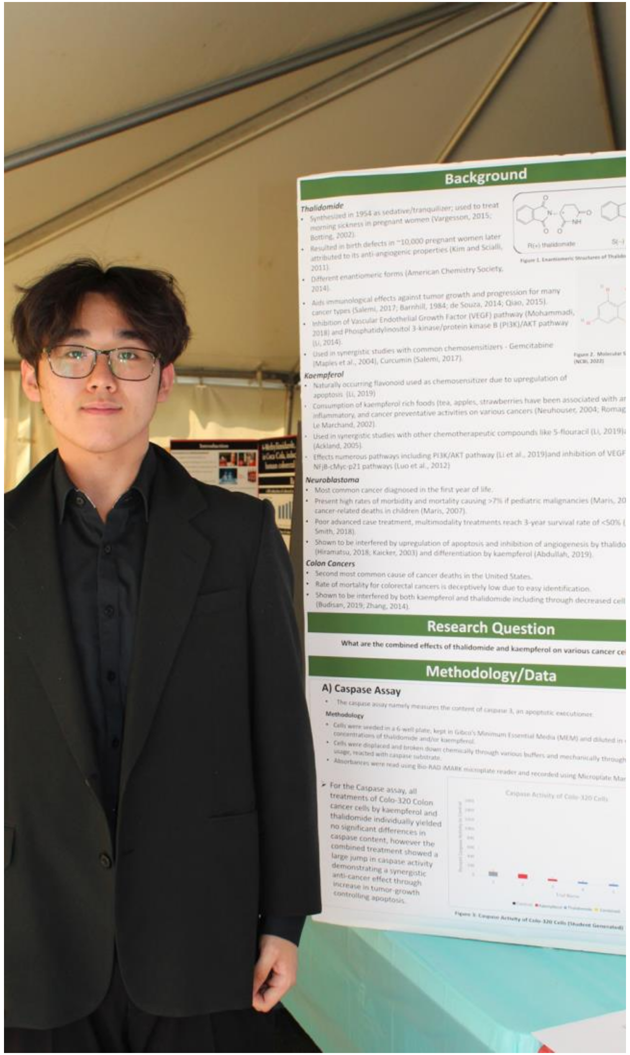
Commack Science Research Photos 2022

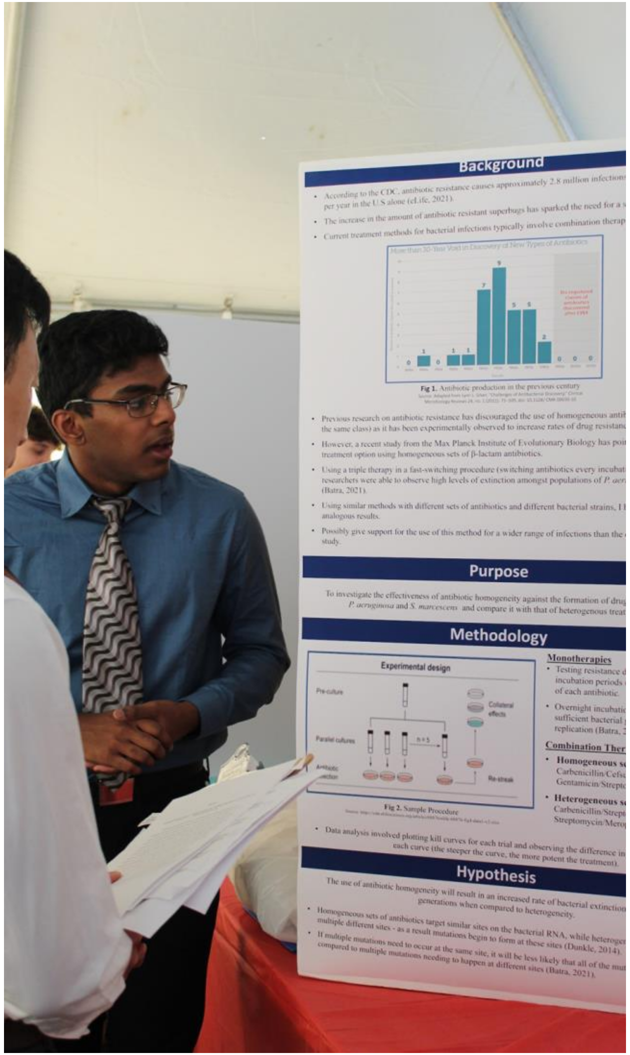

LONG ISLAND SCIENCE CONGRESS
STANYS
HONORS
SENIOR DIVISION

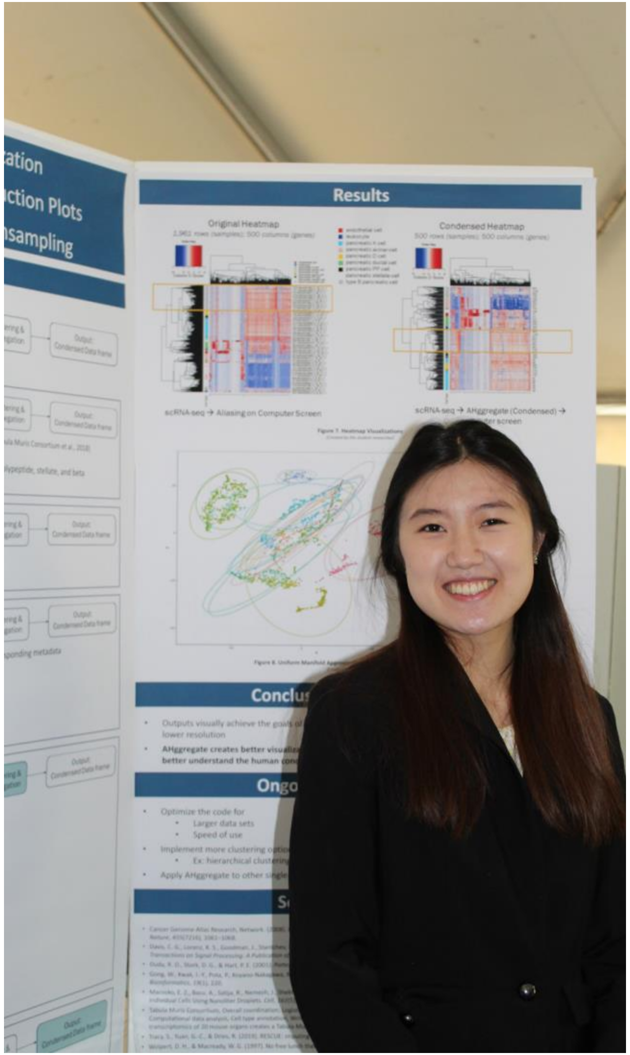

JUNIOR DIVISION
HIGH HONORS


LONG ISLAND SCIENCE CONGRESS
STANYS
LONG ISLAND SCIENCE CONGRESS
STANYS

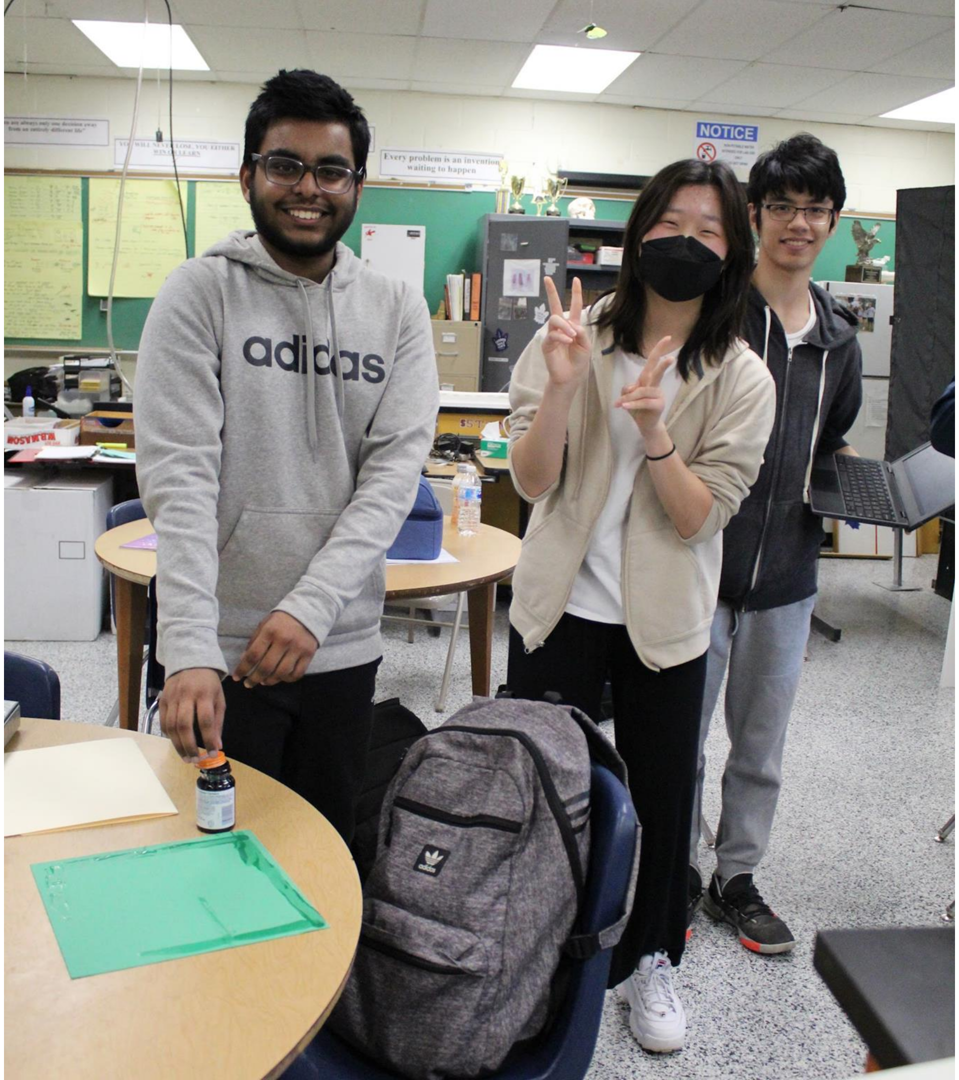

STANYS
JUNIOR DIVISION
HIGH HONORS


Background
Thalidomide
Kaempferol
Neuroblastoma
Colon Cancers
Research Question
Methodology/Data
A) Caspase Assay


Background
Purpose
Methodology
Experimental design
Hypothesis


Results
Original Heatmap
Condensed Heatmap


to predict
the future
is to
create it."
Abraham Lincoln
U.S. Department of Education


NOTICE
Every problem is an invention
waiting to happen
adidas


Background
Methods
Flowchart
Research Question


UNDER NEW


NOTICE
"The Running Authority"
LIVE MATERIAL
AVOID HEAT & FROST

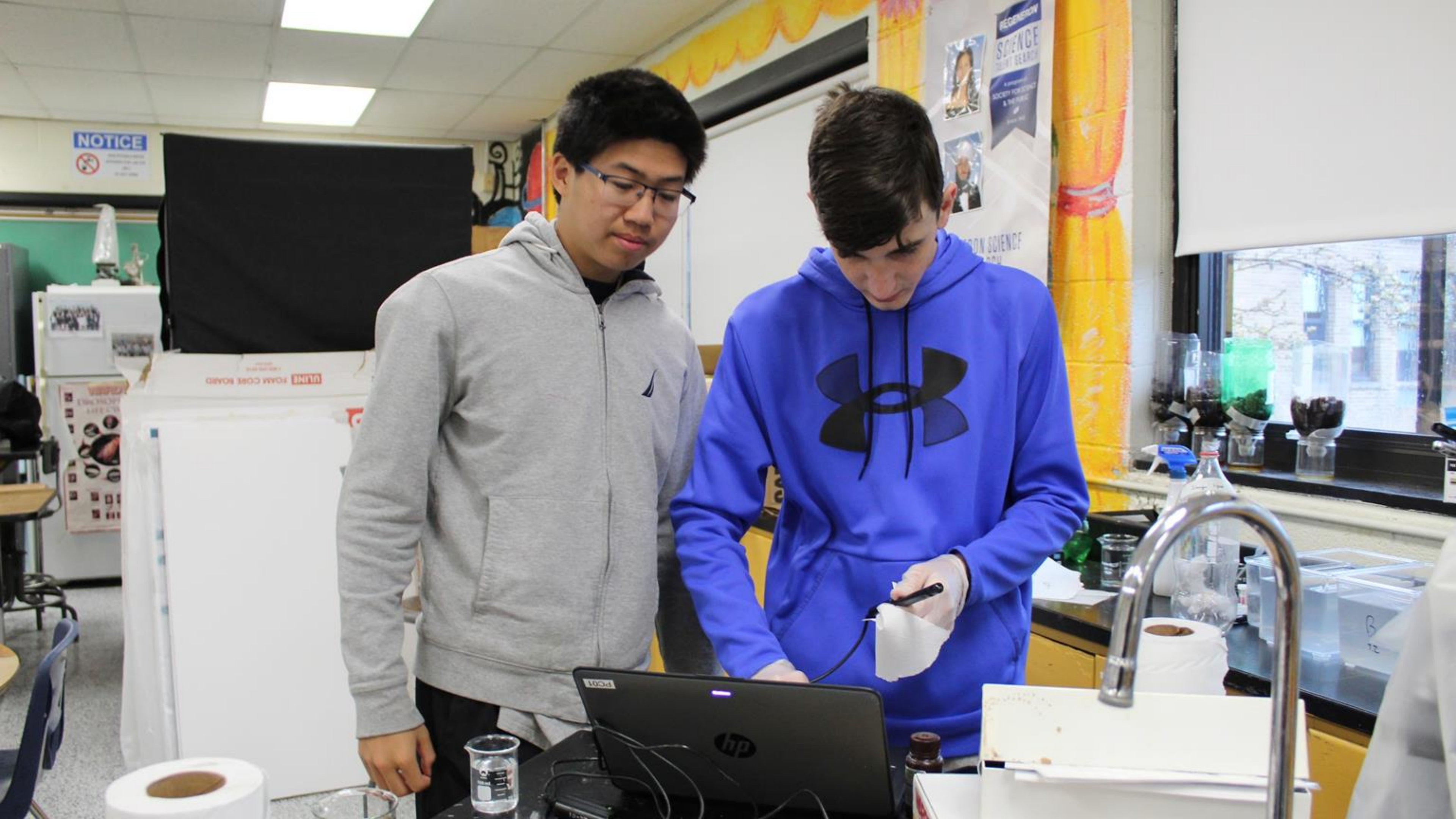

Using GIS to Investigate the Prevale
of Diabetes in New York State
Based on Specific Attributes
COLORADO
1995
SPRINGS


2WIND


HOLLISTER
CALIFORNIA
OPKINS


WARD'S

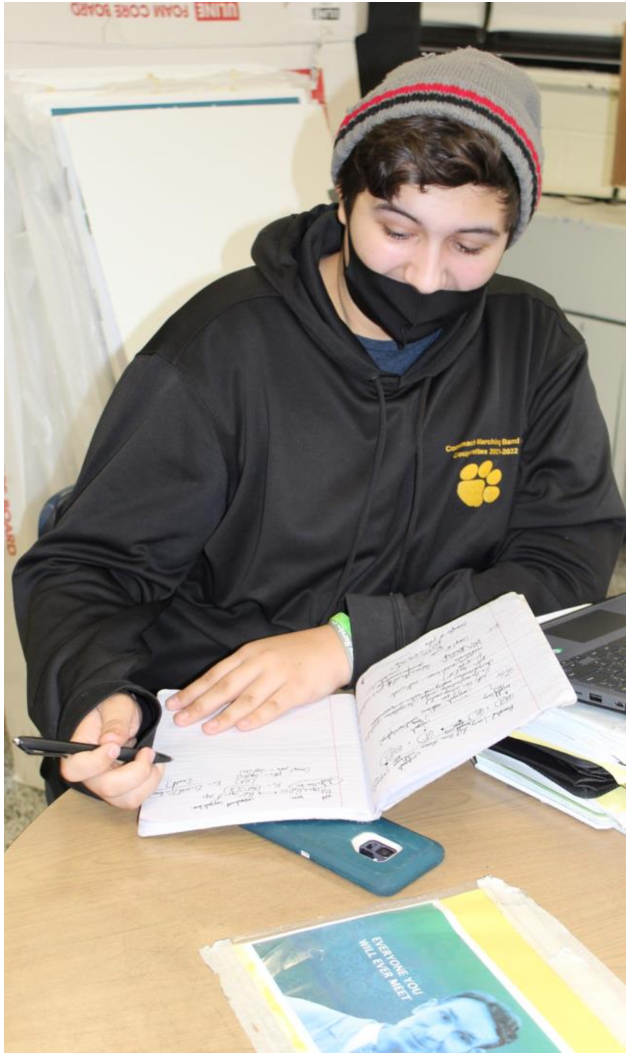

MICHIGAN
M
Thermo Fisher
SCIENTIFIC
CAROLINA


NOTICE
SCIENCE


REGENERON
SCIENCE TALENT SEARCH
CAROLINA
www.carolina.com
LIVE MATERIAL
AVOID HEAT & FROST

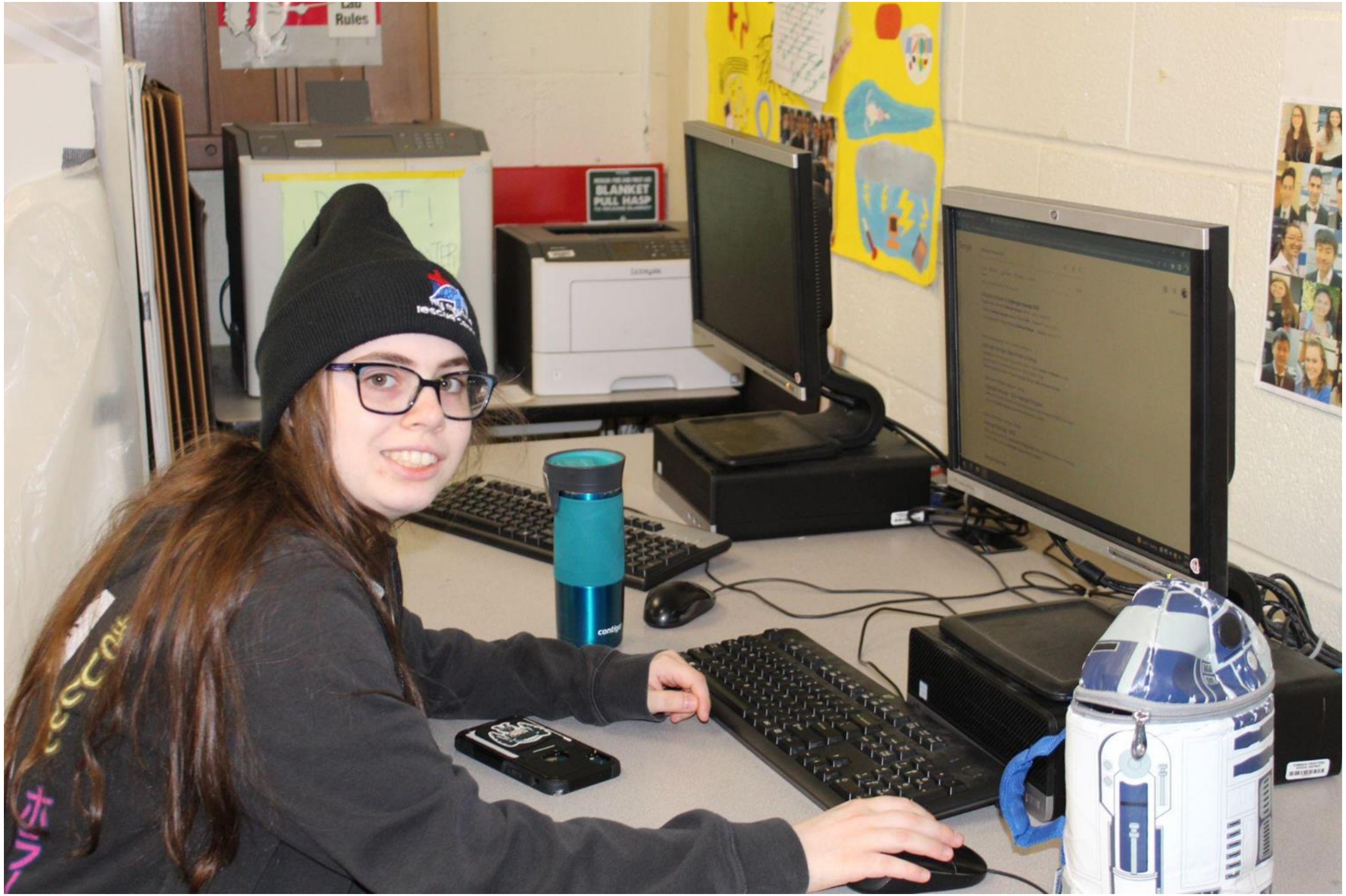

REGENERON
SCIENCE
TALENT SEARCH
EMORY
UNIVERSITY
EMORY
UNIVERSITY
10

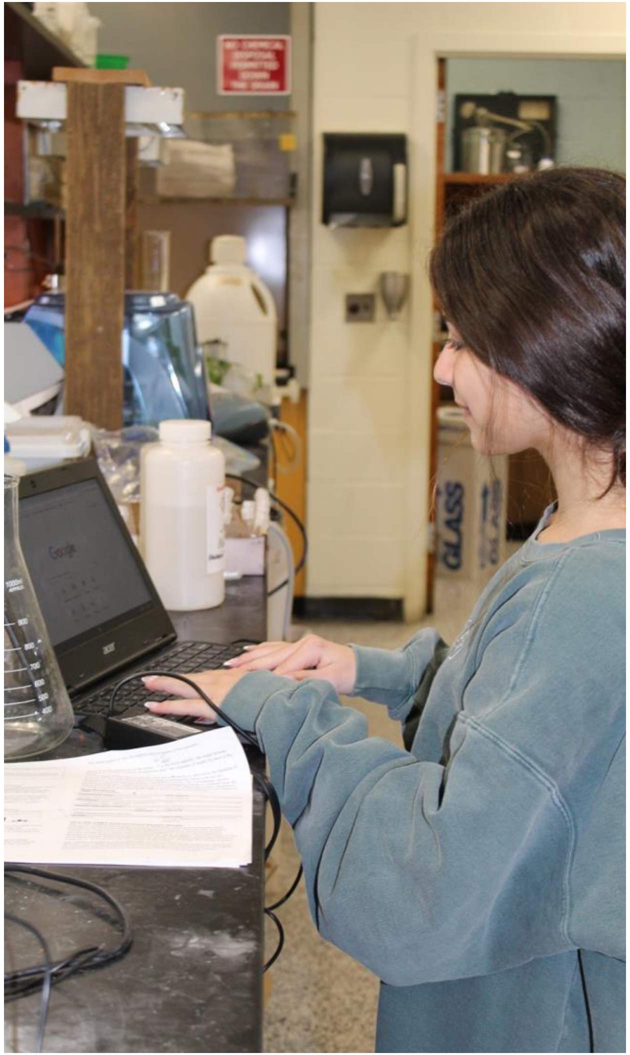

TALENT SEARCH
2020 SCHOLAR SCHOOL
MATHCOUNTS

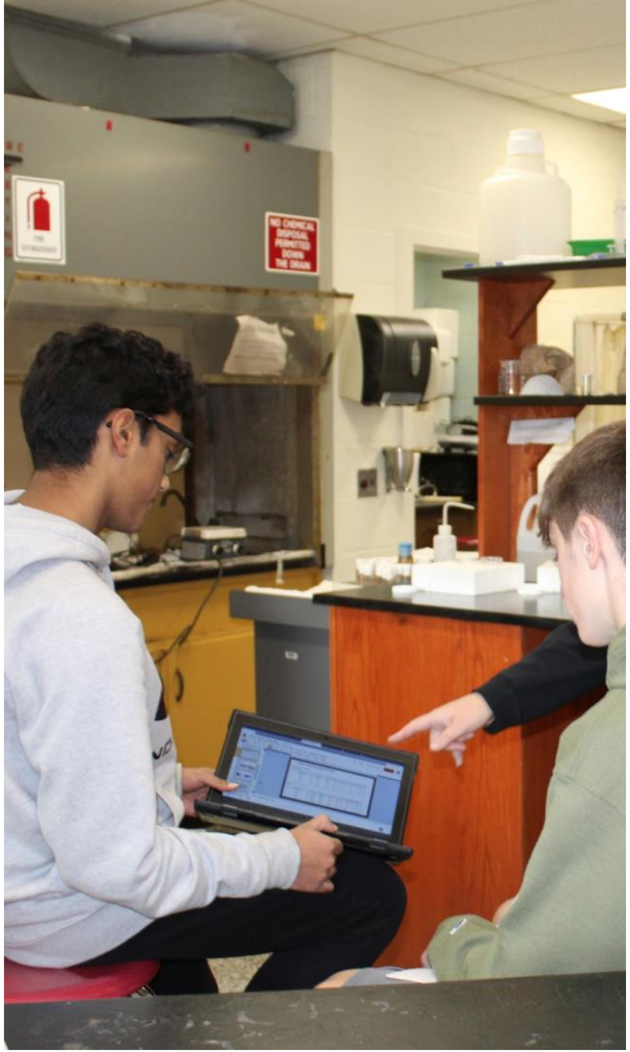

EVERYONE YOU
WILL EVER MEET

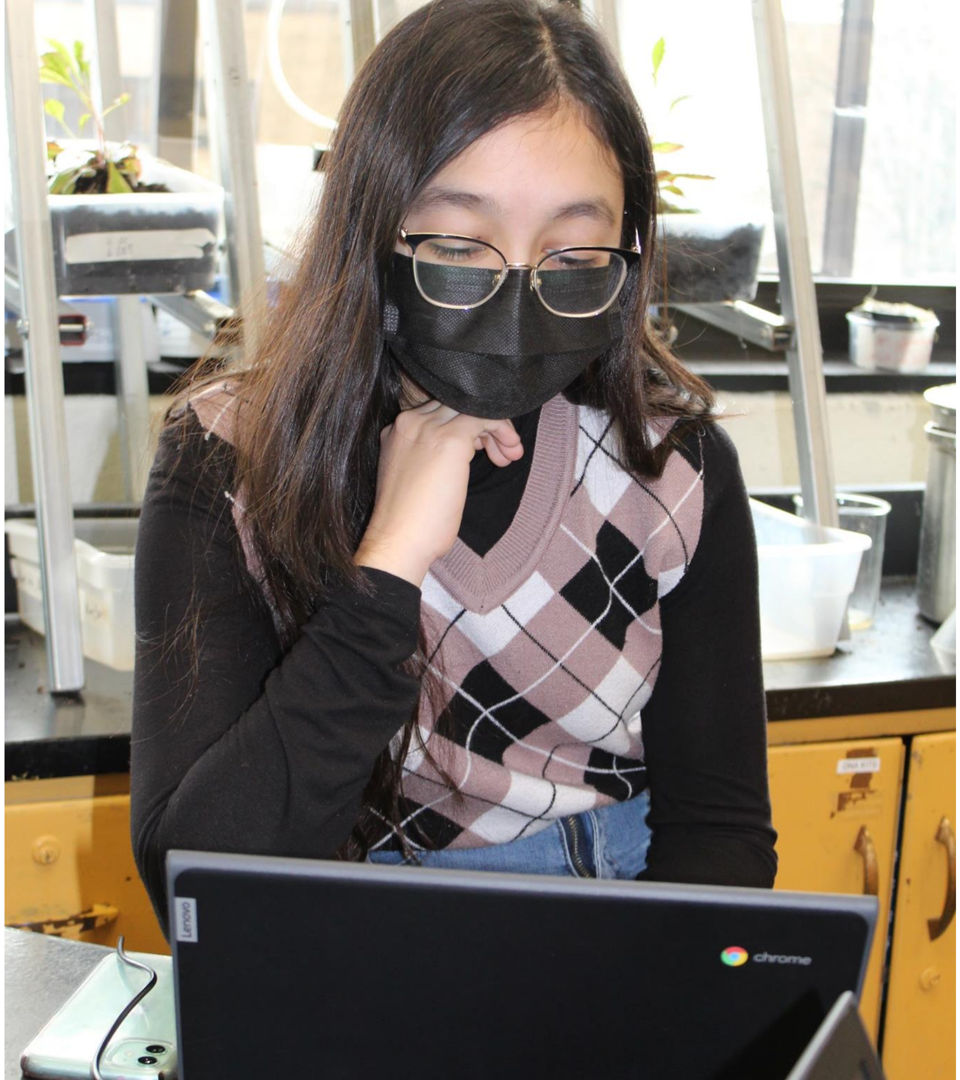

NIKE

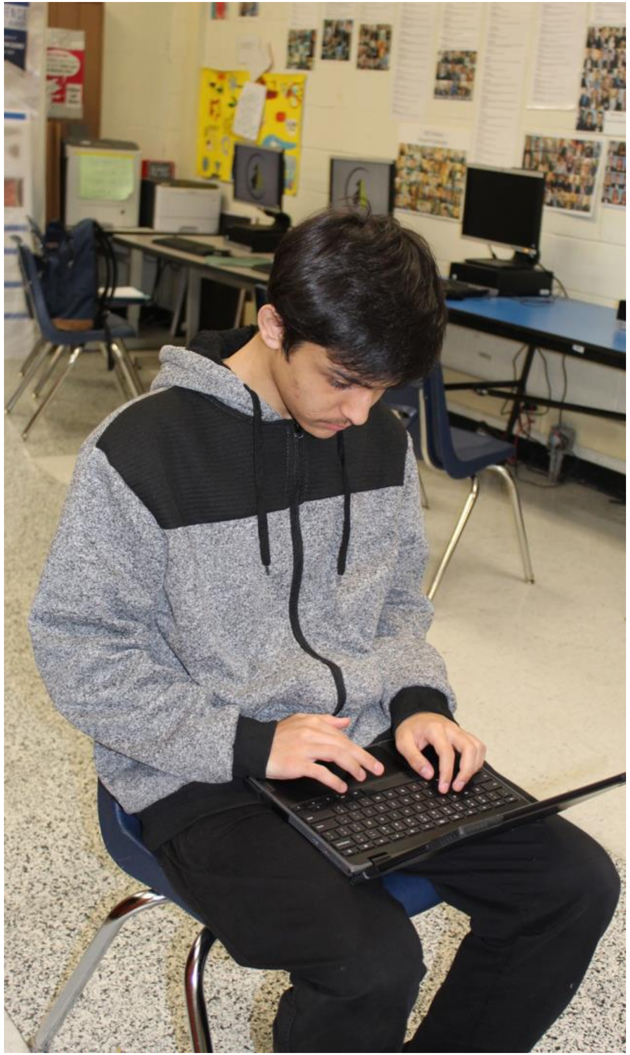

Ruler
DO NOT
TOUCH !


Lab Rules
BLANKET
PULL HASP

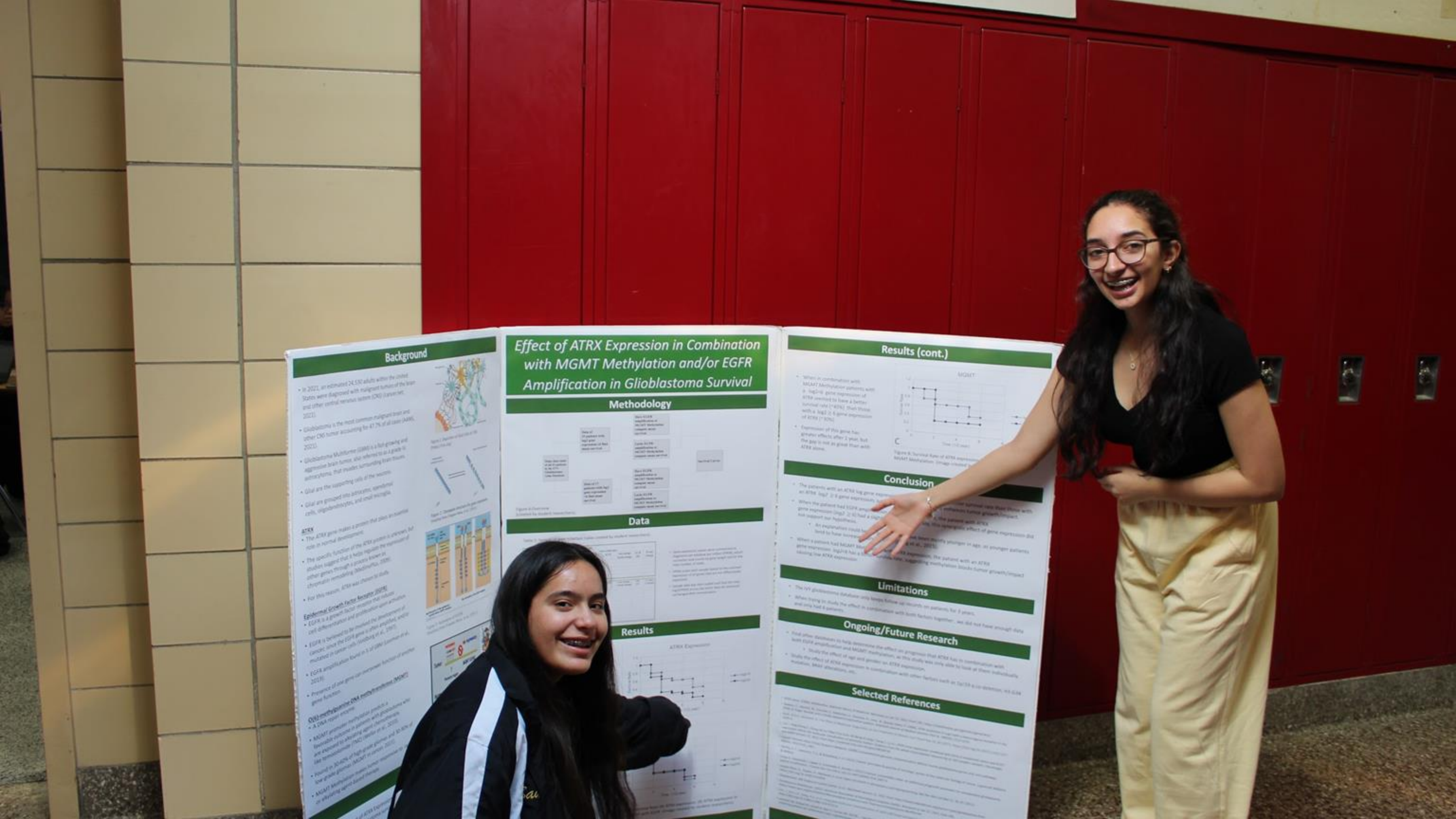

GLASS

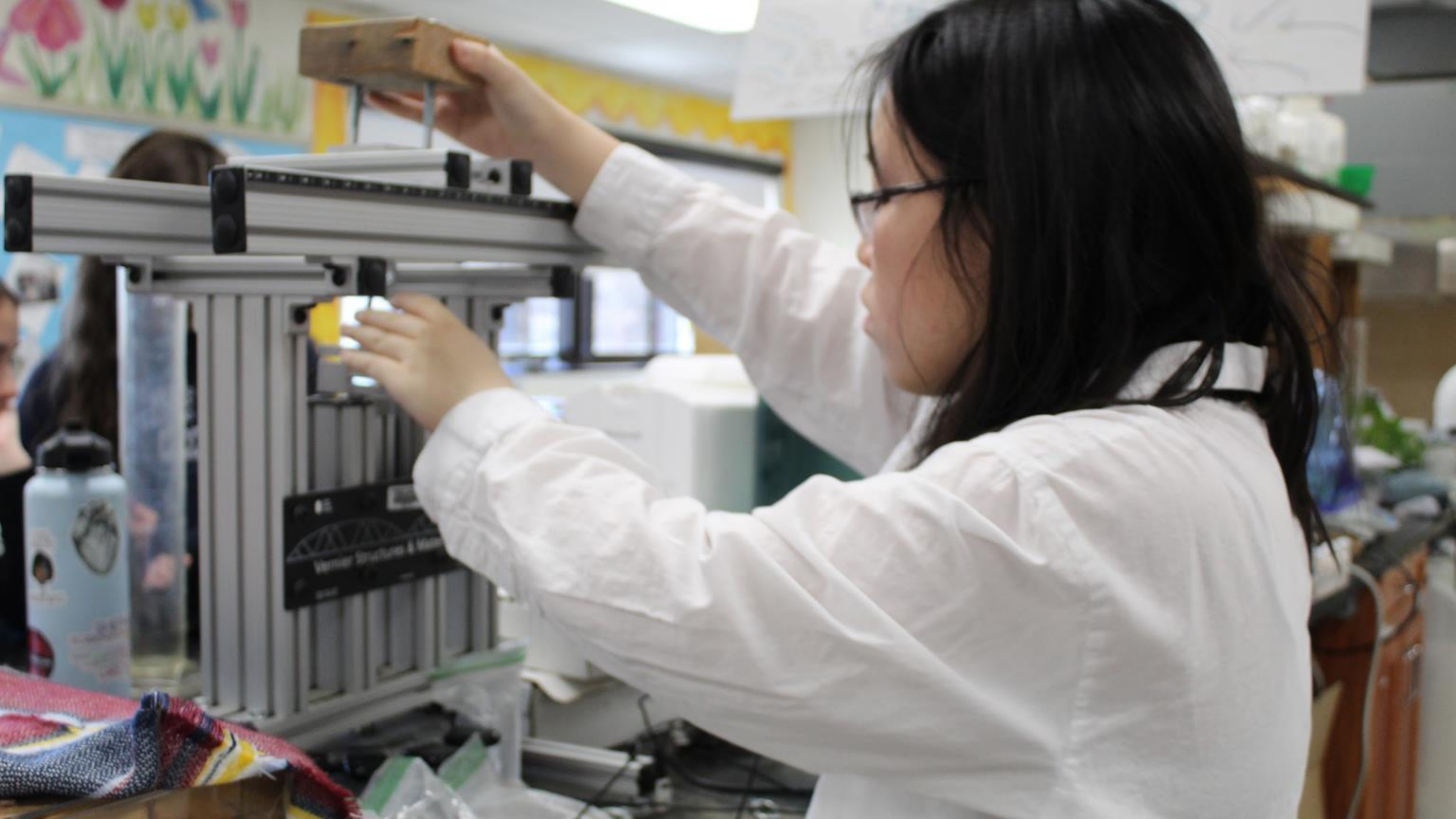

NO CHEMICAL
DISPOSAL
PERMITTED
DOWN
THE DRAIN


chrome




NO CHEMICAL
DISPOSAL
PERMITTED
DOWN
THE DRAIN
chrome
acer


Background
Effect of ATRX Expression in Combination with MGMT Methylation and/or EGFR Amplification in Glioblastoma Survival
Methodology
Data
Results
ATRX Expression
Results (cont.)
MGMT
Conclusion
Limitations
Ongoing/Future Research
Selected References

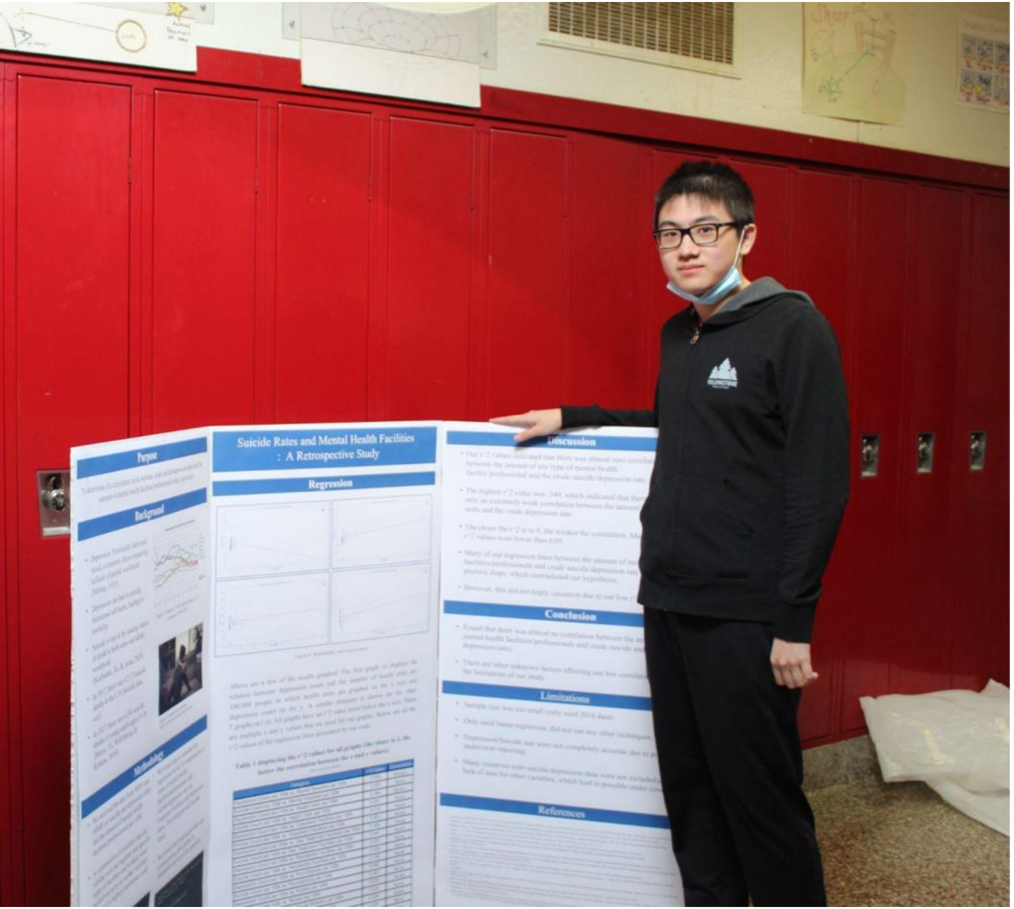

Vernier Structures &

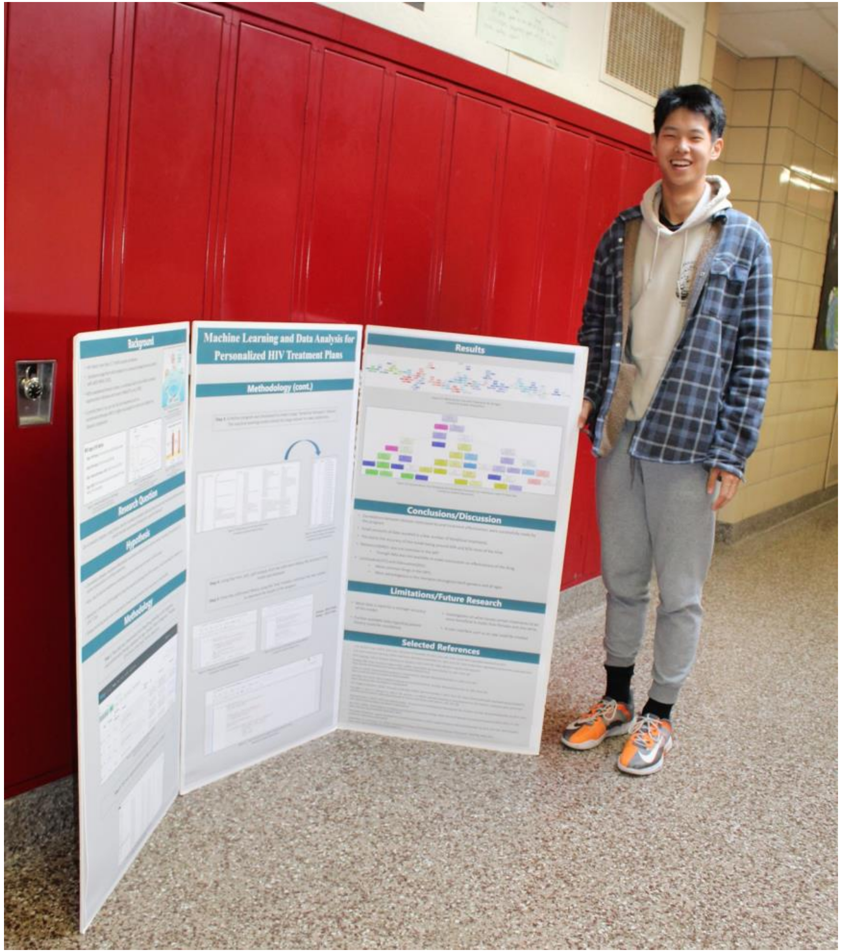

Water
EZ
Oscilloscope

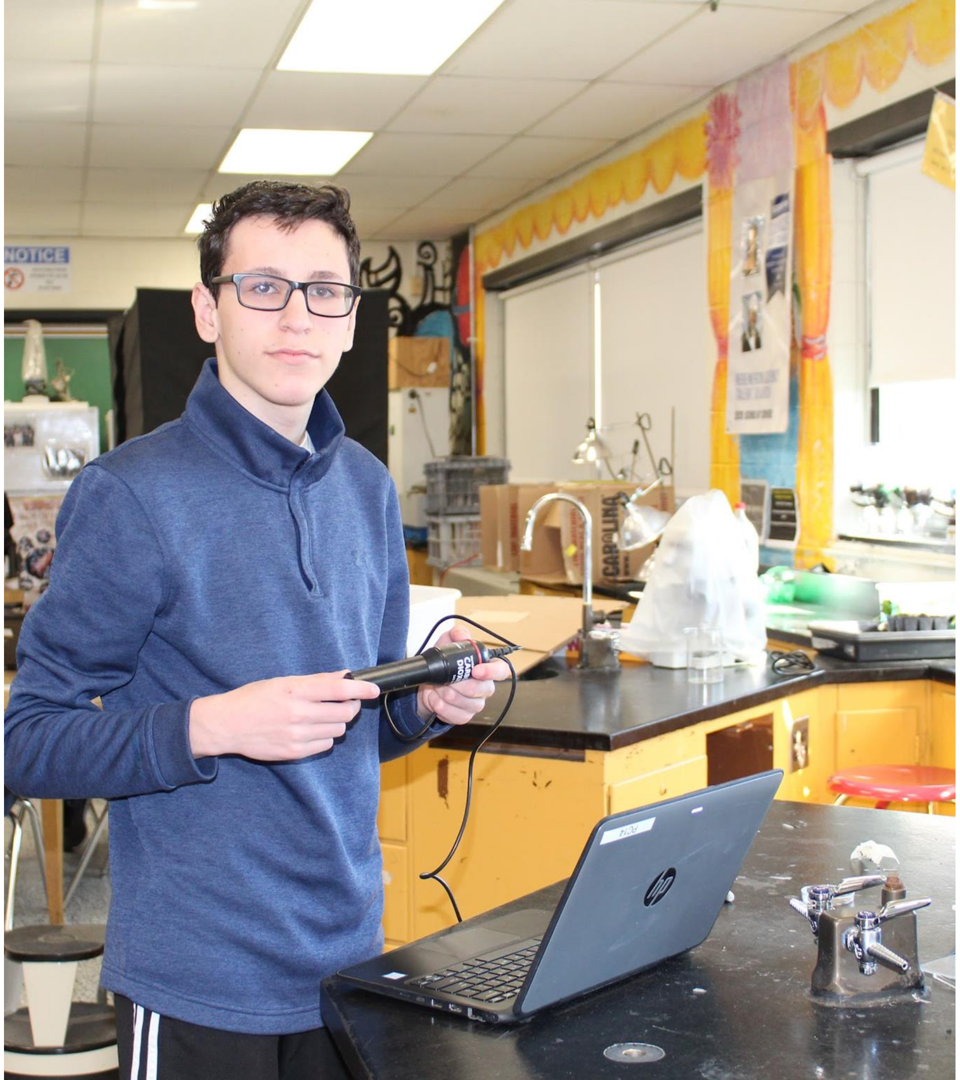

APE COD
EST. CC 1620


GLASS


Lab 9B
FIRE EXTINGUISHER


Purpose
Background
Methodology
Suicide Rates and Mental Health Facilities
: A Retrospective Study
Regression
Discussion
Conclusion
Limitations
References


Background
Research Question
Hypothesis
Methodology
Machine Learning and Data Analysis for
Personalized HIV Treatment Plans
Methodology (cont.)
Results
Conclusions/Discussion
Limitations/Future Research
Selected References

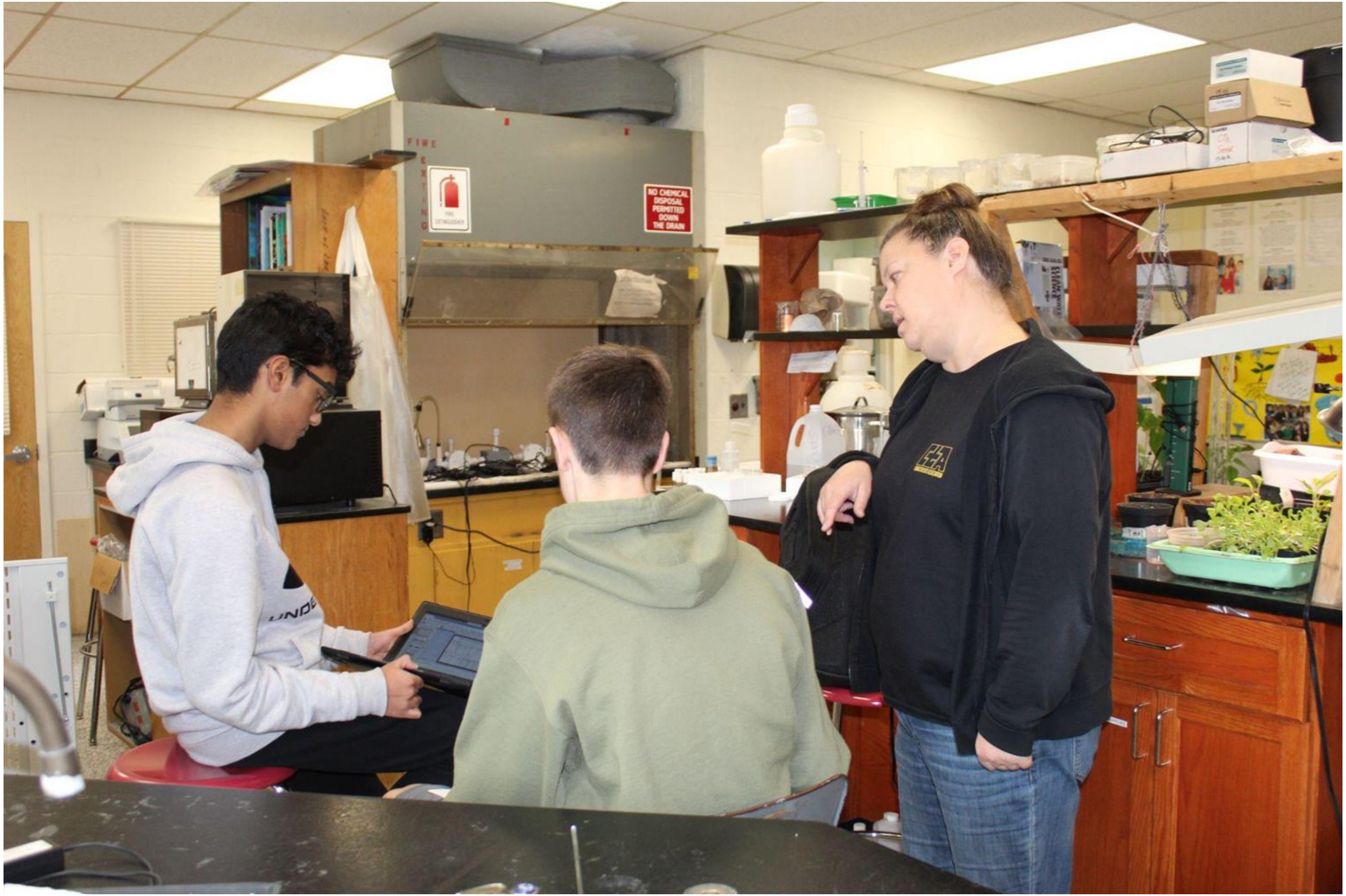

NOTICE
CAROLINA


NEVER put back into a STOCK


Labs 11D - 14D ↑
Rooms 221, 222 ↑


RADIOHEAD


FIRE EXTINGUISHER


NO CHEMICAL DISPOSAL PERMITTED DOWN THE DRAIN


ULINE FOAM CORE BOARD
FRAGILE


FRAGILE
Science
SCIENCE JOURNAL
SOCIAL MEDIA STORM


ULINE
FOAM CORE BOARD


chrome
KIMTECH
Science News
SCIENCE JOURNALISM

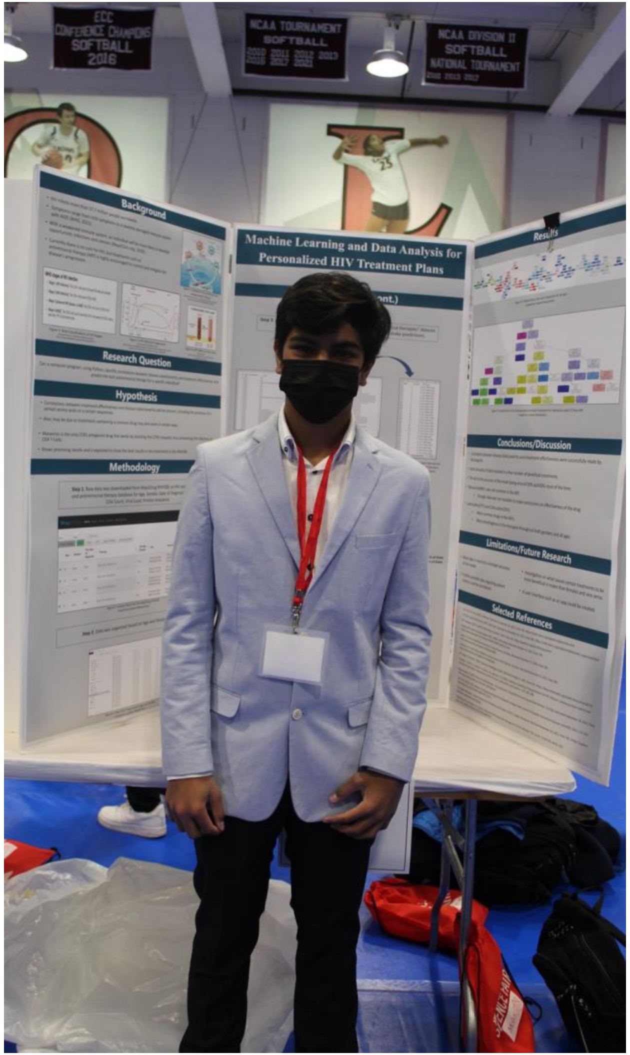

REGENERON
ISEF
A PROGRAM OF
SOCIETY FOR SCIENCE & THE PUBLIC
FILIATED FAIR


Anika Puri
EAEV-245
Location #26


Molloy

Background
Prototype of a Desulfurization and Carbon Dioxide Separation and Capture System from Flue Gas with the use of Nano Porous Materials
Methodology (Cont.)
Research Question
Purpose
Hypothesis
Methodology
63

Background
Methodology
Research Question
Purpose
Hypothesis
Hypothesis Explanation
Results (Cont.)
Results and Discussion



ECC CONFERENCE CHAMPIONS SOFTBALL 2016
NCAA TOURNAMENT SOFTBALL
NCAA DIVISION II SOFTBALL NATIONAL TOURNAMENT
Machine Learning and Data Analysis for Personalized HIV Treatment Plans
Background
Research Question
Hypothesis
Methodology
Results
Conclusions/Discussion
Limitations/Future Research
Selected References


A STREET ROMANCE
Poetic Justice


SCIENCE
REGENERON SCIENCE
TALENT SEARCH

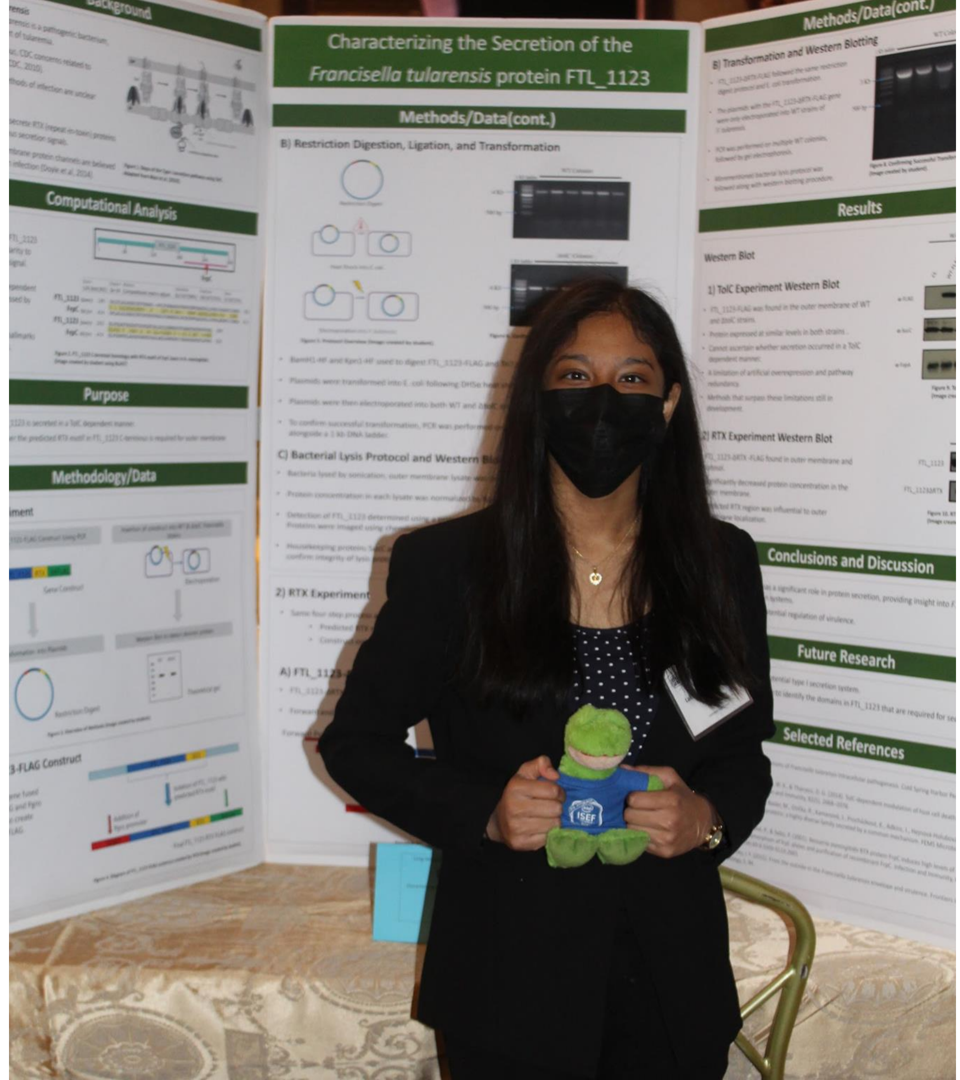


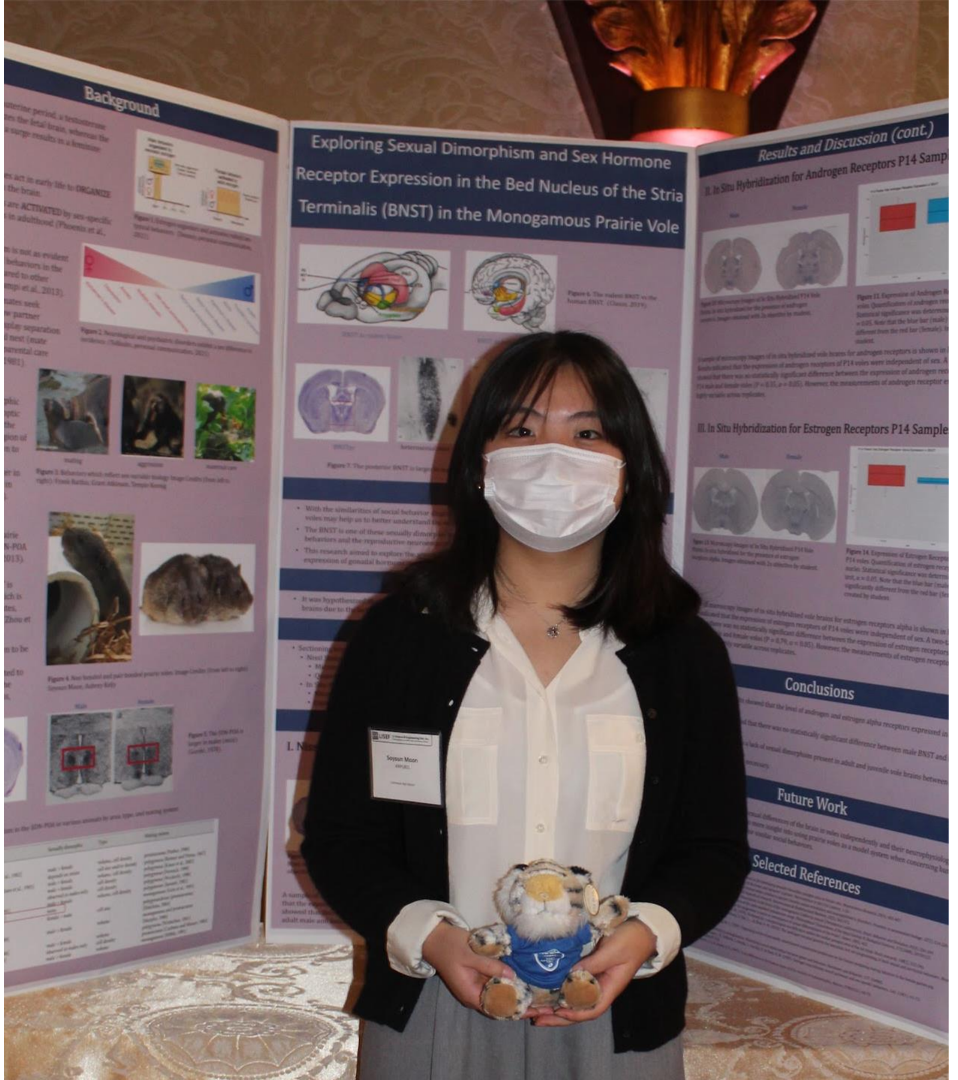
LISEF
LI Science & Engineering Fair, Inc.
Lakkshanna Raveendran
BCMC990
Long Island Science
& Engineering Fair
GRAND AWARDS
FIRST
PLACE
ISEF AFFILIATED REGIONAL FAIR
ISEF

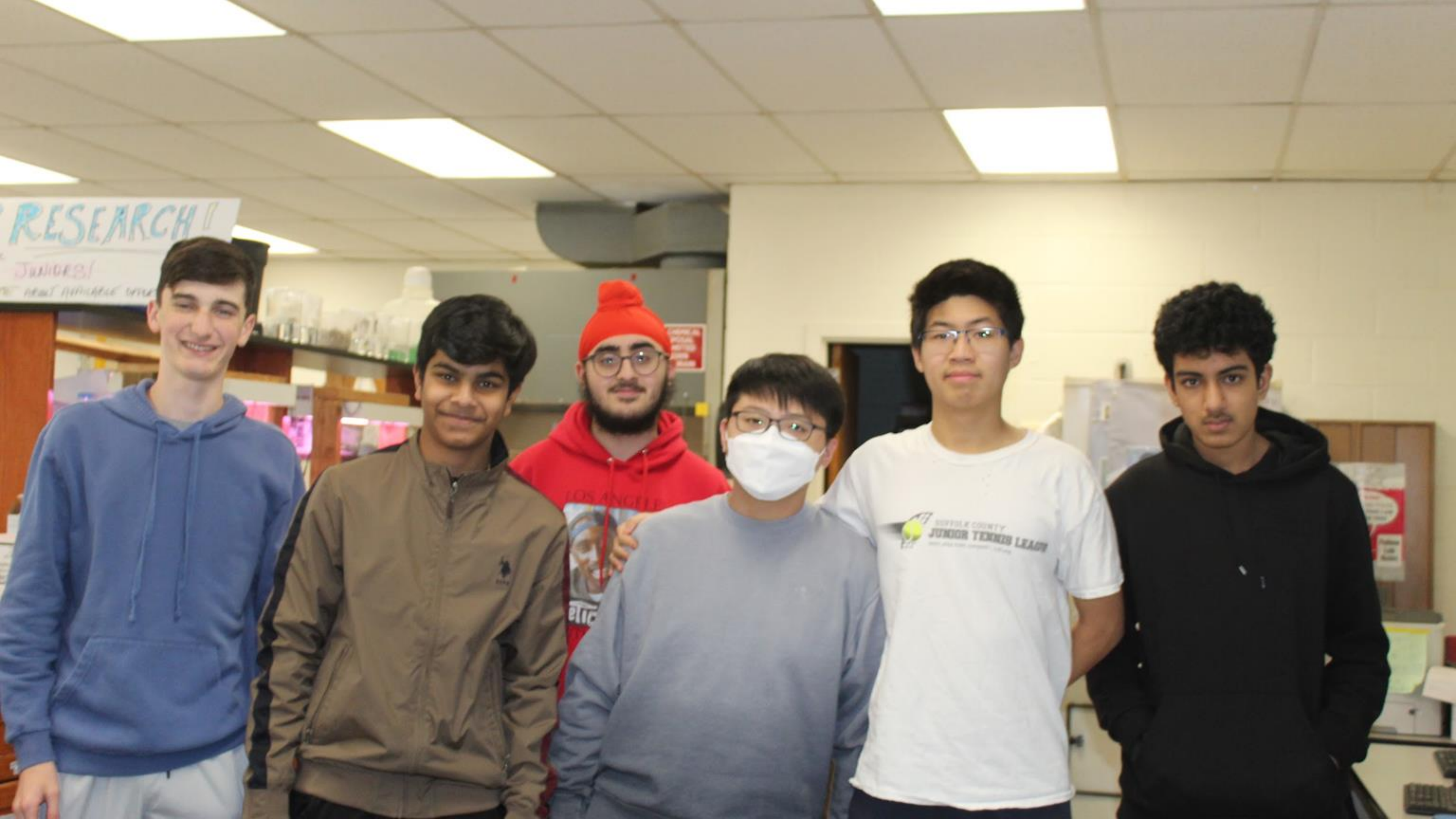
LISEF
LI Science & Engineering Fair, Inc.
Soyoun Moon
Long Island Science
& Engineering Fair
GRAND AWARDS
FIRST
PLACE

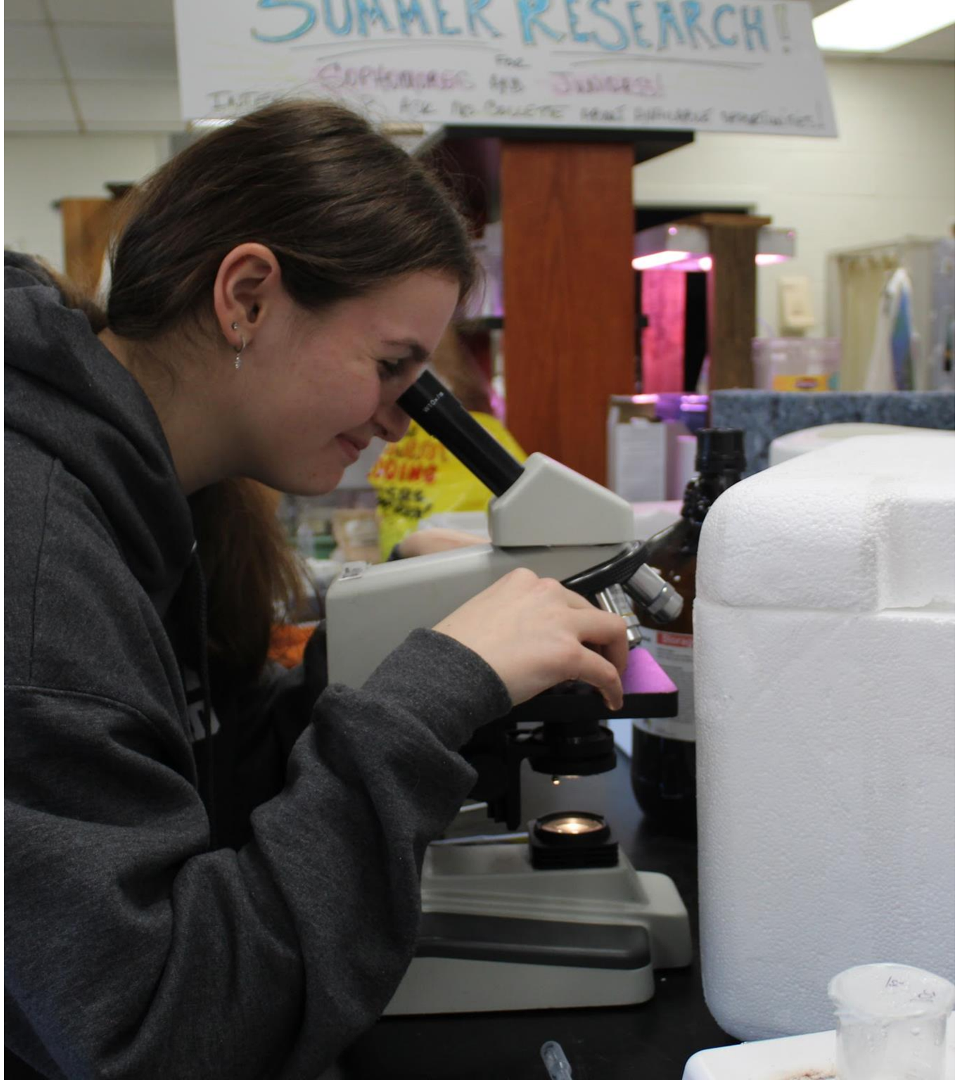

SCHOTT

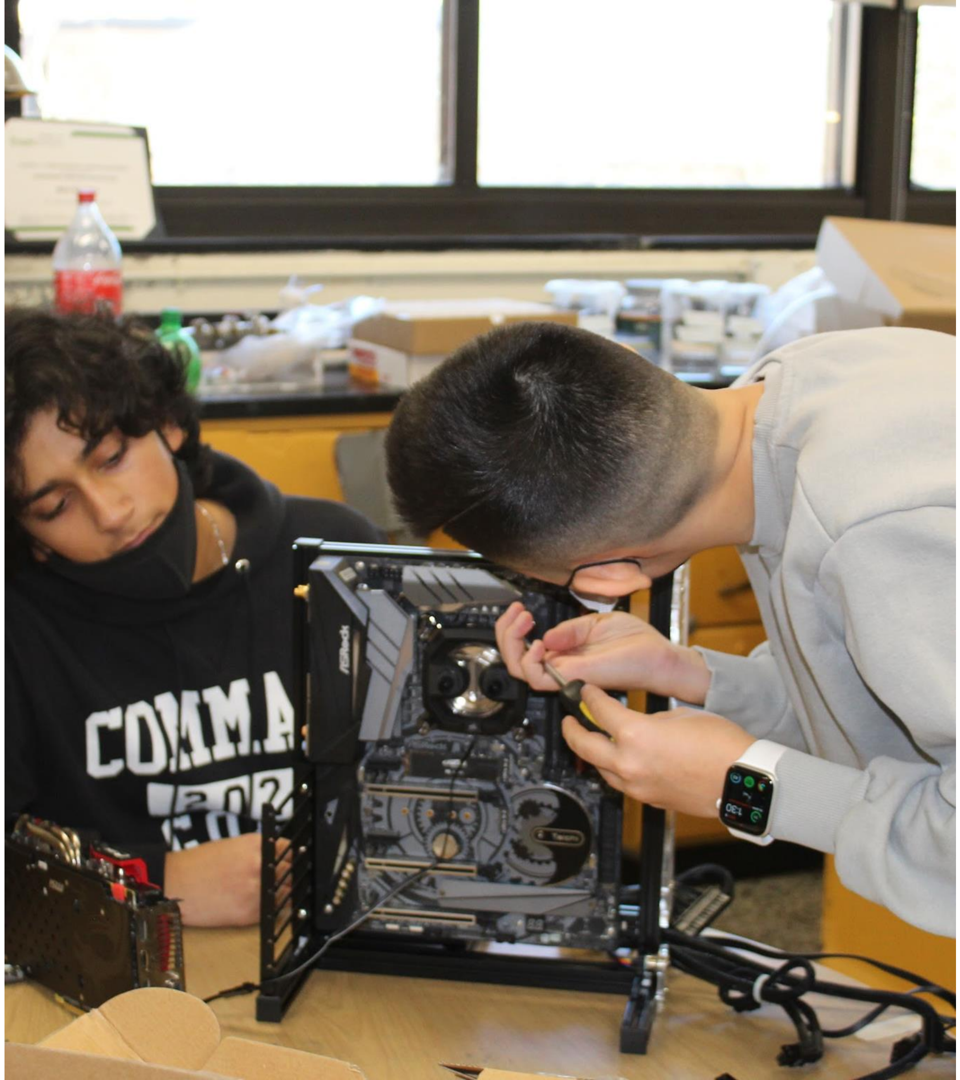

TORONTO
MAPLE
LEAFS
UNITRON


Background
Characterizing the Secretion of the Francisella tularensis protein FTL_1123
Methods/Data(cont.)
B) Restriction Digestion, Ligation, and Transformation
B) Transformation and Western Blotting
Computational Analysis
Purpose
Methodology/Data
Results
Western Blot
1) TolC Experiment Western Blot
C) Bacterial Lysis Protocol and Western Blot
Conclusions and Discussion
Future Research
Selected References
ISEF


Background
Exploring Sexual Dimorphism and Sex Hormone Receptor Expression in the Bed Nucleus of the Stria Terminalis (BNST) in the Monogamous Prairie Vole
Results and Discussion (cont.)
II. In Situ Hybridization for Androgen Receptors P14 Samples
III. In Situ Hybridization for Estrogen Receptors P14 Samples
Conclusions
Future Work
Selected References
Soyoun Moon


RESEARCH
JUNIORS!
JUNIOR TENNIS LEAGUE


SUMMER RESEARCH!




7 min video
Video Upload
1946


NOTICE


SENIOR

60 PACKS
OREO
45 ON THE GO! PACKS


NO CHEMICAL DISPOSAL PERMITTED DOWN THE DRAIN
THINK


nationalgrid

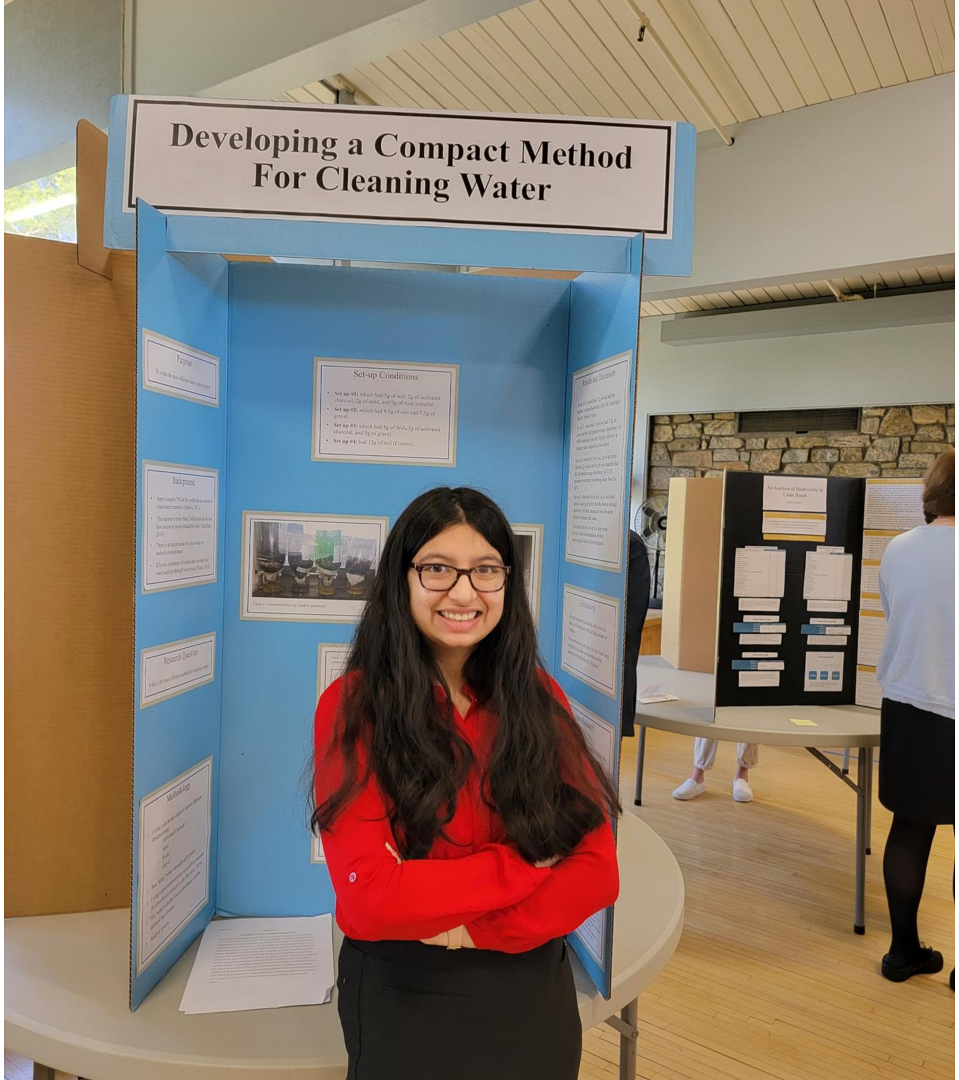
Research 11 shared binders

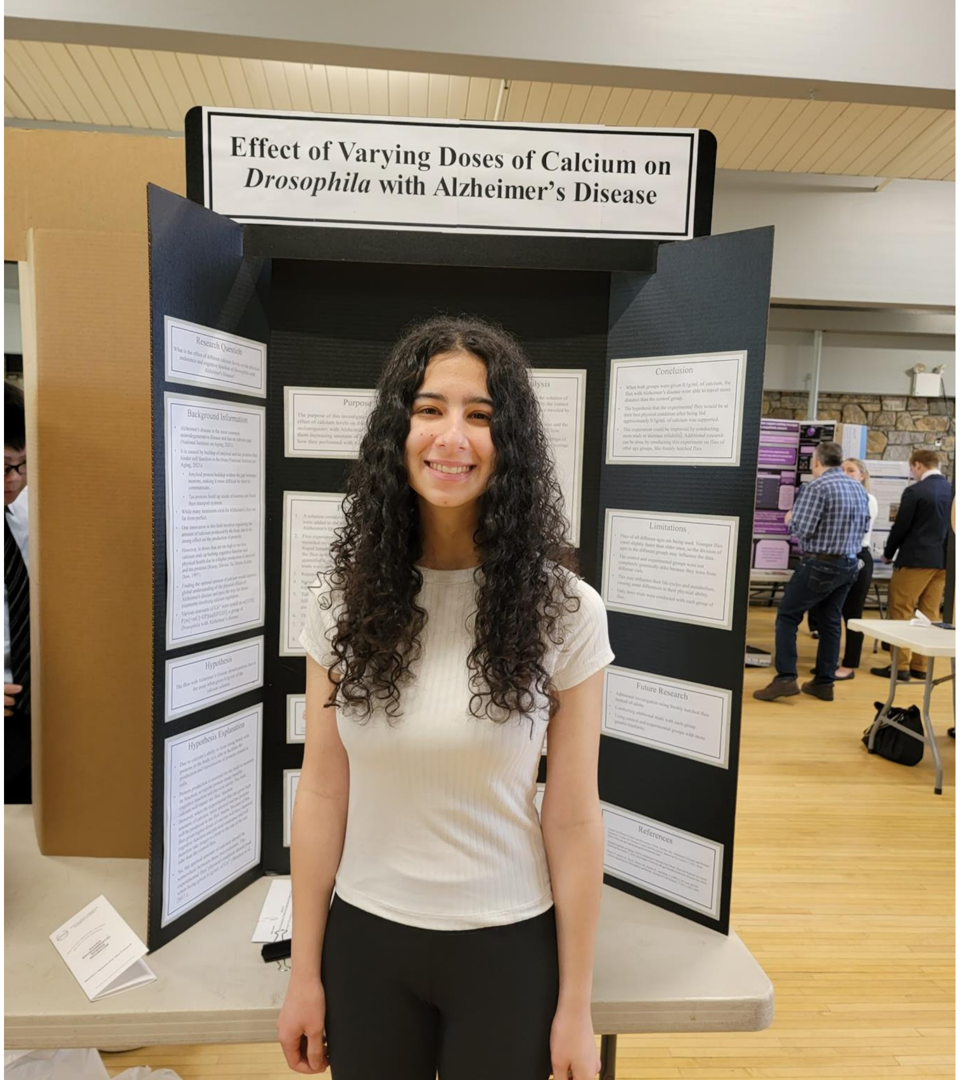

DNA KITS

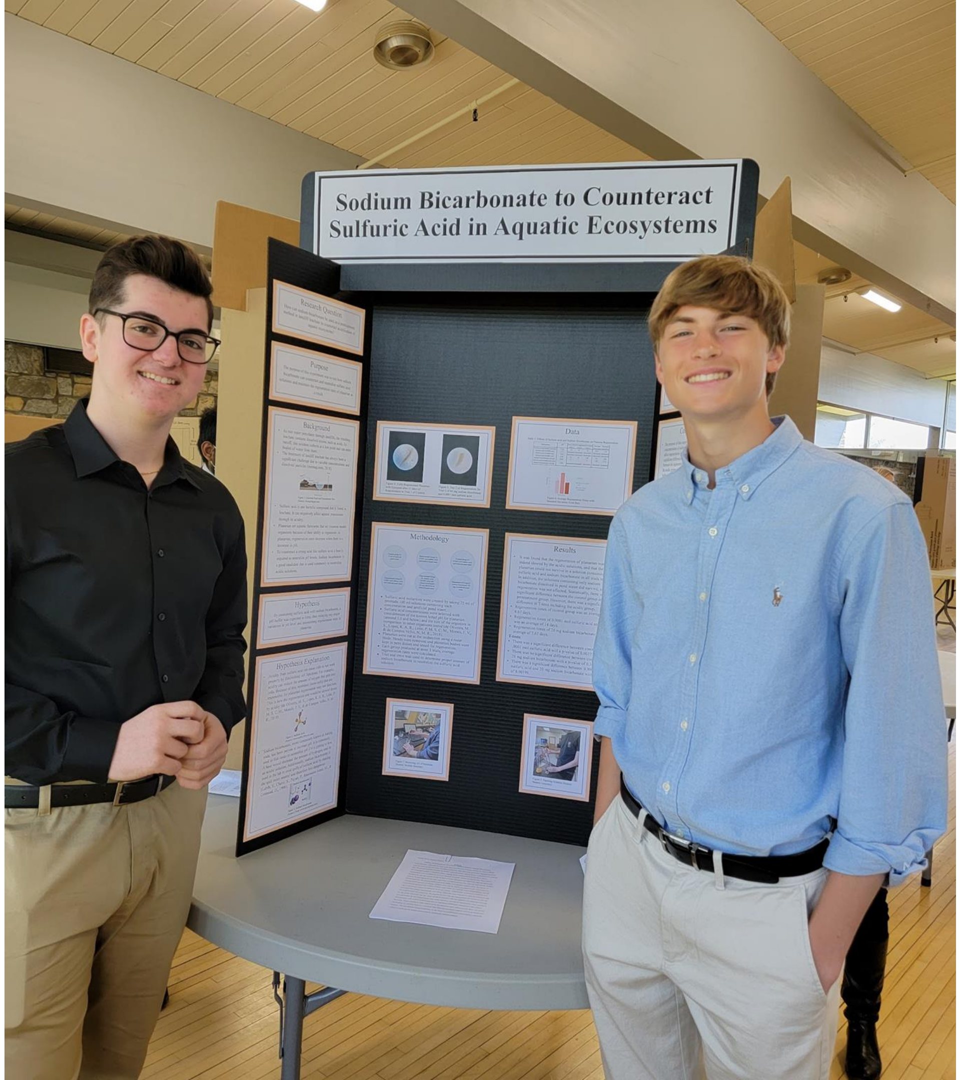

REGENERON SCIENCE TALENT SEARCH
chrome
acer

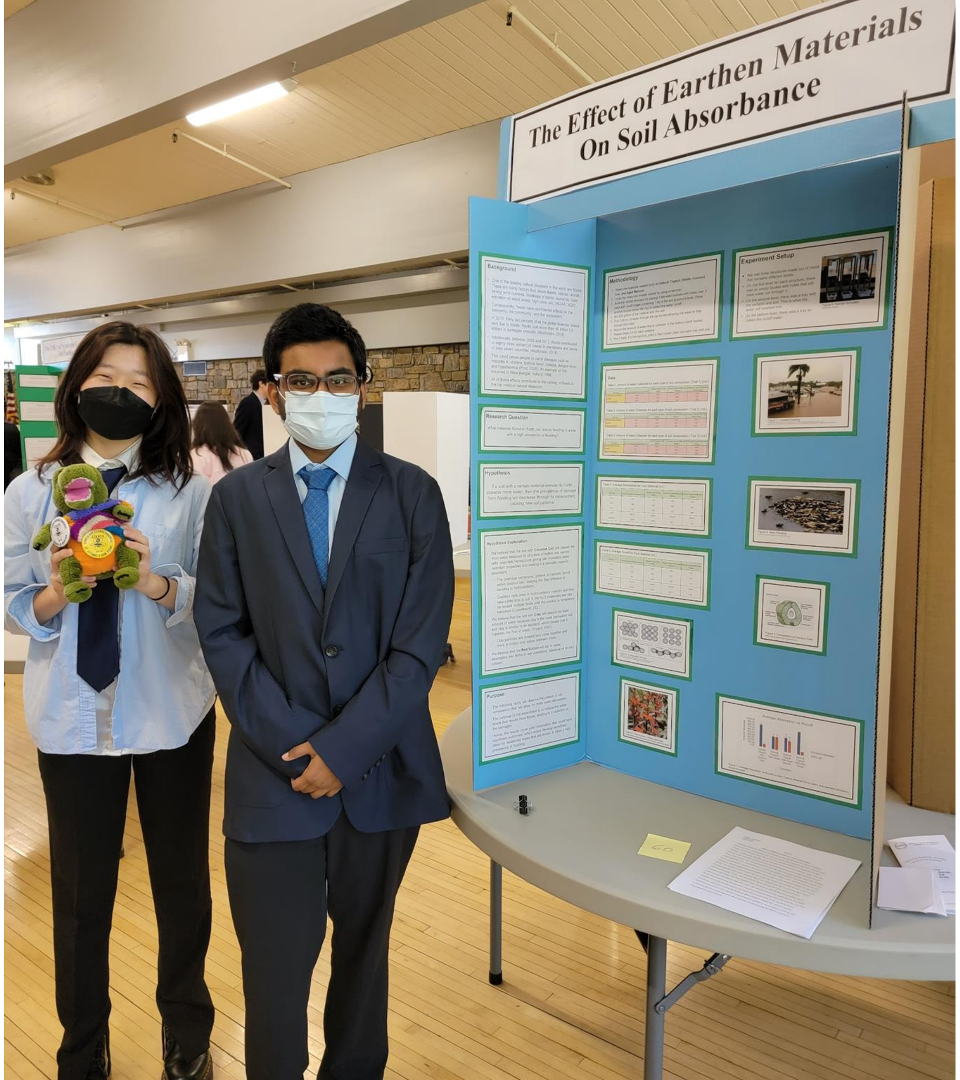

Tollkuhn Lab
Mentor: Katherine Denney
Exploring Sexual Dimorphis
and Sex Hormone Recepto
Expression in the Bed
Nucleus of the Stria
Terminalis (BNST) in the
Monogamous Prairie Vole
Ashley Moo

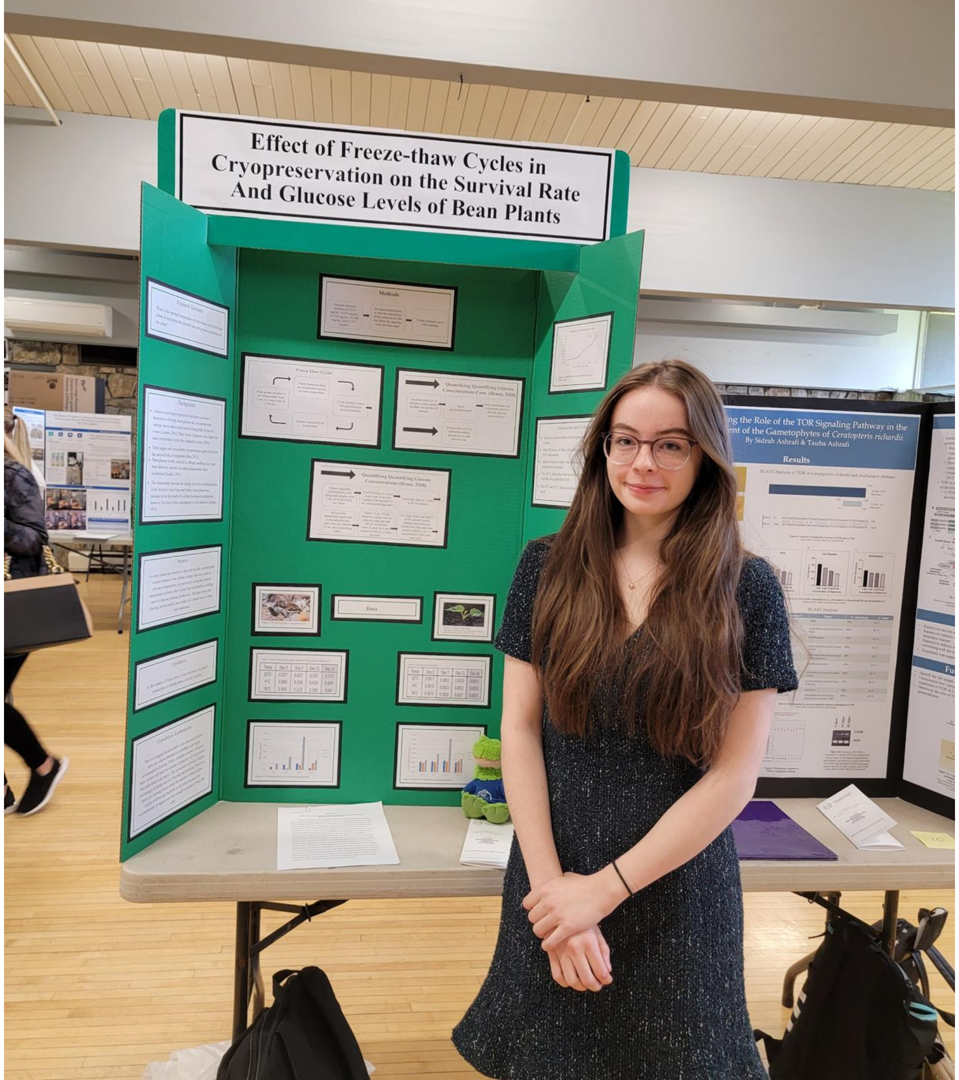

B-WING
EXIT
EXIT
NO SMOKING
I ♥ PHYSICS

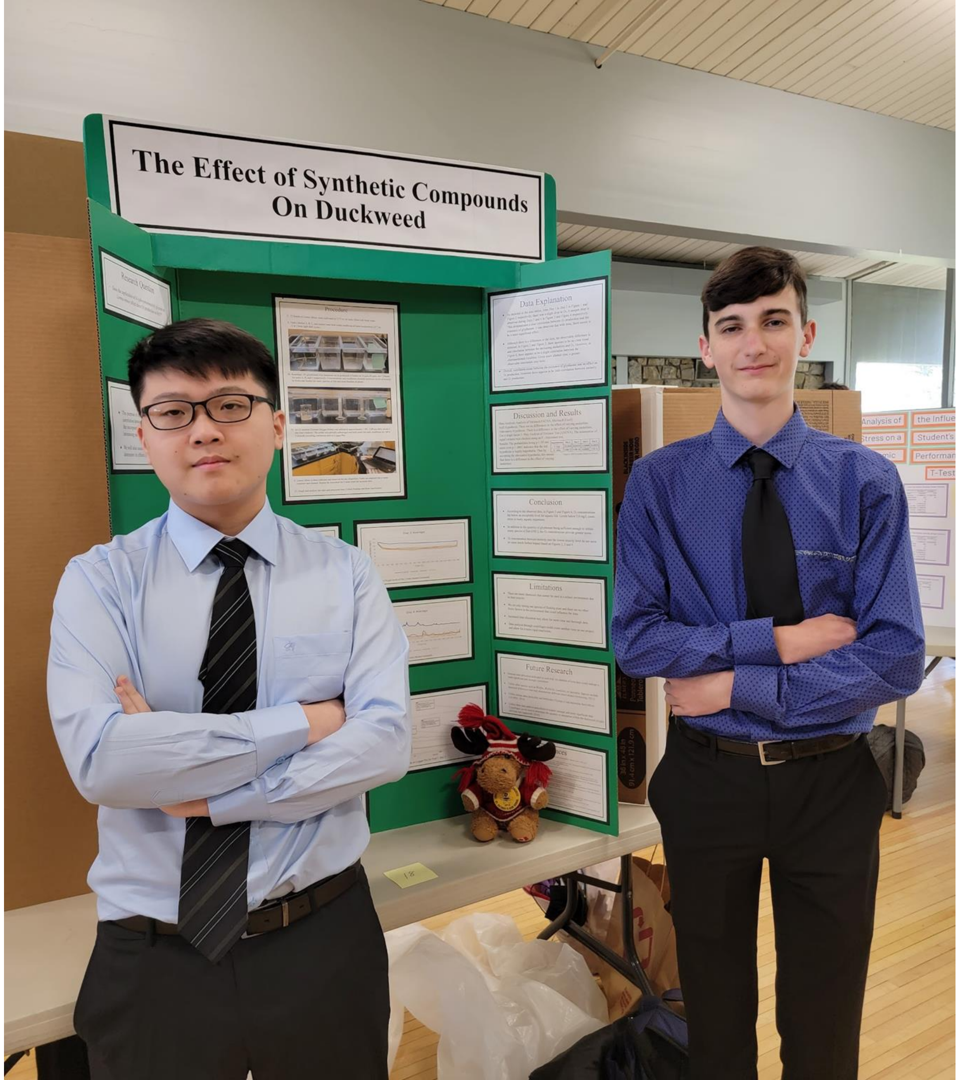

Developing a Compact Method
For Cleaning Water
Purpose
Set-up Conditions
Background
Research Question


Effect of Varying Doses of Calcium on
Drosophila with Alzheimer's Disease
Research Question
Background Information
Hypothesis
Hypothesis Explanation
Purpose
Conclusion
Limitations
Future Research
References

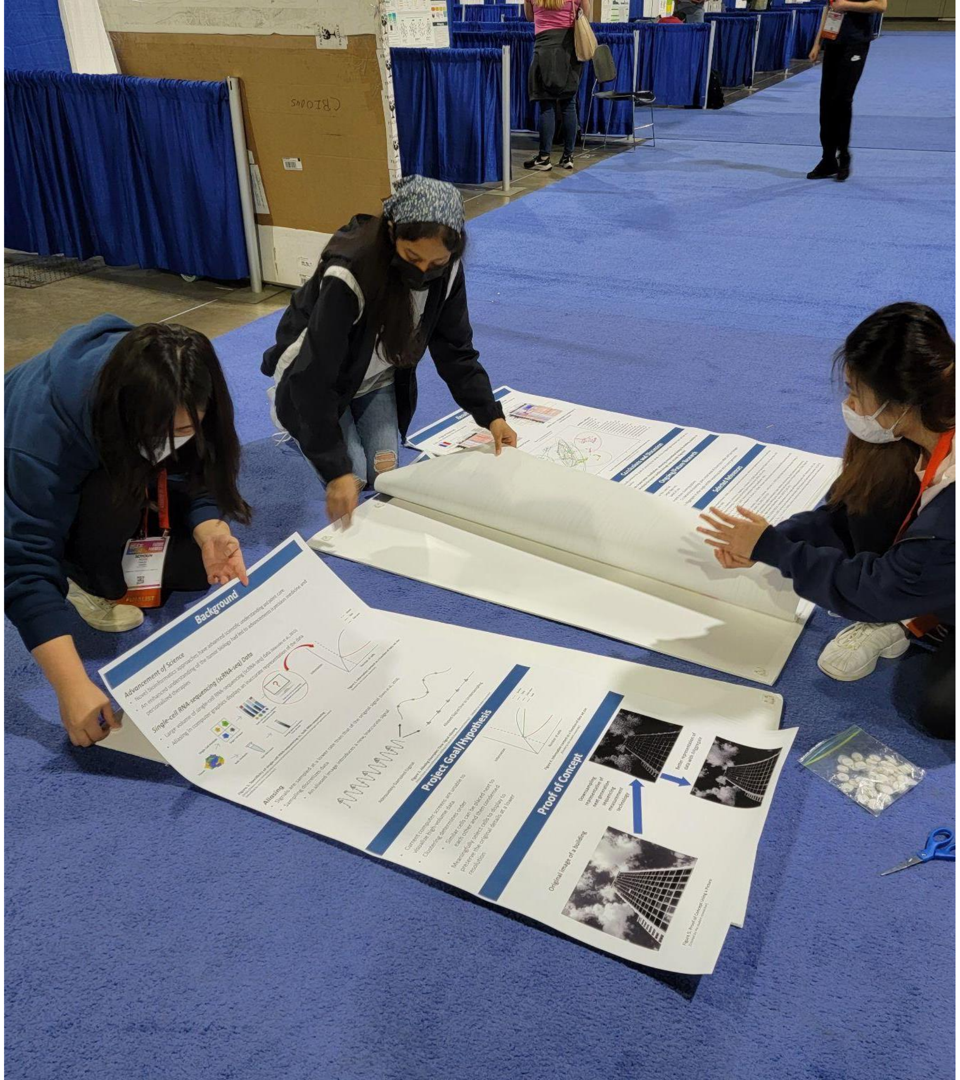

Sodium Bicarbonate to Counteract Sulfuric Acid in Aquatic Ecosystems
Research Question
Purpose
Background
Hypothesis
Hypothesis Explanation
Data
Methodology
Results


The Effect of Earthen Materials On Soil Absorbance
Background
Research Question
Hypothesis
Purpose
Methodology
Experiment Setup
Data


Effect of Freeze-thaw Cycles in Cryopreservation on the Survival Rate And Glucose Levels of Bean Plants
Methods
By Sidrah Ashrafi & Tauba Ashrafi
Results


The Effect of Synthetic Compounds On Duckweed
Procedure
Data Explanation
Discussion and Results
Conclusion
Limitations
Future Research


SCIENCE
SCHOOL
KIRSH


Background
Project Goal/Hypothesis
Proof of Concept


Purpose

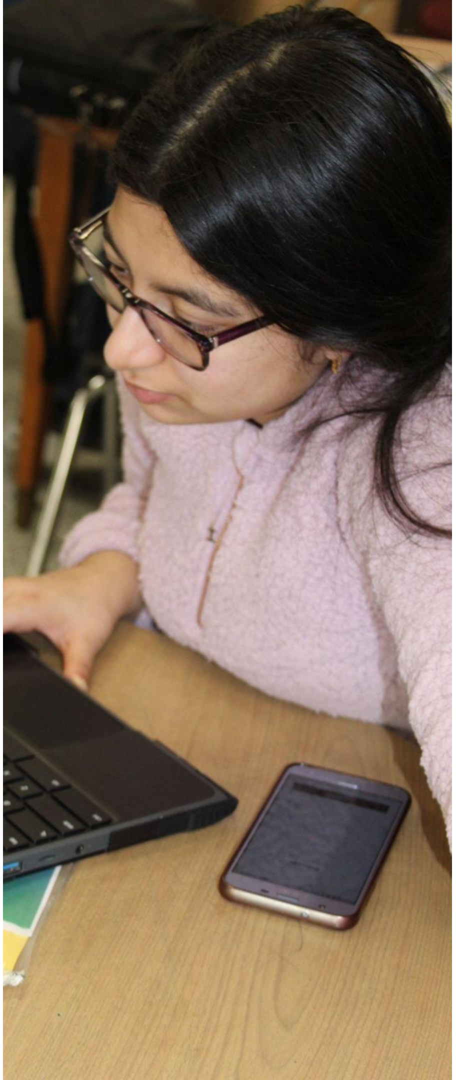

COMMACK HIGH SCHOOL
ANASTASIA
COMMACK HIGH SCHOOL NORTH
BOARD OF EDUCATION

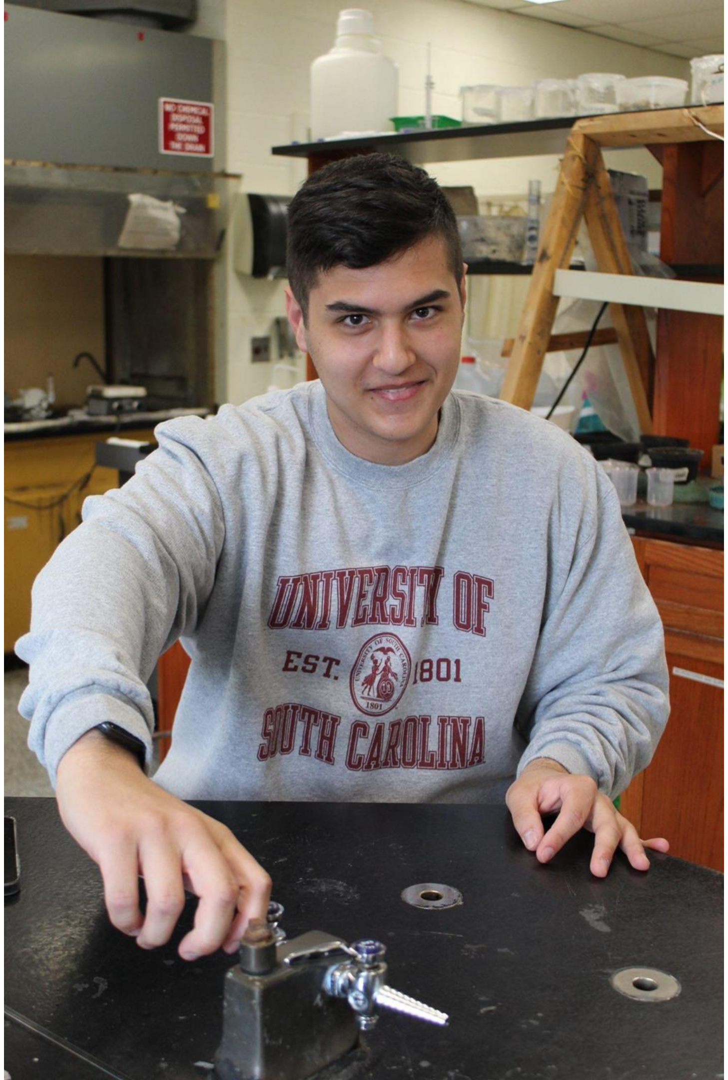

ScienceNews

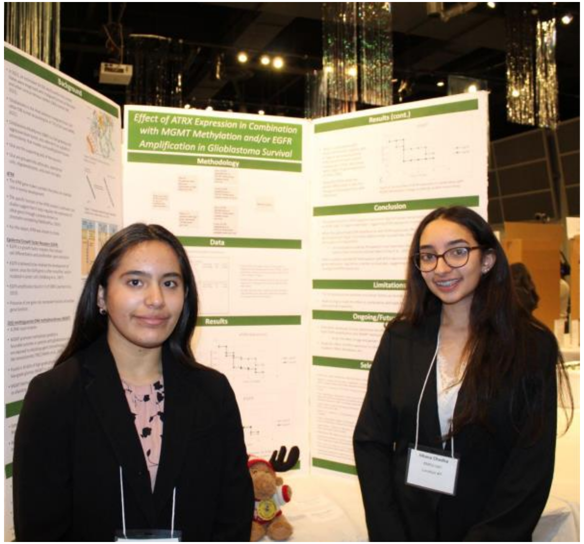

Champion


BIOLOGY


REGENERON
SCIENCE
TALENT SEARCH
A program of
SOCIETY FOR SCIENCE
& THE PUBLIC
Since 1942
REGENERON SCIENCE
TALENT SEARCH
Champion




UNIVERSITY OF
EST. 1801
SOUTH CAROLINA


Effect of ATRX Expression in Combination with MGMT Methylation and/or EGFR Amplification in Glioblastoma Survival
Background
Methodology
Data
Results
Results (cont.)
Conclusion
Limitations

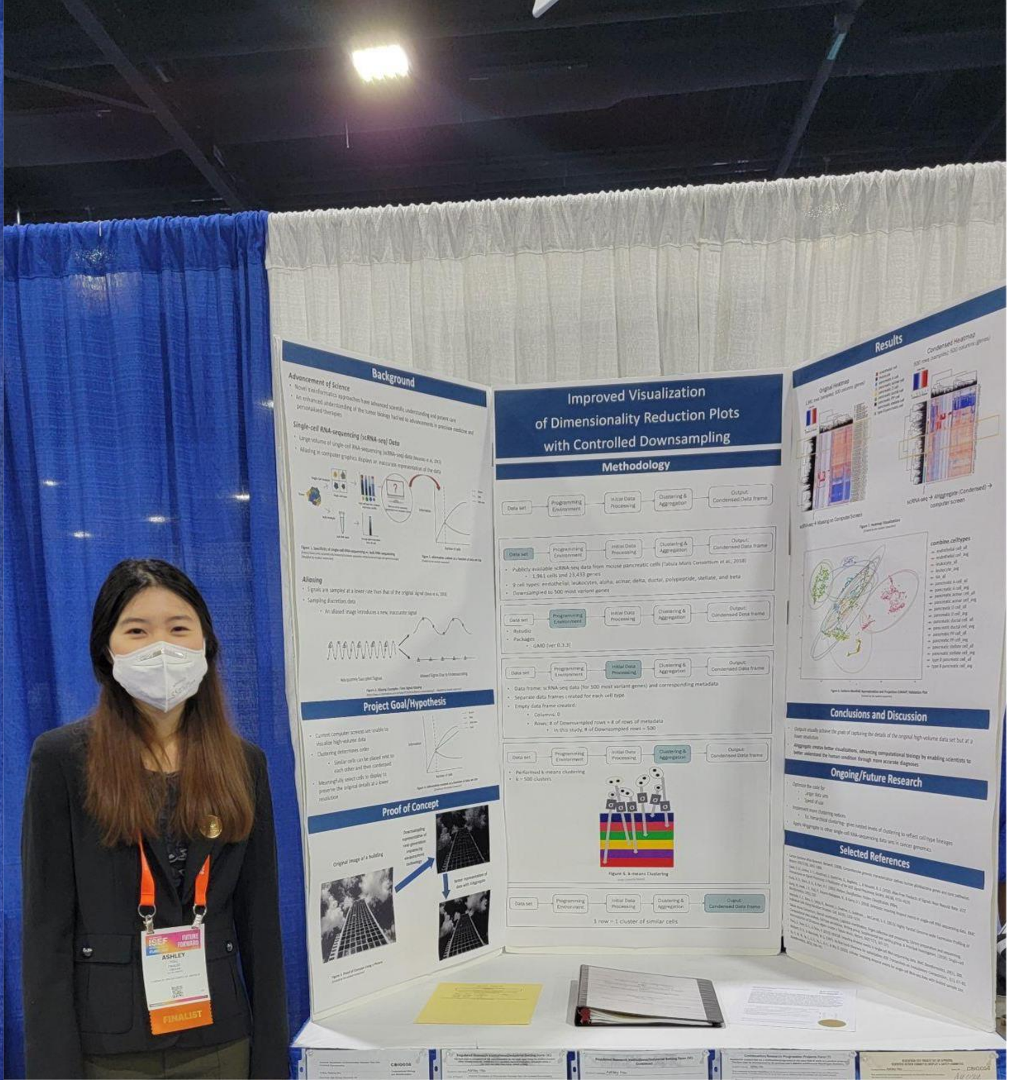

ISEF
FUTURE FORWARD
ASHLEY
FINALIST
FUTURE FORWARD
REGENERON
THIRD PLACE
Society for Science

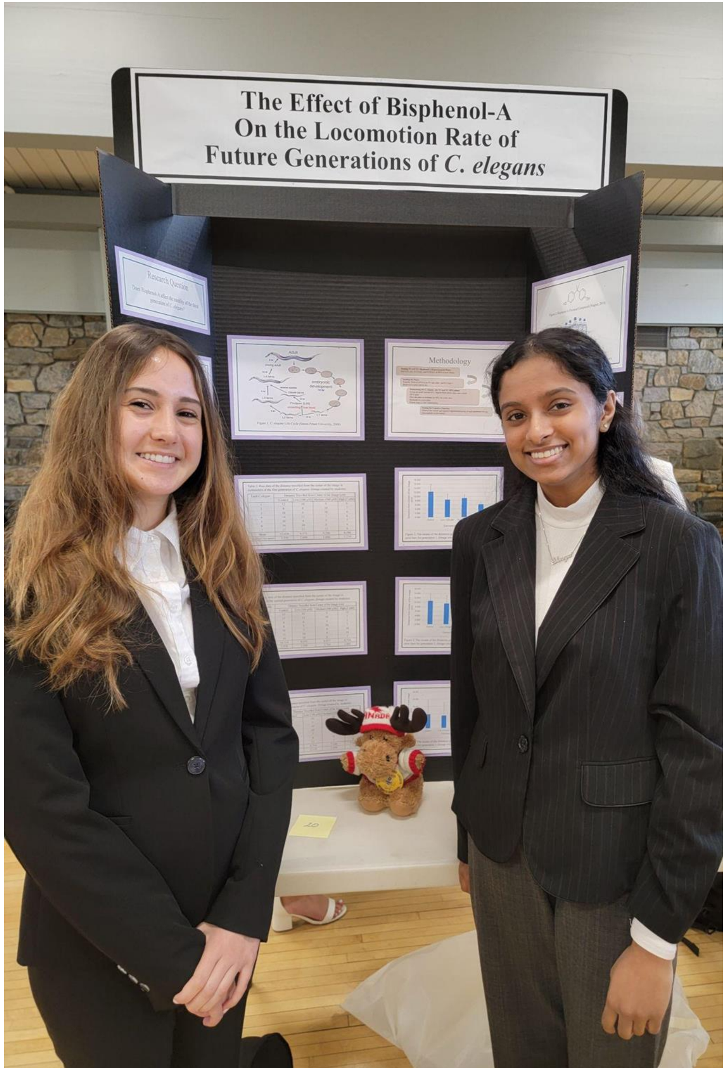
Foundation
Restrooms
ISEF
FUTURE FORWARD
SOYOUN
FINALIST

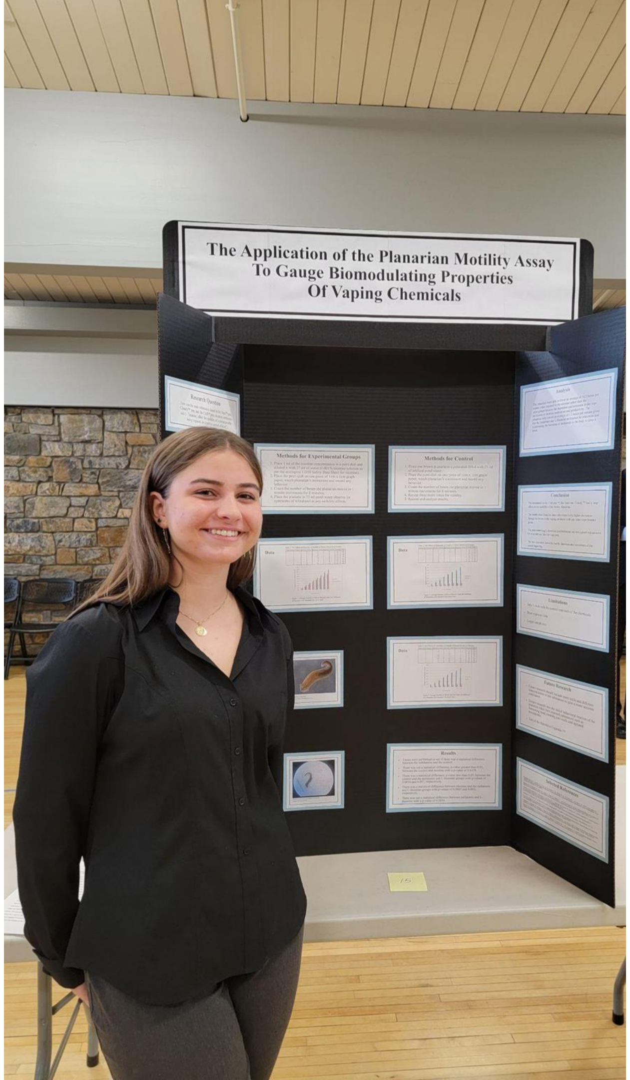

HOLLISTER
CALIFORNIA
chrome
acer

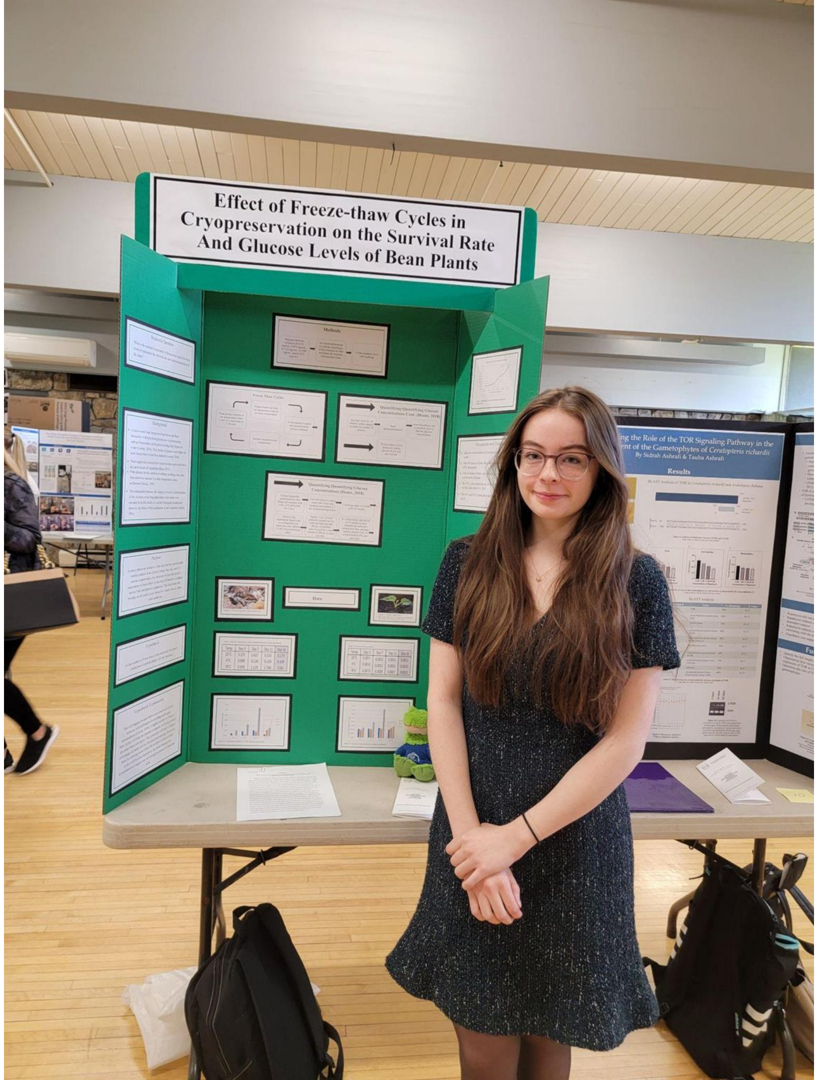

feelingood
ASTROWORLD
StockX
SWABBING
VACCINATE NEW YORK
BLENDERS EYEWEAR

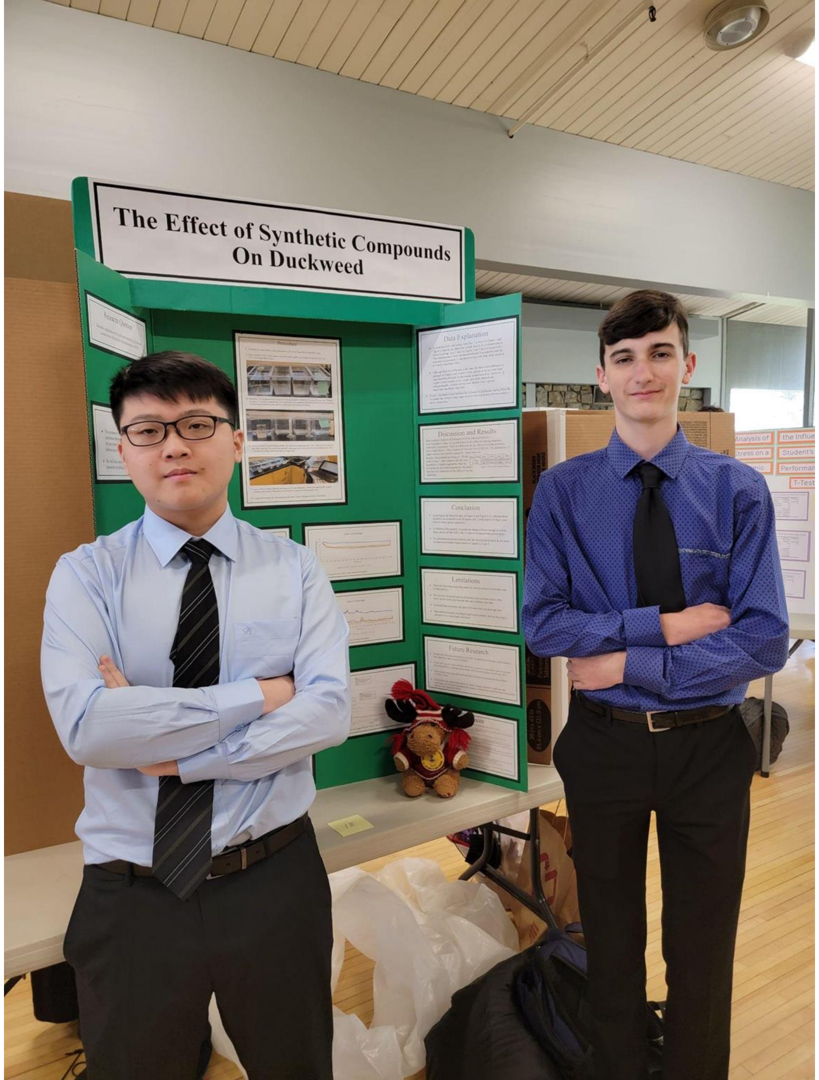

Background
Exploring Sexual Dimorphism and Sex Hormone Receptor Expression in the Bed Nucleus of the Stria Terminalis (BNST) in the Monogamous Prairie Vole
Results and Discussion (cont.)
Conclusions
Future Work
Selected References
FINALIST
SOCIETY ALUMNI

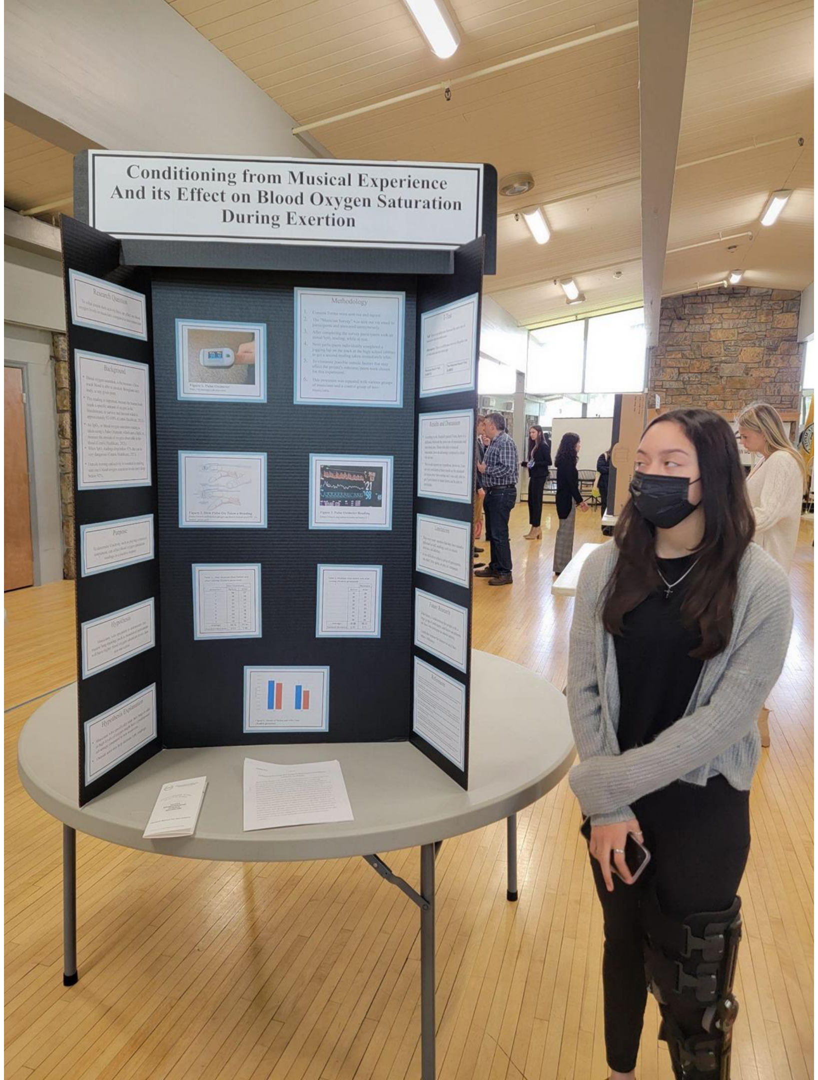

Background
Project Goal/Hypothesis
Proof of Concept
Improved Visualization of Dimensionality Reduction Plots with Controlled Downsampling
Methodology
Results
Conclusions and Discussion
Ongoing/Future Research
Selected References
ASHLEY
FINALIST


The Effect of Bisphenol-A
On the Locomotion Rate of
Future Generations of C. elegans
Research Question
Methodology


The Application of the Planarian Motility Assay
To Gauge Biomodulating Properties
Of Vaping Chemicals
Methods for Experimental Groups
Methods for Control
Results


Effect of Freeze-thaw Cycles in Cryopreservation on the Survival Rate And Glucose Levels of Bean Plants
Methods
Data
Results


The Effect of Synthetic Compounds On Duckweed
Data Explanation
Discussion and Results
Conclusion
Limitations
Future Research

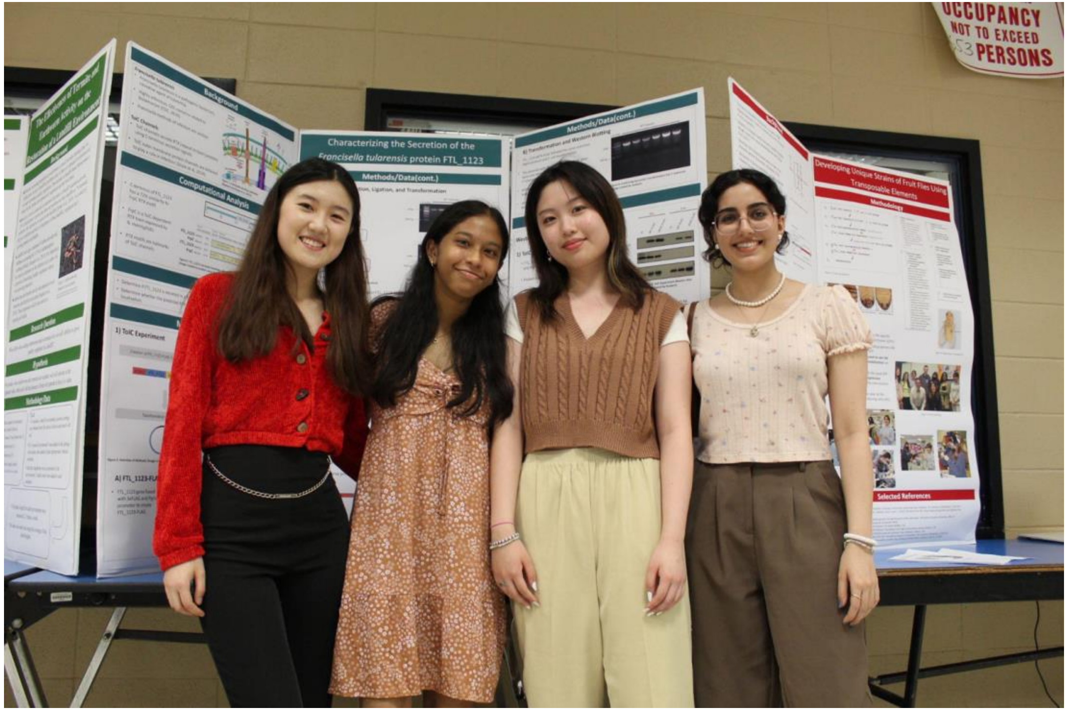

Conditioning from Musical Experience
And its Effect on Blood Oxygen Saturation
During Exertion
Methodology

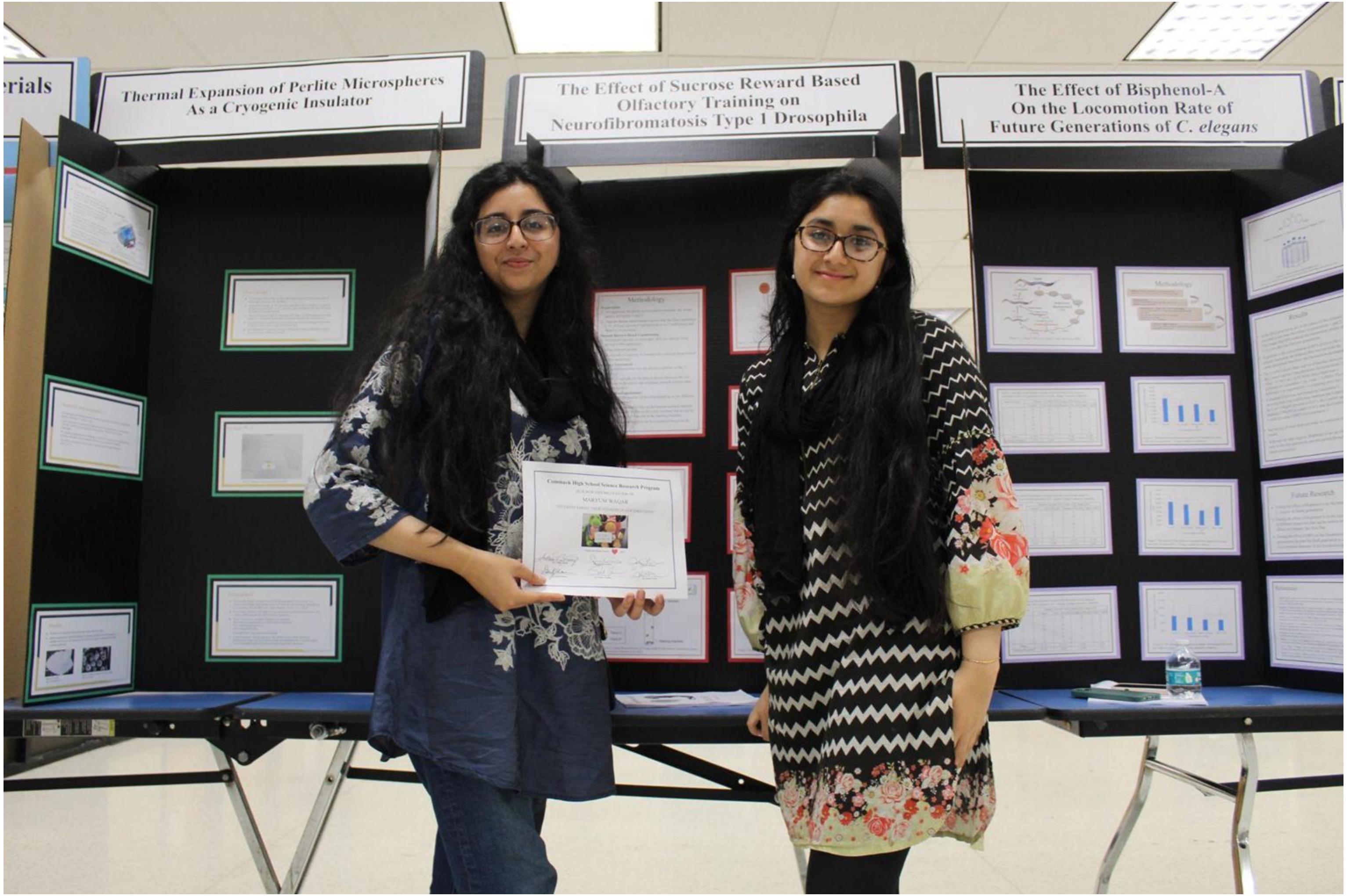

Manganese Toxicity on
tic Ecosystems
The Effect of Lemon Extract Exposure on Cell Differentiation Modeled in Planaria
Methodology
Analysis & Conclusions
Limitations
Future Research
References
Data


THE RESEARCH DRAGON

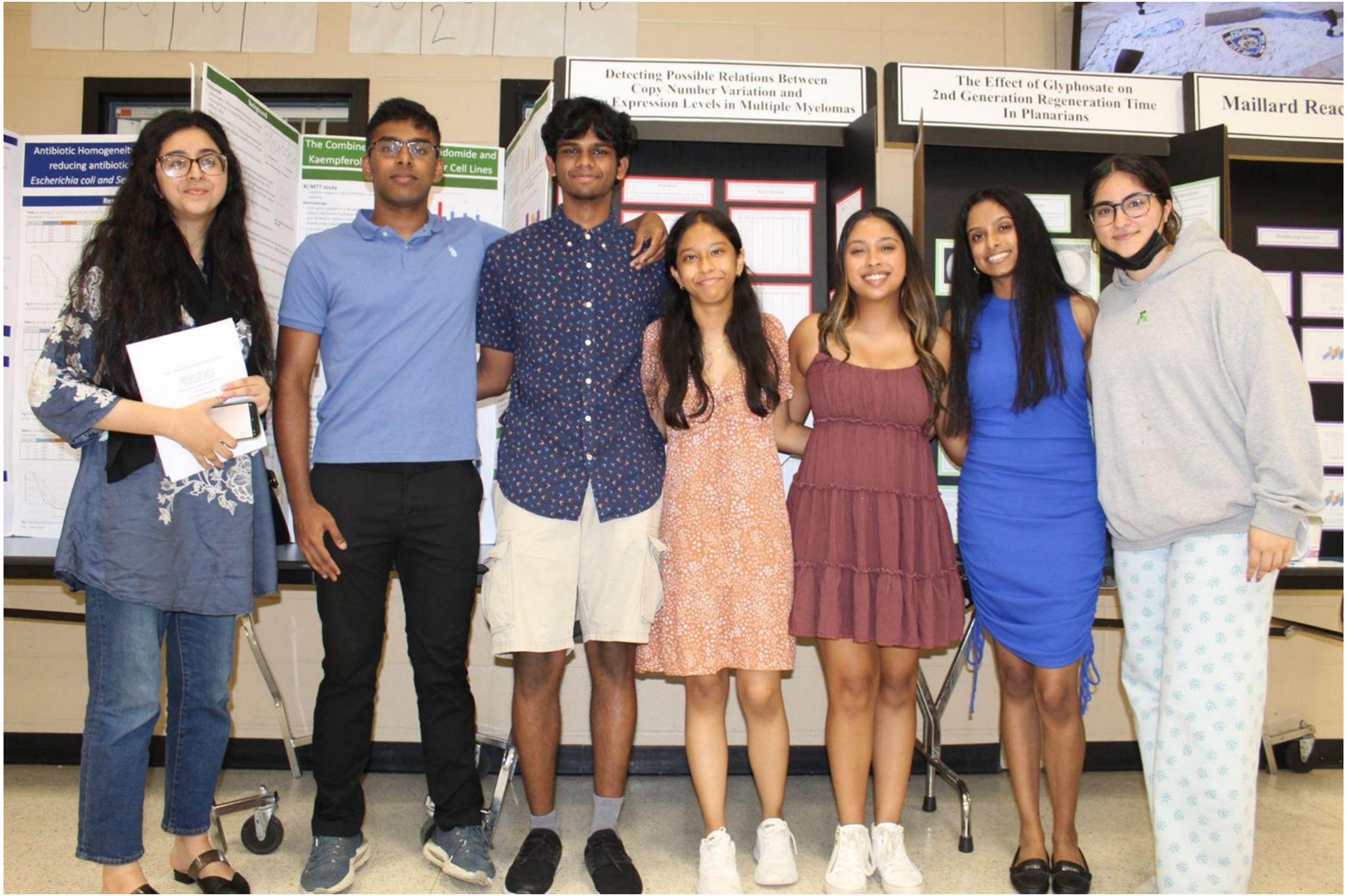

EXIT


MAXIMUM
OCCUPANCY
NOT TO EXCEED
653 PERSONS
Background
Improved Visualization
of Dimensionality Reduction Plots
Results


OCCUPANCY
NOT TO EXCEED
PERSONS
Background
Computational Analysis
Characterizing the Secretion of the Francisella tularensis protein FTL_1123
Methods/Data(cont.)
Methods/Data(cont.)
Developing Unique Strains of Fruit Flies Using Transposable Elements
Methodology
Selected References


Thermal Expansion of Perlite Microspheres
As a Cryogenic Insulator
The Effect of Sucrose Reward Based
Olfactory Training on
Neurofibromatosis Type 1 Drosophila
The Effect of Bisphenol-A
On the Locomotion Rate of
Future Generations of *C. elegans*
Methodology
Results
Future Research


Commack High School Science Research Program
IN HONOR AND RECOGNITION OF
FLORA LIN
"STUDENTS TAKING THEIR INTERESTS IN NEW DIRECTIONS"
Freddy and Moose Forever 2022
Commack High School Science Research Program
IN HONOR AND RECOGNITION OF
AMBER SYED
"STUDENTS TAKING THEIR INTERESTS IN NEW DIRECTIONS"
Freddy and Moose Forever 2022


Detecting Possible Relations Between
Copy Number Variation and
Expression Levels in Multiple Myelomas
The Effect of Glyphosate on
2nd Generation Regeneration Time
In Planarians
Maillard Reac
Antibiotic Homogeneity
Escherichia coli and Se
Kaempferol
Cell Lines


Developing a Compact Method
For Cleaning Water