Commack High School

Research Class of 2022

Define Aktuna
Union College
The Effect of Bisphenol-A on the Locomotion Rate of Future Generations of C. elegans

Victor Angielczyk
Rensselaer Polytechnic Institute
Diagnosing Melanoma Using a Convolutional Neural Network (CNN)

Issar Chadha
Stony Brook University
Analysis of the Impact of Interrupted Sleep on Caloric Intake

Lindsey Chung
Colgate University
Comparing the Effectiveness of Herbal Medicine and Antidepressants in Treating Traumatic Brain Injuries in *Drosophila melanogaster* by Measuring Cognitive Function

Justin Davitashvilli
University of Connecticut
Industrial Manganese Toxicity on Aquatic Ecosystems

Jessica DeYulio
Binghamton University
Testing the Efficiency of Metal Catalysts in Water Electrolysis

Jordan DiPrima
University of New Hampshire
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration

Jason Duffe
University of Florida
Industrial Manganese Toxicity on Aquatic Ecosystems

Sarah Franzen
University of Connecticut
Maillard Reaction and pH

Sanjit Gunasekaran
Binghamton University
The Effectiveness of Termite and Earthworm Activity on the Restoration of a Landfill Environment

Avi Gupta
Emory University
The Effect of the Rising Sea Level on Precipitation Levels

Steven Homenides
University of South Carolina
Comparing the Effectiveness of Herbal Medicine and Antidepressants in Treating Traumatic Brain Injuries in *Drosophila melanogaster* by Measuring Cognitive Function

Ashley Hsu
Duke University
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration
AND
Improved Visualization of Dimensionality Reduction Plots with Controlled Downsampling

Robin Hwang
University of Michigan
Development of a Block-Based Object-Oriented Programming Language using the Java Development Kit

Michael Jang
Amherst College
Using Deep Learning to Detect Malignant Lung Tumors

Gina Kim
University of Michigan
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration

Daphne Koutsoukos
University of Wisconsin-Madison
The Effect of Glyphosate on 2nd Generation Regeneration Time in Planarians

Yashica Kumar
Princeton University
Comparing the Effectiveness of Herbal Medicine and Antidepressants in Treating Traumatic Brain Injuries in *Drosophila melanogaster* by Measuring Cognitive Function

Sarah Levine
George Washington University
Thermal Expansion of Perlite Microspheres as a Cryogenic Insulator

Karen Li
University of California Los Angeles
The Effect of Lemon Extract Exposure on Cell Differentiation Modeled in Planaria

Flora Lin
Fordham University
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration

Soyoun (Ashley) Moon
Harvard University
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration
AND
Exploring Sexual Dimorphism and Sex Hormone Receptor Expression in the Bed Nucleus of the Stria Terminalis (BNST) in the Monogamous Prairie Vole

Eshani Mukherjee
Stony Brook University
Detecting Possible Relations between Copy Number Variation and Gene Expression Levels in Multiple Myelomas

Melina Nicou
George Washington University
The Effects of Zinc Chloride on the Progression and Development of Cognitive Decline in Alzheimer's Disease in *Drosophila melanogaster*

Matthew Pace
United States Marine Corps
Diagnosing Melanoma Using a Convolutional Neural Network (CNN)

Grace Papazoglou
Manchester University
The Effect of Glyphosate on 2nd Generation Regeneration Time in Planarians

Abigail Pappachen
Stony Brook University
The Effect of Lemon Extract Exposure on Cell Differentiation Modeled in Planaria

Harry Poulose
Princeton University
Antibiotic Homogeneity as a method of reducing antibiotic resistance in *Escherichia coli* and *Serratia marcescens*

Lakxshanna Raveendran
Yale University
Characterizing the Secretion of the Francisella Protein FTL_1123

Samantha Singh
Northeastern University
Detecting Possible Relations between Copy Number Variation and Gene Expression Levels in Multiple Myelomas

Shreya Sriram
University of Virginia
The Effect of Bisphenol-A on the Locomotion Rate of Future Generations of *C. elegans*

Amber Syed
St. John's University
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration

Inaya Syed
New York Institute of Technology
Developing a Compact Method for Cleaning Water

Zeynep Tasoglu
Stony Brook University (Honors Program)
Predicting Regional Spikes of COVID-19 from Twitter Using Machine Learning

Brennan Thomann
Stony Brook University
Creating Unique Transgenic Flies Lines as a Tool for Studying Neuroendocrine Disorders: An International Collaboration

Maryum Waqar
Stony Brook University
The Effect of Sucrose Reward based Olfactory Training Neurofibromatosis Type 1 Drosophila

David Yang
Boston University (BA/MD)
The Combined Effects of Thalidomide and Kaempferol on Various Cancer Cell Lines

Asmaa Zahran
New York Institute of Technology
The Effectiveness of Termite and Earthworm Activity on the Restoration of a Landfill Environment