

*Project Title: The Effect of Implicit Racial Stereotypes upon Perception of Employment Categories*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Department of Health and Human Services

NYCSEF Third Award

**Ava Chambers**

*Project Title: Difference in Male and Female Sound Symbolism and Word Association*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Michael Fera**

*Project Title: The Effect of Dietary Health, Body Mass Index, and Peer-induced Stress on Test Performance*

NYCSEF Preliminary Round Participant

**Madeleine Galvin**

*Project Title: The Correlation Between Facial Dominance and Occupational Success in Women*

NYCSEF Preliminary Round Participant

**Max Gertler**

*Project Title: The Effect of Lyrical and Instrumental Cues on Short Term Memory*

NYCSEF Preliminary Round Participant

**Arielle Gironza**

*Project Title: The Effect of a dietary caffeine- taurine solution and aspartame upon spatial learning in blaberus discoidalis cockroaches.*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Leon Gonzalez**

*Project Title: Integration Between Eyes and Antennae in a Microstimulation Task for Adult Blaberus discoidalis*

NYCSEF Preliminary Round Participant

**Sophie Haber**

*Project Title: The Effect of Time and Unconscious Thought on Moral Judgment*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Alexander Lemonides**

*Project Title: The Effect of Maintained Deception on Pupil Diameter*

NYCSEF Preliminary Round Participant

**Emma Livingston**

*Project Title: The Effect of Herbicides on the Spontaneous Nerve Impulses of Earthworms (Eisenia Fetida)*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Lindsay Riley**

*Project Title: The Effect of iPhone Brightness Upon Recall Times and Accuracy*

NYCSEF Preliminary Round Participant

**Sadie Solomon**

*Project Title: The Effect of Reinforcement on Children with Perceived Anxiety During Cognitive Tasks*

NYCSEF Preliminary Round Participant

**Emma Sprague**

*Project Title: The Effect of Visual Distraction and Multitasking on Reaction Times*

NYCSEF Preliminary Round Participant

**Hannah Wing**

*Project Title: The Effect of Transracial Adoption on the Other-Race Effect (ORE)*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Psychological Association

NYCSEF First Award

**Manhattan Center for Science & Mathematics****Sukhanpreet Kaur**

*Project Title: Using Deformation to Produce Triboluminescence*

NYCSEF Preliminary Round Participant

**Mohammedasad Khan**

*Project Title: Regulation of the actin cytoskeleton in Dictyostelium Discoideum:the interaction between a protein kinase, TkIA and a phospholipase, PldB*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Shriraj Shah**

*Project Title: Regulation of the actin cytoskeleton in Dictyostelium Discoideum:the interaction between a protein kinase, TkIA and a phospholipase, PldB*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Stuyvesant High School****David Cahn**

*Project Title: The Relationship Between Functional Connectivity and BOLD Magnitude Explains Sustained Attention Deficits in Schizophrenia*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Jack Cahn**

*Project Title: The Dorsomedial Prefrontal Cortex Is Sensitive to Uncertainty, Not Arousal*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Anthony Chan**

*Project Title: Adolescent Self-Esteem: What Makes High School Seniors Feel More or Less Self-Worth?*

NYCSEF Preliminary Round Participant

**Doris Chen**

*Project Title: Obtaining Superhydrophobicity by Studying the Contact Angles for Teflon in Different Interfaces along with Magic Sand's Effect on PDMS*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Kelly Chen**

*Project Title: On the Horns of a Dilemma: ESR Dating the Middle-Upper Paleolithic Transition at Grotte du Bison, Yonne, France*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Peter Chen**

*Project Title: Growing Rice Aerobically in Arsenic Contaminated Soil Increases the Growth Efficiency of Rice Plants*

NYCSEF Preliminary Round Participant

**Yi Fan Chen**

*Project Title: The Role of MAPK/ERK Signaling Pathway in HPV Infections*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Jacky Cheung**

*Project Title: A Novel Approach to Inserting Genes Responsible for Chitin Synthesis from Candida albicans into the Cellulose Producing Acetobacter xylinus Utilizing Escherichia coli as a Gene Storage Medium*

NYCSEF Preliminary Round Participant

**Sebastian Conybeare**

*Project Title: Canonical Numbering and Orbit Enumeration for Acyclic Graphs*

NYCSEF Preliminary Round Participant

**Soham Daga**

*Project Title: Using Google Trends to Enhance Predictive Models of Mortgage Delinquency to Mitigate Risk in the Loan Lending Process*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

Mu Alpha Theta

NYCSEF First Award

**Risham Dhillon**

*Project Title: Developing a Clinical Assay to Distinguish Between Indolent & Aggressive Prostate Cancer: A Molecular Approach Through Biomarkers PMP22, FGFR1, & CDKN1A/p21*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF First Award

**Libby Ho**

*Project Title: Mycobacteriophage TM4 Tape-Measure Protein Blocks Entry into Stationary Phase of Tuberculosis*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF Second Award

**Ida Huang**

*Project Title: Reduction of Interocular Imbalance in Amblyopia*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Jason Huang**

*Project Title: Simulation of subwavelength light confining structures using hyperbolic metamaterials*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Waqarul Islam**

*Project Title: Characterizing NbSe<sub>2</sub> through Soft Micro-Stencil Lithography and Atomic Force Microscopy*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Mika Jain**

*Project Title: The Effects of Novel Substrates on Morphology and Protein Expression in Podocytes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

Society for In Vitro Biology

**Chiwu Kim**

*Project Title: Chinese and Japanese Attitudes towards the United States*

NYCSEF Preliminary Round Participant

**Elizabeth Kim**

*Project Title: Regulation of Proteasomes in Neuronal Remodeling and Organ Size*

NYCSEF Preliminary Round Participant

**Lily Kim**

*Project Title: Fragile X Syndrome: Testing for Differences in Behavior between Male and Female Zebrafish*

NYCSEF Preliminary Round Participant

**Min Kyu Kim**

*Project Title: Shell We Date?: ESR Dating the Sangamonian Interglacial Deposits at Hopwood Farm, IL*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Stephanie Kwan**

*Project Title: Investigating the Suppression of Mid-Range Harmonics in Violins*

NYCSEF Preliminary Round Participant

**Eugene Lee**

*Project Title: The Elusive Poncelet Point*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Mu Alpha Theta

NYCSEF First Award

**Lily Lee**

*Project Title: Assessment of Thirdhand Exposure to Nicotine from Electronic Cigarettes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

The City University of New York Scholarship - Hunter College

**Henrik Lempa-Cho**

*Project Title: Creating An Interface in Igor Pro to Control a Scanning Tunneling Microscope*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Frank W. and Jan J. Stahl Memorial Award for Technical Excellence

NYCSEF First Award

**Edward Li**

*Project Title: Identifying Dependency in Chiroptera Dental Data to Create New Phylogenetic Paradigms*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - Hunter College

**Jing Lin**

*Project Title: A Novel Azimuthal Polarizer Using A Bulk Acoustic Wave Resonator To Align Silver Nanowires*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Frank W. and Jan J. Stahl Memorial Award for Technical Excellence

NYCSEF First Award

**Tommy Lin**

*Project Title: The Relationship between Specialized High School Admissions Test Preparation Methods and Household Income as an Explanation of the Racial Admissions Gap*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**YunFei Lin**

*Project Title: A Study of the Influence of Electrospinning Parameters on Diameter of Polymer Nanofibers*

NYCSEF Preliminary Round Participant

**Kahmun Lo**

*Project Title: Getting to the 'Root' of Nitrogen Uptake Efficiency in Plants*

NYCSEF Preliminary Round Participant

**Xiao Kai Luo**

*Project Title: Backward Facing Step Flow Energy Harvesting*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Tanzib Razzaki**

*Project Title: Taurine Treatment Reduces Anxious Behavior In Rats*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Alex Sandomirsky**

*Project Title: A Flexible Equivalent Circuit Model of Transformer Core Hysteresis*

NYCSEF Preliminary Round Participant

**Nicole Senderovich**

*Project Title: What makes a freethinker?: The effects of parenting style and peer relationships on the development of authoritarian thinking in adolescents*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Ahmed Sherif**

*Project Title: Human Trafficking and GDP Sectoral Composition: Evidence from Africa and Asia, 2001-2012*

NYCSEF Preliminary Round Participant

**Alvin Wei**

*Project Title: Identifying Secured Camouflaged Gates Using SAT*

NYCSEF Preliminary Round Participant

**Brian Wei**

*Project Title: Optimizing Efficiency of Mesoporous Zn(OH)<sub>2</sub> Solar Cells and its Composites Sensitized by Quantum Dots*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ASM Materials Education Foundation

NYCSEF Third Award

**Peter Wei**

*Project Title: Autophagy prevention of Alcohol induced lipid accumulation in HepG-2 liver cells*

NYCSEF Preliminary Round Participant

**Mandy Wong**

*Project Title: Synaptic changes in neuromuscular junctions in Insomniac mutants of Drosophila Melanogaster*

NYCSEF Preliminary Round Participant

**William Xiao**

*Project Title: Square Quadrilateral Picking*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Shehtab Zaman**

*Project Title: International Comparison of Healthcare Expenditure and Labor Productivity, 1995-2010*

NYCSEF Preliminary Round Participant

**Trinity School**

**Young Joon Kim**

*Project Title: Capillary Action: The Key to Enhanced Bone Regeneration in Micro-Channeled Scaffolds*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Young Women's Leadership School - Harlem**

**Cindy Perez**

*Project Title: Is Fallopija japonica a viable sponge for Carbon Sequestration in Tidal Marshes*

NYCSEF Preliminary Round Participant

**Aziza Rahman**

*Project Title: Habitat Preferences of Nektons in Piermont Marsh*

NYCSEF Preliminary Round Participant

**Nancy Ramirez**

*Project Title: Is Fallopija japonica a viable sponge for Carbon Sequestration in Tidal Marshes*

NYCSEF Preliminary Round Participant

**Queens**

**Archbishop Molloy High School**

**Dhanesh Binda**

*Project Title: Environmentally Sustainable Housing for Urban Expansion and Revitalization*

NYCSEF Preliminary Round Participant

**Thomas Brinskelle**

*Project Title: Effects of Electroculture and Magnetoculture on Radishes*

NYCSEF Preliminary Round Participant

**Francisco Cid**

*Project Title: Survey on Surveys*

NYCSEF Preliminary Round Participant

**Candice Forrester**

*Project Title: The Effect of the Shape of Different Chambers on Social Space Between Rugos 6 and Cantones Drosophila*

NYCSEF Preliminary Round Participant

**Sebastian Geraci**

*Project Title: Environmentally Sustainable Housing for Urban Expansion and Revitalization*

NYCSEF Preliminary Round Participant

**Georgios Gulino**

*Project Title: Environmentally Sustainable Housing for Urban Expansion and Revitalization*

NYCSEF Preliminary Round Participant

**Edrean-Neil Kabigting**

*Project Title: Art Squared: The Psychological Effect of Music on Drawing*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Psychological Association

NYCSEF Second Award

**Kristian Mosquito**

*Project Title: Memory vs. Reading: The Effects of Reading Daily on Short-Term Memory*

NYCSEF Preliminary Round Participant

**Jordi Sevilla**

*Project Title: The Hero Project*

NYCSEF Preliminary Round Participant

**Benjamin N. Cardozo High School****Manasseh Alexander**

*Project Title: The effect of vitamins C and E on the delaying of Parkinson symptoms in wittype, pink-1 and unc-13 caenorhabditis elegans under oxidative.*

NYCSEF Preliminary Round Participant

**Roger Arteaga**

*Project Title: The Effect of Three Plant Antioxidants on Delaying the Onset of Beta Amyloid Accumulation in C. elegans*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Chen Fang**

*Project Title: The Reparative Properties of Carbon Dioxide on UV Exposed Arabidopsis Thaliana*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

The City University of New York Scholarship - City College of New York

**Syed Khurshid**

*Project Title: The effect of vitamins C and E on the delaying of Parkinson symptoms in wittype, pink-1 and unc-13 caenorhabditis elegans under oxidative.*

NYCSEF Preliminary Round Participant

**Hayk Matevosyan**

*Project Title: The Effect of Three Plant Antioxidants on Delaying the Onset of Beta Amyloid Accumulation in C. elegans*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Damaris Roblero**

*Project Title: The Reparative Properties of Carbon Dioxide on UV Exposed Arabidopsis Thaliana*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

The City University of New York Scholarship - City College of New York

**Summer Stoff**

*Project Title: The effects of four plant antioxidants on lifespan of C. elegans*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award



## **Forest Hills High School**

### **Heather Alper**

*Project Title: The Effects of Benzylaminopurine on PEG Grown Ceratopteris richardii*

NYCSEF Preliminary Round Participant

### **Joel Cheung**

*Project Title: The Effect of Titanium Dioxide Nanoparticles on the Growth Rate and Sexual Differentiation of the C-Fern Gametophyte*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **Klaudia Ciszewska**

*Project Title: The Effects of Cr(NO<sub>3</sub>)<sub>3</sub> 9H<sub>2</sub>O and CuO on C-fern Spore Germination*

NYCSEF Preliminary Round Participant

### **Anxhelo Haxhillari**

*Project Title: The Effects of Benzylaminopurine on PEG Grown Ceratopteris richardii*

NYCSEF Preliminary Round Participant

### **Eveliana Kazakova**

*Project Title: The Effects of Ammonium Nitrate on Sexual Differentiation in C-fern*

NYCSEF Preliminary Round Participant

### **Fadil Nero**

*Project Title: The Effect of Titanium Dioxide Nanoparticles on the Growth Rate and Sexual Differentiation of the C-Fern Gametophyte*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **Miguel Ortega**

*Project Title: The Effect of Mannitol on Salt Stressed Ceratopteris richardii spores*

NYCSEF Preliminary Round Participant

### **Laura Palma**

*Project Title: The Effects of Ammonium Nitrate on Sexual Differentiation in C-fern*

NYCSEF Preliminary Round Participant

### **Krupal Patel**

*Project Title: The Effect of Mannitol on Salt Stressed Ceratopteris richardii spores*

NYCSEF Preliminary Round Participant

### **Kamila Pawelec**

*Project Title: The relationship between student motivation and homework policy on homework completion*

NYCSEF Preliminary Round Participant

### **Asim Rana**

*Project Title: The Effects of Benzylaminopurine on PEG Grown Ceratopteris richardii*

NYCSEF Preliminary Round Participant

### **Daniel Shamaev**

*Project Title: The relationship between student motivation and homework policy on homework completion*

NYCSEF Preliminary Round Participant

### **Tamar Solomon**

*Project Title: The Effects of Soot on the Melting Rate of Ice*

NYCSEF Preliminary Round Participant

### **Victoria Szablinski**

*Project Title: The Effects of Cr(NO<sub>3</sub>)<sub>3</sub> 9H<sub>2</sub>O and CuO on C-fern Spore Germination*

NYCSEF Preliminary Round Participant

## **Francis Lewis High School**

### **Amanda Ackermann**

*Project Title: What Degrades My DNA? Effects of Intense Heating on DNA Quantities During Mass Fatality Incidents*

NYCSEF Preliminary Round Participant

### **Tasnim Belal**

*Project Title: The Effect of Potassium Nitrate on Bermuda Grass*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Niman Bhatia**

*Project Title: How Well Do You Know Yourself? We Know You Better!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - City College of New York

**Philip Bis**

*Project Title: Slime Mold Yum Yum: Nutritional Preference of Physarum Polycephalum*

NYCSEF Preliminary Round Participant

**Catherine Botero**

*Project Title: The Effect of Music Genre on the Memory of Children and Adolescents ages 7-18*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Hunter Brink**

*Project Title: Insulin the Traitor? The Effect of Insulin on E. coli*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kelly Cabeza**

*Project Title: The Greatest Wealth = Health? Assessing Nutritional Intake of High School Students*

NYCSEF Preliminary Round Participant

**Gisella Carpio**

*Project Title: Don't nitrate, it won't eliminate!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Iffath Chaity**

*Project Title: The Effect of Differently Colored LED's on Radish (Raphanus sativus) Growth*

NYCSEF Preliminary Round Participant

**Benjamin Chen**

*Project Title: Got Water? Rehydrated! The Effects of Potassium Polyacrylate Gel on Raphanus Sativus*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Connie Chen**

*Project Title: Pansy Torture? How does Acid Rain Effect on Viola tricolor?*

NYCSEF Preliminary Round Participant

**Kyle Chin**

*Project Title: The Effect of Different Herbs on the MDA MB157 Breast Cancer Cell Line Proliferation*

NYCSEF Preliminary Round Participant

**Lisa Cho**

*Project Title: Stomach Wars: EDTA vs B. cereus*

NYCSEF Preliminary Round Participant

**Maria Chung**

*Project Title: Building an Affordable Hydroponics System for Window Sills*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Ricoh Americas Corporation

**Chebria Crandol**

*Project Title: Stomach Wars: EDTA vs B. cereus*

NYCSEF Preliminary Round Participant

**Amina Durkovic**

*Project Title: The Link Between Sleep Deprivation and Academic Performance*

NYCSEF Preliminary Round Participant

**Muhammed El Shatanofy**

*Project Title: Self-assembled structures via manipulation of hydrophilic and hydrophobic surfaces*

NYCSEF Preliminary Round Participant

**Gabriella Eng**

*Project Title: What Degrades My DNA? Affects of Intense Heating on DNA Quantities During Mass Fatality Incidents*

NYCSEF Preliminary Round Participant

**Angeline Fang**

*Project Title: Daily Exercise Survey on Highschool Students: We Will, We Will, Pump Iron!*

NYCSEF Preliminary Round Participant

**Niha Habul**

*Project Title: Building an Affordable Hydroponics System for Window Sills*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Ricoh Americas Corporation

**Amrita Harrichand**

*Project Title: Daily Exercise Survey on Highschool Students: We Will, We Will, Pump Iron!*

NYCSEF Preliminary Round Participant

**Mohammed Hasnat**

*Project Title: Effect of calcium chloride on lima bean growth*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Ivon Hong**

*Project Title: The Effect of Mg(NO<sub>3</sub>)<sub>2</sub> on Mung Bean Growth*

NYCSEF Preliminary Round Participant

**Andrew Hoyos**

*Project Title: Slime Mold Yum Yum: Nutritional Preference of Physarum Polycephalum*

NYCSEF Preliminary Round Participant

**Emily Huang**

*Project Title: The Hidden Dimension of Chaos: How Personality Traits Affect Fractal Preference*

NYCSEF Preliminary Round Participant

**Aadil Hussain**

*Project Title: Effect of calcium chloride on lima bean growth*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Simran Jaspal**

*Project Title: Slime Mold Yum Yum: Nutritional Preference of Physarum Polycephalum*

NYCSEF Preliminary Round Participant

**Eileen Kao**

*Project Title: How Well Do You Know Yourself? We Know You Better!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - City College of New York

**Tarandeep Kaur**

*Project Title: The Link Between Sleep Deprivation and Academic Performance*

NYCSEF Preliminary Round Participant

**Chanyang Kim**

*Project Title: How does cupric sulphate affect the growth of Zinnia elegans?*

NYCSEF Preliminary Round Participant

**Neil Koshy**

*Project Title: Got Water? Rehydrated! The Effects of Potassium Polyacrylate Gel on Raphanus Sativus*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kevin Lam**

*Project Title: How does Magnesium Nitrate Affect the Growth of Black Beans (Phaseolus vulgaris)?*

NYCSEF Preliminary Round Participant

**Seung hyun Lee**

*Project Title: The Link Between Sleep Deprivation and Academic Performance*

NYCSEF Preliminary Round Participant

**Susan Lee**

*Project Title: The Effect of Mg(NO<sub>3</sub>)<sub>2</sub> on Mung Bean Growth*

NYCSEF Preliminary Round Participant

**Guadalupe Leon**

*Project Title: Don't nitrate, it won't eliminate!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**YuChieh Lin**

*Project Title: Insulin the Traitor? The Effect of Insulin on E. coli*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Zarrin Mahmud**

*Project Title: The Effect of Differently Colored LED's on Radish (Raphanus sativus) Growth*

NYCSEF Preliminary Round Participant

**Sameena Manzur**

*Project Title: Stomach Wars: EDTA vs B. cereus*

NYCSEF Preliminary Round Participant

**Ali Mian**

*Project Title: Effect of calcium chloride on lima bean growth*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Samantha Ng**

*Project Title: The Effect of Mg(NO<sub>3</sub>)<sub>2</sub> on Mung Bean Growth*

NYCSEF Preliminary Round Participant

**Kavita Niranjan**

*Project Title: The Effect of Potassium Nitrate on Bermuda Grass*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Dayana Paredes**

*Project Title: Presto! Pesto! The Effect of Different Colored LEDs on Sweet Basil.*

NYCSEF Preliminary Round Participant

**Rhea Patel**

*Project Title: Ultrastructural defects of Drosophila neuromuscular synapses in mutants of rugose, a model of autism spectrum*

NYCSEF Preliminary Round Participant

**Teodoros Petridis**

*Project Title: Building an Affordable Hydroponics System for Window Sills*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

Ricoh Americas Corporation

**Farah Pragga**

*Project Title: Cry me a Sequence! The Gene Expression of Cryptochrome 1 in Ceratopteris*

NYCSEF Preliminary Round Participant

**Humda Rahman**

*Project Title: The effect of LED's on Nemophila menziesii and Eschsholzia californica*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Mia Rodie**

*Project Title: The effect of LED's on Nemophila menziesii and Eschsholzia californica*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Priangka Saha**

*Project Title: Do the Health Belief Model and the Theory of Planned Behavior Predict BMI, Diet, and Exercise Behaviors for Ethnic Minority Women?*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Department of Health and Human Services

NYCSEF Second Award

**Mushe Shaulov**

*Project Title: The Ultimate Shield? The Effects of Proteases on Hemoglobin Encapsulated TMOS Sol Gel*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Vivian Shi**

*Project Title: Pansy Torture? How does Acid Rain Effect on Viola tricolor?*

NYCSEF Preliminary Round Participant

**Khy Ee Siew**

*Project Title: The Greatest Wealth = Health? Assessing Nutritional Intake of High School Students*

NYCSEF Preliminary Round Participant

**Arpna Singh**

*Project Title: Presto! Pesto! The Effect of Different Colored LEDs on Sweet Basil.*

NYCSEF Preliminary Round Participant

NYCSEF Third Award

### **Impreet Singh**

*Project Title: On the Horns of a Dilemma: ESR Dating the Middle-Upper Paleolithic Transition at Grotte du Bison, Yonne, France*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

### **Naveen Singh**

*Project Title: The Effect of Bismuth Nanoparticles in a Magnetic Field on Radish Growth*

NYCSEF Preliminary Round Participant

### **Kaitlin Siu**

*Project Title: How Well Do You Know Yourself? We Know You Better!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - City College of New York

### **Marcelo Torres**

*Project Title: Got Water? Rehydrated! The Effects of Potassium Polyacrylate Gel on Raphanus Sativus*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **Luc Tourangeau**

*Project Title: The Effect of Bismuth Nanoparticles in a Magnetic Field on Radish Growth*

NYCSEF Preliminary Round Participant

### **Razia Uddin**

*Project Title: Help seeking Barriers among Different Ethnicities*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Department of Health and Human Services

NYCSEF Third Award

### **Eva Villarreal**

*Project Title: Daily Exercise Survey on Highschool Students: We Will, We Will, Pump Iron!*

NYCSEF Preliminary Round Participant

### **Kalliope Vourakis**

*Project Title: Don't nitrate, it won't eliminate!*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

### **Jina Wang**

*Project Title: How does cupric sulphate affect the growth of Zinnia elegans?*

NYCSEF Preliminary Round Participant

### **Caroline Wu-Silvera**

*Project Title: Insulin the Traitor? The Effect of Insulin on E. coli*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **Iris Yu**

*Project Title: The Effect of Differently Colored LED's on Radish (Raphanus sativus) Growth*

NYCSEF Preliminary Round Participant

### **Cindiraina Zhai**

*Project Title: The Effect of Music Genre on the Memory of Children and Adolescents ages 7-18*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

### **Kate Zhao**

*Project Title: Presto! Pesto! The Effect of Different Colored LEDs on Sweet Basil.*

NYCSEF Preliminary Round Participant

### **Kelvin Zheng**

*Project Title: But I have to facebook! Poking Outside of the Chatbox 2*

NYCSEF Preliminary Round Participant

### **Mark Zheng**

*Project Title: The Effect of Bismuth Nanoparticles in a Magnetic Field on Radish Growth*

NYCSEF Preliminary Round Participant

### **John Bowne High School**

#### **Carolyn Wakeima Curtis**

*Project Title: Establishing a Correlation between the Urban Heat Island (UHI) Effect and Land Cover in New York City*

NYCSEF Preliminary Round Participant

**Manjot Dhaliwal**

*Project Title: Comparative Effectiveness of Antibiotics and Antibiotic Combinations for Staphylococcus epidermidis Colonization*

NYCSEF Preliminary Round Participant

**Katya Garashchenko**

*Project Title: The effect of oak biochar on soil quality and growth of Glycine max in a stress-free environment*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kimberley Harricharran**

*Project Title: Temperature Variability and Climatic Extremes in New York City*

NYCSEF Preliminary Round Participant

**Elise Harrison**

*Project Title: PCB Effects on Zebrafish Development*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ISEF Finalist

NYCSEF First Award

**Marissa Laikhram**

*Project Title: Comparative Effectiveness of Antibiotics and Antibiotic Combinations for Staphylococcus epidermidis Colonization*

NYCSEF Preliminary Round Participant

**Johnson Lin**

*Project Title: Spatial Variations of Fecal Indicator Bacteria (FIB) and Nutrients in the Gowanus Canal, Brooklyn, New York*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

National Oceanic and Atmospheric Administration

NYCSEF Third Award

Stockholm Junior Water Prize

**Xiaomin Lin**

*Project Title: The Effect of Phosphate in Inorganic Solid Phase Arsenic Determination*

NYCSEF Preliminary Round Participant

**Yu Ying Mei**

*Project Title: The Effect of Phosphate in Inorganic Solid Phase Arsenic Determination*

NYCSEF Preliminary Round Participant

**Laurie Nazaire**

*Project Title: The Effects of Environmental Toxicant, Bisphenol A (BPA), on the Ovarian Cells of the Patiria miniata*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Vilian Quach**

*Project Title: Spatial Variations of Fecal Indicator Bacteria (FIB) and Nutrients in the Gowanus Canal, Brooklyn, New York*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

National Oceanic and Atmospheric Administration

NYCSEF Third Award

Stockholm Junior Water Prize

**JUSTIN SEETARAM**

*Project Title: Differential Pulse - Cathodic Stripping Voltammetry (DPCSV) for simultaneous determination of Cu, Pb, Cd, and Zn in Environmental Samples*

NYCSEF Preliminary Round Participant

**Sanjay Singh**

*Project Title: 'Anti-Stokes emission from dye sensitized nanowires'*

NYCSEF Preliminary Round Participant

**Alexandros Stefanidis**

*Project Title: The effect of oak biochar on soil quality and growth of Glycine max in a stress-free environment*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kimberly Thelusma**

*Project Title: Inter-Annual Comparison of Satellite Passive Microwave Data with Ground based Radiometric Measurements for Snowpack*

NYCSEF Preliminary Round Participant

**Ajith Vellat**

*Project Title: Spatial Variations of Fecal Indicator Bacteria (FIB) and Nutrients in the Gowanus Canal, Brooklyn, New York*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

National Oceanic and Atmospheric Administration

NYCSEF Third Award

Stockholm Junior Water Prize

**Queens High School for Sciences @ York College****Kafayat Abdul**

*Project Title: The Effect of Different Protection Methods on the Germination Rate of Grass Seeds*

NYCSEF Preliminary Round Participant

**Olorunsola Akinsulire**

*Project Title: Using Ratios of Triangle Areas to Improve Facial Recognition Using Computer Technology*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Armand Ali**

*Project Title: Code Deciphering Using Different Mathematical Functions*

NYCSEF Preliminary Round Participant

**Brian Badloo**

*Project Title: The Effect of Testing an Oleophilic Method on Different Aquatic Environments to Discover the Vanguard Setting*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Brooklyn Friends of Clearwater

National Oceanic and Atmospheric Administration

NYCSEF First Award

Stockholm Junior Water Prize

**Joseph Bajor**

*Project Title: The Effect of the Shape of Different Chambers on Social Space Between Rugos 6 and Cantones Drosophila*

NYCSEF Preliminary Round Participant

**Chanho Bak**

*Project Title: The Seasonal Effects of Different Colored Roofing Materials on Surface Albedo in an Urban Environment*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Farzana Begum**

*Project Title: The Effect of Iron on Copper Aqueous Solutions*

NYCSEF Preliminary Round Participant

**Andrea Cadornigara**

*Project Title: Antioxidant Potential of Tropical Philippine Fruits*

NYCSEF Preliminary Round Participant

**Joel Caxaj**

*Project Title: Determining Patterns in Cyclic Primes Using Mathematical Operations*

NYCSEF Preliminary Round Participant

**Bianca Chakravorty**

*Project Title: Using Ratios of Triangle Areas to Improve Facial Recognition Using Computer Technology*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Julie Chan**

*Project Title: Creating an Environmentally Friendly Pesticide*

NYCSEF Preliminary Round Participant

**Gloria Chen**

*Project Title: The Effect of Allelochemicals from Ipomoea Batatas as a Natural Herbicide*

NYCSEF Preliminary Round Participant

**Kevin Chen**

*Project Title: Effects of Commercial Length on Product Sales*

NYCSEF Preliminary Round Participant

**Emily Chiang**

*Project Title: The Effect of Allelochemicals from Ipomoea Batatas as a Natural Herbicide*

NYCSEF Preliminary Round Participant

**Ki Rim Chung**

*Project Title: Patterns in Modern Pop Music based on Musical Notes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Mu Alpha Theta

NYCSEF Third Award

**Ritu Dhar**

*Project Title: Ultrastructural defects of Drosophila neuromuscular synapses in mutants of rugose, a model of autism spectrum*

NYCSEF Preliminary Round Participant

**Min Dong**

*Project Title: Using Cross Correlation Function and Multivariate Regression to Predict and Analyze Trends in the Economy*

NYCSEF Preliminary Round Participant

**Pooja Dutta**

*Project Title: Role of NFkappaB on IL-8 Gene Expression in LPS Stimulated U937 cells*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Kelsey Eng**

*Project Title: The Behavior of Stock Prices During Presidential Terms*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Matthew Gonsalves**

*Project Title: The Effect of Magnifying Film and Mirror Matrices on the Efficiency of Solar Panels*

NYCSEF Preliminary Round Participant

**Katie Han**

*Project Title: The Effect of Different Fertilizers on the Growth of*

NYCSEF Preliminary Round Participant

**Nida Hussain**

*Project Title: Physical and Chemical Characterization of the Water Quality of Lakes and Ponds in Greater New York*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Meteorological Society

NYCSEF Third Award

The City University of New York Scholarship - Hunter College

**Seokyung Hwang**

*Project Title: Creating an Environmentally Friendly Pesticide*

NYCSEF Preliminary Round Participant

**Sandy Jiang**

*Project Title: Effect of Angled Light on Plant Growth*

NYCSEF Preliminary Round Participant

**SungHan Kang**

*Project Title: The Effect of Phosphorus and Sulfur Concentration Application on the Growth of Phaseolus lunatus L.*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Zainab Karim**

*Project Title: The Effect of Garlic Mustard Seeds, Alliaria petiolata, on the Growth of Lettuce, Lactuca sativa, and Radish, Raphanus sativus, Seeds*

NYCSEF Preliminary Round Participant

**Minji Kim**

*Project Title: Identification of Modern Standards of Beauty Using the Golden Ratio*

NYCSEF Preliminary Round Participant

**Karen Kong**

*Project Title: The Effect of Cell Phones on a Voice Verification System*

NYCSEF Preliminary Round Participant

**Edwin Lee**

*Project Title: The Seasonal Effects of Different Colored Roofing Materials on Surface Albedo in an Urban Environment*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Chris Li**

*Project Title: Effect of the Temperature and Salinity of Water on the Absorption of UV Radiation*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Fanny Lin**

*Project Title: Patterns in Modern Pop Music based on Musical Notes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Mu Alpha Theta

NYCSEF Third Award



**Jin Lin**

*Project Title: The Behavior of Stock Prices During Presidential Terms*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Deanna Lochan**

*Project Title: The Effect of Common Pollutants on the Growth of Elodea canadensis*

NYCSEF Preliminary Round Participant

**Amit Manhaini**

*Project Title: Finding the Direction South Without the use of Advanced Tools*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Environmental Quest

NYCSEF Second Award

**Rehat Mannan**

*Project Title: Using Cross Correlation Function and Multivariate Regression to Predict and Analyze Trends in the Economy*

NYCSEF Preliminary Round Participant

**Rabia Mehmood**

*Project Title: Muscle Transcriptome profiling and analysis of Synodus synodus*

NYCSEF Preliminary Round Participant

**Sadia Mohaimin**

*Project Title: The Effect of Thymoquinone Encapsulated within Sol-Gel Nanoparticles on E. coli*

NYCSEF Preliminary Round Participant

**Matthew Moulton**

*Project Title: Carrying Capacity of New York City*

NYCSEF Preliminary Round Participant

**Fatema Noor**

*Project Title: The Effect of Testing an Oleophilic Method on Different Aquatic Environments to Discover the Vanguard Setting*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Brooklyn Friends of Clearwater

National Oceanic and Atmospheric Administration

NYCSEF First Award

Stockholm Junior Water Prize

**Gladys Obaji**

*Project Title: The Effect of Glycyl-L Glutamine on the Efficacy of Regeneration in Dugesia Tigrin*

NYCSEF Preliminary Round Participant

**Olivia Palacios**

*Project Title: Carrying Capacity of New York City*

NYCSEF Preliminary Round Participant

**Eric Pang**

*Project Title: Determining Patterns in Cyclic Primes Using Mathematical Operations*

NYCSEF Preliminary Round Participant

**Harleen Paul**

*Project Title: The Effect of the Vetiver Plant's Phytoremediation Qualities on the Absorption of Heavy Metals in Water*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Sean Pereira**

*Project Title: The Effect of Pork Lard on the Efficiency of Biofuel*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Priya Persaud**

*Project Title: The Effect of Copper Windings Around the Central Shaft of an Electric Motor on its Efficiency*

NYCSEF Preliminary Round Participant

Sarah and Morris Wiesenthal Science Awards

**Dana Ragoonanan**

*Project Title: The Effect of the Vetiver Plant's Phytoremediation Qualities on the Absorption of Heavy Metals in Water*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Denera Ragoonanan**

*Project Title: The Alterations of Condition and Structure of Flavylum Ions on the Light Harvesting of DSSC*

NYCSEF Preliminary Round Participant

**Rasidha Rahman**

*Project Title: The Effect of Solvents on the Photorelease of a Model Drug from a New Phototrigger*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Rasman Rayyan**

*Project Title: The Effect of Pork Lard on the Efficiency of Biofuel*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Celine Ripa**

*Project Title: The Application of Battle Dynamics on Nash Equilibria*

NYCSEF Preliminary Round Participant

**Monica Singh**

*Project Title: The Seasonal Effect of Seed Size on the Growth of Organic White Kidney Bean Seeds*

NYCSEF Preliminary Round Participant

**Claudia Siu**

*Project Title: Effects of Commercial Length on Product Sales*

NYCSEF Preliminary Round Participant

**Emily Song**

*Project Title: The Effects of Using a Manually Controlled Total Artificial Heart on Maintaining Heart Performance in Realistic Applications*

NYCSEF Preliminary Round Participant

**Richa Tamakuwala**

*Project Title: The Effect of Different Protection Methods on the Germination Rate of Grass Seeds*

NYCSEF Preliminary Round Participant

**Amy Truong**

*Project Title: The Effect of Organic Fertilizers on the Pigmentation and Growth of *Ocimum basilicum**

NYCSEF Preliminary Round Participant

**Chi-Ming Tseng**

*Project Title: Ship Hull Coating Effect on Shipping Efficiency*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Carlos Velez**

*Project Title: The Effect of Magnifying Film and Mirror Matrices on the Efficiency of Solar Panels*

NYCSEF Preliminary Round Participant

**Nithya Vishwanathan**

*Project Title: The Effect of Common Pollutants on the Growth of *Elodea canadensis**

NYCSEF Preliminary Round Participant

**Jessie Yang**

*Project Title: Effect of Angled Light on Plant Growth*

NYCSEF Preliminary Round Participant

**Seung Hye Yang**

*Project Title: The Effect of Different Fertilizers on the Growth of*

NYCSEF Preliminary Round Participant

**Yulin Yang**

*Project Title: The Effect of Cell Phones on a Voice Verification System*

NYCSEF Preliminary Round Participant

**Cheng Yuan**

*Project Title: The Effects of Using a Manually Controlled Total Artificial Heart on Maintaining Heart Performance in Realistic Applications*

NYCSEF Preliminary Round Participant

**JunJun Zhang**

*Project Title: The Patterns of Natural Numbers*

NYCSEF Preliminary Round Participant

**Erik Zhao**

*Project Title: Effect of the Temperature and Salinity of Water on the Absorption of UV Radiation*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Peilin Zhen**

*Project Title: The Patterns of Natural Numbers*

NYCSEF Preliminary Round Participant

**Saint Francis Preparatory School**

**Jaclyn Angielczyk**

*Project Title: Changing Children's Perception of Nutrition through Hands-On Education*

NYCSEF Preliminary Round Participant

**Kathryn Angielczyk**

*Project Title: The Effects of Tonal Language, Familial Musicality, and Musical Preference on Pitch Perception Using Applications*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Daniel Bogun**

*Project Title: Tuning the Physical Properties of a Graphite Nanosolution Through Changes in Particle Coagulation*

NYCSEF Preliminary Round Participant

**Jacqueline Heffner**

*Project Title: Oncolytic Virotherapy Using Vaccinia Virus GLV-1h68 Successfully Kills Sorafenib-Resistant Hepatocellular Carcinoma*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Suriah Iqbal**

*Project Title: Occupational and Communal Exposures to Harmful Substances in Relation to Lung and Breast Cancer Risk: An Epidemiological Analysis of Environmental Exposure Utilizing Google Trends*

NYCSEF Preliminary Round Participant

**Diane Lachhman**

*Project Title: Climatic Drivers of Extreme Rainfall Patterns Over the Northeastern United States*

NYCSEF Preliminary Round Participant

**Erene Litis**

*Project Title: How An Individual's Sense of Smell Effect Their Test-Taking Anxiety*

NYCSEF Preliminary Round Participant

**Samantha Moreno**

*Project Title: Alzheimer's Disease and Depression: The Case Against a Similar Etiology*

NYCSEF Preliminary Round Participant

**Umay Mughal**

*Project Title: The Molecular Effect of Age on Liver Toxicity by Asparaginase*

NYCSEF Preliminary Round Participant

**Kevin Power**

*Project Title: The Effects of Alcohol On Reading an Listening Comprehension Tests*

NYCSEF Preliminary Round Participant

**Kimberly Rosal**

*Project Title: Parental Monitoring and its Effects on Adolescents' Bullying Behavior*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

American Psychological Association

NYCSEF Third Award

**Ashley Simons**

*Project Title: Comparative Analysis of the Sleep Patterns of Older and Younger Adults*

NYCSEF Preliminary Round Participant

**Thalia Tamay**

*Project Title: Dog Aggression Change as a Function of the Day of the Week*

NYCSEF Preliminary Round Participant

**Townsend Harris High School****Samia Abedin**

*Project Title: The Effect of Solar Water Disinfection on the Inactivation of Escherichia coli Using Different Concentrations of Food Grade Hydrogen Peroxide*

NYCSEF Preliminary Round Participant

Brooklyn Friends of Clearwater

**Clara Abouelsaad**

*Project Title: The Effect of Different Types of Honey on the Growth of Serratia marcescens*

NYCSEF Preliminary Round Participant

**Monisha Afrooz**

*Project Title: The Effect of Microwave Radiation on the Germination of Phaseolus acutifolius*

NYCSEF Preliminary Round Participant

**Tahsin Akanda**

*Project Title: Development of Silicon-Based Flexible Technology for Biomedical Application: Monitoring of Dystonia*

**Aisha Ali**

*Project Title: The Effect of Sunscreen on the Amount of Skin Damage Caused by UV Rays*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Sindhu Avuthu**

*Project Title: Using a T-maze to test the effects of different stimulants on the memory of the Drosophila melanogaster*

NYCSEF Preliminary Round Participant

**Xhesika Begaj**

*Project Title: Changes in Smad4 Localization as a Result of Different Drug Treatments*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Karun Bhardwaj**

*Project Title: Impact of School Lunches on High School Students*

NYCSEF Preliminary Round Participant

**Chloe Chai**

*Project Title: Asian Americans and Pacific Islanders' (AAPI) Opinion on Affirmative Action in Higher Education*

NYCSEF Preliminary Round Participant

**Deborah Chai**

*Project Title: Gain or Pain: Testing the Effectiveness of Bicycle Lanes in Manhattan*

NYCSEF Preliminary Round Participant

**Jothika Challapalli**

*Project Title: The Role of YAP and TAZ signaling in HIV-associated nephropathy.*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Allison Chan**

*Project Title: Effects of Extracurricular Activities on the Academic performance of NYC High School students*

NYCSEF Preliminary Round Participant

**Darren Chen**

*Project Title: The Effects of Skipping Lunch on Students' Academic Performance*

NYCSEF Preliminary Round Participant

**Else Chen**

*Project Title: How does a neighborhood's income level affect its use of public libraries?*

NYCSEF Preliminary Round Participant

**Neil Chen**

*Project Title: Examination of Phototaxis and Stigmery in Dugesia tigrina*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Kavya Dasari**

*Project Title: The Effect of Disrupted Circadian Rhythm on Alcohol Consumption in Drosophila Melanogaster*

NYCSEF Preliminary Round Participant

**Sarah Elhachimi**

*Project Title: The Effect of Different Types of Honey on the Growth of Serratia marcescens*

NYCSEF Preliminary Round Participant

**Shamilah Faria**

*Project Title: The Effect of Windssocks on Wind Turbine Efficiency*

NYCSEF Preliminary Round Participant

**Nicole Gleizer**

*Project Title: The Comparative Effect of B Vitamins on the Lifespans of Successive D. melanogaster Generations*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Nimrod Gozum**

*Project Title: The Essential Nature of the 3' UTR Region of the Small Segment of Bacteriophage Phi 6*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Shweta Gupta**

*Project Title: Independent Reading and Its Effect on Student Reading Habits*

NYCSEF Preliminary Round Participant

**Elizabeth Ha**

*Project Title: The Comparative Effect of B Vitamins on the Lifespans of Successive D. melanogaster Generations*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Sarah Han**

*Project Title: Do High School Seniors Care More About Reputation or Money When It Comes to College Enrollment Decision?*

NYCSEF Preliminary Round Participant

**Amy Hao**

*Project Title: The Analysis of Posterior Cervical Thickness in Association with Spontaneous Preterm Birth: A Correlational Study*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - Hunter College

**Melinda Harbhajan**

*Project Title: The Effects of Kanamycin Encapsulated Nanoparticles on E. coli*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

US Metric Association

**Faisal Hossain**

*Project Title: The Effect of Carbon Filtration on the Amount of Iron and Copper Ions in Tap Water*

NYCSEF Preliminary Round Participant

**Inderdeep Jaswal**

*Project Title: The Effects of Moringa oleifera on the Phaseolus vulgaris*

NYCSEF Preliminary Round Participant

**Yarim Lee**

*Project Title: Development of a Therapeutic drug for Alzheimer's Disease: A Chemical Approach to Cease Amyloidosis*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Biophysical Society Award

ISEF Finalist

NYCSEF First Award

**Rebecca Li**

*Project Title: Using a T-maze to test the effects of different stimulants on the memory of the Drosophila melanogaster*

NYCSEF Preliminary Round Participant

**Shiying Lin**

*Project Title: The effect of the components of dairy milk on the larval mass of Bombyx Mori*

NYCSEF Preliminary Round Participant

**Monica Maharjan**

*Project Title: The Effect of a Single Herbal Remedy, a Combined Herbal Remedy, and an Over-the-Counter Sleep Medication on the Memory of Dugesia tigrina*

NYCSEF Preliminary Round Participant

**Swathi Mettela**

*Project Title: The Effect on the Behavior of Drosophila melanogaster When Presented With Distilled Water, Orange Flavored, and Increasing Volumes of Octyl Ethanoate*

NYCSEF Preliminary Round Participant

**Mahnoor Mirza**

*Project Title: Studying the Correlation between Aspects of Identity and the College Student's GPA*

NYCSEF Preliminary Round Participant

**Jillian Panagakos**

*Project Title: Determining the Optimal Parameters to Maximize Lifetime of Emission in a Coupled Type-II and Type-I Quantum Dot System*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Jan Pazhayampallil**

*Project Title: The Effect of Different Types of Water on the Voltage Created by Microbial Fuel Cells*

NYCSEF Preliminary Round Participant

**Zoya Qureshi**

*Project Title: The Effect of a Barrier on Particle Mobilization and Discoloration*

NYCSEF Preliminary Round Participant

**Syed Rahman**

*Project Title: The Effects of Moringa oleifera on the Phaseolus vulgaris*

NYCSEF Preliminary Round Participant

**Abrianna Reddy**

*Project Title: The Effect of Diet on the Regeneration Rate of Dugesia tigrina*

NYCSEF Preliminary Round Participant

**Daniel Restifo**

*Project Title: Reduced Willpower and Decision Fatigue Among Supermarket Shoppers*

NYCSEF Preliminary Round Participant

**Alexa Rizzuto**

*Project Title: The Influence of Parenting Styles on Teen Happiness*

NYCSEF Preliminary Round Participant

**Washika Ruhani**

*Project Title: The Impact of College Tuition and Educational Debt on the Choice of Degree a Student Wants to Pursue*

NYCSEF Preliminary Round Participant

**Jhumpa Sarkar**

*Project Title: Don't Cap! Use Tap!: A Study on Bottled Water and Tap Water Preferences of College Students*

NYCSEF Preliminary Round Participant

**Solly Sebastian**

*Project Title: The Effects of Kanamycin Encapsulated Nanogels on E.coli*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

US Metric Association

**Maryam Shahab**

*Project Title: The Effect of Sunscreen on the Amount of Skin Damage Caused by UV Rays*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Stiven Shkempi**

*Project Title: Development of an Environmentally Friendly Organic Solar Paint*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ASM Materials Education Foundation

NYCSEF Third Award

**Talwinder Singh**

*Project Title: The effect of an early postnatal lesion of the thalamic nucleus on pyramidal cell apical dendrite lengths in the prefrontal cortex*

NYCSEF Preliminary Round Participant

**Sadiqa Taaseen**

*Project Title: The Effect of Syzygium aromaticum on the growth of Serratia marcescens*

NYCSEF Preliminary Round Participant

**Alessandra Taboada**

*Project Title: Pilot Study: Characterization of Diquinolium Compounds and Study of Their Interaction with DNA*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ASM Materials Education Foundation

NYCSEF Second Award

US Metric Association

**Yun-Ping Tseng**

*Project Title: Utilization of Wind Power Using Sail in Shipping Transportation*

NYCSEF Preliminary Round Participant

**Saloni Vishwakarma**

*Project Title: The Effect on the Behavior of Drosophila melanogaster When Presented With Distilled Water, Orange Flavedo, and Increasing Volumes of Octyl Ethanoate*

NYCSEF Preliminary Round Participant

**Catherine Vozikis**

*Project Title: The Impact of Qualities of Hospice Care on Family Members of Terminally Ill Patients*

NYCSEF Preliminary Round Participant

**Simrankaur Wahan**

*Project Title: The Effect of Different Materials on Oil Absorption*

NYCSEF Preliminary Round Participant

**Linda Wu**

*Project Title: A comparison of the rate of proton transport in the d-channel of cytochrome c oxidase in Paracoccus denitrificans and the bovine heart*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Elizabeth Yakubova**

*Project Title: Spine Distribution and Density within Pyramidal Cells of the Somatosensory Cortex in C57 Black 6 Mice*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

The City University of New York Scholarship - Hunter College

**Staten Island****Staten Island Technical High School****Burhan Azeem**

*Project Title: Deposition of Carbon on Copper Wire: A New Process for the Fabrication of Carbon Microtubes*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

ASM Materials Education Foundation

Frank W. and Jan J. Stahl Memorial Award for Technical Excellence

ISEF Finalist

NYCSEF First Award

**Fatmira Curovic**

*Project Title: The Effect of Sleep on Cognition and Motor Development in Infants*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

Department of Health and Human Services

NYCSEF Third Award

**Theodora Danias**

*Project Title: Eye Abnormalities Caused by the N-Ras Gene*

NYCSEF Preliminary Round Participant

**Shreya Jain**

*Project Title: Using a 3-Point Bending Test to Measure Metatarsal Bone Strength and Stiffness to Reduce Sports Injuries in Athletes' Feet*

NYCSEF Preliminary Round Participant

**Chelsey Lin**

*Project Title: Recombinant Production of the Potassium Channel-Activating Snake Toxin Tx7335*

NYCSEF Preliminary Round Participant

**Kevin Lin**

*Project Title: DNA Barcodes of Staten Island Snapping Turtles and Their Leech Parasites*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award

**Freeman Lou**

*Project Title: A time division multiple access with data prediction protocol for underwater wireless sensor networks.*

NYCSEF Preliminary Round Participant

**Emily Maj**

*Project Title: Can a Computerized Language Learning Program Foster Russian Language Acquisition?*

NYCSEF Preliminary Round Participant

**Julia Medina**

*Project Title: The Effectiveness of Sex Education in High School Students*

NYCSEF Preliminary Round Participant

**Ewa Przybylko**

*Project Title: The Effects of Operant Conditioning on Patterns of Social Behavior in Heterocephalus Glaber*

NYCSEF Preliminary Round Participant

**Sarah Stalerman**

*Project Title: Using Morphological Measurements to determine the health of Painted turtle populations of Long Pond and Freshkills Park*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Third Award

**Akash Vaidya**

*Project Title: DNA Barcodes of Staten Island Snapping Turtles and Their Leech Parasites*

NYCSEF Preliminary Round Participant and NYCSEF Finals Round Participant

NYCSEF Second Award