This year, a total of 436 high school students and 317 projects participated in the online Preliminary Round, aiming for an opportunity to advance to the Finals Round and showcase their research to the judges. The exhibitors at Terra NYC vie for a range of awards, with the ultimate distinction being one of the 13 projects chosen to represent the NYC region at the esteemed Regeneron International Science and Engineering Fair (ISEF). Below, you will find the names of the student researchers along with their sponsoring teachers.

The mission of the Terra NYC STEM Fair is to celebrate and showcase the innovative achievements of middle and high school scholars in STEM research. Our goal is to foster connections among these students and their advocates while encouraging their pursuit of science, technology, engineering, and mathematics. For additional details, please visit tnycfair.org or reach out to tnycfair@terraed.org.

Abigail, Karen, PLNT-030, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Concentrations of Phosphatic Clay on Inhibiting the Growth of Harmful Algae in a Hydroponic System

Ahluwalia, Ravneet, ANIM-062, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Rhodiola rosea on Vanessa cardui Growth and Development when Administered at Various Life Stages

Ahmady, Nadia, CELL-418, Cellular and Molecular Biology category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: HIV-I Infection and Antiretroviral Treatment (ART) Regulate the Activity of Dendritic Cell Signaling Pathways

Alam, Fouzia, PLNT-099, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Calcium Silicate on solanum tuberosum (potato) in Drought Stress

Alam, Taybah, BESP-124, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: Graduate Students' Assessment of Dread Factors and Risk Perception

Ali, Sameer, BESP-027, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effects of Different Learning Conditions on Students' Performance During Reading Comprehension Tests

Alkhoury, John Pierre, ENGN-360, Engineering category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Building a device that measures indoor air quality.

Alshansky, Daniel, BESN-460, Behavioral Social Sciences - Neuroscience category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Role of Fixational Eye Movements in Perception of Black Hole Illusions

Amin, Arish, PHYS-161, Physics and Space category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Tire Treads on the Effectiveness of Friction

Amoils, Morgan, MEDH-320, Medicine and Health Sciences category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: Validating RNA-Seq Results on the Top Differentially Expressed Genes That Are Upregulated in Oncogenic GNAS R201C Pancreatic Ductal Organoids

Anand, Pritish, MEDH-225, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Assessing the toxicity of Cadmium in Caenorhabditis elegans

Auyeung, Leanne, MRCO-125, Microbiology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: Investigating the role of yhdP gene in transporting mislocalized proteins in the outer membrane of Gram-negative bacteria

Aziz, Aasiyah, PLNT-089, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of a Phosphate Buffer on the pH and Growth of Hydroponically Grown Kale

Babayev, Miriam, EAEV-009, Earth and Environmental Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Ethylene Glycol Automobile Coolant (Antifreeze) Produced By Galleria Mellonella (Wax Worm) Byproduct

Badalov, Berta, PLNT-054, Plant Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Different Effects of Natural vs. Synthetic sources of Beta-carotene on the Growth and Germination Rates of Triticum Aestivum (wheat)

Baksh, Zain, EAEV-361, Earth and Environmental Sciences category, 9 grade,
KEW FOREST SCHOOL (THE), Sponsoring Research Teacher: Amanprit Kaur
Project Title: The Effect of Air and Water Temperature on the Pollution Concentration of Nitrate, Nitrite and Heavy Metals in the East River, NY

Banik, Saptarshi, ANIM-062, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Rhodiola rosea on Vanessa cardui Growth and Development when Administered at Various Life Stages

Barshay, Anne, MEDH-023, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Association of Dietary Whole Grains with Coronary Heart Disease

Basaran, Elif, PLNT-068, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The effect of Saccharomyces Cerevisiae on Spinacia Oleracea under high temperature conditions

Basnet, Simoni, ENGN-016, Engineering category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Cosmetic Engineering of Perfume

Bhuyain, Abir, BESP-245, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Echo Chambers and Emotional Contagion

Bland, Nevaeh, MEDH-395, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Racial Disparities Among the Older Generation Who Use Medicare

Bonilla, Yasmine, PLNT-084, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Coffee on the Hydroponic Growth of Beta Vulgaris L.

Borges, Isidro, BESP-299, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Perceptions of Real and Plant-Based Meat

Boukhadia, Aymane, CELL-390, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Effects of Down syndrome on Interferon Pathways

Boumakis, Theodora, PLNT-067, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: How does the sound of stream water affect the growth of Cucumis sativus plants under drought?

Brogna, Donato, ANIM-046, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Astragalus membranaceus Root Extract on Parkinson Inflicted Caenorhabditis elegans

Brown, Maddox, CELL-425, Cellular and Molecular Biology category, 12 grade,
MANHATTAN CENTER FOR SCIENCE MATHEMATICS, Sponsoring Research Teacher: Denise Croote
Project Title: Differential Expression Analysis of Cystic Fibrosis Lung Epithelial Cells Identifies Distinct Inflammatory Gene Signatures Distinguish Disease Status

Caldon, Madison, MEDH-340, Medicine and Health Sciences category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Temperature's Effects on Bovine Articular Cartilage Stiffness

Cartegni, Giulia, MEDH-277, Medicine and Health Sciences category, 12 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: Type I interferon genes deletion in pancreatic cancer and response to radiotherapy

Chahal, Manraj, BCHM-053, Biochemistry category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Banana Peel Solution on Buffalo Teeth-Whitening

Chai, Elisabeth, BESN-213, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: A Computational Approach to Empathy and Emotional Salience in Mental Health Disorders

Chan, Chloe, ANIM-175, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: The effect of bird dolls on the presence of European starlings — A preliminary study Chloe Chan The Bronx High School of Science

Chan, Kiera, CELL-364, Cellular and Molecular Biology category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Coupling the Cybernetic Model with Flux Balance Analysis for Dynamic Simulation of Overflow Metabolism in Escherichia coli

Chandra Kumar, Shirooba, BESP-461, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: Effects of Perceived Video Emotion on Typing Efficiency

Chasteen, Joshua, ENGN-072, Engineering category, 12 grade,
MANHATTAN CENTER FOR SCIENCE MATHEMATICS, Sponsoring Research Teacher: Evelyn Wing
Project Title: How Does the Arrangement of Body Tube Sizes Affect altitude on 2 Body Tube Model Rocket

Chaudhry, Omar, ANIM-046, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Astragalus membranaceus Root Extract on Parkinson Inflicted Caenorhabditis elegans

Cheema, Meerab, BESP-024, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effect of Achievement Motivation on Student's Performance

Cheerasarn, Sittha, MEDH-278, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: The Effect of Inhibiting Deubiquitinating Enzymes on Cell Survival during Induced Ischemic Stroke

Chelst, Maytal, MRCO-459, Microbiology category, 12 grade,
YESHIVA UNIVERSITY HIGH SCHOOL FOR GIRLS, Sponsoring Research Teacher: Ruth Fried
Project Title: Rheological and Toxicological Properties of the Extracellular Polymeric Material (EPM) Produced by Rhizobium Tropici ATCC 49672

Chen, Andrew, BESP-338, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: The Impact of COVID-19 on 3rd through 8th Grade Student Achievement Across the Nation

Chen, Benjamin, CELL-227, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: Enhancer segments within the PBX1 super-enhancer display differential enhancer activity patterns unique to lung adenocarcinoma epigenomic subtypes

Chen, Derrick, EAEV-408, Earth and Environmental Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Comparing Arthropod Communities During Drought and Non-drought Years at a Reclaimed Landfill

Chen, Eddy, SORO-346, Software Robotics category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Capabilities of SOFA in Simulating REACCH

Chen, Ivy, PLNT-084, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Coffee on the Hydroponic Growth of Beta Vulgaris L.

Chen, Janice, BESP-059, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation Between Caffeine Intake on a High School Student's Algebra 1 Test Score

Chen, Jiaen, BESP-028, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effect of Background Sounds on Food Choice

Chen, Johnny, PLNT-068, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The effect of Saccharomyces Cerevisiae on Spinacia Oleracea under high temperature conditions

Chen, Joyce, BESP-029, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Correlation of Crowding and Reading Speed in Adolescents

Chen, Kawaii, PLNT-058, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Aloe vera on the Water Retention of Soil of Ocimum basilicum

Chen, Leeanna, BESP-186, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Economic Recession Prejudice Towards the Unsheltered: Creation of a New Scale on the Basis of Terror Management Theories

Chen, Maggie, ANIM-057, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Accelerated Crayfish Regeneration Rate by Turmeric with the Black Pepper Adjuvant

Chen, Mandy, BESP-341, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Monkeypox and Tiktok: A Cross-Sectional Study for Content Quality and Stigma

Chen, Serena, PLNT-092, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Green, Oolong, and Black Tea Bags vs. Rockwool on the Growth of Cucumis sativus (Corinto cucumers)

Chen, Sky, BCHM-117, Biochemistry category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Jason Econome
Project Title: Design and development of arginine mimic that acts as a PRMT inhibitor and the synthesis of a core intermediate

Chen, Stephy, BESP-162, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: How do different diets influence one's emotions and mental well being?

Chen, Tina, MEDH-258, Medicine and Health Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Analysis of the ABCD 1 gene to identify conserved, potentially functional RNA secondary structures and potential ASO therapeutic binding sites

Chen, Xin Yi, EAEV-009, Earth and Environmental Sciences category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Ethylene Glycol Automobile Coolant (Antifreeze) Produced By Galleria Mellonella (Wax Worm) Byproduct

Cheng, Julian, PHYS-231, Physics and Space category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Investigating the Effects of Convective Overshoot Scheme and Zone Location on the Development of Blue Loops for Cepheid Variable Stars

Cheng, Teo, ANIM-064, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Barley Grass on Malnourished Silkworm's Productivity

Cheung, Emily, EAEV-145, Earth and Environmental Sciences category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Using Phytoplankton to Reduce CO2 Concentration in Designated Oceanic and Atmospheric Locations

Chikkerur, Siri, ANIM-060, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Astaxanthin on the Lifespan of Starved Brine Shrimp

Chklovskii, Samantha, BESP-260, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Bandwidth Accessibility: Quality of Life of Those With Access to Bandwidth Across The United States

Chok, Edward, ANIM-022, Animal Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Patterns in Nest Construction of Monk Parakeets

Chowdhury, Debanjoli, MEDH-193, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Khaled Mahmoud
Project Title: A closer examination of Hirschsprung disease genes: what do they tell

Chu, Preston, ANIM-173, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kale Powder on Silkworms Silk Quality and Yield

Chumacer, Christopher, MRCO-144, Microbiology category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: System regulation: Microbial Fuel Cell microorganism comparison

Clarke, Mykhaelia, BESN-014, Behavioral Social Sciences - Neuroscience category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Exploring the Feasibility of a Fluorescence Imaging-Based Brain-Machine Interface

Cohen, Eleanor, ANIM-426, Animal Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Examining Atlantic Croaker Dynamics for Evidence of Climate Change Response

Corcuera, Carolina, EAEV-250, Earth and Environmental Sciences category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The Effect of State Marine Reserves on Kelp Coverage in the Northern and North-Central California Coastal Ecosystems

Cosovic, Edita, MEDH-316, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: Gene dysregulation by inactivation of Tbx1 in cardiac and facial muscle progenitor cells in mammalian embryogenesis

Coven, Maks, MEDH-094, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: Surgical Septal Myectomy: A Permanent Cure for Hypertrophic Cardiomyopathy?

Cruz, Melanie, BESN-205, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: Differences in sensory thalamo-cortical circuits in single-hit double-hit autistic mice

D' Costa, Pithiya, CELL-307, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Khaled Mahmoud
Project Title: Emergence of a novel mycobacteriophage: Mycobacteriophage PBY1 in infecting and overcoming antibiotic resistant M. smegmatis and M. Tuberculosis

Das, Anika, CELL-391, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: High fat diet and chronic stress on energy metabolism

Das, Anindita, ANIM-171, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: Understanding urban wildlife activity levels using camera traps and machine learning

Dass, Larissa, MEDH-206, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Electrically Conductive Hydrogels as Possible Drug Delivery Vehicles

Datikash, Nicole, BESP-164, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: How do Colors Influence Academic Performance and Learning?

Davidoff, Emma, MRCO-052, Microbiology category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Food Sources on Slime Mold Growth and Memory

Davis, Natalie, BCHM-160, Biochemistry category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Application of Cyanobacteria on H2O-Based Medium Solutions and its effect on Biohydrogen Generation and Electrical Conductivity

De Silva, Ishan, EAEV-434, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: Effects of Aluminum on Northeastern Freshwater Habitats

Delim, Kristen, ANIM-043, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Fish Oil on Planaria Memory, Learning, and Regenerative Abilities on Navigation through a Maze

Denker, Benjamin, BESP-268, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano

Project Title: An Examination of Modern Partisan Redistricting and its Future: The Gerrymandering Metric Composite

D'Halleweyn, Sophie, SORO-136, Software Robotics category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Disentangling Algorithmic Bias

Di Maggio, Thomas, ANIM-066, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Banana Flour on Galleria mellonella's Digestion of Low-Density Polyethylene

Dimailig, Marlon, BESP-086, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Screen Brightness on the Attention of Teens

Dimont, Sophia, EAEV-389, Earth and Environmental Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Establishing the effect of invasive turtles on water quality at water bodies of NYC Parks in Queens, NY

Dimyan, Mary, EAEV-215, Earth and Environmental Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: The Rates of Carbon Sequestration in Non-Native and Native Tree Species in Inwood Hill and Highbridge Park

Dokic, Natalija, EAEV-259, Earth and Environmental Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Potential of nitrogen-fixing perennial plants (Medicago sativa, Trifolium pratense, Cajanus cajan) to aid carbon dioxide fixation

Donoso, Maraya, ANIM-043, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Fish Oil on Planaria Memory, Learning, and Regenerative Abilities on Navigation through a Maze

Durovic, Delisa, EAEV-009, Earth and Environmental Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Ethylene Glycol Automobile Coolant (Antifreeze) Produced By Galleria Mellonella (Wax Worm) Byproduct

Dzhurayev, Emily, BESN-140, Behavioral Social Sciences - Neuroscience category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Literal Optical Illusions on the Accuracy of Mathematical Exams

Eastwood, Jemima, BESP-221, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano

Project Title: Women's Rights in Far Right Dominated States

Efrat-Henrici, Ben, EAEV-074, Earth and Environmental Sciences category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Investigating the Impact of Climate Change On Local Heat Extremes Using New High Resolution CASI Models

Egwuogu, Cynthia, MEDH-283, Medicine and Health Sciences category, 12 grade,
PELHAM LAB HIGH SCHOOL, Sponsoring Research Teacher: Lea Buena
Project Title: Antioxidant Nutrients Inflammatory Diseases

Elbadri, Malaz, BESP-377, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Mindful Breathing Techniques Exercises on the Visual Intelligence of Students

Erfan Mamedkhanova, Diyorabonu, ANIM-057, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Accelerated Crayfish Regeneration Rate by Turmeric with the Black Pepper Adjuvant

Estevez, Kate, CELL-489, Cellular and Molecular Biology category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The Correlation Between Complement Split Product and Lupus Anticoagulant

Evans, Lydia, EAEV-148, Earth and Environmental Sciences category, 11 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: NO2 Emissions from Stove Units in NYC Apartments

Excoffon, Lohann, CELL-076, Cellular and Molecular Biology category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Art plasmid transformations for high-school learning kit

Falter, Alana, PLNT-146, Plant Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: The combined effects of varying gravity levels and light exposures on garden cress development using a low cost 3D printed clinostat.

Farid, Samia, MEDH-031, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: COVID-19 PPE on Acne Vulgaris and Atopic Dermatitis

Fazio, Vincent, ENGN-447, Engineering category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Increasing FDM 3D Printer Flow Rate By Preheating Filament With A Novel Heated Bowden Tube

Feist, Miradyn, ANIM-176, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt

Project Title: An updated assessment of the role of forage fish and cephalopods in marine sustainability

Feng, Max, ANIM-448, Animal Sciences category, 11 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: The Effects of Caffeine and Alcohol on the Electrically Evoked Potentials of L. terrestris

Ferencz, Matthew, BCHM-257, Biochemistry category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Khaled Mahmoud
Project Title: Repurposing Random Forest Regression in Python to predict effective cancer treatment on the Ras pathway.

Foellmer, Mia, EAEV-259, Earth and Environmental Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Potential of nitrogen-fixing perennial plants (Medicago sativa, Trifolium pratense, Cajanus cajan) to aid carbon dioxide fixation

Fucich, Carina, MRCO-479, Microbiology category, 11 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The effect of electrolytes on growth of Agrobacterium tumefaciens

Funabiki, Kanae, CELL-321, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: Characterizing Mutant ApoE4 Genes in Cultured Mouse Melanoma Cells

Furman, Malcolm, CELL-335, Cellular and Molecular Biology category, 12 grade,
HORACE MANN SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: Genome-wide association study and immunohistochemical panel implicates novel RUNX2 gene in Progressive supranuclear palsy

Gao, Kate, CELL-314, Cellular and Molecular Biology category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Measuring the decrease in myelin in the brain after a traumatic brain injury

Gao, Tian, ANIM-066, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Banana Flour on Galleria mellonella's Digestion of Low-Density Polyethylene

Garcia Gonzalez, Saul, MEDH-436, Medicine and Health Sciences category, 12 grade,
MANHATTAN CENTER FOR SCIENCE MATHEMATICS, Sponsoring Research Teacher: Denise Croote
Project Title: Investigating gene expression patterns in Schizophrenia genes

Garcia Moreno, Sarah, BESN-416, Behavioral Social Sciences - Neuroscience category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Characterizing TH+ cells in melanomas from mice carrying common Parkinson's mutation

Garderewicz, Christopher, BESP-424, Behavioral Social Sciences- Psychology/Sociology category, 9 grade,

QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: Does playing video games help or hurt those who play them?

Gelfer, Naomi, MRCO-401, Microbiology category, 11 grade,
HORACE MANN SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: Constructing a DRE and AHR-Based Luciferase Dual-Plasmid Biosensor for the Detection of PCBs in Water Sources

Gephardt, Warner, MATH-033, Mathematical Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effect of Crowd Capacity and Travel on Winning NFL Games

Gessesse, Yared, MEDH-397, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Beating Tubular Micro-heart Models for Accelerated Drug Discovery

Gino, Anu, PLNT-084, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Coffee on the Hydroponic Growth of Beta Vulgaris L.

Giordano, Marco, ENGN-488, Engineering category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Deployment of e-scooters with corral assignments and elastic demand

Girand, Olivia, BESP-274, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: The Relationship Between Increasingly Restrictive Parental Involvement Laws for Abortion and the Pregnancy and Abortion Rates of Teenagers Throughout the United States: A Correlation Study

Glikman, Milana, PLNT-472, Plant Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: The efficiency of chlorophyta in filtering greywater

Gosfield, Roxie, BESP-152, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Ellen Schweitzer
Project Title: Relating high school students' perceived academic stress to mental and physical health status

Grafals, David, CELL-170, Cellular and Molecular Biology category, 12 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: Assessment of DNA from Vertebrates within the Stratification of Lake Carmel

Guevara, Bethzy, PLNT-050, Plant Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Effectiveness of Egeria Densa on Mitigating Hypoxia Through Oxygen Production

Gupta, Siya, MEDH-201, Medicine and Health Sciences category, 12 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: PI3-Kinase Mutations Leading to Potential Resistance to HER2-Targeted Therapy in HER2-Low Breast Cancer

Gural, Daria, BCHM-345, Biochemistry category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Elisa Margarita
Project Title: How Bacteria Develops Antibiotic Resistance

Haque, Nora, BESP-306, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joshua Fialkow
Project Title: Using Parental Immigrant Status as a Predictor of Perceptions of Friendship and Related Applications in Students

Harideo, Jason, BESP-086, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Screen Brightness on the Attention of Teens

Harris, Miller, CELL-402, Cellular and Molecular Biology category, 12 grade,
HORACE MANN SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: PP1-PNUTS fusion protein as a potential method of studying phosphatase activity

Harrop-Williams, Dilan, ANIM-007, Animal Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Artificial Intelligence vs. Organic Intelligence: Testing the Route Optimization Efficiency of Google Maps Compared to Pogonomyrmex barbatus

He, Fiona, BESN-365, Behavioral Social Sciences - Neuroscience category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Analyzing Low Voltage Fast Seizures Recorded From Human Patients With Epilepsy

Heesch, Finley, MRCO-200, Microbiology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: Structural Determination of EmrAB-TolC Protein Complex in E. coli using Computational and Experimental Approaches

Ho, Derek, BESP-235, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Effects of COVID-era Inflation on Households of Different Economic Backgrounds

Hong, Kathy, PLNT-092, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Green, Oolong, and Black Tea Bags vs. Rockwool on the Growth of Cucumis sativus (Corinto cucumers)

Hordiychuk, Anna, PLNT-218, Plant Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella

Project Title: The effect of fungal-bacterial interactions on the growth of Lepidium sativum

Hossain, Nowshin, ANIM-097, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Vitamin C and D3 on Alzheimer's Inflicted C. elegans

Hossain, Samen, MATH-190, Mathematical Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Applying Probabilistic Principle of Inclusion-Exclusion For Increasing Subsequences for Random Permutations

Hossain, Tasnim, BESP-311, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: Association Between Symptom Severity and Physical Activity in People With Depression and Anxiety Disorders

Howe, Bailey, MRCO-108, Microbiology category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Intra and Interspecies Control of Bacterial Growth Through Quorum Sensing Molecules

Huang, Angel, EAEV-300, Earth and Environmental Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Effect of Drought on Grassland Bird Species in an Urban Reclaimed Landfill

Huang, David, SORO-346, Software Robotics category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Capabilities of SOFA in Simulating REACCH

Huang, Jason, MEDH-253, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Characterizing Dimer-Specific RAF inhibitors and Combination Treatments of Dimer-Specific RAF inhibitors with MEK inhibitors in Different Cellular Contexts.

Huang, Jing, ANIM-064, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Barley Grass on Malnourished Silkworm's Productivity

Huang, Shi Qi, PLNT-067, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: How does the sound of stream water affect the growth of Cucumis sativus plants under drought?

Huang, Willie, EAEV-384, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Raywattie Chan
Project Title: The Efficacy of Bioaugmentation and Biostimulation techniques on Remediating Petroleum and Heavy Metal contaminated soil

Hubbard, Kayla, ANIM-217, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: Is There Safety in Numbers? The implications of Herd Grouping on Asian elephant Exploration Behavior.

Huda, Ahmad, BESN-396, Behavioral Social Sciences - Neuroscience category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Effects of Icer Overexpression on Neuroplasticity: Gene Expression and Neuron Morphology

Hwang, Jason, MEDH-298, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: How mutations affect sequencing of SARS-CoV-2

Ibrohimova, Nazokat, BESP-032, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effect of Audio Environment on Concentration

Imbert, Anthony, BESN-455, Behavioral Social Sciences - Neuroscience category, 12 grade,
MANHATTAN CENTER FOR SCIENCE MATHEMATICS, Sponsoring Research Teacher: Denise Croote
Project Title: Hippocampal Inhibition Following Aversive Learning Disrupts Memory-Linking

Javier, Micaella, MRCO-061, Microbiology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Different Combinations of Orange and Lemon Essential Oil on Serratia marcescens

Jean Louis, Saradine, EAEV-102, Earth and Environmental Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Stephanie Doire
Project Title: How Select Cover Crops Affect Carbon Sequestration in Soil

Jesurasa, Judith, PLNT-085, Plant Sciences category, 12 grade,
Francis Lewis Highschool, Sponsoring Research Teacher:
Project Title: The Effect of Concentrations of Earl Grey Tea on the Growth of Daikon radish (Raphanus sativus)

Jethwani-Keyser, Taj, SORO-297, Software Robotics category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: "The truth will come out": Defending Against the Viral Spread of Misinformation by Characterizing User Responses to Fake News.

Jiang, Adriena, BESP-036, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Effects of Time Since Last Meal on Working Memory

Jiang, Amy, EAEV-250, Earth and Environmental Sciences category, 11 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The Effect of State Marine Reserves on Kelp Coverage in the Northern and North-Central California Coastal Ecosystems

Jiang, Benson, MRCO-144, Microbiology category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: System regulation: Microbial Fuel Cell microorganism comparison

Jiang, Evelyn, MEDH-258, Medicine and Health Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Analysis of the ABCD 1 gene to identify conserved, potentially functional RNA secondary structures and potential ASO therapeutic binding sites

Jimenez, Darian, BESP-471, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The Effect of Bass Equalization Levels in Music on Focus

Jinan, Rabtah, MRCO-479, Microbiology category, 11 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The effect of electrolytes on growth of Agrobacterium tumefaciens

Kantor, Jonathan, MEDH-209, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: Analyzing cellular pathways to understand SARS-CoV-2 related cardiomyopathy through differential expression analysis of single cell transcriptomic data from infected human iPSC-derived cardiac cells.

Kar, Susmoy, MRCO-105, Microbiology category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Testing E. Coli growth with natural vs non-steroidal anti-inflammatory agents

Karani, Shaun, BESN-295, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: The Effect of Contracting COVID on Speech Perception in High-School Students: Evidence from the Brain

Kasprowicz, Julia, ENGN-008, Engineering category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The 6th Sense

Kaur, Manpreet, PLNT-089, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of a Phosphate Buffer on the pH and Growth of Hydroponically Grown Kale

Keenan, Sacha, MEDH-019, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effects of Hands On vs Hands Off Perturbations on Muscle Activation in Paraplegics

Kemmett, Danielle, MRCO-052, Microbiology category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen

Project Title: The Effect of Different Food Sources on Slime Mold Growth and Memory

Keshwani, Aman, MRCO-270, Microbiology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: The Effect of Kombucha's Tea Base on Ethanol Production

Khan, Ameemah, BESP-037, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effect of Cultural Beliefs on Adolescents' Perceptions of Mental Health

Khando, Rinzin, PLNT-054, Plant Sciences category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Different Effects of Natural vs. Synthetic sources of Beta-carotene on the Growth and Germination Rates of Triticum Aestivum (wheat)

Kim, Aaron, MATH-369, Mathematical Sciences category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: On Numbers whose Integer Parts are Always Composite

Kim, Hanmin, PLNT-085, Plant Sciences category, 12 grade,
Francis Lewis Highschool, Sponsoring Research Teacher:
Project Title: The Effect of Concentrations of Earl Grey Tea on the Growth of Daikon radish (Raphanus sativus)

Kim, Samantha, PLNT-078, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kiwi Puree as the Nutrient Source on the Growth of Lactuca sativa var. capitata in a Hydroponic System

Kim, Spencer, SORO-417, Software Robotics category, 11 grade,
HORACE MANN SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: Self-Supervised Fine-Tuning for Dense Retrievers for Clinical Note Passage Retrieval

King, Jacqueline, MATH-452, Mathematical Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Analyzing Best Correction Combinations for GPS Satellites for Garmisch and KIT Ground Receivers to Improve Positioning Accuracy

Koda, Asuka, BESP-252, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Auditory Acuity and Auditory Feedback Response in Children With and Without Residual Speech Sound Disorder

Kolla, Sree, BESN-460, Behavioral Social Sciences - Neuroscience category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Role of Fixational Eye Movements in Perception of Black Hole Illusions

Kukic, Altin, MEDH-013, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: An Analysis and Review of Cervical Cancer Screening and Viewpoints in Muslim American Women in North American Urban Areas

Kulahlioglu, Elif, ANIM-350, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: A New Mathematical Model for Forecasting Upcoming Zoonotic Pandemics and Math-driven Strategies for Containing the Economic Impact Below Catastrophic Levels

Kumar, Rhia, ANIM-142, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Nanoemulgel Clove oil Anesthesia on Earthworm Physiology and Behaviorology

Kwait-Gonchar, Benjamin, PLNT-146, Plant Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: The combined effects of varying gravity levels and light exposures on garden cress development using a low cost 3D printed clinostat.

Lago, Tara Isabel, ANIM-282, Animal Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Can SLEAP be used to track and quantify octopus arm movement?

Lakhanpal, Rudr, ANIM-066, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Banana Flour on Galleria mellonella's Digestion of Low-Density Polyethylene

Larida, Gianna, BESP-065, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation of Students' Chopstick Grips with Their Pencil Grips and MBTI Personality Types

Lashley, Max, EAEV-361, Earth and Environmental Sciences category, 9 grade,
KEW FOREST SCHOOL (THE), Sponsoring Research Teacher: Amanprit Kaur
Project Title: The Effect of Air and Water Temperature on the Pollution Concentration of Nitrate, Nitrite and Heavy Metals in the East River, NY

Lau, Ka Wing, PLNT-012, Plant Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: Epigenetic Arabidopsis Plant Research

Lee, Jeongwon, PLNT-289, Plant Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Analysis of Climate Sensitivity of Crop Pollinations: Game Theoretical Model for the Coexistence Dynamics of Anemophiles and Entomophiles in the Ecosystem and Agrosystem

Lee, Juhyoung, SORO-330, Software Robotics category, 12 grade,

STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: An Evaluation Mechanism For Crowdsourcing Storefront Accessibility Data

Lee, Julianne, PHYS-207, Physics and Space category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Moving matter with sound: Activating dynamical systems with interfering acoustic waves

Lee, Stephanie, MATH-334, Mathematical Sciences category, 11 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: The Correlations between Socioeconomic Factors and the Amount of Trihalomethane in Drinking Water in the State of NY

Lee, Yule, ANIM-173, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kale Powder on Silkworms Silk Quality and Yield

Lema, Justin, EAEV-111, Earth and Environmental Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Effects of Umbellifers germination on soil respiration

Lengsfield, Mira, CELL-337, Cellular and Molecular Biology category, 11 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: Mechanisms of lysosomal cross-correction in Mucopolysaccharidosis type IIIC by gene-modified hematopoietic stem and progenitor cells

Li, Abigail, BCHM-476, Biochemistry category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: The effect of Vitamin B1 and Citric Acid on the Fat Content of Raw Beef

Li, Allen, BESP-150, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Ellen Schweitzer
Project Title: Financial literacy and stock market participation; Evidence from the 2019 Survey of Consumer Finances

Li, Andrew, EAEV-071, Earth and Environmental Sciences category, 11 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: Identifying Thermokarst Lakes in the Qinghai-Tibetan Plateau Using Discrete Wavelet Transform-Based Deep Learning

Li, Haorun, MEDH-070, Medicine and Health Sciences category, 10 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: Multi-Property De Novo Drug Design Using Multi-Objective Deep Reinforcement Learning

Li, Jeffrey, CELL-208, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa

Project Title: Using Statins to Inhibit Feraheme Nanoparticle Internalization in Macrophages to Improve Nanomedicine for Cancer

Li, Justin, CELL-118, Cellular and Molecular Biology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Jason Econome
Project Title: Investigating the role of the Nse2 subunit of yeast Smc5/6 in SUMOylation, DNA Recombination, and Replication

Li, Katie, ANIM-060, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Astaxanthin on the Lifespan of Starved Brine Shrimp

Li, Mingpei, MEDH-392, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: The Role of HGF/c-Met Signaling in the Development of Type 1 Diabetes

Li, Rebecca, BESN-365, Behavioral Social Sciences - Neuroscience category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Analyzing Low Voltage Fast Seizures Recorded From Human Patients With Epilepsy

Li, Rosanna, EAEV-482, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Raywattie Chan
Project Title: Enhancing the Removal of Nitrates and Phosphates in Marsh Water by the Synergetic Relationship between Mytilus edulis and Eisenia fetida

Libshutz, Lucas, PHYS-373, Physics and Space category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: Results of Synthetic High Resolution Spectra from Titan Surface Observations

Liew, Alex, BESP-045, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: How does listening to music of different languages influence academic performance?

Lim, Abigail, PLNT-020, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Kelp Extract on Growth and Development of Phaseolus vulgaris

Lim, Mandy, BCHM-236, Biochemistry category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: Analysis of Conformations of ATP and ADP Bound to Proteins

Lim, Sharon, ANIM-097, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Vitamin C and D3 on Alzheimer's Inflicted C. elegans

Lin, Anthony, EAEV-005, Earth and Environmental Sciences category, 11 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Circulation Patterns and Long-Term Trends in the Duration and Spacing Between Heat Waves for the NYC Metropolitan Area

Lin, Calvin, BESP-045, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: How does listening to music of different languages influence academic performance?

Lin, David, EAEV-384, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Raywattie Chan
Project Title: The Efficacy of Bioaugmentation and Biostimulation techniques on Remediating Petroleum and Heavy Metal contaminated soil

Lin, Jun, ANIM-046, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Astragalus membranaceus Root Extract on Parkinson Inflicted Caenorhabditis elegans

Lin, Kyler, BESP-191, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: How can video game music affect someone's concentration and productivity?

Lin, Maggie, PLNT-047, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Ghost Shrimp (Palaemonetes paludosus) Aquaponics on the Cultivation of Watercress (Nasturtium officinale)

Lin, Nicole, ANIM-147, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Specialized diet on Polystyrene consumption in Galleria Mellonella

Lin, Nikki, ANIM-051, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Noise Pollution on Lumbricidae Behavior

Lin, Shiya, MEDH-202, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: Identifying Patterns in Approval Rationale for Clinical Glioblastoma Drug Treatments

Lin, Si Rong, MRCO-106, Microbiology category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: The Effects of Vapes on the Microbiomes

Lin, Vicky, ANIM-060, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Astaxanthin on the Lifespan of Starved Brine Shrimp

Lin, Vivian, PLNT-050, Plant Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Effectiveness of Egeria Densa on Mitigating Hypoxia Through Oxygen Production

Lin, Winni, BESP-059, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation Between Caffeine Intake on a High School Student's Algebra 1 Test Score

Lin, Yi Ran, PLNT-020, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Kelp Extract on Growth and Development of Phaseolus vulgaris

Liu, Daniel, SORO-351, Software Robotics category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Jason Econome
Project Title: Comparison of Convolutional Neural Network Architectures In Training A Machine Learning Classifier for Urban Home Sounds

Liu, Emily, ANIM-057, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Accelerated Crayfish Regeneration Rate by Turmeric with the Black Pepper Adjuvant

Liu, Jed, SORO-346, Software Robotics category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Capabilities of SOFA in Simulating REACCH

Liu, Jiahe, EAEV-071, Earth and Environmental Sciences category, 11 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: Identifying Thermokarst Lakes in the Qinghai-Tibetan Plateau Using Discrete Wavelet Transform-Based Deep Learning

Liu, Michelle, BESP-428, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Transitioning from summer vacation to school increases stress levels in high school students with irregular menstruation.

Liu, Michelle, BESP-036, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Effects of Time Since Last Meal on Working Memory

Liu, Olivia, EAEV-071, Earth and Environmental Sciences category, 12 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Melissa Doellman
Project Title: Identifying Thermokarst Lakes in the Qinghai-Tibetan Plateau Using Discrete Wavelet Transform-Based Deep Learning

Liu, Xin Qi, MEDH-292, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov

Project Title: New Computational Methodology to Identify Classes of Near-Infrared Fluorescence Cyanine Dyes for Early Diagnosis of Alzheimer's Diseases

Liu, Ziqing, EAEV-325, Earth and Environmental Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Denitrification of Stormwater Outfalls Using Woodchip Bioreactors

Livshits, Ilana, CELL-119, Cellular and Molecular Biology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Jason Econome
Project Title: High-resolution analysis of human skeletal stem cell function reveals an age-related increase in differentiation that could drive stem cell loss

Lok, Ingrid, BESP-035, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Relationship Between Coping Styles and the Severity of PTSD Symptoms

Lomboy, Alexandra, ANIM-097, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Vitamin C and D3 on Alzheimer's Inflicted C. elegans

Long, Anthony, PLNT-293, Plant Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Transcriptome analysis reveals possible mechanisms of SR45 as a suppressor of defense genes in Arabidopsis thaliana

Luo, Joshua, CELL-387, Cellular and Molecular Biology category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: Single-molecule Investigation of the Interaction between MeCP2 and chromatin

Ma, Alex, BCHM-327, Biochemistry category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Biophysical Characterization of Human Immune Protein S100A12 and its Interaction with CD36

Ma, Angela, SORO-178, Software Robotics category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Elese Lau
Project Title: The Implementation of Gesture Prediction through Classification

Ma, Nicole, ANIM-142, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Nanoemulgel Clove oil Anesthesia on Earthworm Physiology and Behaviorology

Mackay, Harry, EAEV-172, Earth and Environmental Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: Identifying the Nutrients That Control Algal Blooms and Hypoxia in New York Estuaries

Mahbub, Zubayer, MEDH-324, Medicine and Health Sciences category, 12 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Goldilocks' Bedtime: The Effect of Hours of Sleep on Adolescent Obesity

Mai, Alexis, BESN-017, Behavioral Social Sciences - Neuroscience category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Impact of Social Isolation on Microglia

Mallia, Abigail, SORO-450, Software Robotics category, 12 grade,
ARCHBISHOP MOLLOY HIGH SCHOOL, Sponsoring Research Teacher: Mary Mallia
Project Title: Sound-Aid: Using Python to Discriminate Between Music and Speech

Marka, Arpad, MEDH-397, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Beating Tubular Micro-heart Models for Accelerated Drug Discovery

Martinez, Denise, PLNT-078, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kiwi Puree as the Nutrient Source on the Growth of Lactuca sativa var. capitata in a Hydroponic System

Mau, Kaitlynn, PLNT-018, Plant Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Impact of Lactobacillus casei on corn, pea, and radish plants in sterilized and non-sterilized soil

Meksi, Erti, MRCO-144, Microbiology category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: System regulation: Microbial Fuel Cell microorganism comparison

Melika, Marcellino, PLNT-067, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: How does the sound of stream water affect the growth of Cucumis sativus plants under drought?

Meneses, Isabelle, BCHM-053, Biochemistry category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Banana Peel Solution on Buffalo Teeth-Whitening

Meylikhov, Denis, BCHM-010, Biochemistry category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: The Impact of L-carnitine, Phosphatidylcholine, Choline Bitartrate, and L-Arginine (Dietary Supplements) on Escherichia coli Growth and the Subsequent Production of Trimethylamine N-Oxide (TMAO)

Meylikhov, Elya, BCHM-010, Biochemistry category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: The Impact of L-carnitine, Phosphatidylcholine, Choline Bitartrate, and L-Arginine (Dietary Supplements) on Escherichia coli Growth and the Subsequent Production of Trimethylamine N-Oxide (TMAO)

Michel, Krislyn, EAEV-123, Earth and Environmental Sciences category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Communicating the Plastic Pollution Issue in New York City through Data Visualization: An Interactive Microplastics Information Platform

Mikheyeva, Marianna, ANIM-256, Animal Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: A Comparative Investigation of Maximum Likelihood Methods for Estimating Phylogenies from DNA Barcodes

Mishra, Arjun, BESP-377, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Mindful Breathing Techniques Exercises on the Visual Intelligence of Students

Mitchneck, Samuel, BESP-244, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Comparing the Accuracy of Two Indicators of Gerrymandering

Mohammed, Siddiq, ENGN-130, Engineering category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: Investigating the Production of Gelatin Methacryloyl Polymerized Microspheres with Breast Cancer Cells Using Microfluidic Devices

Moonthaha, Siddratul, BESN-203, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: The Role of Melanocortin 4 Receptor GABAergic Neurons in Depression and Feeding in the Dorsal Raphe Nucleus

Morehead, Wilhelmina, ENGN-041, Engineering category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Modifications of Turbo Chargers in a Common Passenger Car

Morgan, Kiele, BESN-232, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: The Effect of NMDA Receptor Blockade on Neurogenesis and Neural Crest Development.

Morshed, Sadeea, MRCO-479, Microbiology category, 11 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The effect of electrolytes on growth of Agrobacterium tumefaciens

Motwani, Zahra, CELL-375, Cellular and Molecular Biology category, 12 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: The Isolation of Exosomes from Bovine Colostrum and Preparation and Characterization of Exosomal-Curcumin Formulation with Lung Cancer Cell Lines A549 and H1299

Mulholland, Blair, BESP-473, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,

Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: Increased use of Social Media Impacts the Establishment of Autonomy in Adolescents: a Possible Effect of COVID-19 Quarantine

Mulkandov, Joshua, ANIM-007, Animal Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Artificial Intelligence vs. Organic Intelligence: Testing the Route Optimization Efficiency of Google Maps Compared to Pogonomyrmex barbatus

Munoz, Sophie, PLNT-030, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Concentrations of Phosphatic Clay on Inhibiting the Growth of Harmful Algae in a Hydroponic System

Murray, Annette, BESP-386, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Emotional factors in maternal relationships predict the diagnosis of anorexia nervosa, bulimia nervosa, and binge eating disorder

Mushiyev, David, BESP-131, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Machine Learning and Artificial Intelligence Approach to Forecasting COVID-19 Complications with the Purpose of Early Treatment and Combating Systemic Racism

Nadler, Hannah, BESN-210, Behavioral Social Sciences - Neuroscience category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: The Effect of Cancer on the Spontaneous Signals of Neurons in the PNS and CNS

Nanberg, Lena, EAEV-414, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: The Effects of Calcium Hydroxide and Potassium Hydroxide on the Degradation of PFAS

Nasir, Aleeza, BESP-086, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Screen Brightness on the Attention of Teens

Nassar, Salma, BCHM-179, Biochemistry category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Elese Lau
Project Title: A Biomimetic Approach to Serotonin Regulation: Examining Serotonin Degree of Association to Select Aromatic Dipeptides

Newman, Elizabeth, BESP-301, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Crumbling Faith in Democracy: the Relationship Between Trust in Government and Gerrymandering

Newman, Rosemary, BESP-275, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Partisanship or Partnership: Tracing the Connection Between Political Ideology and Financial Support From Bipartisan Sources

Ng, Veronica, EAEV-107, Earth and Environmental Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Performing Barcoding and Soil Analyses to Investigate Ecosystem Resiliency in Different Flood Zones of Brooklyn, NY

O'Connor, Theresa, BESP-223, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: Learning Without Trying: Detecting Evidence of Unconscious Learning During Visual Task with Multiple Goal-Relevant Stimuli

Obertos, Anna, MEDH-011, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Food Environment and Life Expectancy in California

Obertos, Christina, MEDH-011, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Food Environment and Life Expectancy in California

O'Gallagher, Katie Anne, BESP-443, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: Analyzing Twitter Hate Speech as a Predictor for LGBTQ+ Hate Crimes

Oh, Yeon Su, BESP-065, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation of Students' Chopstick Grips with Their Pencil Grips and MBTI Personality Types

Oke, Stutee, MATH-156, Mathematical Sciences category, 12 grade,
ARCHBISHOP MOLLOY HIGH SCHOOL, Sponsoring Research Teacher: Mary Mallia
Project Title: Analysis of Operational Performance

Olhoviks, Michelle, ENGN-442, Engineering category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: Improving MRI Function with $5 Walkman Audio Tape: Nanoparticle Amplification of Transverse Fields in Magnetic Resonance

Ong, Maggie, PLNT-078, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kiwi Puree as the Nutrient Source on the Growth of Lactuca sativa var. capitata in a Hydroponic System

Owens, Benjamin, MATH-328, Mathematical Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS

Project Title: Perfect Numbers and the Repeated Sigma Function

Pabon, Mariah, CELL-393, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Validation and Optimization of Fluorescent Probes to Detect Dkk2 mRNA

Panchal, Shivani, BESN-140, Behavioral Social Sciences - Neuroscience category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Literal Optical Illusions on the Accuracy of Mathematical Exams

Pankevich, Vera, PLNT-222, Plant Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: A new montane species of Protium from Ecuador and Peru.

Papamitsakis, Lucas, BESP-141, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
Brooklyn Technical HIgh School, Sponsoring Research Teacher: MacRae Maxfield
Project Title: A Quantitative Analysis of Global Well-being

Parkin, Zoe, BESP-151, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Ellen Schweitzer
Project Title: Promising increases in third-grade test scores following the institution of high-quality universal pre-K in NYC

Parsa, Oriana, CELL-481, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Exosomes the Early Detection of Gynecologic Cancers

Paschke, Lucas, MATH-034, Mathematical Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: Multivariable analysis on stock price and trade volume trends in the post-COVID-19 stock market shutdown era

Patel, Rohan, MRCO-332, Microbiology category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Optimal Conditions for an Influenza A Viral Infection in MDCK Cells

Patel, Ruchi, PLNT-068, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The effect of Saccharomyces Cerevisiae on Spinacia Oleracea under high temperature conditions

Patel, Shirish, ENGN-313, Engineering category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Revolutionizing Fluid Flow Using Triply-Periodic Minimal Surfaces

Patel, Shivansh, SORO-174, Software Robotics category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Elese Lau

Project Title: Implementing a Novel Feature Selection Framework for EMG Signal Classification

Paul, Swarnali, BESP-269, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Age Gaps and Divorce: An Examination into How Age Gaps Affect Likelihood of Divorce

Pavon-Trujeque, Valeria, EAEV-482, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Raywattie Chan
Project Title: Enhancing the Removal of Nitrates and Phosphates in Marsh Water by the Synergetic Relationship between Mytilus edulis and Eisenia fetida

Pensabene, Isabella, SORO-247, Software Robotics category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Elese Lau
Project Title: Using MATLAB and the Ninapro Database to Determine the Most Accurate Method for Surface Electromyography Collection

Perazzo, Alexandra, BESP-186, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Economic Recession Prejudice Towards the Unsheltered: Creation of a New Scale on the Basis of Terror Management Theories

Perez, Camille, CELL-189, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Prematurely terminated NSD1 escapes nonsense-mediated mRNA decay to promote stem cell self-renewal

Perkis, Ruby, MRCO-110, Microbiology category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Modeling the Infant Microbiota: Influence of Baby Formulas on Bacterial Growth and Absorbance

Peter, Sarah, BESP-115, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Ellen Schweitzer
Project Title: COVID Pandemic Effects on Marriage and Fertility Rates: Evidence from the American Community Survey

Petrovici, Paul, MEDH-263, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: .Does Nutrition Information Affect Obesity Rates? A study of trends across the United States.

Pham, Tony, BCHM-053, Biochemistry category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Banana Peel Solution on Buffalo Teeth-Whitening

Pilozo, Ida, PLNT-050, Plant Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Effectiveness of Egeria Densa on Mitigating Hypoxia Through Oxygen Production

Pokharel, Rishima, MEDH-470, Medicine and Health Sciences category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: Microengineering Biosystems for Pancreatic Cancer Modeling

Pozhoga, Daria, PHYS-026, Physics and Space category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: Characterization of WASP-39b atmosphere with JWST

Pradhan, Avik, EAEV-361, Earth and Environmental Sciences category, 9 grade,
KEW FOREST SCHOOL (THE), Sponsoring Research Teacher: Amanprit Kaur
Project Title: The Effect of Air and Water Temperature on the Pollution Concentration of Nitrate, Nitrite and Heavy Metals in the East River, NY

Qureshi, Sara, MRCO-039, Microbiology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: Association of Malassezia in Crohn's Disease and its detection through an RT-PCR test

Ramlall, Arianna, MEDH-407, Medicine and Health Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: PARP inhibitors Cause Low Viability and Higher Cytotoxicity in Cells with BRCA Mutations

Ranjan, Ashwin, BESP-458, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
DALTON SCHOOL (THE), Sponsoring Research Teacher: Joaquin Ramsey
Project Title: A Novel Method for Real-Time Detection of Psychological Stress in High School Students

Rawshan, Tasnuva, MRCO-052, Microbiology category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Food Sources on Slime Mold Growth and Memory

Reich, Logan, PHYS-048, Physics and Space category, 11 grade,
HUNTER COLLEGE CAMPUS SCHOOLS, Sponsoring Research Teacher: Brian Park
Project Title: A Detailed Model of the AGN in NGC 7469

Reid, Natalie, CELL-204, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: In-silico analysis of post-translational modifications of PTEN suggest a role in pathogenicity of PTEN hamartoma tumor syndrome, autism spectrum disorder and developmental delay

Reynoso, Mariella, ANIM-282, Animal Sciences category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Can SLEAP be used to track and quantify octopus arm movement?

Ritz-Jack, Alden, MATH-494, Mathematical Sciences category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Creating a Mathematical Model to find cost-effective solutions to Beamforming

Roh, Kun-Hyung, MEDH-382, Medicine and Health Sciences category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Novel pharmacogenomic methodology for the identification of the first-in-class mechanisms of phenothiazine derivatives to delay and rescue Alzheimer's Disease pathology and extend lifespan in C. elegans

Rosenberg, Julian, MRCO-388, Microbiology category, 12 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: Knocking Out SMG6L to Examine Nonsense-Mediated-Decay and Antigenic Variation in Plasmodium falciparum

Rothman, Gabe, MRCO-459, Microbiology category, 12 grade,
YESHIVA UNIVERSITY HIGH SCHOOL FOR GIRLS, Sponsoring Research Teacher: Ruth Fried
Project Title: Rheological and Toxicological Properties of the Extracellular Polymeric Material (EPM) Produced by Rhizobium Tropici ATCC 49672

Roy, Nilanjana, BCHM-160, Biochemistry category, 12 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The Application of Cyanobacteria on H2O-Based Medium Solutions and its effect on Biohydrogen Generation and Electrical Conductivity

Rualo, Gavin, BESP-381, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Has the COVID-19 pandemic affected implicit bias as a result of increased mortality salience?

Rubinoff, Joshua, PLNT-089, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of a Phosphate Buffer on the pH and Growth of Hydroponically Grown Kale

Rukin, Sophie, MEDH-403, Medicine and Health Sciences category, 11 grade,
HORACE MANN SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: Evaluating the Efficacy of Ventilatory Burden

Rup, Taylor, ANIM-355, Animal Sciences category, 12 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: Evolutionary significance of Drosophila species enzyme function

Rupert-Gopalsami, Daniella, MRCO-157, Microbiology category, 12 grade,
ARCHBISHOP MOLLOY HIGH SCHOOL, Sponsoring Research Teacher: Mary Mallia
Project Title: The Efficacy of Ginger vs Neomycin vs Combination of Both on Inhibition of Bacterial Growth in the Treatment of Infectious Disease

Ryan, Oliver, CELL-214, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: Modified forward genetic screen in neurexin knockout C. elegans identifies mutants with mutations relevant to presynaptic assembly

Saha, Sharna, BESN-394, Behavioral Social Sciences - Neuroscience category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: ASSESSMENT OF DRUGS INHIBITING METABOLIC GENES AND THEIR IMPLICATION IN ALZHEIMER'S DISEASE MODEL IN CAENORHABDITIS ELEGANS

Sami, Shahabir, CELL-132, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: An overview of the distribution of the structural motifs among DNA-binding proteins.

Sampson, Angel, BESP-165, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: How does music affect reaction rate?

Samuels, Eliana, MRCO-459, Microbiology category, 12 grade,
YESHIVA UNIVERSITY HIGH SCHOOL FOR GIRLS, Sponsoring Research Teacher: Ruth Fried
Project Title: Rheological and Toxicological Properties of the Extracellular Polymeric Material (EPM) Produced by Rhizobium Tropici ATCC 49672

Sandoval, Hailey, MEDH-409, Medicine and Health Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Long-Term Consequences of Growth Hormone Therapy and the Likelihood of Developing Germ Cell Tumors and Arthritis

Sasson, Rommy, BCHM-312, Biochemistry category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Development of a Short Peptide to Prevent Non-Thrombogenic Clot Formation on Hydrophobic Surfaces

Schein, Hillel, CELL-467, Cellular and Molecular Biology category, 12 grade,
YESHIVA UNIVERSITY HIGH SCHOOL FOR GIRLS, Sponsoring Research Teacher: Ruth Fried
Project Title: Evaluating the Effect of Increased Resorcinol Diphenyl Phosphate (RDP) Concentrations in Clay on the Neurogenic Differentiation of Human Dental Pulp Stem Cells (hDPSCs)

Schwartz, Zoe, PLNT-085, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Concentrations of Earl Grey Tea on the Growth of Daikon radish (Raphanus sativus)

Shafique, Shahrin, PLNT-058, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Aloe vera on the Water Retention of Soil of Ocimum basilicum

Shah, Rajne, ENGN-008, Engineering category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: The 6th Sense

Shaham, Roni, BESP-264, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: #HermanWho? Using Linguistic Analysis To Empirically Measure the Fifth Filter of the Propaganda Model in 2022

Shan, Annie, BESP-484, Behavioral Social Sciences- Psychology/Sociology category, 9 grade,
BASIS INDEPENDENT BROOKLYN, Sponsoring Research Teacher: Matthew Goldman
Project Title: Functional Decline as a Major Outcome of Geriatric Depression and Predictor of Its Trajectories: Longitudinal Evidence from the Health and Retirement Study (HRS)

Sharafa, Shefa, MEDH-031, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: COVID-19 PPE on Acne Vulgaris and Atopic Dermatitis

Shek, Ethan, BESP-027, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effects of Different Learning Conditions on Students' Performance During Reading Comprehension Tests

Shi, Johnny, ENGN-326, Engineering category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Viability of Aluminum Amide Deep Eutectic Electrolytes in Batteries

Shoshin, Daniel, ENGN-339, Engineering category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: A Study of Complex Mirror Symmetry in RLC Circuits

Sivakumar, Vigneshwari, MRCO-061, Microbiology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Different Combinations of Orange and Lemon Essential Oil on Serratia marcescens

Sklyar, Aleena, BESN-017, Behavioral Social Sciences - Neuroscience category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Impact of Social Isolation on Microglia

Sloane, Lucia, EAEV-414, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: The Effects of Calcium Hydroxide and Potassium Hydroxide on the Degradation of PFAS

Soltau, Nikhil, BCHM-367, Biochemistry category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Flicker On, Flicker Off: Investigations into the Luminescent Detection of Heavy Metal Ions in Plant Life

Spaet, Annika, EAEV-319, Earth and Environmental Sciences category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin

Project Title: Water Retention of Small-Scale Green Roofs with Edible Vegetation

Spina, Stefan, PHYS-477, Physics and Space category, 12 grade,
ARCHBISHOP MOLLOY HIGH SCHOOL, Sponsoring Research Teacher: Mary Mallia
Project Title: Is the Increasing Detection of Gravitational Waves a Result of Technological Improvements or Natural Causes?

Stanescu, Cristina, MEDH-362, Medicine and Health Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: James LaRocca
Project Title: Assessing if Certain Orthodontic Indexes are Risk Factors to Obstructive Sleep Apnea

Stanley, Zoe, CELL-199, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Tracy LaGrassa
Project Title: Elucidating Ionizing-Radiation Activated Apoptosis: A Genetic Screen to Define the Cytoplasmic Caspase-2 Activation Platform

Stasiewicz, Ewa, BESP-461, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: Effects of Perceived Video Emotion on Typing Efficiency

Stefanakis, Johanna, MRCO-220, Microbiology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Beyond a Scientific Method: A Novel Methodology to Create New Means of Fighting Antibiotic Resistance

Stewart, Tessa, MRCO-110, Microbiology category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Modeling the Infant Microbiota: Influence of Baby Formulas on Bacterial Growth and Absorbance

Strickman, Orli, BESP-266, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Women in the Workforce: How Parental Leave Affects Maternal Mental Health

Sullivan, Rebecca, CELL-467, Cellular and Molecular Biology category, 12 grade,
YESHIVA UNIVERSITY HIGH SCHOOL FOR GIRLS, Sponsoring Research Teacher: Ruth Fried
Project Title: Evaluating the Effect of Increased Resorcinol Diphenyl Phosphate (RDP) Concentrations in Clay on the Neurogenic Differentiation of Human Dental Pulp Stem Cells (hDPSCs)

Sumaita, Tasnim, CELL-398, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Impact of UV-exposure and Polycomb activity on H3K36me2 expression in EpSCs

Sumona, Tanzina, BESP-116, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Ellen Schweitzer
Project Title: Pandemic Effects on High Schoolers' Social and Academic Experiences: Evidence from the Adolescent Behavior and Experience Survey

Sun, Selina, MRCO-061, Microbiology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Different Combinations of Orange and Lemon Essential Oil on Serratia marcescens

Super, Devon, SORO-246, Software Robotics category, 11 grade,
PACKER COLLEGIATE INSTITUTE, Sponsoring Research Teacher: Erin Schmitz
Project Title: A pipeline to deploy monocular depth estimation on autonomous drones

Suri, Suraiya, BCHM-291, Biochemistry category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Rational Design of Small Molecules to Inhibit the Reston Ebola Virus: Identification of Cryptic Pockets within a Protein

Tabassum, Adiba, BESP-169, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Internet Addiction and its Effects on Adolescents in the United States

Tang, Angel, MEDH-399, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Characterization of FSH in Down Syndrome Mouse Model Ts65Dn

Taylor, Elijah, ANIM-173, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Kale Powder on Silkworms Silk Quality and Yield

Thanikachalam, Santhosh, ANIM-147, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Specialized diet on Polystyrene consumption in Galleria Mellonella

Thompson, Kayla, PLNT-099, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Calcium Silicate on solanum tuberosum (potato) in Drought Stress

Tiger, Sabrina, EAEV-233, Earth and Environmental Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: A Panel Threshold Regression: The Effect of Urbanization, Industrialization, and Population Aging on Carbon Emissions in 132 Countries

Toque, Ariadne Grace, MEDH-194, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Khaled Mahmoud
Project Title: The Effect of polg-1 Gene SNPs on Human Female Infertility

Tran, Mingtam, ANIM-043, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen

Project Title: The Effect of Fish Oil on Planaria Memory, Learning, and Regenerative Abilities on Navigation through a Maze

Tse, Chloe, MEDH-042, Medicine and Health Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effect of Blue Light Blocking Lenses on Digital Eye Strain

Tsoi, Ka Tak, ANIM-437, Animal Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Emily Schmidt
Project Title: The Effect of Facial Morphology on Cat and Dog Perception of the Rotating Snakes Illusion

Uceda, Helena, BESP-303, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: LATINOS AS CREATORS AND CONSUMERS: THE EFFECTS OF SOCIAL MEDIA ON PERCEPTION AND COMMUNICATION

Ullah, Akram, CELL-481, Cellular and Molecular Biology category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Exosomes the Early Detection of Gynecologic Cancers

Usvyat, Gabrielle, MEDH-254, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Max Chomet
Project Title: Characteristics of Epithelial Cells in Pancreatic Ductal Adenocarcinoma

Vaithilingam, Archana, ANIM-040, Animal Sciences category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Does the number of monk parakeets in a group effect the frequencies of different calls?

Vasilescu, Margaux, CELL-415, Cellular and Molecular Biology category, 11 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Making Sense of Missense: Machine Learning Training On a Model for Missense Variants Data Anomalies

Vasilescu, Nicholas, PHYS-103, Physics and Space category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Stephanie Doire
Project Title: Deep Learning to Find Anomalies in Large Astrophysics Data Such As Star Candidates That Could Be SETI Or Other Anomalies, Such As Unusually Large and/or Double Exoplanents

Wade, Arthur, EAEV-434, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: Effects of Aluminum on Northeastern Freshwater Habitats

Waitz, Elias, EAEV-434, Earth and Environmental Sciences category, 10 grade,
EDWARD R MURROW HIGH SCHOOL, Sponsoring Research Teacher: Howie Wong
Project Title: Effects of Aluminum on Northeastern Freshwater Habitats

Wang, Yuxuan, BESP-406, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
COLUMBIA GRAMMAR PREPARATORY SCHOOL, Sponsoring Research Teacher: Ilya Yashin
Project Title: Loneliness and Well-being in Mid and Late Adolescents: The Role of Resilience, Hope, and Wisdom as Protective Factors

Weinberg, Ethan, BESP-249, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joshua Fialkow
Project Title: Redrawing the Lines: Simulating Gerrymandering's Adverse Impacts On Competitiveness, Representation, and Other Political Factors

Widjaja, Jocelyn, MEDH-399, Medicine and Health Sciences category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Characterization of FSH in Down Syndrome Mouse Model Ts65Dn

Wieland, Amelia, BESN-462, Behavioral Social Sciences - Neuroscience category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Lrrk2-G2019S mutations impact on corticostriatal signaling

Wijoyo, Arnold, BCHM-153, Biochemistry category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Ferulic Acid enhancing topical antioxidants preventing free radical damage oxidative stress on phycocyanin.

Wilson, Emani, MEDH-185, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Elese Lau
Project Title: The exploration of classification between action and rest tremors

Wolfson, Alana, ANIM-142, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Nanoemulgel Clove oil Anesthesia on Earthworm Physiology and Behaviorology

Wong, Nicolas, CELL-405, Cellular and Molecular Biology category, 12 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Alyssa Shearer
Project Title: A Nutritional Approach For The Treatment Of Alzheimer's Disease: EPA and Vitamin B12 as Separate and Combined Treatments For Alzheimer's-induced Cytotoxicity

Wu, Angel, BESP-028, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effect of Background Sounds on Food Choice

Wu, Jamie, ANIM-147, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effects of Specialized diet on Polystyrene consumption in Galleria Mellonella

Wu, Katelin, CELL-315, Cellular and Molecular Biology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner

Project Title: Optimizing a Cerebral Organoid Model of HIV-1 Pathogenesis in the Central Nervous System

Wu, Katlyn, PLNT-058, Plant Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effects of Aloe vera on the Water Retention of Soil of Ocimum basilicum

Wu, Nora, BESP-059, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation Between Caffeine Intake on a High School Student's Algebra 1 Test Score

Xie, Frank, MEDH-211, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Joann Gensert
Project Title: Overview of bike concussions during the Covid-19 Epidemic

Xie, Jiahui, PHYS-427, Physics and Space category, 11 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Stephanie Doire
Project Title: Searching For Fast Radio Bursts in Radio Ranges of 10-88 mHz

Xing, Zheng, PHYS-195, Physics and Space category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Linear localization of non-Hermitian with Partially Integrated PT-symmetry Electronics

Xu, Aaron, BESP-028, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Stacy Goldstein
Project Title: The Effect of Background Sounds on Food Choice

Xu, Owen, EAEV-145, Earth and Environmental Sciences category, 11 grade,
FOREST HILLS HIGH SCHOOL, Sponsoring Research Teacher: Matthew Woo
Project Title: Using Phytoplankton to Reduce CO2 Concentration in Designated Oceanic and Atmospheric Locations

Xu, Priscilla, BESP-357, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Richard Lee
Project Title: Researching Meditation: An Analysis of Participant Retention

Xylas, Arietta, EAEV-250, Earth and Environmental Sciences category, 12 grade,
TOWNSEND HARRIS HIGH SCHOOL, Sponsoring Research Teacher: Katherine Cooper
Project Title: The Effect of State Marine Reserves on Kelp Coverage in the Northern and North-Central California Coastal Ecosystems

Yang, Isabel, PLNT-047, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Ghost Shrimp (Palaemonetes paludosus) Aquaponics on the Cultivation of Watercress (Nasturtium officinale)

Yang, Jeffrey, BESN-466, Behavioral Social Sciences - Neuroscience category, 10 grade,

STEM Fairs

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: The impact of COVID on the teenage brain and a novel screening tool for assessing brain health

Yang, Jeffrey, MEDH-271, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Erin O'Leary
Project Title: USING LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY TO DETERMINE ASSOCIATION BETWEEN PANCREATIC CANCER RISK AND PER- AND POLYFLUOROALKYL SUBSTANCES

Yang, Paddy, ENGN-104, Engineering category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Stephanie Doire
Project Title: Efficiency Comparison of Hybrid and Conventional Vertical Axis Wind Turbines (VAWT)

Yang, Yewon, BESN-400, Behavioral Social Sciences - Neuroscience category, 12 grade,
HIGH SCHOOL FOR MATH SCIENCE AND ENGINEERING AT CCNY, Sponsoring Research Teacher: Hossein Aleyasin
Project Title: Projection patterns of the ventral hippocampus

Ye, Bryant, PLNT-092, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Green, Oolong, and Black Tea Bags vs. Rockwool on the Growth of Cucumis sativus (Corinto cucumers)

Ye, Susan, BESP-261, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: How are Men Impacted by Sexual Assault? An Examination into the Relationship Between Sexual Misconduct with Men and Subsequent PTSD Symptoms

Yeh, Anna, BESP-294, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Marisa Wagner
Project Title: The Effect of Internet Access on Suicide Rates of Adolescents

Yeung, Crystal, CELL-314, Cellular and Molecular Biology category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Measuring the decrease in myelin in the brain after a traumatic brain injury

Yilmaz, Alara, EAEV-464, Earth and Environmental Sciences category, 11 grade,
HORACE MANN UPPER SCHOOL, Sponsoring Research Teacher: Stephanie Feigin
Project Title: Investigating the Metallic Fabric Electrodes of Water Electrolysis for Corrosion Reduction and Hydrogen Generation Enhancement

Yu, Erica, EAEV-300, Earth and Environmental Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: The Effect of Drought on Grassland Bird Species in an Urban Reclaimed Landfill

Yu, Grady, SORO-330, Software Robotics category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: An Evaluation Mechanism For Crowdsourcing Storefront Accessibility Data

Yu, Leheng, BESP-027, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: The Effects of Different Learning Conditions on Students' Performance During Reading Comprehension Tests

Yue, Fiona, BESP-229, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Prevalence of eating disorders among sexual and gender minority teens

Yukhanov, Ariana, ANIM-062, Animal Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Rhodiola rosea on Vanessa cardui Growth and Development when Administered at Various Life Stages

Yung, Isabelle, PLNT-047, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Ghost Shrimp (Palaemonetes paludosus) Aquaponics on the Cultivation of Watercress (Nasturtium officinale)

Zaba, Alex, BESP-183, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: Does reading books affect a person's IQ?

Zagoria, Grace, BESP-234, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: "Four Effects on the Strength of the American Response to Russian Aggression in Ukraine."

Zaman, Mahdher, BESP-242, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: The Effect of Connectedness Factors on Vaccine Hesitancy

Zaslow, Mia, MEDH-262, Medicine and Health Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: Ethnic Demographics and Tendency to Share Genetic Test Results in Families: A Correlation Study

Zeng, Xiaohui, BESP-182, Behavioral Social Sciences- Psychology/Sociology category, 11 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: Do academic games have the same negative effects as non-academic video games?

Zhang, Hilary, BESP-065, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Correlation of Students' Chopstick Grips with Their Pencil Grips and MBTI Personality Types

Zhao, Amy, BESP-133, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano

Project Title: Ukrainian Refugee Education

Zhao, Sean, BESP-299, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Perceptions of Real and Plant-Based Meat

Zheng, Christine, ENGN-360, Engineering category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Building a device that measures indoor air quality.

Zheng, Edna, ENGN-285, Engineering category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: An ANN-based method to optimize the parameters and dramatically reduce diagnostic errors from cutting-edge MRI-based experimental medical diagnosis techniques for the brain

Zheng, Eileen, EAEV-107, Earth and Environmental Sciences category, 12 grade,
BROOKLYN TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: Michael Estrella
Project Title: Performing Barcoding and Soil Analyses to Investigate Ecosystem Resiliency in Different Flood Zones of Brooklyn, NY

Zheng, Joyce, ANIM-064, Animal Sciences category, 10 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Lingyan Wang
Project Title: The Effect of Barley Grass on Malnourished Silkworm's Productivity

Zheng, Winni, PLNT-020, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Kelp Extract on Growth and Development of Phaseolus vulgaris

Zhong, Andy, CELL-080, Cellular and Molecular Biology category, 12 grade,
STUYVESANT HIGH SCHOOL, Sponsoring Research Teacher: Jason Econome
Project Title: Predictive Epitope Mapping of DNASE1L3 Reveals Sites of Autoantibody Binding

Zhong, Mingfeng, BESP-015, Behavioral Social Sciences- Psychology/Sociology category, 12 grade,
MIDWOOD HIGH SCHOOL, Sponsoring Research Teacher: Glenn Elert
Project Title: Fiction vs. Nonfiction: Motivating Pro-Environmental Behavior

Zhou, Emily, MEDH-439, Medicine and Health Sciences category, 12 grade,
Saint Francis Preparatory School, Sponsoring Research Teacher: Casey Clark
Project Title: Analyzing the nutritional composition of public and private lunch menus in four different countries

Zhou, Ivy, PLNT-030, Plant Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Different Concentrations of Phosphatic Clay on Inhibiting the Growth of Harmful Algae in a Hydroponic System

Zhou, Nicole, MEDH-241, Medicine and Health Sciences category, 12 grade,

BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Scott Savaiano
Project Title: An Analysis of the Barriers that Impact Asian American Elderly Immigrant Access to Mental Health Services with an Emphasis on Languages Offered at Mental Hospitals

Zhou, Vicki, BESP-166, Behavioral Social Sciences- Psychology/Sociology category, 10 grade,
QUEENS METROPOLITAN HIGH SCHOOL, Sponsoring Research Teacher: Soonyoung Kwon
Project Title: How does participation in sports impact students' grades?

Zhu, Enyu, MEDH-342, Medicine and Health Sciences category, 11 grade,
STATEN ISLAND TECHNICAL HIGH SCHOOL, Sponsoring Research Teacher: JOHN DAVIS
Project Title: Analyzing Dermatology Workforce Trends and Melanoma Mortality

Zhu, Yunqing Alison, ANIM-051, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Noise Pollution on Lumbricidae Behavior

Zinczuk, Victoria, PLNT-099, Plant Sciences category, 11 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Calcium Silicate on solanum tuberosum (potato) in Drought Stress

Zou, Vivian, EAEV-181, Earth and Environmental Sciences category, 12 grade,
BRONX HIGH SCHOOL OF SCIENCE, Sponsoring Research Teacher: Vladimir Shapovalov
Project Title: Analyzing Effects of Data Fluctuation on Models of Groundwater Level Using Time Series Modeling on PASTAS

Zuniga, Michelle, ANIM-051, Animal Sciences category, 12 grade,
FRANCIS LEWIS HIGH SCHOOL, Sponsoring Research Teacher: Jessica Cohen
Project Title: The Effect of Noise Pollution on Lumbricidae Behavior