

#### NYCSEF

NYC Science and Engineering Fair Office of STEM Initiatives Office of Academic Affairs 16 Court Street, 3rd Floor Brooklyn, NY 11201 Phone: 718-254-7252 NYCSEF@cuny.edu nycsef.cuny.edu

### 2017 New York City Science and Engineering Fair - Finalist 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. More than 700 students from around the city submitted applications to the 2017 NYCSEF for a chance to compete for a variety of cash and prizes including an all-expense trip to Los Angeles, CA representing NYC at the Intel International Science and Engineering Fair (ISEF). This year's Preliminary Event was held on Sunday, March 5, 2017 at The City College of New York (Manhattan). Listed below are the names of the students who have been selected to advance to the Finals Event on Tuesday, March 28, 2017 at the American Museum of Natural History. For more information about NYCSEF please visit nycsef.cuny.edu.

The NYCSEF Awards Ceremony will be held on March 31st at Tribeca Performing Arts Center at the Borough of Manhattan Community College from 4:00PM – 6:00PM. ISEF finalists, Special Award, and NYCSEF Award winners will be announced during this ceremony. THE STUDENT RECIPIENT OR A FAMILY MEMBER MUST BE PRESENT TO CLAIM ALL AWARDS - THIS INCLUDES THE OPPORTUNITY TO REPRESENT NYC AND ATTEND ISEF.

#### Al Noor School

Student Name	Category	Project ID	Project Title
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Rahma Ibrahim Biochemistry 41543BI (Indiv) The Effect of Gluconic Acid on Beta Amyloid

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

Student Name	Category	Project ID	Project Title
	Earth & Environmental Sciences	`	Eco-Friendly Habitat Restoration: Using Photo- Deprivation to Eradicate Phragmites australis and to Promote Native Plant Succession in Piermont Marsh, New York, Continued.

#### **Bronx High School of Science**

Student Name David Carter	Category Earth & Environmental Sciences	Project ID 25277EE (Indiv)	Project Title Dependence of Climate during the mid-Cretaceous Thermal Maximum on Ocean Heat Transports and CO2 Concentration
Geevanesam Devakanm	n Cellular & Molecular Biology	07382CM (Indiv)	Improving cancer immunotherapy through Candida HSP70 and Listeria monocytogenes
Nikhil Devraj	Medicine & Health Sciences	79860MH (Indiv)	New Algorithm for Computational Diagnosis of Diseases with Framework for Artificial Intelligence Implementation
Ryan Foo	Behavioral & Social Sciences	98462BS (Indiv)	Effects of Maternal Interactions on Infants' Transition from Crawling to Walking
Aidan Gibbons	Chemistry	08530CH (Indiv)	Modeling the First Ever Molecular Explanation behind Commercially Feasible Hydrogen Sensors to Stimulate the Hydrogen Powered Automobile Market (a Density Functional Theory Approach)

Liam Gordon	Cellular & Molecular Biology	20267CM (Indiv)	The Effects of Pretreatment and Co-exposure of Arsenic and Ethanol on the Endoplasmic Reticulum and its Impact on the Unfolded Protein Response in Zerbrafish Embryos
Gregory Gueorguiev	Earth & Environmental Sciences	19686EE (Indiv)	A Novel Methodology for Co-clustering Identification and Analysis For Endemic Plants With Applications to Conservation and Agricultural Planning
Zinedine Hoque	Cellular & Molecular Biology	88920CM (Indiv)	Mismatch Repair Deficiency leads to Chemoresistance in Pediatric Lymphoblastic Leukemia cells
Charlotte Kavaler	Engineering	17349EN (Indiv)	First Effective Mathematical Model Allowing the Dramatic Improvement in the Efficiency of Biorotary Nanomotors Through the Application of Maxwell's Demon
Michelle Liu	Cellular & Molecular Biology	68308CM (Tea	Identification of a Factor that Induces Prostate Specific Membrane Antigen (PSMA) Expression in Human Endothelial Cells
Nusrat Mim	Medicine & Health Sciences	06980MH (Indiv)	Investigating the genetic interaction between Tbx1 and Jag1 and its role in gene expression and patterning of the developing inner ear
Justin Qi	Earth & Environmental Sciences	04303EE (Team	Pushing the Boundaries: ESR Mollusc Dating near the Amik Triple Junction, Hatay Province, Turkey
Rema Rasheed	Cellular & Molecular Biology	06916CM (Indiv)	Bone marrow stem cell-derived exosomes transport mRNA of multiple intestinal growth factors
Neeraj Sakhrani	Earth & Environmental Sciences	67288EE (Indiv)	Mathematically Cutting to the Bone: Solving Analytical Problems in ESR Dating the Paleolithic Site at Isimila, Tanzania
Kaya Scheman	Behavioral & Social Sciences	30269BS (Indiv)	Perceptual and Inhibition Training Improves Visual and Auditory Selective Attention
Adam Shaham	Behavioral & Social Sciences	50382BS (Indiv)	The Potential of Morphine as a Secondary Preventative Treatment for PTSD
Nandini Sharma	Medicine & Health Sciences	12014MH (Indiv)	Localized Quantification and Proteomics of Neurofibrillary Tangles in Rapidly Progressive and Sporadic Alzheimer's Disease Patients
Eliana Shaskan	Medicine & Health Sciences	51217MH (Indiv)	Innate Immunity Stimulation via TLR9 as a Novel Therapeutic Approach to Alzheimer's Disease in a Nonhuman Primate Model of CAA
George Stefanakis	Computer Science	86797CS (Indiv)	A Novel Methodology Addressing Two Major Obstacles in Developing the Elusive Quantum Computer
Corinne Stonebraker	Animal Sciences	06098AS (Indiv)	Dynamics of aristae and neuron responses to wind stimuli in Drosophila melanogaster
Sophia Wang	Mathematical Science	10138MA (Indiv)	Row Sums of Calkin-Wilf trees
Kathryn Wicks	Behavioral & Social Sciences	11786BS (Indiv)	Executive Suite Volatility and Firm Performance: Implications for Policy and Investigating Company Behavior
Ajmain Yamin	Mathematical Science	52201MA (Indiv)	n-Dimensional Fractions and a Generalized Calkin-Wilf Tree

Vera Zarubin	Engineering	50354EN (Indiv) A novel methodology to build organic thermoelectric
		materials for sustainable and renewable energy
		applications.

## **Brooklyn Technical High School**

Student Name Emily Cheng	Category Physics & Space Sciences	Project ID 09785PH (Indiv)	Project Title Optical properties of mouse brain tissue before and after treatment with CLARITY
Joyce Feng	Chemistry	34072CH (Team	n In-situ monitoring biodiesel transesterification utilizing ultrasonic transducers
Irwin Huang	Physics & Space Sciences	86952PH (Indiv)	The Effects of Decoherence and Dephasing on the Quantum Random Walk
Abhayvir Singh	Chemistry	78227CH (Team	Effect of Pure Cellulose Nanocrystal (CNC) particles and Modified CNC particles on the Biodegradability, Thermal, and Mechanical Properties of Polycaprolactone (PCL)
Anjali Singh	Chemistry	78227CH (Team	Effect of Pure Cellulose Nanocrystal (CNC) particles and Modified CNC particles on the Biodegradability, Thermal, and Mechanical Properties of Polycaprolactone (PCL)
Michele Soltsov	Animal Sciences	47846AS (Team	The Biodiversity of Nematodes in New York City
Marva Tariq	Engineering	33869EN (Indiv)	Temperature Dependent Photoluminescence of CdSe Quantum Dots
Jenny Xu	Chemistry	34072CH (Team	n In-situ monitoring biodiesel transesterification utilizing ultrasonic transducers
Ching Laam Yuen	Chemistry	34072CH (Team	n In-situ monitoring biodiesel transesterification utilizing ultrasonic transducers

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

Student Name Khaly Durst	Category Animal Sciences	Project ID 22318AS (Indiv)	Project Title The effect of conventional pesticides on the ability of planarian to retain memories after decapitation
Yun Gao	Microbiology	07465MI (Indiv)	A Comparative Study of the Effectiveness of Bacterial Bio-Battery
Kelly Young	Earth & Environmental Sciences	96788EE (Indiv)	Barley Straw as a Growth Inhibitor of Prospect Park Lake Cyanobacteria

### **Fontbonne Hall Academy**

Student Name Keara Donahue	Category Behavioral & Social Sciences	Project ID 90826BS (Indiv)	Project Title Gender Specific Associations Between Types of Childhood Maltreatment and the Development of Psychopathic Traits
Isabella Grillo	Medicine & Health Sciences	23868MH (Indiv	Vitamin C as an alternative cancer treatment to restore TET enzymatic function in patients with Acute Myeloid Leukemia

### **Forest Hills High School**

Student Name Category Project ID Project Title

Tirzah Kamran	Cellular & Molecular Biology	47016CM (Tea	The Effect of Dibutyl Phthalate on the Regeneration Rate of Dugesia tigrina
Shabiha Nishi	Cellular & Molecular Biology	47016CM (Tea	The Effect of Dibutyl Phthalate on the Regeneration Rate of Dugesia tigrina
Dolly Patel	Behavioral & Social Sciences	66757BS (Team	The Effectiveness of Interactive Technology Versus Traditional Learning On Elementary Students' Comprehension Abilities
Kayla Peña	Cellular & Molecular Biology	47016CM (Tea	The Effect of Dibutyl Phthalate on the Regeneration Rate of Dugesia tigrina
Saptarshi Prachi	Behavioral & Social Sciences	66757BS (Team	The Effectiveness of Interactive Technology Versus Traditional Learning On Elementary Students' Comprehension Abilities
Nancy Yousry	Behavioral & Social Sciences	66757BS (Team	The Effectiveness of Interactive Technology Versus Traditional Learning On Elementary Students' Comprehension Abilities

# Francis Lewis High School

Student Name Rose Berkovski	Category Plant Sciences	Project ID 43330PS (Team	Project Title  Do Not Get Saucy! The effect of dilute urea on cherry tomatoes, Solanum lycopersicum
Mohammed Bhuiyan	Animal Sciences	59358AS (Team	The Effects of Different Concentration Levels of Manuka Honey on Planarian Regeneration
Sarah Chaudhary	Microbiology	08647MI (Team	) We Will Choke You Berry Hard: The Antimicrobial Effects of the Chokeberry (Aronia melanocarpa) on S.epidermidis Bacteria
Anastasia Dakis	Microbiology	08647MI (Team	) We Will Choke You Berry Hard: The Antimicrobial Effects of the Chokeberry (Aronia melanocarpa) on S.epidermidis Bacteria
Haiyue Deng	Plant Sciences	96197PS (Team	Buffering is not THAT Bad: Remediating Effects of Carbonates on Kale (Brassica oleracea) Treated with Sulfuric Acid
Jonathan Gideon	Biochemistry	95347BI (Team)	UV and Temperature Effects on Choloracetanilide and Triazine Pesticide Degredation and its Toxicity
David Guber	Plant Sciences	96197PS (Team	Buffering is not THAT Bad: Remediating Effects of Carbonates on Kale (Brassica oleracea) Treated with Sulfuric Acid
Anzila Haris	Plant Sciences	22697PS (Team	Let Me A-Salt You, Bro: The Effect of Potassium Chloride (KCI) on Brassica Oleracea
Camellia Huang	Cellular & Molecular Biology	68274CM (Indiv	The Legends of Zelda: The Role of Zelda Protein in the Development of Drosophila melanogaster Third Instar Larval Eye Discs
Naseerah Juman	Plant Sciences	69770PS (Team	Watts Up Wheatgrass?: The Effect of LED Color on Thinopyrum intermedium (hard red wheatgrass) Growth
Mehak Kazi	Behavioral & Social Sciences	44106BS (Team	The Effect of Color on the Attention of Teens.

Thomas Khadoo	Plant Sciences	96197PS (Team	Buffering is not THAT Bad: Remediating Effects of Carbonates on Kale (Brassica oleracea) Treated with Sulfuric Acid
Jamine Kwok	Plant Sciences	89659PS (Team	The Effects of Citric Acid on Lima Beans (Phaseolus lunatus) Growth
Sunwoo Lee	Earth & Environmental Sciences	43115EE (Indiv)	The Pattern of Toxic Heavy Metal Mobilization in Flushing Meadows Corona Park Soil
Gavin Li	Earth & Environmental Sciences	04303EE (Team	Pushing the Boundaries: ESR Mollusc Dating near the Amik Triple Junction, Hatay Province, Turkey
Janet Li	Plant Sciences	69770PS (Team	Watts Up Wheatgrass?: The Effect of LED Color on Thinopyrum intermedium (hard red wheatgrass) Growth
Jonathan Mulligan	Biochemistry	95347BI (Team)	UV and Temperature Effects on Choloracetanilide and Triazine Pesticide Degredation and its Toxicity
Michael Norinskiy	Plant Sciences	43330PS (Team	Do Not Get Saucy! The effect of dilute urea on cherry tomatoes, Solanum lycopersicum
Matthew Shinh	Plant Sciences	89659PS (Team	The Effects of Citric Acid on Lima Beans (Phaseolus lunatus) Growth
Jasmine Tong	Plant Sciences	22697PS (Team	Let Me A-Salt You, Bro: The Effect of Potassium Chloride (KCI) on Brassica Oleracea
Evelyn Vasquez	Plant Sciences	22697PS (Team	Let Me A-Salt You, Bro: The Effect of Potassium Chloride (KCI) on Brassica Oleracea
Jessica Wade	Animal Sciences	59358AS (Team	The Effects of Different Concentration Levels of Manuka Honey on Planarian Regeneration
Mark Yagudayev	Plant Sciences	89659PS (Team	The Effects of Citric Acid on Lima Beans (Phaseolus lunatus) Growth
Sunayra Zaman	Animal Sciences	59358AS (Team	The Effects of Different Concentration Levels of Manuka Honey on Planarian Regeneration
Linda Zhou	Behavioral & Social Sciences	44106BS (Team	The Effect of Color on the Attention of Teens.

# Herbert H. Lehman High School

Student Name	Category	Project ID	Project Title
Ivie Odiase	Medicine & Health Sciences	29924MH (Indiv	) The Effects of Adiposity on Memory

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

Student Name Mazie Alexander	Category Cellular & Molecular Biology	Project ID 62481CM (Tea	Project Title The Role of Rivers on the Endemicity of the Blue- crowned Manakin (Lepidothrix coronata) in Amazonia
Natalie Munoz	Animal Sciences	47846AS (Team	The Biodiversity of Nematodes in New York City
Ethan Wang	Cellular & Molecular Biology	62481CM (Tea	The Role of Rivers on the Endemicity of the Blue- crowned Manakin (Lepidothrix coronata) in Amazonia

# High School for Mathematics, Science and Engineering @ CCNY $\,$

Student Name	Category	Project ID	Project Title
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William Esseks	Cellular & Molecular	47301CM (Indiv) Determining the Expression of DRD1 in G2019S Knock-
	Biology	In Mutated Mice Compared to Wild Type Mice at Early

Postnatal Ages

# **Horace Mann High School**

Student Name	Category	Project ID	Project Title
Naomi Cebula	Physics & Space Sciences	58488PH (Indiv)	Effects of Varied Mass in the Double Pendulum
Karen Jiang	Cellular & Molecular Biology	, ,	Elucidating the Roles of the REST C-Terminus and CoREST1 in Zebrafish Neural Development and Behavior
Stephanie Li	Mathematical Science	37402MA (Tea	A 6-Chromatic Unit Distance Graph in Space

# **Hunter College High School**

Student Name Riya Bhattacharya	Category Biochemistry	Project ID 12399BI (Indiv)	Project Title Identification of Secondary Calmodulin Binding Site in Eukaryotic Elongation Factor 2 Kinase
Prithi Chakrapani	Animal Sciences	55805AS (Indiv)	The pattern of gene family evolution of the piRNA gene Maelstrom in stalk-eyed flies (Diopsidae)
Brendon Choy	Biochemistry	97101BI (Indiv)	The Response of UvrA to ATP
James Crook	Physics & Space Sciences	83765PH (Indiv)	An Analysis of Low-Surface-Gravity Brown Dwarfs and Field Dwarf Color
Benjamin Firester	Plant Sciences	06455PS (Indiv)	Modeling the Spatio-Temporal Spread of Potato Late Blight: Optimization, Validation, and Applications
Ari Firester	Engineering	23056EN (Indiv)	Desalinating Water Using Electric Fields
Michelle He	Medicine & Health Sciences	66320MH (Indiv	) Mechanisms of Arctigenin in Diabetic Kidney Disease
Serina Hu	Chemistry	96670CH (Indiv)	Molecular Dynamics Simulations of the Interactions between the Collagen Triple Helix with Water in the Presence of Sodium Chloride Ions
Dylan Li	Medicine & Health Sciences	90746MH (Indiv	Designing and Testing a Novel Drug Targeting the Distinct Metabolic Roles of the Isoforms of PPARgamma
Janni Lin	Plant Sciences	74859PS (Indiv)	An Investigation into Temporal Resistance in Various Potato Cultivars: Antibacterial Activity of Wound Tissue Extracts against E. coli and E. carotovora
Nancy Lu	Biochemistry	32035BI (Indiv)	Antibacterial Polysaccharide-Based Hybrid Nanoparticles for Efficient Anticancer Drug Delivery
Helen Lu	Computer Science	79281CS (Team	A Computational Model for the Spread of Zika Through Twitter Analysis
Abishrant Panday	Computer Science	79281CS (Team	A Computational Model for the Spread of Zika Through Twitter Analysis
Sabrina Reguyal	Earth & Environmental Sciences	52035EE (Indiv)	Disruptions in Carbon Sequestration of a Restored Urban Salt Marsh
Katherine Turchin	Behavioral & Social Sciences	30873BS (Indiv)	Potential Implicit Enhancement of a Process Simulation Mindset Through Different Words Used In Articulating Goals

Sophia Zhang	Biochemistry	97582BI (Indiv)	Discovering Molecules that Contribute to Cryptococcus neoformans Virulence
Amanda Zong	Computer Science	43645CS (Indiv)	Novel Screening Test for Melanoma Using Computational Image Analysis

#### **Institute for Collaborative Education**

Student Name Tobias Beckwith-Quino	Category Behavioral & Social Sciences	Project ID 89999BS (Indiv)	Project Title Middle and High Schooler Responses to Wason Selection Tasks of Varying Levels of Relevance
Paulina Lichtman	Behavioral & Social Sciences	67129BS (Indiv)	The Effect of Semantic Camouflage on Food Preferences
Madeline Mardiks	Behavioral & Social Sciences	66377BS (Indiv)	The Effect of Different Note Taking Techniques on Reading Comprehension using the Bader Reading and Language Inventory Test

## John Bowne High School

<b>Student Name</b> Yuqing Chi	Category Animal Sciences	Project ID 70942AS (Team	<b>Project Title</b> The Effect of Vitamin E on the Reproduction and Fertility of Daphnia magna
Minah Hong	Cellular & Molecular Biology	82163CM (Indiv	Rab-10 and Autophagy in C. elegans
Yui Him Lo	Animal Sciences	69949AS (Indiv)	Impact of Temperature Regulated Heart Rate on Heart Formation
Lyubov Soboleva	Earth & Environmental Sciences	44463EE (Indiv)	Sequencing NY Harbor Fish DNA to Generate Accurate 12S Gene Sequences for the Local Database
Xin Cheng Yuan	Biochemistry	67095BI (Indiv)	The Synthesis of Novel Endogenous Opioid Peptides for Orphan GPCRs
Jingyi Zhang	Animal Sciences	70942AS (Team	The Effect of Vitamin E on the Reproduction and Fertility of Daphnia magna
MENGYING ZHENG	Animal Sciences	70942AS (Team	The Effect of Vitamin E on the Reproduction and Fertility of Daphnia magna

#### **Manhattan Center for Science & Mathematics**

Student Name	Category	Project ID	Project Title
Franklin Perez Cordero	Animal Sciences	47846AS (Team	The Biodiversity of Nematodes in New York City

### Midwood High School @ Brooklyn College

Student Name Mahmoud Abouelkheir	<b>Category</b> Microbiology	Project ID 95299MI (Indiv)	Project Title Intra-microcolony spatial positioning affects antibiotic susceptibility in Neisseria gonorrhoeae
Amna Aslam	Microbiology	63832MI (Indiv)	Role of Nucleolar Stress Factors in DNA Damage Response
Lilin Liu	Earth & Environmental Sciences	15144EE (Indiv)	X-Ray Fluorescence Testing on Lead Contaminated Vegetable Tissue
Vivian Luu	Chemistry	95263CH (Indiv)	A variable temperature study of the conductivity and activation energy of aqueous solutions of VOSO4 in 1 M TFSA

Nomon Mohammad	Engineering	09494EN (Indiv) Anthraquinone as an Effective Electrolyte for Redox Flow Batteries
Allan Nosov	Earth & Environmental Sciences	09525EE (Indiv) Lapse Rate Analysis - Model versus Observations
Minna Zeldin	Medicine & Health Sciences	64682MH (Indiv) Circuit Amplification with DNA Strand Displacement Cascade for the Evolution of Cell Surfaces

## **Packer Collegiate Institute**

Student Name	Category	Project ID	Project Title
Nigel Jaffe	Engineering	63297EN (Indiv	Using Robotics to Model Simple Organism Behavior in
			Response to Stimuli

# Queens High School for Sciences @ York College

Student Name Hajin Choi	Category Mathematical Science	Project ID 46913MA (Indiv)	Project Title The Effect of Time of Day and Distance from Subway Stations on the Number of Felony Assaults Committed in New York City
Maxwell Gonsalves	Earth & Environmental Sciences	21552EE (Indiv)	The Effect of the Size of an Electrode on the Engergy Output of a Fuel Cell
Erik Menjivar	Earth & Environmental Sciences	07684EE (Indiv)	Sedimentology of Surficial Deposits: York College Campus (Queens) and Montauk Point (Long Island)
Si Long Mong	Mathematical Science	01609MA (Indiv)	Convergence in Nodes of a Graph
Brandon Muncan	Cellular & Molecular Biology	29887CM (Indiv)	FTY720-Induced Apoptosis in HDLM-2 Nodular Sclerosing Hodgkin Lymphoma Cells
Xin Ling Yuan	Mathematical Science	56021MA (Indiv)	Development of a Randomized Controlled/Comparative Trial Medical Database for Personalized Medicine and Public Access

## **Riverdale Country School**

Student Name	Category	Project ID	Project Title
Jessica Frank	Cellular & Molecular Biology	03392CM (Indiv	) Towards Accurate Copy Number Calling in High Ploidy Tumors

## Spence School

Student Name	Category	Project ID	Project Title
Hanna Yip	Computer Science	57396CS (Indiv	) Musical Instrument Classification

## **Staten Island Technical High School**

Student Name Marina Andrawis	Category Medicine & Health Sciences	Project ID 02687MH (Indiv)	<b>Project Title</b> The Expression of the Brain-derived Neurotrophic Factor in Mouse Spinal Cord Following Direct Current Stimulation
Kemal Aziz	Physics & Space Sciences	77192PH (Indiv)	Examination of Magnetocaloric Effect in La-Fe-Si and Inverse Magnetocaloric Effect in CoMnSi
Youssef Fahmy	Engineering	61927EN (Indiv)	Design of a Multi-Drug-Delivery System based on DNA Nanostructures
Amy Kuang	Animal Sciences	01615AS (Indiv)	Differential pathways from the defense and offense related areas in the VMHvI

Iqura Naheed	Earth & Environmental Sciences	65489EE (Indiv) The Effect of Distance Color and Brightness on Blue Light Intensity in Electronic Screens
Julia Radzio	Medicine & Health Sciences	65146MH (Indiv) Virtual Clinical Trial of Template Based Prostate Biopsies
Ester Rekhelman	Medicine & Health Sciences	48686MH (Indiv) The Foveal Avascular Zone in Parkinson Disease
Samantha Shakhvorosto	Medicine & Health Sciences	01260MH (Indiv) Effect of Different Types of Alcoholic Beverages on EF Stress in Pancreatic Acinar Cells

# **Stuyvesant High School**

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Student Name Raphael Kirou	<b>Category</b> Microbiology	Project ID 13772MI (Indiv)	Project Title Identification of a candidate new tuberculosis therapy target in Mycobacterium smegmatis
Phillip Kucher	Microbiology	80347MI (Indiv)	High-frequency polymorphisms found in double- stranded DNA viruses suggest coevolution with a uniquely diverse set of bacterial hosts
Thomas Lee	Mathematical Science	37402MA (Tea	A 6-Chromatic Unit Distance Graph in Space
Sharon Lin	Computer Science	02522CS (Indiv)	A Novel Multiparameter Optical Sensor Using CMOS Imaging and Remote Neural Networks for Microbial Analysis
Judy Liu	Cellular & Molecular Biology	68308CM (Tea	Identification of a Factor that Induces Prostate Specific Membrane Antigen (PSMA) Expression in Human Endothelial Cells
Bayle Smith-Salzberg	Animal Sciences	12858AS (Indiv)	Hidden diversity in parasitic wasps from the Andes mountains: a case study on Cryptopteryx wasps
Michael Ye	Earth & Environmental Sciences	04303EE (Team	Pushing the Boundaries: ESR Mollusc Dating near the Amik Triple Junction, Hatay Province, Turkey

# **Townsend Harris High School**

<b>Student Name</b> Mya Allen	Category Behavioral & Social Sciences	Project ID 64635BS (Indiv)	Project Title Social Media and Youth Voter Registration
Sasha Balkaran	Microbiology	48222MI (Indiv)	The Impact of Urbanization on Soil Microbial Communities
Muhamed Bicic	Earth & Environmental Sciences	08017EE (Team	Development of an Equation for Density Based on Salinity, Temperature, and Cyclodextrin Concentration
Chelsea Chaug	Behavioral & Social Sciences	63284BS (Indiv)	Gendered Names & Employers' Decisions to Hire
Farhat Chowdhury	Earth & Environmental Sciences	25591EE (Team	The Effects of Different Concentrations of Enterobacter aerogenes on Polyethylene Terephthalate Decomposition
Nicholas Doss-Hom Dos	Behavioral & Social Sciences	63516BS (Indiv)	Technological Communication and Satisfaction in a Relationship
Georja Fotiou	Behavioral & Social Sciences	63256BS (Indiv)	Social Segregation in NYC public highschools

Fatema Haidery	Earth & Environmental Sciences	09659EE (Indiv)	The Effect of Climate Change on the Intensity and Frequency of Hurricanes in the North Atlantic Ocean
Samantha Jaloza	Behavioral & Social Sciences	63228BS (Indiv)	The Effect of Meditation on Academic Performance, Stress Level, and Focus
Katerina Jou	Cellular & Molecular Biology	74627CM (Indiv)	) Role of CIRP in NETosis
David Kozuch	Microbiology	46225MI (Indiv)	The Effect of Bacteriocins on the Growth of Gram Positive and Gram Negative Cultures
Teresa Mettela	Plant Sciences	93665PS (Team	The Effect of Different Types of Composts on the Growth of Rapid Radishes
Leah Musheyev	Cellular & Molecular Biology	59808CM (Tea	Effects of Lead Solutions on Regeneration in Dugesia Tigrina
Daniil Novikov	Earth & Environmental Sciences	08017EE (Team	Development of an Equation for Density Based on Salinity, Temperature, and Cyclodextrin Concentration
Lauren Rudin	Microbiology	02692MI (Indiv)	The Effect of Herbal Teas on Escherichia coli K-12
Noah Sadik	Cellular & Molecular Biology	59808CM (Tea	Effects of Lead Solutions on Regeneration in Dugesia Tigrina
Gurpreet Sahansra	Plant Sciences	93665PS (Team	The Effect of Different Types of Composts on the Growth of Rapid Radishes
Paul Valdivia	Earth & Environmental Sciences	25591EE (Team	The Effects of Different Concentrations of Enterobacter aerogenes on Polyethylene Terephthalate Decomposition
Qing Zhu	Earth & Environmental Sciences	08017EE (Team	Development of an Equation for Density Based on Salinity, Temperature, and Cyclodextrin Concentration

# **Urban Assembly New York Harbor High School**

Student Name Grace Carter	Category Earth & Environmental Sciences	Project ID 35181EE (Team	Project Title Species Richness of Benthic Marine Invertebrates within the Lower Hudson River Estuary
Brian Delgado	Earth & Environmental Sciences	93452EE (Team	Eco-Friendly Habitat Restoration: Using Photo- Deprivation to Eradicate Phragmites australis and to Promote Native Plant Succession in Piermont Marsh, New York, Continued.
Jared Rosin	Earth & Environmental Sciences	35181EE (Team	Species Richness of Benthic Marine Invertebrates within the Lower Hudson River Estuary

# Young Women's Leadership School - Harlem

Student Name	Category	Project ID	Project Title
Keylen Lucero	Earth & Environmental	93452EE (Team	Eco-Friendly Habitat Restoration: Using Photo-
	Sciences		Deprivation to Eradicate Phragmites australis and to
			Promote Native Plant Succession in Piermont Marsh,
			New York, Continued.