



# Connecticut Science & Engineering Fair

## Quinnipiac University

### March 2 - 14, 2026

*These judging results are unaudited by the fair's Database Committee. The CSF reserves the right to correct the listings.*

### Preliminary Judging Results

### Honors Received in Regular Fair Preliminary Judging

[SchTown]	[School]	[Teacher]	[Proj#]	[FCat]	[Honors]	[Project Title]	Student(s)	Grade	Town
Avon	Avon High School	John Salerni	3119	LS	2	Hyper-Activated Interferon Pathways in Asthmatic B Cells Contribute to Exaggerated Immune Response	Aarika Bhave	11	Avon
Avon	Avon High School	John Salerni	3085	LS	2	Automated Detection of Pulmonary Nodules in Computed Tomography Scans Using Deep Learning to Reduce Radiologist Workload	Nathaniel Lee	11	Avon
Avon	Avon High School	John Salerni	3172	LS	3	Integrating Copy Number Alterations and Transcriptomics with Machine Learning Improves Survival Prediction in HPV-negative Head and Neck Cancer	Vishnu Mukku	11	Avon
Avon	Avon High School	John Salerni	3076	LS	1	Static and Dynamic Functional Connectivity Within and Cross Reading and Default Mode Networks in Children Varying in Family Risk for Dyslexia and Reading	Mridhulaa Rajagopal	12	Avon
Avon	Avon High School	John Salerni	6103	PS	3	Adaptive Machine Learning-Driven Waste Management System	Karthikeyen Suresh Nagan	10	Avon
Avon	Talcott Mountain Science Center	Kaitlyn Roberts	5003	P7	1	Engineering A Durable Algae-Argonite Alkalinity System To Reduce CO2 Driven Ocean Acidification and Enhance Biological Resilience In Coastal Marine Ecosystems	Raji Doshi	7	Farmington
Avon	Talcott Mountain Science Center	Brigette Zacharzcenko	2005	L7	1	Sensory Triggers of Defensive Behavior in Manduca seat	Sheldon Hsiao	7	Farmington

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**Avon** Talcott Mountain Science Center Brigette Zacharczenko

2001 L7 1 Operation Brine Shrimp: Optimizing Life Conditions

**Student(s)** Nikhil Krishnamurthy **Grade 7** **Town** Avon

**Avon** Talcott Mountain Science Center Kenneth Wright

2504 L8 3 A Cognitive Analysis of Social Media Engagement and Multitasking Behaviors in Adult Attention and Focus Endurance

**Student(s)** Dean Raptis **Grade 8** **Town** West Hartford

**Bethel** Bethel High School Raymond Turek

6046 PS 3 The Effect of Hydroxyapatite Concentration Within Dentistry Composite Resin on the Wear, Acidic Erosion, and Discoloration on a Synthetic Tooth.

**Student(s)** Amanda Almeida **Grade 12** **Town** Bethel

**Bethel** Bethel High School Ray Turek

6003 PS 2 Fleet for Localized Atmospheric Research and Environmental Surveillance (FLARES): Autonomous drones and machine learning working for a cleaner environment.

**Student(s)** Toshan Bhattacharya **Grade 11** **Town** Bethel

**Bethel** Bethel High School Raymond Turek

3089 LS 2 Microplastics vs. Bioplastics: Comparative Effects on Seed Germination and Early Plant Growth

**Student(s)** Kady Cibery **Grade 12** **Town** Bethel

**Bethel** Bethel High School Ray Turek

6029 PS 2 A Multiscale Evolutionary Simulation and Machine Learning Framework to Predict Immunotherapy Failure from Tumor-Immune Interaction Dynamics

**Student(s)** Srirama Desiraju **Grade 12** **Town** Bethel

**Bethel** Bethel High School Raymond Turek

3065 LS 3 How Different Suturing Techniques and Materials Impact the Effectiveness of the Suture, Measured by Wound Strength, Aesthetics and Infection, When Experimenting with Banana Peels?

**Student(s)** Emma Doyle **Grade 12** **Town** Bethel

**Bethel** Bethel High School Raymond Turek

3102 LS 2 Sustainable Induction of Medicinal Phytochemicals: The Effects of Low Intensity Stress on Phytochemical Yield in Basil

**Student(s)** Gabriela Greenstein **Grade 12** **Town** Bethel

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**Bethel** Bethel High School Raymond Turek

3048 LS 2 Differences in Memory Retention Between Real Images and Artificially Generated Images.

**Student(s) Brianna Jack** **Grade 12** **Town** BETHEL

**Bethel** Bethel High School Ray Turek

3534 LST 1 Wavelet-Based Multiscale Anisotropy-Aware Cell-Cell Communication Inference and Niche Segmentation

**Student(s) Shravya Mankala** **Grade 11** **Town** Bethel  
**Scarlett Chen** **Grade 11** **Town** Scarsdale  
**Jiayu Su** **Grade 10** **Town** Ridgefield

**Bozrah** Fields Memorial School Joshua Fish

1003 LT 1 The Impact of Ice Melting Substances On Unicellular Organisms In Pond Water

**Student(s) Analise Williams** **Grade 8** **Town** Bozrah  
**Ella Sikorski** **Grade 8** **Town** Bozrah

**Bridgeport** Black Rock School Elizabeth Moran

5010 P7 1 Bridge Weight Bearing Capacity

**Student(s) Aiden Cote** **Grade 7** **Town** Bridgeport

**Bridgeport** Black Rock School Elizabeth Moran

5528 P8 3 Solar vs Battery Powered Car Performance

**Student(s) Robert Daley** **Grade 8** **Town** Bridgeport

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

6067 PS 2 Utilizing Organic Byproducts Within the Internal Arrangement of Concrete to Enhance the Dimension Stability and Durability of Porous Concrete

**Student(s) Emily Barnhart** **Grade 12** **Town** Monroe

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

6075 PS 1 Solid-State Synthesis Using Metal Supported Biochar to Minimize Polycyclic Aromatic Hydrocarbon Impurities

**Student(s) Austin Bell** **Grade 12** **Town** Bridgeport

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

6059 PS 2 Development of a Crustacean  $\beta$ -chitin Biopolymer With Improved Functional Stability and Enhanced Decomposition

**Student(s) Campbell Cohen** **Grade 12** **Town** Fairfield

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**Bridgeport** Bridgeport Regional Aquaculture Center Holly Turner

3191 LS 3 Do Lobsters prefer foods with Astaxanthin? Investigating dietary choices in Homerus Americans.

**Student(s)** Joseph DeSabia **Grade** 10 **Town** Fairfield

**Bridgeport** Bridgeport Regional Aquaculture Center Holly Turner

3199 LS 3 Impact of increasing water temperatures on strobilation rates in Aurelia aurita.

**Student(s)** Calyn Fletcher **Grade** 10 **Town** fairfield

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

6032 PS 2 Development of a Dipole PVDF Film Pyroelectric Generator utilizing Process Waste Heat

**Student(s)** Aiden Reyes **Grade** 12 **Town** Trumbull

**Bridgeport** Bridgeport Regional Aquaculture Center Holly Turner

3510 LST 2 How Light Color Influences Agar Production in Gracilalia tikvahiae.

**Student(s)** Cherelle Ricketts **Grade** 10 **Town** Bridgeport

Joshua Ball **Grade** 11 **Town** Bridgeport

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

3050 LS 2 Utilizing Vibrio natriegens for Sequestration of Heavy Metals to Promote Aquatic

**Student(s)** Max Saunders **Grade** 12 **Town** Fairfield

**Bridgeport** Bridgeport Regional Aquaculture Center Kirk Shadle

3090 LS 2 Enhancing Lactobacillus Acidophilus. Molecular Responses with Hydroxyapatite to Stimulate Tooth Enamel Regeneration.

**Student(s)** Sofia Youssefi **Grade** 12 **Town** Trumbull

**Bridgeport** Central Magnet High School Caitlin Wall

3504 LST 3 How Eyewitness Testimony and Hair Analysis Contribute to Crime Scene Investigation within Forensic Science

**Student(s)** Senavene Wilson **Grade** 12 **Town** Bridgeport

Mia Martinez **Grade** 12 **Town** Bridgeport

**Bridgeport** Fairchild Wheeler Aerospace Marissa Barreto

6509 PST 2 SeatPal - Vehiculaar Heatstroke Prevention Device

**Student(s)** Geaon Sohn **Grade** 12 **Town** Bridgeport

Maya Sawaki **Grade** 12 **Town** Bridgeport

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**Bridgeport** Fairchild Wheeler Aerospace Marissa Barreto

3150 LS 3 Unlocking Neurodivergent Focus Skills

**Student(s)** **Becky Veliz Ruiz** **Grade 9** **Town** Bridgeport

**Bridgeport** Fairchild Wheeler Biotech Tara Liskov

3515 LST 1 Testing the Efficacy of Non-Toxic Substances on the Destruction of Lanternflies and Egg Masses

**Student(s)** **Maxwell Egbuzie** **Grade 12** **Town** Bridgeport

**Sebastian Polanco** **Grade 12** **Town** Bridgeport

**Bridgeport** Fairchild Wheeler Biotech Marilyn Carolina

3036 LS 3 Budgerigars' Behavioral Responses to Different Genres of Music

**Student(s)** **Carolyn Fox** **Grade 12** **Town** Bridgeport

**Bridgeport** Fairchild Wheeler Biotech Lucien Bouffard

3109 LS 1 Equine Cooling Patterns: Physiological Modification

**Student(s)** **Carly Grimm** **Grade 9** **Town** Norwalk

**Bridgeport** Interdistrict Discovery Magnet School Susan Beres

1022 LT 3 More Than Just Water

**Student(s)** **Gabriella Dickson** **Grade 7** **Town** Bridgeport

**Catherine Sather** **Grade 7** **Town** Trumbull

**Bridgeport** Interdistrict Discovery Magnet School Susan Berez

2002 L7 3 Starch Wars

**Student(s)** **Alicia Palacios** **Grade 7** **Town** Bridgeport

**Bridgeport** IT & Software Engineering High School Ricki Chiem

6510 PST 1 How Effectively Can AI Classify Waste?

**Student(s)** **Alan Brewster** **Grade 10** **Town** Milford

**Mikayla Larbi** **Grade 10** **Town** Bridgeport

**Brandon Granados Pastora** **Grade 10** **Town** Bridgeport

**Bridgeport** IT & Software Engineering High School Ricki Chiem

6094 PS 2 Designing Metalloid bags to help reduce static buildup in powders

**Student(s)** **Ayden Gamble** **Grade 11** **Town** Bridgeport

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**Bridgeport** John Winthrop School Srilakshmi Kongani

5510 P8 3 Insulation Investigation

**Student(s)** Lavinya Baence **Grade 8** **Town** Bridgeport

**Bridgeport** John Winthrop School Srilakshmi Kongani

5520 P8 2 The War of Energy Efficiency

**Student(s)** Anthony Gomes **Grade 8** **Town** Bridgeport

**Bridgeport** John Winthrop School Erin Snow

5012 P7 1 Catalase's pH sweet spot

**Student(s)** Jacob Lin **Grade 7** **Town** Bridgeport

**Bridgeport** Luis Munoz Marin School Allison Kovac

4015 PT 3 Cardboard Hydraulic Claw: A Syringe-Driven Hydraulic Grabbing Device

**Student(s)** Sofia Santos **Grade 7** **Town** Bridgeport

Julissa Jaimes **Grade 7** **Town** Bridgeport

**Bridgeport** Multicultural Magnet School Corina Starn

4006 PT 1 SMART CANE

**Student(s)** Erick Aquino **Grade 8** **Town** Bridgeport

Dhavid Caetano **Grade 8** **Town** Bridgeport

**Bridgeport** Read School Trisha Bartholomew

5509 P8 3 How Does Air Flow Around Different Shape of Cars?

**Student(s)** Aaron Samaroo **Grade 8** **Town** bridgeport

**Bridgeport** Warren Harding High School Shelton Neale

3117 LS 1 Plants Grow in Different Soils

**Student(s)** Joseph Colon-Machado **Grade 11** **Town** Bridgeport

**Bridgeport** Warren Harding High School Dionne Cross

3073 LS 3 Which Surface in the Lab has the Most Microbes that Could Cause Bread to Spoil.

**Student(s)** Johannes Quezada **Grade 9** **Town** Bridgeport

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**Bridgeport** Warren Harding High School Dionne Cross

6524 PST 3 Robotic Arm

**Student(s)** **Daiany Velasquez** **Grade 9** **Town** Bridgeport  
**Juliette Medina-Calderon** **Grade 9** **Town** Bridgeport

**Cheshire** Cheshire High School Julie Barker

6030 PS 1 Towards Faster Materials Simulation: GPU-Optimized Neural Networks for Interatomic Potentials

**Student(s)** **Raine Ma** **Grade 11** **Town** Cheshire

**Cheshire** Cheshire High School Julie Barker

3142 LS 2 How do different compressible clothing items affect the balance of a person with Hyper-mobile Ehlers-Danlos syndrome?

**Student(s)** **Bella Solimine** **Grade 10** **Town** Cheshire

**Cheshire** Cheshire High School Julie Barker

3522 LST 2 Phytoplankton Adaptation to Ocean Acidification

**Student(s)** **Neha Tatikonda** **Grade 11** **Town** Cheshire  
**Emily Junaedi** **Grade 11** **Town** Cheshire

**Danbury** Saint Joseph School Kathleen Spina

2004 L7 1 Does your choice of footwear have a significant impact on your jumping ability?

**Student(s)** **Emily Bauco** **Grade 7** **Town** Danbury

**Danbury** Saint Joseph School Kathleen Spina

2513 L8 2 To Drink or Not To Drink: How clean is your water?

**Student(s)** **Christopher Caputo** **Grade 8** **Town** danbury

**Danbury** Saint Joseph School Kathleen Spina

2506 L8 2 Homemade Water Filtration

**Student(s)** **Ryder Maravilla** **Grade 8** **Town** Danbury

**Danbury** Saint Joseph School Kathleen Spina

2009 L7 1 Does Chocolate Improve Memory?

**Student(s)** **John Zilliox** **Grade 7** **Town** Danbury

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**Danbury** St. Gregory the Great School Christine Fahey  
5511 P8 3 Pennies for Luck or Poison for Ponds  
**Student(s) Dheer Bhavsar** **Grade 8** **Town** Danbury

**Danbury** St. Gregory the Great School Christine Fahey  
1011 LT 2 Grounds for Growth  
**Student(s) Kristen Lazzara** **Grade 7** **Town** Brookfield  
**Moira McKinney** **Grade 7** **Town** Danbury

**Danbury** St. Gregory the Great School Christine Fahey  
5011 P7 1 The Hot-Weather Whiff Effect  
**Student(s) Slok Mishra** **Grade 7** **Town** Danbury

**Danbury** St. Gregory the Great School Christine Fahey  
1005 LT 1 The effect of location on water quality of the Upper Saugatuck River Watershed using macroinvertebrate metrics.  
**Student(s) Gemma Molisani** **Grade 8** **Town** Redding  
**Lucia Molisani** **Grade 8** **Town** Redding

**Danbury** St. Gregory the Great School Christine Fahey  
2511 L8 1 Novel & Portable Cards For Detection of Common Food Allergens  
**Student(s) Rahil Shah** **Grade 8** **Town** Danbury

**Danbury** Westside Middle School Academy Nancy Barlow  
4001 PT 2 What desalinates water the most efficiently; Solar Distillation, Reverse Osmosis, and Boiling  
**Student(s) Joseph Brocia** **Grade 7** **Town** Danbury, CT  
**Colin Guidotti** **Grade 7** **Town** Danbury  
**Brian Saltzman** **Grade 7** **Town** Danbury

**Danbury** Westside Middle School Academy Nancy Barlow  
1006 LT 2 The Effect of Acid Rain on Plants Around the World  
**Student(s) Brooke Cyphers** **Grade 7** **Town** Danbury  
**Margo Anderson** **Grade 7** **Town** Danbury

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**Danbury** Westside Middle School Academy Nancy Barlow

1001	LT	1	The Effect of Different Music Genres on Time it Takes Ants to Travel
<b>Student(s)</b>			
		<b>Zahir Guaman</b>	<b>Grade 8 Town Danbury</b>
		<b>Jhon Ramirez</b>	<b>Grade 8 Town Danbury</b>
		<b>Frandell Olea</b>	<b>Grade 8 Town Danbury</b>

**Danbury** Westside Middle School Academy Nancy Barlow

4009	PT	1	What is the Affect of Wing Design on the Speed a Model Plane Flies?
<b>Student(s)</b>			
		<b>Shihan Lin</b>	<b>Grade 8 Town Danbury</b>
		<b>Isabella Amenta</b>	<b>Grade 8 Town Danbury</b>
		<b>Ally Kay</b>	<b>Grade 8 Town Danbury</b>

**Danbury** Westside Middle School Academy Nancy Barlow

1020	LT	3	How Do Organisms Affect The Rate Off Food Decomposition?
<b>Student(s)</b>			
		<b>Reina Melendez</b>	<b>Grade 8 Town Danbury</b>
		<b>Sophia Cardenas</b>	<b>Grade 8 Town Danbury</b>

**Danbury** Westside Middle School Academy Nancy Barlow

4005	PT	1	Can You Detect Muons and Cosmic Rays Using Household Materials? How do Coronal Mass Ejections affect the number of muons and cosmic rays detected?
<b>Student(s)</b>			
		<b>Sean O'Marra</b>	<b>Grade 8 Town Danbury</b>
		<b>Alius Santiago-Stra</b>	<b>Grade 8 Town Danbury</b>

**Danbury** Westside Middle School Academy Nancy Barlow

1027	LT	2	Keeping It Cool & Damp
<b>Student(s)</b>			
		<b>Madison Rowe</b>	<b>Grade 7 Town Danbury</b>
		<b>Sophia Fernandes</b>	<b>Grade 7 Town Danbury</b>
		<b>Makayla Roxo</b>	<b>Grade 7 Town Danbury</b>

**Danbury** Westside Middle School Academy Nancy Barlow

4013	PT	2	The Effect of Electrolyte Concentration on the Voltage Produced by a Baghdad Battery
<b>Student(s)</b>			
		<b>Logan Schneider</b>	<b>Grade 8 Town Danbury</b>
		<b>Daniel Sposato</b>	<b>Grade 8 Town Danbury</b>

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**Danbury** Westside Middle School Academy Nancy Barlow

4017 PT 1 The Effect of Phone Case Materials on EMF Radiation from an iPhone Under Various Scenarios.

**Student(s)** **Gowtham Vallinayagam** **Grade 8** **Town** Danbury  
**Edward Sola** **Grade 8** **Town** Danbury  
**Rafael Barreto** **Grade 8** **Town** Danbury

**Danbury** Westside Middle School Academy Nancy Barlow

1013 LT 1 How can we use phytoremediation to extract different heavy metals out of soil?

**Student(s)** **Rhea Yadav** **Grade 8** **Town** Danbury  
**Aanya Popuri** **Grade 8** **Town** Danbury

**Danbury** Wooster School Parvin Taraz

3106 LS 2 A Multiscale Wavelet Transform Approach to Spatial Gene Expression in Breast Cancer

**Student(s)** **Gabriel Mayorga** **Grade 9** **Town** Danbury

**Darien** Darien High School Christine Leventhal

6043 PS 3 Evaluating Fluorine-to-Hydrogen Substitution in PFOS to Predict Safer Variants

**Student(s)** **Ananyasri Baranidharan** **Grade 11** **Town** Darien

**Darien** Darien High School David Lewis

3087 LS 2 Analysis of Approval-Based Committee Voting Methods using Real-World Ballot Data

**Student(s)** **Ian Bozzuto** **Grade 12** **Town** Darien

**Darien** Darien High School Guy Pratt

3200 LS 3 The effects of psychiatric service dogs on veterans with PTSD and co-occurring mental health disorders: A Meta-Analysis

**Student(s)** **Anastasia Buchesky** **Grade 12** **Town** Darien

**Darien** Darien High School David Lewis

6085 PS 2 Functionalizing DNA Nanotechnology: Optimizing the Impact of Buffer Conditions on Chemical Ligation

**Student(s)** **Claire Chan** **Grade 12** **Town** Darien

**Darien** Darien High School Guy Pratt

3032 LS 2 The CpG Overlap between Alzheimer's and Bipolar Disorder in the Cerebellum of Homo sapiens

**Student(s)** **Avery Hanson** **Grade 11** **Town** Darien

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**Darien** Darien High School Ayman Reffai

3169 LS 2 Explanatory machine learning modeling of a seven-molecular marker panel for immune checkpoint inhibition response per RECIST v1.1 in metastatic urothelial carcinoma

**Student(s) Matthew Li** **Grade 12** **Town** Darien

**Darien** Darien High School Guy Pratt

3195 LS 3 Effect of Access to Healthcare on Stage at Diagnosis and Treatment Outcomes for Carcinoma Skin Cancer

**Student(s) Kate Massey** **Grade 12** **Town** Darien

**Darien** Darien High School Guy Pratt

3045 LS 2 The Effectiveness of Physical Therapy Camp Interventions on Motor Function in Children with Cerebral Palsy

**Student(s) Ava Mohr** **Grade 12** **Town** Darien

**Darien** Darien High School David Lewis

6091 PS 3 Post-Robbing Behavioral Shifts in Native and Invasive Bees

**Student(s) Stella Nehro** **Grade 12** **Town** Darien

**Darien** Darien High School Guy Pratt

3049 LS 2 Association Between Short-Term Sleep Deprivation and Cognitive Performance: Inhibitory Control, Problem Solving, Working Memory, and Divergent Thinking

**Student(s) Taylor Platt** **Grade 12** **Town** Darien, CT

**Darien** Darien High School David Lewis

3128 LS 2 Analyzing the Impact of Weight Cutting upon Head Trauma Recieved in Mixed Martial Arts Bouts

**Student(s) Flynn Sullivan** **Grade 12** **Town** Darien

**East Hartford** Connecticut IB Academy Francis Ferrall

6008 PS 3 A Graphene Oxide-Enhanced Biochar System for PFAS Filtration and Mineralization

**Student(s) Kwabena Addai-Boateng** **Grade 9** **Town** East Hartford

**East Lyme** East Lyme High School Cecilia Prytko

3182 LS 2 Baby Connect: A haptic solution for deaf parents

**Student(s) Sashrika Das** **Grade 10** **Town** East Lyme

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**East Lyme** East Lyme High School Jian Li

3006 LS 1 Multimodal Deep Learning for BI-RADS Classification Prediction Using Breast Ultrasound and Patient Clinical Data

**Student(s)** Danlu Li **Grade** 10 **Town** East Lyme

**East Lyme** East Lyme Middle School Jung Hyun Kim

2516 L8 3 Predicting Erosive Potential: Comparing Acid Type and Titratable Acidity in Common Beverages

**Student(s)** Ayden Kim **Grade** 8 **Town** East Lyme

**Ellington** Ellington High School James Manger

6110 PS 3 Development of Versatile Metal Casting Molds for Low Melting Temperature Metals Via the Use of Compliant Mechanisms

**Student(s)** Thomas Gerlach **Grade** 11 **Town** Ellington

**Fairfield** Fairfield Warde Ryan Gleason

3523 LST 2 The effect of rising sea levels on the germination and survival of Lathyrus Japonicus (beach pea)

**Student(s)** Calista Gleason **Grade** 11 **Town** Fairfield

Emma Speicher **Grade** 11 **Town** Fairfield

**Farmington** Farmington High School Alexandra Raymunt

6525 PST 2 AI Driven Tax Calculator that calculates taxes END to END

**Student(s)** Aman Arun **Grade** 10 **Town** Farmington

Arush Ghosh **Grade** 10 **Town** Farmington

**Farmington** Farmington High School Alexandra Raymunt

6535 PST 1 Quantifying Caffeine Content in Commercially Labeled Caffeinated versus Decaffeinated Products

**Student(s)** Pranit Bagchi **Grade** 11 **Town** Farmington

Liora Dorsett **Grade** 11 **Town** Farmington

**Farmington** Farmington High School Alexandra Raymunt

3069 LS 1 Optimizing Bromelain and Papain Protease Formulations to Preserve Catalytic Activity Under Simulated Human Gastrointestinal Stress

**Student(s)** Rajanya Bishi **Grade** 10 **Town** Farmington

**Farmington** Farmington High School Alexandra Raymunt

6037 PS 3 SAVI: A Self-Autonomous Vehicle Intelligence Framework for Future Adaptive Learning in Autonomous Vehicles

**Student(s)** Yash Chandrasekaran **Grade** 9 **Town** Unionville

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**Farmington** Farmington High School Alexandra Raymunt

6505	PST	2	Saving Artist's Money : Using a vacuum pump to recycle contaminated Turpenoid
<b>Student(s)</b>			
		<b>Sophia Jiang</b>	<b>Grade 11 Town Farmington</b>
		<b>Yiquan Li-Zhou</b>	<b>Grade 11 Town Farmington</b>

**Farmington** Farmington High School Alexandra Raymunt

3055	LS	2	XAI-SHAP for Personalized Eczema Risk: Quantifying Feature Importance of Hyper-Local Environmental Pollutants
<b>Student(s)</b>			
		<b>Samanyu Kasinadhuni</b>	<b>Grade 10 Town Farmington</b>

**Farmington** Farmington High School Alexandra Raymunt

6520	PST	1	Utilizing Banana Peels to Depollute Water
<b>Student(s)</b>			
		<b>Aniket Menon</b>	<b>Grade 10 Town Unionville</b>
		<b>Andrew Nguyen</b>	<b>Grade 10 Town Farmington</b>
		<b>Daniel Marimekala</b>	<b>Grade 10 Town Farmington</b>

**Farmington** Farmington High School Alexandra Raymunt

3501	LST	2	Predicting Peak Cognitive Performance in Teens Using Chronotype and Machine Learning
<b>Student(s)</b>			
		<b>Arjun Mishra</b>	<b>Grade 10 Town Farmington</b>
		<b>Steven Sadlowski</b>	<b>Grade 10 Town Unionville</b>

**Farmington** Farmington High School Alexandra Raymunt

6515	PST	2	Evaluating Biodegradable Polymers for Aerospace Applications: Mechanical, Thermal, and Environmental Performance
<b>Student(s)</b>			
		<b>Sudeep Nelakudity</b>	<b>Grade 10 Town Farmington</b>
		<b>Sankarsh Maddala</b>	<b>Grade 10 Town Farmington</b>

**Farmington** Farmington High School Alexandra Raymunt

3157	LS	3	The Key to the Door of Studying
<b>Student(s)</b>			
		<b>Krish Rajkumar</b>	<b>Grade 9 Town Unionville</b>

**Farmington** Farmington High School Alexandra Raymunt

3188	LS	1	Characterizing Direct and Immune-Mediated Anti-Neoplastic Effects of Acute Exercise-Conditioned Serum on High-Grade Serous Carcinoma
<b>Student(s)</b>			
		<b>Nithin Solomon</b>	<b>Grade 12 Town Unionville</b>

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**Farmington** Farmington High School Alexandra Raymunt

3527 LST 2 Development and Evaluation of an Offline Medical Question-Answering System Using Local Large-Language-Model Inference

**Student(s)** **Monish Chowdry Thalapaneni** **Grade** 11 **Town** Farmington  
**Ashrava Tiwari** **Grade** 11 **Town** Farmington  
**Shreysht Rajesh** **Grade** 11 **Town** Farmington

**Farmington** Miss Porter's School Christine Scanlon

3138 LS 3 How Cooking Affects Antioxidant Levels in Cauliflower and Their Role in Cancer Prevention

**Student(s)** **Olivia Cheon** **Grade** 11 **Town** Seoul

**Farmington** Miss Porter's School Christine Scanlon

6071 PS 2 Comparative Fabrication and Mechanical Evaluation of Mycelium-Based Leather Grown on Sawdust Substrates

**Student(s)** **Ejin Chung** **Grade** 10 **Town** Gangnam-gu

**Farmington** Miss Porter's School Christine Scanlon

6082 PS 2 Decoding Dark Matter: What Determines Its Share?

**Student(s)** **Claire Lee** **Grade** 11 **Town** Farmington

**Farmington** Miss Porter's School Christine Scanlon

3091 LS 2 Targeting Pulmonary Fibrosis: Macrophage-Specific Lung-Targeted Lipid Nanoparticles for Gas6 siRNA Delivery

**Student(s)** **Leyi Lin** **Grade** 10 **Town** Shanghai

**Glastonbury** Glastonbury High School Stephen Falcigno

6079 PS 1 OPTIMIZATION FEASIBILITY ANALYSIS OF COMPLIANT MECHANISM REPLACEMENTS OF HYDRAULICS IN PENDULUM TUNED MASS DAMPERS

**Student(s)** **Diego Aguilar** **Grade** 12 **Town** South Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

3052 LS 2 SAFETY ASSESSMENT OF RADIOISOTOPE LOADED MESOPOROUS SILICA NANOPARTICLES AND ITS TRANSLATIONAL IMPLICATION

**Student(s)** **Catherine Brown** **Grade** 11 **Town** glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

3027 LS 2 Investigating How APC4 and Shtd Gene Knockdown and Temperature Affect Sperm Structure in Drosophila Melanogaster.

**Student(s)** **Shriya Chennavajhula** **Grade** 11 **Town** Glastonbury

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**Glastonbury** Glastonbury High School Stephen Falcigno

3035 LS 2 DISCOVERING DIRECT PROBING REAGENTS FOR MODIFYING DNA STRUCTURE WITH MASS SPECTROMETRY

**Student(s)** Olivia Chi **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

6042 PS 2 Quantifying Heat Accumulation in Power Electronics via Numerical Modeling

**Student(s)** Owen Collette **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Yuri Gloumakov

6100 PS 2 Predicting human intention with tactile sensing in human-robot collaboration for moving boxes

**Student(s)** Shrestha Kar **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

3011 LS 2 Identifying Target for Treatment of Neuropsychiatric Illness Through Investigating the Morphology of Low-Leak C-Subunit Mice Mitochondria

**Student(s)** Ananya Lingamallu **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

6035 PS 1 Green Cellulose Extraction From Autumn Leaves For Biodegradable Packaging Films

**Student(s)** Ioana Popescu **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

6051 PS 2 Designing and Manufacturing a Wingshape Optimized for High-Endurance Mars Flight

**Student(s)** Taraksh Singh **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

6066 PS 3 Predicting Motion Outcomes in Civil Litigation Cases

**Student(s)** Afraz Sohail **Grade** 12 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

3161 LS 3 Experimental Validation of Computational Tools for Nanobody Affinity Maturation

**Student(s)** Anya Srivastava **Grade** 11 **Town** Glastonbury

**Glastonbury** Glastonbury High School Stephen Falcigno

3062 LS 2 A Usability Evaluation of the LookUpTrials Mobile Application to Improve Oncology Clinical Trial Participation

**Student(s)** Aanshi Thumar **Grade** 11 **Town** Glastonbury

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<b>Greenwich</b>	Brunswick School	Dana Montanez	3502	LST	2	Comparing Photo Complexes of Spinach and Cyanobacteria in Biophotovoltaic Devices
		<b>Student(s)</b>				<b>Stanford Apple</b> <b>Grade</b> 10 <b>Town</b> Greenwich
						<b>Colt Inman</b> <b>Grade</b> 10 <b>Town</b> New Canaan
<b>Greenwich</b>	Brunswick School	Dana Montañez	3525	LST	2	Linking Bacterial Contamination in Public Water Sources to Daphnia Behavior and Health
		<b>Student(s)</b>				<b>Owen Bartoszek</b> <b>Grade</b> 11 <b>Town</b> Greenwich
						<b>Aidan Williams</b> <b>Grade</b> 11 <b>Town</b> Greenwich
<b>Greenwich</b>	Brunswick School	Dana Montanez	3536	LST	2	Biochar as a Bioremediation Method to Control Microplastic Effects on Agricultural Crops
		<b>Student(s)</b>				<b>Giancarlo Cuesta</b> <b>Grade</b> 10 <b>Town</b> Stamford
						<b>Quinn Cunningham</b> <b>Grade</b> 10 <b>Town</b> Greenwich
<b>Greenwich</b>	Brunswick School	Dana Montanez	6504	PST	1	Teaching Artificial Intelligence to Detect Focal Seizures Accurately Using a Camera System.
		<b>Student(s)</b>				<b>Jude Evans</b> <b>Grade</b> 10 <b>Town</b> Greenwich
						<b>Collin McCreath</b> <b>Grade</b> 10 <b>Town</b> Ryebrook
<b>Greenwich</b>	Brunswick School	Dana Montanez	6047	PS	3	Applying Causal Inference Methodologies to a Large-scale Publicly Available Dataset to Assess Causality Between Nutrient Deficiencies and ADHD Diagnoses
		<b>Student(s)</b>				<b>Sohan Javeri</b> <b>Grade</b> 10 <b>Town</b> Greenwich
<b>Greenwich</b>	Brunswick School	Dana Montanez	3514	LST	2	A comparative analysis of Equine Nutritive Supplements utilizing invitro gas production as a proxy for in vitro breakdown and absorption
		<b>Student(s)</b>				<b>Reed Keller</b> <b>Grade</b> 10 <b>Town</b> Greenwich
						<b>Bear Sickles</b> <b>Grade</b> 10 <b>Town</b> Greenwich
<b>Greenwich</b>	Brunswick School	Dana Montanez	3044	LS	3	Using Stochastic Modeling Techniques to Determine the Impact of Removal of the Measles Vaccine Mandate in Florida
		<b>Student(s)</b>				<b>Arjun Leih</b> <b>Grade</b> 10 <b>Town</b> Greenwich

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Greenwich	Brunswick School	Dana Montanez	3074	LS	3	Determining the Effects of Oleic Acid on Aspergillus oryzae $\alpha$ -Amylase Enzyme Activity
			<b>Student(s)</b>		<b>Shepherd McGovern</b>	<b>Grade 11 Town Greenwich</b>
Greenwich	Brunswick School	Dana Montanez	3530	LST	1	An investigation of Methylene Blue's Neuroprotective ability to Inhibit Excess Glutamate in aquatic Invertebrates.
			<b>Student(s)</b>		<b>Jayden Montanez</b>	<b>Grade 11 Town Greenwich</b>
					<b>Callum Holl</b>	<b>Grade 11 Town Old Greenwich</b>
Greenwich	Brunswick School	Dana Montanez	3507	LST	1	Antioxidant Delivery using Food Grade Nanoclay as a strategy to emulsify lipids and potentially reduce LDL oxidation.
			<b>Student(s)</b>		<b>Nathaniel O'Connor</b>	<b>Grade 11 Town Chappaqua</b>
					<b>Tyrus Ostrowski</b>	<b>Grade 11 Town Port Chester</b>
Greenwich	Brunswick School	Dana Montanez	3519	LST	1	Comparative Analysis of Biopolymer Hydrogels: an Investigation of Degradability, Nitrogen Leaching, and Plant Growth.
			<b>Student(s)</b>		<b>Chris Pedlow</b>	<b>Grade 11 Town Cos Cob</b>
					<b>Gabriel Levy</b>	<b>Grade 11 Town Greenwich</b>
Greenwich	Brunswick School	Dana Montanez	3177	LS	1	Preventing Zoonotic Parasitic Growth in Freshwater Aquaculture Using Aerogel Praziquantel Feed Additives
			<b>Student(s)</b>		<b>Sawyer Sacks</b>	<b>Grade 11 Town Greenwich</b>
Greenwich	Brunswick School	Dana Montanez	6514	PST	2	Enhancing Photostability of Aquazol with the Addition of HALS and UVAs
			<b>Student(s)</b>		<b>Harry Saunders</b>	<b>Grade 11 Town greenwich</b>
					<b>Peter Saunders</b>	<b>Grade 11 Town Greenwich</b>
Greenwich	Brunswick School	Peter Adams	3143	LS	2	Fostering Bioluminescence In Physcomitrium Patens Embryos Using Plasmid Transformation
			<b>Student(s)</b>		<b>Thomas Walsh</b>	<b>Grade 10 Town Harrison</b>

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**Greenwich** Brunswick School Dana Montanez

6039 PS 1 Comparative Study of Magnetohydrodynamic Propulsion Designs for Marine Applications

**Student(s) Jack Wendell**

**Grade 11 Town Greenwich**

**Greenwich** Central Middle School Marina Pinkhasik

5507 P8 2 Evaluating Dissolved CO<sub>2</sub> and Alkalinity in Coastal Waters

**Student(s) Kearnon Henske**

**Grade 8 Town Cos Cob**

**Greenwich** Central Middle School Andrew Bramante

2503 L8 1 In situ, Natural Degradation of Cyanotoxins in Water by *L. acidiphilus*, with Concurrent Stimulation of the Aquatic Ecosystem

**Student(s) Clarissa Maldonado**

**Grade 8 Town Greenwich**

**Greenwich** Central Middle School Andrew Bramante

2508 L8 1 Investigating the Inclusion of Hair Extracted Keratin Nanostructures for Increased Strength and Flexibility for the Construction of an Artificial Anterior Cruciate Ligament

**Student(s) Juliette Prezioso**

**Grade 8 Town Greenwich**

**Greenwich** Central Middle School Andrew Bramante

5502 P8 2 Repurposing Carbon Combustion Residuals from a Landfill Waste to a Beneficial Soil Additive

**Student(s) Morgan Schwartzstein**

**Grade 8 Town Greenwich**

**Greenwich** Eastern Middle School Andrew Bramante

2517 L8 1 A Web-Based Detection Tool for Medical Conditions Effecting the Eye: Integrating Multiple Trained CNNs for Accessible Smartphone Screening

**Student(s) Ares Bandedo-Cambra**

**Grade 8 Town Old Greenwich**

**Greenwich** Eastern Middle School Andrew Bramante

5515 P8 3 Computer Simulation for School Traffic Optimization

**Student(s) Ivyn Chen**

**Grade 8 Town Greenwich**

**Greenwich** Eastern Middle School Andrew Bramante

5501 P8 1 Fabrication of a UV-A versus UV-B Dual-Wavelength, Wearable Patch

**Student(s) Julia Gitelman**

**Grade 8 Town Old Greenwich**

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<b>Greenwich</b>	Eastern Middle School	Andrew Bramante	5506	P8	1	OASIS: A Solar-Powered Off-Grid System for Harvesting Water from Subsurface Sand Moisture to Support Desert Vegetation Recovery	<b>Student(s)</b> Jiahao Luo	<b>Grade</b> 8	<b>Town</b> Greenwich
<b>Greenwich</b>	Eastern Middle School	Andrew Bramante	2502	L8	1	Can Dietary Anti-oxidant Pre-treatment Control the Hyperphosphorylation of Tau Protein,	<b>Student(s)</b> Neil Mikkilineni	<b>Grade</b> 8	<b>Town</b> Greenwich
<b>Greenwich</b>	Eastern Middle School	Andrew Bramante	2509	L8	1	Machine Learning-Based Analysis of Smartphone Behavioral Data for Detection of Depression in High School and College Students	<b>Student(s)</b> Srihari Mysore	<b>Grade</b> 8	<b>Town</b> Cos Cob
<b>Greenwich</b>	Greenwich Academy	Deana Semenza	2512	L8	2	Glutathione as a neuroprotectant against glucose induced dopaminergic degeneration in Caenorhabditis elegans	<b>Student(s)</b> Addison Garner	<b>Grade</b> 8	<b>Town</b> Greenwich
<b>Greenwich</b>	Greenwich Country Day School	Nathan Haag	3093	LS	2	The Effect of Different Concentrations of Ampicillin vs. Tea Tree Oil on Bacterial Growth	<b>Student(s)</b> Bianca Amen	<b>Grade</b> 12	<b>Town</b> Greenwich
<b>Greenwich</b>	Greenwich Country Day School	Nathan Haag	3099	LS	2	Viability of Freshwater Mussels as a Water-Management Tool in America	<b>Student(s)</b> Cate Auerswald	<b>Grade</b> 12	<b>Town</b> Cos Cob
<b>Greenwich</b>	Greenwich Country Day School	Nathan Haag	6049	PS	3	Evaluating YOLO-Based Neural Networks for Automated Drone Interception on Resource-Constrained Hardware	<b>Student(s)</b> Zachry Bostock	<b>Grade</b> 12	<b>Town</b> Greenwich
<b>Greenwich</b>	Greenwich Country Day School	Nathan Haag	3005	LS	3	Fruits: Can you remember better with or without them?	<b>Student(s)</b> Iyla Brown	<b>Grade</b> 12	<b>Town</b> Norwalk

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**Greenwich** Greenwich Country Day School Nathan Haag

3009 LS 2 Seeing Red: Examining Fixed Action Patterns and Vision in the Three Spined Stickleback Fish, *Gasterosteus aculeatus*

**Student(s)** Caroline Cabrera **Grade** 12 **Town** Old Greenwich

**Greenwich** Greenwich Country Day School Nathan Haag

6063 PS 2 Convolutional Neural Network Classification of DaTSCAN Images for Parkinson's Disease with Interpretability Analysis

**Student(s)** Mary Chickering **Grade** 11 **Town** Greenwich

**Greenwich** Greenwich Country Day School Nathan Haag

3056 LS 2 The effect of various sugar compounds on memory

**Student(s)** Margaux Citrin **Grade** 12 **Town** Greenwich

**Greenwich** Greenwich Country Day School Nathan Haag

3118 LS 2 The effects of spray and lotion sunscreen on corals

**Student(s)** Charlotte Darwent **Grade** 12 **Town** Greenwich

**Greenwich** Greenwich Country Day School Nathan Haag

6020 PS 3 Effects of different drive-signal strategies on refresh rate and resolution of a Micro controller-driven CRT display.

**Student(s)** Oliver Davis **Grade** 11 **Town** Riverside

**Greenwich** Greenwich Country Day School Nathan Haag

3208 LS 2 From Learning to Read to Reading to Learn: How Picture Books Affect Retention and Comprehension Rates In Greenwich Country Day Fourth Graders

**Student(s)** Tessie Filicetti **Grade** 12 **Town** Cos Cob

**Greenwich** Greenwich Country Day School Nathan Haag

3001 LS 3 Oyster Filtration Efficiency on Different Common Sediments

**Student(s)** Liam Kennon **Grade** 12 **Town** Old Greenwich

**Greenwich** Greenwich Country Day School Nathan Haag

3121 LS 1 Engineering a Thermostable Enzyme for the Degradation of PET Through Manipulation of Disulfide Bonds

**Student(s)** Jackson Lieberman **Grade** 11 **Town** Greenwich

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**Greenwich** Greenwich Country Day School Nathan Haag  
3086 LS 2 Natural versus synthetic sugar and the short-term effects on cognitive functioning in high school students  
**Student(s)** Mary McDonnell **Grade** 12 **Town** Greenwich

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**Greenwich** Greenwich Country Day School Nathan Haag  
3105 LS 3 The Impact of Artificial Intelligence on Student Problem-Solving in Education  
**Student(s)** Taylor Messina **Grade** 12 **Town** Old Greenwich

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**Greenwich** Greenwich Country Day School Nathan Haag  
3023 LS 3 Distraction in Motion: Measuring Student Attention and Movement Response to Hallway Events  
**Student(s)** Evan Myers **Grade** 12 **Town** Stamford

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**Greenwich** Greenwich Country Day School Nathan Haag  
3148 LS 3 The Cognitive and Neurological Effects of Test-Induced Stress on the Adolescent Brain  
**Student(s)** Kaia Novack **Grade** 12 **Town** Stamford

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**Greenwich** Greenwich Country Day School Nathan Haag  
3134 LS 3 How Probiotics and Antibiotics Impact Fish Health: Effects of B-Glucan, Bacillus licheniformis, and Ampicillin on Blue Nile Tilapia Health  
**Student(s)** Nicholas Shefter **Grade** 11 **Town** Greenwich

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**Greenwich** Greenwich High School Andrew Bramante  
3094 LS 1 Determining how prevalence of single nucleotide polymorphisms alters HLA molecule's expression, and dictates Juvenile Idiopathic Arthritis' best treatments in specific populations  
**Student(s)** Tessa Addeo **Grade** 10 **Town** Greenwich

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**Greenwich** Greenwich High School Andrew Bramante  
3054 LS 2 Design of Zein-Trimethyl Chitosan Nanoparticles for the Non-Invasive Capture and Removal of  
**Student(s)** Isha Bharti **Grade** 10 **Town** Riverside

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**Greenwich** Greenwich High School Andrew Bramante  
3014 LS 2 CD44-Targeted Nanoparticle Co-Delivery of Simvastatin and Colchicine for Localized Treatment of Atherosclerotic Plaque Inflammation in Cardiovascular Disease  
**Student(s)** Arnav Bhatia **Grade** 11 **Town** Old Greenwich

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**Greenwich** Greenwich High School Andrew Bramante

3101 LS 2 Design of a Fluorescence-Based, Point-of-Care Diagnostic for Chronic Kidney Disease via Smartphone  
Detection of Salivary Creatinine-Porphyrin Conjugation

**Student(s)** Rajs Choudhary **Grade** 9 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

3066 LS 2 Microneedle-Contact Lens Co-Delivery of Azobenzene-Liposome Photoswitches and PEDF Neurotrophic  
Growth Factors to Repair the Effects of Macular Degeneration

**Student(s)** Hannah Dcruz **Grade** 11 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3104 LS 2 Colorimetric Sensory Detection of High Levels of Uric Acid and Endothelin-1 for Early Pulmonary  
Hypertension

**Student(s)** Amelia Foell **Grade** 11 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3028 LS 1 A Novel Dual-Targeting Therapeutic Patch for Non-Addictive, Non-Opioid Pain Suppression via Selective  
Transient Receptor Potential (TRP) Modulation

**Student(s)** Nishant Jain **Grade** 11 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

6060 PS 3 Bridging the Sim-to-Real Gap in Autonomous Drone Control via Curriculum-Scheduled Domain  
Randomization

**Student(s)** Henry Jin **Grade** 12 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3020 LS 1 Exploration of Neuroprotective potential of Moringa oleifera against Alzheimer's Disease and Drosophila  
Alzheimer's model validation

**Student(s)** Raymond Li **Grade** 11 **Town** riverside

**Greenwich** Greenwich High School Andrew Bramante

6019 PS 3 Harvesting Energy using Rain: Self-Healing Triboelectric Nanogenerators using CNT Composite Paper  
to Produce Meaningful Energy Production

**Student(s)** Richard Lu **Grade** 9 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3185 LS 1 Development of a Novel Nanoparticle Drug Delivery System using OLAH Targeting to Deliver Surfactant  
Protein and Prevent Neonatal Respiratory Distress Syndrome

**Student(s)** Tyler Malkin **Grade** 10 **Town** Greenwich

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**Greenwich** Greenwich High School Andrew Bramante

3083 LS 2 Development of an Adaptive Glucose-Responsive Oral Insulin Capsule: A Glucose-Oxidase Nanoparticle System for Intestinal Delivery in Type 1 Diabetes

**Student(s)** Ellie Mao **Grade** 9 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

3125 LS 1 Creation of PACA nanoparticles with a chitosan bilayer for effective oral delivery of a sildenafil PDE-5

**Student(s)** Neil Pendkar **Grade** 11 **Town** Old Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3059 LS 1 Discovery and Validation of Biopolymer Coatings for Nanoparticle-Loaded Silk Fibroin Sutures to Accelerate Tissue Regeneration with a Novel Multimodal Machine Learning Model

**Student(s)** Raghav Ramji **Grade** 10 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

3034 LS 2 Effects of Betanin as a Potential Therapeutic Agent in Parkinson's Disease using a Drosophila melanogaster Model.

**Student(s)** Tania Samant **Grade** 10 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3133 LS 1 Design of a Novel, Dual-Functioning, T-Cell-Engaging and Cytarabine-Based Nanotherapeutic for Acute Myeloid Leukemia Treatment

**Student(s)** Lula Wang **Grade** 11 **Town** Old Greenwich

**Greenwich** Greenwich High School Andrew Bramante

6097 PS 1 Process Optimization of Green Chemistry Pathway for Fabric-to-Fabric Recycling of Cotton

**Student(s)** Marley Wies **Grade** 12 **Town** Old Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3007 LS 1 Novel On Chip Screening Device for Ovarian Cancer with Algorithm from SVM-RFE on Serum miRNA Relative Expression Orderings

**Student(s)** Sophie Yu **Grade** 11 **Town** Riverside

**Greenwich** Sacred Heart Greenwich Joyce Reed

3203 LS 1 Hearing Loss's Correlation to Anxiety

**Student(s)** Haley Blackwell **Grade** 12 **Town** Rye

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**Greenwich** Sacred Heart Greenwich Joyce Reed

3513 LST 2 Using Hydromoths to Analyze Energy and Average Power Denisty in Long Island Sound and Bahamas

**Student(s)** Sutton Burchetta **Grade** 12 **Town** Port Chester  
Finley Newman **Grade** 12 **Town** Bedford Corners

**Greenwich** Sacred Heart Greenwich Mary Musolino

4007 PT 1 Evaluating Biodegradable Plastics Made from Avocados, Bananas, and Mangos

**Student(s)** Lauren Davidoff **Grade** 8 **Town** Pelham  
Grace Nicholas **Grade** 8 **Town** Armonk

**Greenwich** Sacred Heart Greenwich Mary Musolino

4010 PT 2 Testing Different Types of Algae To Reduce The Amount to Carbon Dioxide Emissions in the Atmosphere

**Student(s)** Riley Driscoll **Grade** 8 **Town** Rye  
Catherine Villar **Grade** 8 **Town** Darien  
Gabby Leveille **Grade** 8 **Town** Norwalk

**Greenwich** Sacred Heart Greenwich Mary Musolino

4014 PT 3 Purifying Water using Different Types of Graphene to Adsorb Harmful Pollutants

**Student(s)** Adriana Hassani-Sadi **Grade** 8 **Town** Old Greenwich  
Malaika Bazie **Grade** 8 **Town** White Plains

**Greenwich** Sacred Heart Greenwich Mary Musolino

4004 PT 2 Evaluating the Effectiveness of Supplementing Simulated Lunar Soil to Promote Crop Growth for Future Lunar Missions

**Student(s)** Lily Hohensee **Grade** 8 **Town** Stamford  
Lily Chase **Grade** 8 **Town** Rye  
Paige Yantz **Grade** 8 **Town** Greenwich

**Greenwich** Sacred Heart Greenwich Joyce Reed

3015 LS 1 Understanding The Effects of Music Usage On Caregivers of Alzheimer's Patients

**Student(s)** Grace Muccia **Grade** 12 **Town** Rye

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**Greenwich** Sacred Heart Greenwich Mary Musolino

4018 PT 2 Bio Fuel from Bamboo: Comparing the Yield of Ethanol Produced from Fermentation to the Bio Oil Produced from Solvent Extraction

**Student(s)** Riley Williams **Grade 8** **Town** Harrison  
Paula Tonkovich **Grade 8** **Town** New Canaan

**Greenwich** Western Middle School Andrew Bramante

5505 P8 1 Creating a Crab Trap That Uses Computer Vision To Detect and Capture the Invasive European Green Crab

**Student(s)** Laila McQueen **Grade 8** **Town** Greenwich

**Greenwich** Western Middle School Andrew Bramante

5526 P8 1 Comparative analysis of CO2 Reduction by Common Houseplants Using an Arduino-Based Environmental Monitoring System

**Student(s)** Victoria Shkabarnya **Grade 8** **Town** Greenwich, CT

**Hamden** Hamden Hall Country Day School Sarrah Gavin

3176 LS 3 Genetic diversity of aging and stress on breast cancer survival

**Student(s)** Anna Aslan **Grade 10** **Town** Hamden

**Hamden** Hamden Hall Country Day School Paulomi Aldo

2501 L8 2 The Effect of Soda Acidity, sugar level, and caffeine level on Daphnia Magna's Physiological Responses

**Student(s)** Jason Cabral **Grade 8** **Town** Wallingford

**Hamden** Hamden Hall Country Day School Gina DAngelo

3164 LS 3 Finding a way to qualitatively measure anxiety in adolescents with undetectable questionnaire

**Student(s)** Penelope Dwyer **Grade 11** **Town** Madison

**Hamden** Hamden Hall Country Day School Paulomi Aldo

5522 P8 3 Which shapes are the best for making the most aerodynamic car

**Student(s)** David Esposito **Grade 8** **Town** North Haven

**Hamden** Hamden Hall Country Day School Paulomi Aldo

2510 L8 2 The Effect of Fungi on Plastic Decomposition

**Student(s)** Emma Gammans **Grade 8** **Town** Woodbridge

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Hamden	Hamden Hall Country Day School	Paulomi Aldo	5517	P8	3	Parallel parking test	Gabriel Goldner	8	Bethany
Hamden	Hamden Hall Country Day School	Paulomi Aldo	5014	P7	1	What is the Lowest Ratio of Earth to Mars Soil in which Plants can be Grown?	George Hirsch	7	North Haven
Hamden	Hamden Hall Country Day School	Alice Loth	6095	PS	3	Innovated Emergency Vital Sign Detector	Rhea Hu	10	North Haven
Hamden	Hamden Hall Country Day School	Palumi Aldo	2520	L8	3	How different color of light affect potato growth	Zhiyang Lu	8	Hamden
Hamden	Hamden Hall Country Day School	Daniel Kemp	3207	LS	3	How environmental factors (temperature and UV light intensity) affect planarian's regeneration?	Tongran Luan	10	Hamden
Hamden	Hamden Hall Country Day School	Alice Loth	3170	LS	2	Development of an AI-algorithm-enabled mobile application and Near-Infrared (NIR) LED device to assist in venipuncture	Neev Makin	12	Hamden
Hamden	Hamden Hall Country Day School	Patrick Fitzgerald	3201	LS	2	Investigation of effect of PFOS on human hippocampal development and function by using human brain organoids	Daniel Park	11	milford
Hamden	Hamden Hall Country Day School	Paulomi Aldo	2505	L8	2	The Amount of Carbon Dioxide That Nannochloropsis, Chlorella, and Chlamydomonas can Photosynthesize	Gabi Pereira	8	Hamden

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<b>Hamden</b>	Hamden Hall Country Day School	Jacob Marchesi	6522	PST	1	Active Noise Cancellation Efficiencies of an Adaptive ANC System Using Destructive Interference to Reduce Harmful Low-frequency Urban Noise.	Student(s)	<b>Frida Ramirez Moreno</b>	Grade 11	Town Meriden
								<b>Barbara Ramirez Moreno</b>	Grade 12	Town Meriden
<b>Hamden</b>	Hamden Hall Country Day School	Patrick Fitzgerald	3136	LS	2	Mutating the Copper Binding Residues of CSRP2 to Asses Protein Function in Murine Primary Myoblasts	Student(s)	<b>Alessandra Sticca</b>	Grade 11	Town Milford
<b>Hamden</b>	Hamden Hall Country Day School	Patrick Fitzgerald	3144	LS	3	Therapeutic Potential of Neurokinin Receptor 1 Antagonist in Breast Cancer	Student(s)	<b>Sophia Vash</b>	Grade 12	Town Fairfield
<b>Hamden</b>	Hamden Hall Country Day School	Paulomi Aldo	2515	L8	2	Do Outside Environmental Factors Affect Your Ability To Memorize?	Student(s)	<b>Matthew Wallis</b>	Grade 8	Town Hamden
<b>Hamden</b>	Hamden Hall Country Day School	Daniel Kemp	6517	PST	3	How Does pH Affect the Corrosion Rate of Steel?	Student(s)	<b>Yuxiao Yang</b>	Grade 9	Town Guilford
								<b>Jiale Luo</b>	Grade 9	Town Derby
								<b>Xinyi Xiao</b>	Grade 9	Town Derby
<b>Hamden</b>	Hamden Hall Country Day School	Daniel Cuneo	6527	PST	3	Evaluating US Coinage -- From Lincoln Cent	Student(s)	<b>George Zhang</b>	Grade 10	Town Hamden
								<b>Alina Zhu</b>	Grade 9	Town Hamden
<b>Hamden</b>	Hamden Hall Country Day School	Daniel Kemp	3033	LS	3	The Hidden Danger of Overusing Antibiotics	Student(s)	<b>Bella Zhou</b>	Grade 9	Town Hamden
<b>Hamden</b>	Sacred Heart Academy	Elizabeth Christophy	6511	PST	2	The Effects of Smoke from Wildfires on the Temperature of Surrounding Areas	Student(s)	<b>Avery Cretella</b>	Grade 10	Town North Haven
								<b>Gianna Saldibar</b>	Grade 10	Town West Haven

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<b>Hamden</b>	Sacred Heart Academy	Elizabeth Christophy	6502	PST	1	Comparing $\alpha$ -Pinene Emissions from Local Wood's Smoke Through Polarimetric Data	<b>Student(s)</b>	<b>Persephone Delaney Delaney</b>	<b>Grade 10 Town Wallingford</b>
							<b>Cathleen Coughlin</b>	<b>Grade 10 Town North haven</b>	
<b>Hamden</b>	Sacred Heart Academy	Paula Napychank	3122	LS	3	Never Miss a Dose	<b>Student(s)</b>	<b>Beatrice Dikow</b>	<b>Grade 9 Town HAMDEN</b>
<b>Hamden</b>	Sacred Heart Academy	Elizabeth Christophy	6065	PS	3	How Polarizing Filters Can Affect Glare and Road Safety	<b>Student(s)</b>	<b>Braelyn Heusser</b>	<b>Grade 10 Town Meriden</b>
<b>Hamden</b>	Sacred Heart Academy	Paula Napychank	6119	PS	2	Medication Management	<b>Student(s)</b>	<b>Adriana LaMonico</b>	<b>Grade 9 Town Woodbridge</b>
<b>Hamden</b>	Sacred Heart Academy	Elizabeth Christophy	3512	LST	3	Modeling Aerosol-Albedo Interactions: The Effect of Incense Smoke Above a Simulated Ocean	<b>Student(s)</b>	<b>Audrey Medvecky</b>	<b>Grade 10 Town Guilford</b>
							<b>Emilia Prato</b>	<b>Grade 10 Town North Branford</b>	
<b>Hamden</b>	Sacred Heart Academy	Paula Napychank	3037	LS	2	Antioxidants From Food Sources Inhibit Bacterial Growth	<b>Student(s)</b>	<b>Caroline Rogers</b>	<b>Grade 9 Town Madison</b>
<b>Hartford</b>	Hartford Magnet Trinity College	Marcus Stafford	6114	PS	2	Analyzing PKB activity and ROS within Dictyostelium discoideum cells via capillary	<b>Student(s)</b>	<b>Naiya Newhouse</b>	<b>Grade 12 Town Ellington</b>
<b>Kent</b>	Kent School	Jesse Klingebiel	3088	LS	3	Ginger-Derived Exosomes Inhibit Microbial Contamination in Aqueous Environment	<b>Student(s)</b>	<b>Leni Fan</b>	<b>Grade 10 Town Lexington</b>

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**Kent** Kent School Jesse Klingebiel

6120 PS 2 CardVis: Intelligent Automated Surface Defect Inspection System for Playing Cards

**Student(s) Chloe Feng** **Grade 10** **Town Las Vegas**

**Kent** Kent School Michael Green

3058 LS 3 MelodyMemo: A Novel Emotion-Aware Memory-Music Modeling and Recommendation System for Older Adults

**Student(s) Newton Niu** **Grade 11** **Town Stamford**

**Kent** Kent School Jesse Klingebiel

6092 PS 2 Modular Development of a Pneumatic Lumbar Exoskeleton for Assisting Stoop Lifting

**Student(s) Yu Tung Shan** **Grade 10** **Town Kent**

**Kent** Kent School Claudia Cea

3067 LS 3 Flexible Organic Transistor-Based Devices for Neural Recording in the Gut

**Student(s) Emma Sun** **Grade 11** **Town Hamilton**

**Kent** Kent School Jesse Klingebiel

6080 PS 3 Dog Nose Print Recognition Method and System

**Student(s) Yiduan Wang** **Grade 10** **Town Kent**

**Kent** Kent School Jesse Klingebiel

6098 PS 2 Assessment of Walking Ability in Parkinson's Patients Using Three-Dimensional Plantar Pressure Sensors

**Student(s) Tianrui Zhang** **Grade 11** **Town Kent**

**Manchester** Manchester High School Stefanie Sebastiao-Kirby

3159 LS 2 The Impact of Presentation Styles on Engagement in High School Math Classes

**Student(s) Shaelan Gara Grady** **Grade 12** **Town Manchester**

**Manchester** Manchester High School Wendy Turek

3524 LST 2 Investigating Genetic Correlations Between Down Syndrome and Congenital Heart Defects Through Biostatistical Analysis to Develop a Predictive Model

**Student(s) Grace Golas** **Grade 12** **Town Manchester**

**Aine Corbett-Cousins** **Grade 12** **Town Manchester**

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**Manchester** Manchester High School Stefaine Sebastiao-kirby

3112 LS 1 Investigation of Reptile UV bulb on vitamin D2 synthesis in pulverized oyster mushrooms : An analysis over 0, 1, 2, and 3 hour durations using Thin Layer Chromatography (TLC).

**Student(s)** Warda Iqbal **Grade** 12 **Town** Manchester

**Manchester** Manchester High School Wendy Turek-Hernandez

3168 LS 2 The effects of micropastics on plant growth.

**Student(s)** Malala Naeem **Grade** 12 **Town** manchester

**Manchester** Saint James School Brigid Utz

5004 P7 3 The Effect of the Temperature of the Environment on the Ice and Temperature of Water After 24 Hours

**Student(s)** Blake Chambers **Grade** 7 **Town** Manchester

**Manchester** Saint James School Brigid Utz

5015 P7 2 The Effect of the Different Type of Baseball Bats on the Exit Velocity of the Baseball

**Student(s)** Connor Martin **Grade** 7 **Town** Manchester

**Manchester** Saint James School Brigid Utz

1025 LT 3 The Effect of Sound and Music Genres on Heart Rate (Measured in Beats per Minute)

**Student(s)** Therese Pfeiffer **Grade** 7 **Town** Tolland  
Morgan Gaidos **Grade** 7 **Town** Glastonbury

**Mansfield** Edwin O. Smith High School Cheryl Granger

3528 LST 1 Optimizing Jurkat Cell Cryopreservation Formulation for Safer T-Cell Therapy

**Student(s)** Alice Han **Grade** 11 **Town** Storrs  
Bibhuti Marasini **Grade** 11 **Town** Storrs

**Mansfield** Edwin O. Smith High School Cheryl Granger

3211 LS 2 Researching the Effects Of Different Concentrations of Formaldehyde on the Presence of Different Species of Bacteria in Soil

**Student(s)** Avery Hancock-Braun **Grade** 10 **Town** Storrs

**Meriden** H. C. Wilcox Technical High School Jeffrey Daddona

6518 PST 3 Using storm water run off to generate clean energy and water.

**Student(s)** Chase Andrews **Grade** 11 **Town** wallingford  
Riley Keyes **Grade** 11 **Town** wallingford  
Kyle Miranda **Grade** 11 **Town** Meriden

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**Montville** Saint Thomas More School Yajamana Ramu

3129 LS 3 Towards Climate-Smart Agriculture: Decoding PP2C Gene Functions for Abiotic Stress Resilience in Maize

**Student(s) Ami Rastogi**

**Grade 11 Town** Monroe Township

**New Haven** Engineering and Science University Magnet Alyssa Anderson

3092 LS 3 Investigating the Impact of Akkermansia Muciniphila on Neuropathology in Parkinson's Disease Mice

**Student(s) Titiladeoluwa Adeniran**

**Grade 11 Town** Seymour

**New Haven** Engineering and Science University Magnet Alyssa Anderson

3038 LS 1 Implementation and Validation of a Novel Machine-Learning Framework for Classifying Fossil Invertebrates Using Quantitative Morphological Trait Matrices

**Student(s) Sahithi Aliminate**

**Grade 11 Town** Milford

**New Haven** Engineering and Science University Magnet Alyssa Anderson

5008 P7 1 BiteSight: Development of a Mobile Deep Learning Application for Bug Bite Identification

**Student(s) Cayden Joseph**

**Grade 7 Town** West Haven

**New Haven** Engineering and Science University Magnet Paula Matei-Grysiak

6007 PS 3 Real-Time Adaptive Support for Dementia: An Integrated Multimodal Device for Spatial and Auditory Guidance

**Student(s) Ethan Joseph**

**Grade 11 Town** West Haven

**New Haven** Engineering and Science University Magnet Alyssa Anderson

6530 PST 3 Gpu price to performance per game.

**Student(s) Maceo Regan**

**Grade 9 Town** Milford

**antonio roblero**

**Grade 9 Town** fair haven

**New Haven** Engineering and Science University Magnet Alyssa Anderson

3156 LS 1 Capturing Carbon Dioxide with Chemical Solutions of Varying Alkalinity

**Student(s) Anabelle Silverman**

**Grade 9 Town** New Haven

**New Haven** Engineering and Science University Magnet Alyssa Anderson

4011 PT 3 Which Material Erodes The Most

**Student(s) Jacob Werlin**

**Grade 7 Town** New haven

**Finnian Dooley**

**Grade 7 Town** New Haven

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New Haven	Hopkins School	Viktorii Kolesnyk	3097	LS	2	Understanding Uterus Wound Healing and Tissue Remodeling: The Role of Fibroblast Growth Factor 2	Derin Bahtiyar	11	New Haven
New Haven	Hopkins School	Phillip Stewart	6040	PS	2	Arduino-Based Active Stabilization System for Model Rockets Using IMU Feedback and Servo-Driven Fins	Aiden Gomez	10	Orange
New Haven	Hopkins School	Z Ping Lin	3078	LS	1	Investigating the Role of Rad52 Inhibition in HR Repair in Ovarian Cancer	Riya Rao	12	Woodbridge
New Haven	Hopkins School	Leilei Shinohara	5521	P8	2	Optical Fire Detection using Computer Vision	Maki Lawrence Shinohara	8	New Haven
New Haven	Hopkins School	Yi Wang	3025	LS	2	Nano-Enabled Defense: Using Sulfur Nanoparticles to Limit Cadmium in Soybeans	Luannie Wang	10	Guilford
New Haven	Hopkins School	Phillip Stewart	3021	LS	3	How does the expression or dysfunction of KCC2 protein relate to epilepsy and a potential treatment	Heli (Aurelia) Wen	11	Woodbridge
New Haven	Sound School	Charles Mulligan	3529	LST	2	Potential Impact of PET Leachate on Nutrient Uptake of Marine Microalgae	Violet Sibley Gabriella Belizaire	12 11	New Haven Hamden
New Haven	Wilbur Cross High School	John Lazzari	3140	LS	1	Studying Compositionality in Multitasking Artificial Neural Networks for Motor Control	Julian Theodore	12	New Haven

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**New Haven** Worthington Hooker School Douglas Jones

1030	LT	3	Natural Cleaners vs Chemical Cleaners
<b>Student(s)</b> Paulina Borowski			<b>Grade 8</b> <b>Town</b> New Haven
Camila Guerrero Diaz			<b>Grade 8</b> <b>Town</b> New Haven

**New Haven** Worthington Hooker School Douglas Jones

1009	LT	3	Does light wavelength affect plant growth?
<b>Student(s)</b> Ayra Tarabar			<b>Grade 8</b> <b>Town</b> New Haven
Kayla Pinkard			<b>Grade 8</b> <b>Town</b> new Haven

**New Milford** Canterbury School Woo Rin Lee

3061	LS	2	Eco-Friendly Floating Bio-Island for Simultaneous Removal of Heavy Metals from Polluted Water Using Aquatic Macrophytes
<b>Student(s)</b> Minhyo Tae			<b>Grade 11</b> <b>Town</b> Seoul, South Korea

**North Haven** Slate School Jennifer Staple-Clark

2514	L8	1	A Microbiology Study of Ancient and Modern Flours: Comparing Microbial and Chemical Changes in Leavening Systems
<b>Student(s)</b> Pierson Clark			<b>Grade 8</b> <b>Town</b> North Haven

**Norwich** Norwich Technical High School Kaitlin McKale

3526	LST	1	Using Loop-Mediated Isothermal Amplification (LAMP) for Hydrilla Verticillata Identification in New England Waters
<b>Student(s)</b> Jarelis Acevedo			<b>Grade 12</b> <b>Town</b> Norwich
Addison Hackett			<b>Grade 12</b> <b>Town</b> Willimantic

**Norwich** Norwich Technical High School Kaitlin McKale

3057	LS	3	Influence of microplastic size and density on the structure of microbial communities: Implications for soil health
<b>Student(s)</b> Nyashia Bostick			<b>Grade 11</b> <b>Town</b> Willimantic

**Norwich** Norwich Technical High School Kaitlin McKale

3010	LS	2	Blue Oyster Cult(ure): Using Pleurotus for Mycoremediation of Water Contaminants
<b>Student(s)</b> Debbie Calixto Mota			<b>Grade 11</b> <b>Town</b> Willimantic

**Norwich** Norwich Technical High School Kaitlin McKale

3004	LS	2	Effects of Environmental Conditions on Bone Degradation.
<b>Student(s)</b> Ruby Craig			<b>Grade 11</b> <b>Town</b> Moosup

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<b>Norwich</b>	Norwich Technical High School	Kaitlin McKale	3100	LS	2	Investigation of microbial pigments for use as an antimicrobial	Student(s) Kivannys Diaz Ruiz	Grade 11	Town moosup
<b>Norwich</b>	Norwich Technical High School	Kaitlyn McKale	3098	LS	2	what plants bees prefer to pollinate with	Student(s) Elijah Jackman	Grade 11	Town voluntown
<b>Norwich</b>	Norwich Technical High School	Kaitlin McKale	3022	LS	3	Gut content analysis of the invasive European Green Crab <i>Carnius maenas</i>	Student(s) Lily Kosma	Grade 11	Town Moosup
<b>Norwich</b>	Norwich Technical High School	Kaitlin Mckale	3196	LS	1	The Effects of Skin Care Products on the Face Microbiome	Student(s) Emma Stimson	Grade 11	Town Moosup
<b>Plainville</b>	Plainville High School	Michelle Bellinger	6005	PS	1	Improving Airplane Efficiency and Maximizing a Sustainable Angle of Attack Through Acoustic Streamlining	Student(s) Raman Kasabrukhou	Grade 10	Town Plainville
<b>Pomfret</b>	Pomfret School	Gwyneth Connell	3210	LS	2	Cortisol-Induced Epigenetic Changes in Skin Cells and the Potential of Plant-Derived Exosomes for Reversing Stress-Induced Skin Aging	Student(s) Euhyun Jahng	Grade 11	Town Seoul
<b>Pomfret</b>	Pomfret School	Annie O'Sullivan	6124	PS	2	Leg exoskeletons that can help people with leg disabilities walk	Student(s) Jiazhi Zhao	Grade 10	Town Pomfret
<b>Redding</b>	Joel Barlow High School	Katherine Nuzzo	3166	LS	2	Impact of Drought-Induced Stress on The Accumulation of Polysaccharide and Glucosinolate levels in <i>Raphanus sativus</i> Roots, and Their Possible Implications on the Gut Microbiome	Student(s) Victoria Abukhovich	Grade 11	Town Redding
<b>Redding</b>	Joel Barlow High School	Paul Testa	6054	PS	2	Adaptive Authentication Against DDoS Attacks: A Performance Analysis	Student(s) Christopher Alvarado	Grade 11	Town Easton

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<b>Redding</b>	Joel Barlow High School	Kathrine Nuzzo				
3189	LS	3	Pediatric school stress and biomarkers for respiratory health in teenagers			
<b>Student(s)</b>		<b>Sierra Iacovella</b>	<b>Grade</b>	<b>9</b>	<b>Town</b>	Easton
<b>Redding</b>	Joel Barlow High School	Katherine Nuzzo				
6045	PS	2	Novel Approach for Viewing Quantum Superposition			
<b>Student(s)</b>		<b>Randy Rivera</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Redding
<b>Ridgefield</b>	Ridgefield High School	Ryan Gleason				
3531	LST	2	The effect of temperature on Swamp Milkweed germination and growth rates,			
<b>Student(s)</b>		<b>Leighton Accinelli</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Ridgefield
		<b>Stella Accinelli</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Ridgefield
<b>Ridgefield</b>	Ridgefield High School	Ryan Gleason				
3041	LS	3	Testing Human Ability to Detect AI Generated Faces Across Trials			
<b>Student(s)</b>		<b>Erin Byrne</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Ridgefield
<b>Ridgefield</b>	Ridgefield High School	Patrick Hughes				
6523	PST	1	A Nuclear Magnetic Resonance Spectroscopy Study of Five Di-imine Molecules			
<b>Student(s)</b>		<b>Eva Figlar</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Ridgefield
		<b>Anahit Abernethy</b>	<b>Grade</b>	<b>11</b>	<b>Town</b>	Ridgefield
<b>Ridgefield</b>	Ridgefield High School	Ryan Gleason				
3141	LS	2	Prevalence of Pathogens in Asian Longhorn Ticks (Haemaphysalis Longicornis) in Bridgeport Connecticut			
<b>Student(s)</b>		<b>Sara Hill</b>	<b>Grade</b>	<b>12</b>	<b>Town</b>	Ridgefield
<b>Ridgefield</b>	Ridgefield High School	Ryan Gleason				
3030	LS	2	The Effects of Glucose on Traumatic Brain Injury Recovery in Drosophila Relevant to Chronic Traumatic Encephalopathy			
<b>Student(s)</b>		<b>William Knispel</b>	<b>Grade</b>	<b>11</b>	<b>Town</b>	Ridgefield
<b>Ridgefield</b>	Ridgefield High School	Adam Vigil				
3167	LS	2	Assessment of Accuracy in Predicting Human Clearance for Linear Monoclonal Antibodies from Animal Models			
<b>Student(s)</b>		<b>Hancheng Peng</b>	<b>Grade</b>	<b>11</b>	<b>Town</b>	Ridgefield

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**Rocky Hill** Rocky Hill High School Brian Graca

6090 PS 3 Evaluating Post-Pandemic Recoveries in Standardized Test Scores across Connecticut School Districts and their Explanatory Factors

**Student(s)** Akaansha Ganisshan **Grade** 11 **Town** Rocky Hill

**Rocky Hill** Rocky Hill High School Sharon Parker

3053 LS 1 The correlation of gut microbes with depression in patients with multiple sclerosis

**Student(s)** Tanisha Sahu **Grade** 11 **Town** Rocky Hill

**Rocky Hill** Rocky Hill High School Sharon Parker

3130 LS 2 Identifying Psychiatric Disorder Risk Genes: Computational Multi-Omic Analysis of Gene Expression and Chromatin Accessibility Comparing Developing vs. Adult Prefrontal Cortex

**Student(s)** Ashika Sharma **Grade** 11 **Town** Rocky Hill

**Salisbury** Indian Mountain School Marissa Teator

1014 LT 2 The Dividing Line of Language: A Computational Model and Cross-Cultural Analysis of How Linguistic Labels Reshape "Chaotic" Perception

**Student(s)** Kelly Chen **Grade** 7 **Town** Lakeville

Xinyue Zhang **Grade** 7 **Town** Lakeville

**Salisbury** The Hotchkiss School Jennifer Rinehart

3149 LS 2 A novel ferritin delivery system targeting glioblastoma

**Student(s)** Jerry Fan **Grade** 11 **Town** Watervliet

**Salisbury** The Hotchkiss School Jennifer Rinehart

3183 LS 1 Disrupting the Inflammatory–Fibrotic Circuit: Evaluating Galectin-3 Inhibition as a Novel Non-Hormonal Therapy for Adenomyosis

**Student(s)** Yunting Jin **Grade** 10 **Town** Lakeville

**Salisbury** The Hotchkiss School Jennifer Rinehart

3026 LS 2 Trends in Early-Onset Cancer and Associations With Obesity, Alcohol Use, Marijuana, and Nicotine Use in the United States

**Student(s)** Arya Samat **Grade** 9 **Town** Avon

**Salisbury** The Hotchkiss School Jennifer Rineharticus

3064 LS 2 Exploring potential biomarkers involved in oxidative stress and intercellular crosstalk in diabetic microvascular complications

**Student(s)** Xirong(Hermione) Wu **Grade** 11 **Town** Salisbury

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**Salisbury** The Hotchkiss School Jennifer Rinehart  
3175 LS 2 Salt Form Modification of Resveratrol: A Novel Approach for Creating an Effective Cardiovascular Drug  
Student(s) William Xie Grade 10 Town Lakeville

**Salisbury** The Hotchkiss School Jennifer Rinehart  
3162 LS 1 Iron Biofortification in Portulaca oleracea: A Comparative Analysis of Iron Accumulation and Bioavailability in Root, Stem, and Leaf Under Soil and Hydroponic Conditions.  
Student(s) Chuyao (Yaoyao) Yuan Grade 11 Town Lakeville

**Shelton** Shelton Intermediate School Rebecca Manzer  
1008 LT 2 What Is The Best Way To Preserve Strawberries?  
Student(s) Corinne Cortinhas Grade 8 Town Shelton  
Ellie Randall Grade 8 Town Shelton  
Jayce Micholovich Grade 8 Town Shelton

**Shelton** Shelton Intermediate School Rebecca Manzer  
1021 LT 3 What Is the Dirtiest Public Restroom?  
Student(s) Charlotte Goncalves Grade 7 Town Shelton  
Sienna Basile Grade 7 Town shelton

**Shelton** Shelton Intermediate School Rebecca Manzer  
1002 LT 1 Impact of Varying Wavelengths of Light and Controlled Environmental Conditions on the Degredation of Vitamin C Potency in Fruits  
Student(s) Aria O'Connor Grade 8 Town Shelton  
Anna Campbell Grade 8 Town Shelton

**Simsbury** Westminster School Mike Van Dolah  
6513 PST 1 Multi-Function Submersible for Microplastic Collection and Aquatic Environmental Analysis  
Student(s) Muqiao Zong Grade 10 Town Simsbury  
Andrew Ma Grade 11 Town Simsbury

**South Windsor** South WIndsor High School April Davis  
6508 PST 3 Green Light AI  
Student(s) Devdutt Bhatte Grade 10 Town South Windsor  
Jude Pohl Grade 10 Town South Windsor  
Srivashist Gaddam Grade 10 Town South Windsor

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<b>South Windsor</b>	South Windsor High School	Danel Eitel					
3209	LS	2	TRACK I-S: Predicting Future Lyme Disease Risk Zones in CT Counties through a Scratch-Based Simulation				
<b>Student(s)</b>		<b>Chiamaka Chidiadi</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	Danel Eitel					
6076	PS	2	Trash To Treasure				
<b>Student(s)</b>		<b>Kaitlyn Earley</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	Danel Eitel					
6526	PST	2	SHAP-Interpretable Random-Forest Analysis of Multimodal Brownfield Site Data for Cost-Aware, Community-Driven Bioremediator Recommendations				
<b>Student(s)</b>		<b>Gian Handa</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
		<b>Nevin Joseph</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	Danel Eitel					
6036	PS	2	Q.U.A.R.K.: A Quantitative Urban Anomaly Risk Kinetics Model for Forecasting Climate-Driven Human Displacement Using Multi-Factor Time-Series Analysis				
<b>Student(s)</b>		<b>Saisatvik Koppu</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	April Davis					
6516	PST	2	Developing Eco Friendly Sunscreen Formulations With Optimized Ingredient Concentrations to Reduce Zebrafish and Aquatic Ecosystem Toxicity				
<b>Student(s)</b>		<b>Akshara Labhe</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
		<b>Charvi Dixon Islur</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
		<b>Siva Nalamolu</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	Danel Eitel					
3095	LS	1	A Quantitative Evaluation of Microplastic Degradation Using Enzyme Kinetics and Binding Energy				
<b>Student(s)</b>		<b>Rachel Mathew</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	
<b>South Windsor</b>	South Windsor High School	Danel Eitel					
3193	LS	1	Salt-Eating BioTiles: A Sustainable Solution to Combat Soil Salinity Using Halobacterium				
<b>Student(s)</b>		<b>Prasheeta Mohanty</b>	<b>Grade</b>	10	<b>Town</b>	South Windsor	

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**South Windsor** South Windsor High School Danel Eitel  
6011 PS 2 From Fumes to Fertilizer: A Dual-Stage Catalytic System Converting Livestock Methane into Carbonate for Sustainable Crop Growth

**Student(s)** Aniron Pal **Grade** 10 **Town** South Windsor

**South Windsor** South Windsor High School Danel Eitel  
6533 PST 2 Project MASTERMIND: Mobilizing Actuarial Science To Extrapolate Risk Maps Identifying Natural Disasters

**Student(s)** Keshav Prem **Grade** 10 **Town** South Windsor

Henry Venne **Grade** 10 **Town** South Windsor

**South Windsor** South Windsor High School Danel Eitel  
3518 LST 3 Cyanopanel

**Student(s)** Diva Shajith **Grade** 10 **Town** South Windsor

Amariah Ysabelle Luci **Grade** 10 **Town** South Windsor

Sahasra Natti **Grade** 10 **Town** South Windsor

**South Windsor** South Windsor High School Minatchy Visvanathan  
6061 PS 2 DOTBot: Diffusion-Aligned Chain-of-Thought Bipedal Humanoid Robot for Interpretable Real-Time Autonomous Navigation, Hazard Mitigation, and Recovery in High-Risk Built Environments

**Student(s)** Karthik Srikumar **Grade** 11 **Town** South Windsor

**Southington** Southington High School Nicole Riccio  
3516 LST 3 Application of powdered magnetite as an absorbent for petroleum spill removal from seawater.

**Student(s)** Esra Agirman **Grade** 10 **Town** Southington

Vaibhav Reddy Nandi Reddy **Grade** 10 **Town** Southington

**Stamford** King School Victoria Schulman  
6088 PS 1 Real-Time Instance Segmentation for Curb and Path Detection in Assistive Wearables for Blind and Low-Vision Assistance

**Student(s)** Olivia Ajayi **Grade** 11 **Town** Stamford

**Stamford** King School Victoria Schulman  
6072 PS 2 Predicting Detectability of Transiting Exoplanets: A Python-based Signal-to-Noise Ratio Model

**Student(s)** Mia Jakubowsky **Grade** 11 **Town** Rye

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<b>Stamford</b>	King School	Victoria Schulman				
3114	LS	3	Potential Medications to Treat Concussion in D. melanogaster as a Model Organism			
<b>Student(s) Kleighton Kennedy</b>			<b>Grade 11</b>	<b>Town</b>	Greenwich	
<b>Stamford</b>	King School	Victoria Schulman				
3017	LS	2	Illuminating the Role of Lipid Metabolism Pathways in T-cell Exhaustion			
<b>Student(s) Madison Kennedy</b>			<b>Grade 11</b>	<b>Town</b>	Greenwich	
<b>Stamford</b>	King School	Victoria Schulman				
6014	PS	2	A Voice-Controlled Robotic Arm for Assisting Complex Surgical Tasks			
<b>Student(s) Dillon Maltese</b>			<b>Grade 12</b>	<b>Town</b>	Greenwich	
<b>Stamford</b>	King School	Victoria Schulman				
3146	LS	3	Effects of Dietary Sugars on Bone Mass and Mechanical Strength			
<b>Student(s) Max Marti</b>			<b>Grade 11</b>	<b>Town</b>	New Canaan	
<b>Stamford</b>	King School	Victoria Schulman				
3202	LS	2	Assessing the Effects of GLP-1 Receptor Agonists on Digestion in Drosophila Melanogaster			
<b>Student(s) Nicholas Marti</b>			<b>Grade 11</b>	<b>Town</b>	New Canaan	
<b>Stamford</b>	King School	Victoria Schulman				
3197	LS	1	CX3CR1+ Cell Type-Specific ERK Hyperactivation Promotes Inflammatory Remodeling			
<b>Student(s) Lilah Mehta</b>			<b>Grade 11</b>	<b>Town</b>	New Canaan	
<b>Stamford</b>	King School	Victoria Schulman				
3082	LS	2	Alarmin release by renal cell carcinoma cells undergoing hypoxia-induced cell death			
<b>Student(s) Mahnoor Nomani</b>			<b>Grade 11</b>	<b>Town</b>	Stamford	
<b>Stamford</b>	King School	Victoria Schulman				
6083	PS	2	A Sustainable Treatment For Heavy Metal Pollution: Adsorption and Desorption of Ni(II) Ions In Water Using DNA-Wrapped Carbon Nanotubes			
<b>Student(s) Bruno Reinhoefer Ribeiro</b>			<b>Grade 12</b>	<b>Town</b>	Riverside	
<b>Stamford</b>	King School	Victoria Schulman				
6038	PS	2	Design and Application of Gamified Health Tools: From Population-Level Habit Formation to Clinical Evaluation in Traumatic Brain Injury			
<b>Student(s) Vito Scutari</b>			<b>Grade 12</b>	<b>Town</b>	Norwalk	

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**Stamford** King School Victoria Schulman  
3108 LS 2 Assessing the Effects of Equine Grazing Muzzles on Upper Incisor Length and Dental Qualities in Ponies  
**Student(s) Marilyn Sommerville** **Grade 11** **Town** South Salem

**Stamford** King School Victoria Schulman  
3204 LS 3 Experimentation and Application of Nutrient Additives to Enhance Resilience of Coral Reefs Against Climate Change  
**Student(s) Lucia Vivanco** **Grade 12** **Town** Stamford

**Stamford** Laurel Springs School Vera Ulanovskaya  
6096 PS 2 Driven By Demand: A Mixed-Integer Linear Programming Framework to Optimize the Efficiency and Quality of Bus Services in Stamford, CT  
**Student(s) Victoria Makarov** **Grade 12** **Town** Stamford

**Stonington** St. Michael School Anna-Helene Grossomanides  
5518 P8 3 Investigating the effect of tire type on robot performance  
**Student(s) Tyler Baltrukonis** **Grade 8** **Town** Pawcatuck

**Stonington** St. Michael School Anna Grossomanides  
2007 L7 1 Sweet Science: How Sugars Fuel Yeast Vs. Humans  
**Student(s) Audrina Chapman Roberts** **Grade 7** **Town** westerly

**Stonington** St. Michael School Anna-Helene Grossomanides  
5016 P7 3 Potter Hill Problem  
**Student(s) Vito Gynther** **Grade 7** **Town** Westerly

**Stonington** St. Michael School Anna-Helene Grossomanides  
2507 L8 3 To Swim or Not To Swim  
**Student(s) Camille Thomas** **Grade 8** **Town** Gales Ferry

**Stratford** St. Mark School Patrick Fallon  
2008 L7 1 The Rust Race  
**Student(s) Arianna Chuco** **Grade 7** **Town** stratford

**Stratford** St. Mark School Andrea Borbor  
5512 P8 2 Crash! Testing Model Cars  
**Student(s) Stella Jass** **Grade 8** **Town** Trumbull

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<b>Suffield</b>	Suffield Academy	Heng Song	3152	LS	2	Engineered Probiotic OMs Overcome IBD Therapeutic Barriers via Dual-Gene Editing & ClyA-SOD Membrane Fusion	<b>Student(s)</b>	<b>Jingshu Wang</b>	<b>Grade</b> 10	<b>Town</b> Shanghai
<b>Suffield</b>	Suffield High School	Sam Harfenist	6102	PS	2	Evaluation of Environmental Parameters and Design Optimization for Kirigami-Inspired Parachutes	<b>Student(s)</b>	<b>Arnav Ukidwe</b>	<b>Grade</b> 11	<b>Town</b> Suffield
<b>Suffield</b>	Suffield High School	Sam Harfenist	6068	PS	2	Multivariate and Bayesian Regression Modeling of Stock Performance using Microeconomic, Macroeconomic, and Momentum based Predictors.	<b>Student(s)</b>	<b>Shaunak Ukidwe</b>	<b>Grade</b> 11	<b>Town</b> Suffield
<b>Trumbull</b>	Trumbull Agriscience & Biotechnology	Kevin Boken	6529	PST	3	Using pro-biotics in sports drinks to reduce inflammation	<b>Student(s)</b>	<b>Elianna Brocco</b>	<b>Grade</b> 11	<b>Town</b> Shelton
								<b>Karina Castro Conde</b>	<b>Grade</b> 11	<b>Town</b> Bridgeport
								<b>Yashila Suresh</b>	<b>Grade</b> 11	<b>Town</b> Shelton
<b>Trumbull</b>	Trumbull Agriscience & Biotechnology	Kevin Boken	6056	PS	3	Development of a Multi-Axis Adaptive Inertia Regulation Exoskeleton System: A Counter-Rotational Gyroframe for Stabilization and Energy Efficiency	<b>Student(s)</b>	<b>Johnathon Lin</b>	<b>Grade</b> 10	<b>Town</b> Bridgeport
<b>Trumbull</b>	Trumbull Agriscience & Biotechnology	Kevin Boken	3533	LST	3	The affect of acetaminophen on children during pregnancy and risk of neurodevelopmental disorders.	<b>Student(s)</b>	<b>Daniel Pereira</b>	<b>Grade</b> 11	<b>Town</b> Bridgeport
								<b>Selvin Lemus-Solano</b>	<b>Grade</b> 11	<b>Town</b> Bridgeport
<b>Trumbull</b>	Trumbull Agriscience & Biotechnology	Kevin Boken	3505	LST	2	Foods Containing Allicin Affect on Killing Resistant Bacteria	<b>Student(s)</b>	<b>Atiya Rogers</b>	<b>Grade</b> 11	<b>Town</b> Bridgeport
								<b>Melanie Vasquez</b>	<b>Grade</b> 11	<b>Town</b> Bridgeport

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**Trumbull** Trumbull Agriscience & Biotechnology Kevin Boken

3181	LS	3	Comparative analysis of the performance proficiency between CRISPR-Cas9 and CRISPR-Cas12a in crop and bacterium genome genetic modification
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**Student(s)** Autumn Settembre **Grade** 10 **Town** Trumbull

**Trumbull** Trumbull Agriscience & Biotechnology Kevin Boken

3532	LST	3	Analyzing The Decline of Sickle Cell Genes in Regions Where Malaria Has Disappeared
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**Student(s)** Keeley Tolido **Grade** 11 **Town** Stratford

Olivia Kish **Grade** 11 **Town** Shelton

Adriana Castillo **Grade** 11 **Town** Trumbull

**Trumbull** Trumbull Agriscience & Biotechnology Kevin Boken

3120	LS	1	Optimizing the Mechanical Strength of Mycelium-Based Composites (MBCs) Through Substrate Manipulation
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**Student(s)** Madeline Totten **Grade** 11 **Town** Trumbull

**Wallingford** Choate Rosemary Hall Talia Dell Angelo

6009	PS	2	Conics Determined By Triangle Centers In Ceva-Six Configurations
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**Student(s)** Benjamin Cha **Grade** 11 **Town** Tenafly

**Wallingford** Choate Rosemary Hall Yunfei Bai

6028	PS	3	Multi-degree-of-freedom Synchronous-driven Spinal Rehabilitation Exoskeleton for Post-injury and Postoperative Recovery
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**Student(s)** Grace Ju **Grade** 11 **Town** Wallingford

**Wallingford** Choate Rosemary Hall Jan Cook

3111	LS	1	Innovative Restoration of Coastal Marine Ecosystems: Phage-Based Disease Control and pH Modulation in Connecticut Waters
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**Student(s)** Taeyoung Kim **Grade** 10 **Town** Seattle

**Wallingford** Choate Rosemary Hall George Gu

6111	PS	1	NeuroMirror: An Intelligent EEG-Driven Mirror Therapy System Grounded in Hebbian Theory for Post-Stroke Upper-Limb Rehabilitation
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**Student(s)** Sabrina Liu **Grade** 10 **Town** Wallingford

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**Wallingford** Choate Rosemary Hall Talia Dell Angelo

6531 PST 2 Harvesting Water from Air: Optimization of a Novel Solar-Powered Atmospheric Water Generator

**Student(s) Hsiao Chian Tseng**

**Grade 11 Town Bellevue**

**Hiyab Mebrahtu**

**Grade 11 Town Haverford**

**Wallingford** Choate Rosemary Hall Jan Cook

6018 PS 3 AquaAcoustic AI: A Low-Cost Intelligent Device for Rapid Reagent-Free Water Quality Assessment via Acoustic Resonance

**Student(s) Neil Wang**

**Grade 11 Town North York**

**Washington** The Frederick Gunn School Morgen Fisher

3084 LS 2 Dose-Dependent Effects of Chitosan Nanoparticles on Human Fibroblast Proliferation and Skin Wound Closure

**Student(s) Eva Kwon**

**Grade 11 Town Washington**

**Washington** The Frederick Gunn School Morgen Fisher

3123 LS 1 Identify NK Cell Global Changes during Breast Cancer Development via Analyzing Single-cell Transcriptomes in Human Breast

**Student(s) Xuena Zhang**

**Grade 11 Town Lexington**

**Waterbury** ACES Chase Academy Anne Pember

5013 P7 2 Exploring Scent Movement and Diffusion

**Student(s) Ayanna Aybar**

**Grade 7 Town Waterbury**

**Waterbury** ACES Chase Academy Anne Pember

6004 PS 3 Live-All Purpose GPS Tracker using Arduino

**Student(s) Fernando Figueiredo**

**Grade 9 Town Naugatuck**

**Waterbury** ACES Chase Academy Anne Pember

5001 P7 2 Strength of Passwords Based on Character Combinations

**Student(s) Tessa Finch**

**Grade 7 Town Bethlehem**

**Waterbury** ACES Chase Academy Anne Pember

4008 PT 3 How Temperature Changes Influence Ocean Currents

**Student(s) Haley Galvin**

**Grade 7 Town Waterbury**

**Sheyla Martos Carchi**

**Grade 7 Town Waterbury**

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**Waterbury** ACES Chase Academy Anne pember  
3184 LS 3 Dominat salt marsh species, Spartina alterniflora and Geukensia demissa, being used to mesure the health of a marsh.

**Student(s)** Nina Garcia **Grade** 10 **Town** Waterbury

**Waterbury** ACES Chase Academy Rachel Murray  
1032 LT 2 Human Ability to Detect AI-Generated Images: A Comparative Photo Survey

**Student(s)** Charlotte Joyce **Grade** 7 **Town** Prospect  
Kamryn Torres **Grade** 7 **Town** Naugatuck

**Waterbury** ACES Chase Academy Anne Pember  
6078 PS 2 A Comparative Analysis of CPU Utilization in Bubble Sort and Merge Sort.

**Student(s)** Aarshman Khan **Grade** 9 **Town** Waterbury

**Waterbury** ACES Chase Academy Anne Pember  
1024 LT 2 From Food Waste to Water Bottles: Testing Avocado (Persea Americana) Skins as a Sustainable Material

**Student(s)** Emalyn Lemos **Grade** 7 **Town** Oakville  
Camila Ruiz-Ribeiro **Grade** 7 **Town** Waterbury

**Waterbury** ACES Chase Academy Anne Pember  
5018 P7 3 Breaking Down Rust with Everyday Liquids

**Student(s)** Tallulah Madore **Grade** 7 **Town** Meriden

**Waterbury** ACES Chase Academy Anne Pember  
1017 LT 2 Galleria Melonella Larvae as Plastic Eaters: Myth or Fact?

**Student(s)** Mason Mercado **Grade** 7 **Town** Waterbury  
Jason Deo **Grade** 7 **Town** Waterbury

**Waterbury** ACES Chase Academy Anne pemper  
6115 PS 3 AI-Based Adaptive Street Safety Assistant for the Visually Impaired

**Student(s)** Kauan Nascimento **Grade** 10 **Town** waterbury

**Waterbury** ACES Chase Academy Rachel Murray  
1010 LT 2 Germ Geography: Mapping Microbes Around Our School

**Student(s)** Liam St. Germain **Grade** 7 **Town** Waterbury  
Brian Devoe **Grade** 7 **Town** Waterbury

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<b>Waterbury</b>	ACES Chase Academy	Anne Pember	5007	P7	2	Cake Chemistry and Leavening Agents	<b>Student(s)</b> Kamila Tellez	<b>Grade</b> 7	<b>Town</b> Waterbury
<b>Waterbury</b>	ACES Chase Academy	Anne Pember	6022	PS	2	Using chitin and chitin-based derivatives to remove and remediate nitrates.	<b>Student(s)</b> Kathryn Thibeault	<b>Grade</b> 9	<b>Town</b> Waterbury
<b>Watertown</b>	The Taft School	Amanda Benedict	3179	LS	2	Investigating the Neuroprotective and Stress-Modulating Effects of Oxytocin on Human Cells under Cortisol-Induced Stress Conditions	<b>Student(s)</b> Esther Lee	<b>Grade</b> 10	<b>Town</b> Watertown
<b>Watertown</b>	The Taft School	Amanda Benedict	6016	PS	2	Monte Carlo Simulation-Based Probability Model of Wildfire Spread on a Two-Dimensional Grid	<b>Student(s)</b> Hyunseung Lee	<b>Grade</b> 10	<b>Town</b> Woodbury
<b>Watertown</b>	The Taft School	Amanda Benedict	3043	LS	3	Impact of Photosynthetic Pathway on Trait Tradeoffs and Nitrogen Use in Bromeliads	<b>Student(s)</b> Qinrong Qian	<b>Grade</b> 11	<b>Town</b> Watertown
<b>Watertown</b>	The Taft School	Amanda Benedict	3521	LST	1	Finding a New Class of Inhibitors for IL-1 $\beta$ (interleukin-1 beta) Towards the Cure of Age Related Macular Degeneration	<b>Student(s)</b> Jonathan So Jamie Ho	<b>Grade</b> 11 <b>Grade</b> 11	<b>Town</b> Watertown <b>Town</b> Lawrence Township
<b>Watertown</b>	The Taft School	Anton Antonov	6099	PS	2	Neural A*: Learning-Guided, Bounded-Optimal Path Planning for Cluttered Maps	<b>Student(s)</b> Andreas Tsang	<b>Grade</b> 10	<b>Town</b> Watertown
<b>Watertown</b>	The Taft School	Amanda Benedict	6070	PS	1	A Novel Equestrian Virtual Reality-Based Coordination Rehabilitation System for Post-Stroke Motor Recovery	<b>Student(s)</b> Mily Xue	<b>Grade</b> 10	<b>Town</b> Watertown

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**West Hartford** Kingswood Oxford Ashkan Novin

3178 LS 1 A Multi-Modal AI/ML Platform for Neurodegenerative Risk Prediction: Integrating Epigenetic Signatures through cfDNA Methylation and Functional Mobility Data

**Student(s)** Rhea Doshi **Grade** 10 **Town** Farmington

**West Hartford** Kingswood Oxford Allison Tucker

5524 P8 2 Evaluating the Effectiveness of Nano-ZnO in Removing Heavy Metals from Petroleum Refinery Wastewater

**Student(s)** London Veseski **Grade** 8 **Town** Wethersfield

**West Haven** Notre Dame High School Omar Espinosa

3107 LS 3 Decoding Adhesion Proteins: Computational Insights for Smarter Brain-on-a-Chip Interfaces

**Student(s)** Siddarth Kothandam **Grade** 11 **Town** Hamden

**Weston** Weston High School Stacey Greenberg

6507 PST 2 Prometheus: Discovering Novel Quantum Critical Phenomena in Disordered Systems Using Unsupervised Deep Learning

**Student(s)** Brandon Yee **Grade** 12 **Town** Weston

Maximilian Rutkowski **Grade** 12 **Town** Weston

Wilson Collins **Grade** 12 **Town** Weston

**Westport** Greens Farms Academy Mathieu Freeman

6062 PS 3 A Novel Proposal for the Implementation of Microreactors & Conveyor Systems into the Transportation Phase of Mining to Eliminate Rock Truck CO<sub>2</sub> Emissions

**Student(s)** Cannon Anderson **Grade** 12 **Town** weston

**Westport** Greens Farms Academy Mathieu Freeman

6053 PS 2 Evaluating the Effectiveness of Agricultural Waste-Derived Biochars Embedded in Sodium Alginate Hydrogel Beads for Mitigating Aqueous Copper Ion Toxicity

**Student(s)** Anya Bhuyan **Grade** 11 **Town** Westport

**Westport** Greens Farms Academy Juli Gerdes

3135 LS 3 Vitamin B's Effect on Delaying Alzheimer's

**Student(s)** Skylar Dreas **Grade** 12 **Town** norwalk

**Westport** Greens Farms Academy Mathieu Freeman

3113 LS 3 The Influence of Environment on Regenerative Inhibition of MyoD in Dugesia japonica

**Student(s)** Brady Jordan **Grade** 12 **Town** Norwalk

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<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	3080	LS	1	Comparative Efficacy of Intravenous vs. Intraosseous Tranexamic Acid in Simulated Hemorrhage and Warfarin-Altered Clotting	<b>Student(s)</b> Dylan Karpf	<b>Grade</b> 9	<b>Town</b> Westport
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	6109	PS	1	Open Alert: A Novel Alert System For School Safety	<b>Student(s)</b> Benjamin Kiev	<b>Grade</b> 9	<b>Town</b> Westport
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	6086	PS	3	The “Why” Behind the Move: Coding a Sudoku Tutor and Comparing It to an Optimized Solver	<b>Student(s)</b> Anthony Low	<b>Grade</b> 9	<b>Town</b> Westport
<b>Westport</b>	Greens Farms Academy	Juli Gerdes	3131	LS	3	Investigating Neural Regeneration and Memory Retention in Dugesia Planaria Under Different Light Conditions as a Model for Stroke Recovery	<b>Student(s)</b> Halle Monschein	<b>Grade</b> 12	<b>Town</b> Norwalk
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	3115	LS	2	The Influence of Dataset Size and Modality on No-Code AI Accuracy in Benign-Malignant Breast Cancer Classification.	<b>Student(s)</b> Tyler Neiva	<b>Grade</b> 12	<b>Town</b> Trumbull
<b>Westport</b>	Greens Farms Academy	Juli Gerdes	3192	LS	1	How Climate Change’s Alteration to the Protein Composition in Aedes aegypti Food Source Impacts Their Life History Traits	<b>Student(s)</b> Lolade Oshin	<b>Grade</b> 12	<b>Town</b> West Haven
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	3154	LS	2	Chemical Detoxification as a Parameter for Assessing the Health of the New Creek Marsh	<b>Student(s)</b> Tanvi Rajangam	<b>Grade</b> 12	<b>Town</b> Westport
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman	6044	PS	2	Developing a Methodology to Predict Flash Flooding in Southwestern Connecticut Using Historic Flood Events and Weather Data	<b>Student(s)</b> Oliver Rohrbasser	<b>Grade</b> 12	<b>Town</b> Wilton

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<b>Westport</b>	Greens Farms Academy	Julianne Gerdes				
3040	LS	3	The Psychology of Yondr Pouches and The Impact on Student Well-being			
<b>Student(s) Amalia Slade</b>			<b>Grade 12</b>	<b>Town</b>	Westport	
<b>Westport</b>	Greens Farms Academy	Mathieu Freeman				
3016	LS	3	A Data-Driven Evaluation of Behavioral and Dermatologic Factors in Adolescent Skincare Practices in the Context of Social Media Exposure			
<b>Student(s) Anika Vaidheeswaran</b>			<b>Grade 11</b>	<b>Town</b>	Stamford	
<b>Westport</b>	Staples High School	Amy Parent				
6023	PS	2	Optimizing Fin Design for a Mars-Launched Rocket Using Open-Source Simulation			
<b>Student(s) Anit Arvind</b>			<b>Grade 11</b>	<b>Town</b>	Westport	
<b>Westport</b>	Staples High School	Amy Parent				
6034	PS	2	The Next Frontier: Vision Transformer Versus Convolutional Neural Network Architecture in Exoplanet Transit Classification			
<b>Student(s) Serena Diamond</b>			<b>Grade 10</b>	<b>Town</b>	Westport	
<b>Westport</b>	Staples High School	Amy Parent				
6025	PS	2	Evaluation the Therapeutic Potential of Curcumin in Improving Motor Neuron Health in Spinal Muscular Atrophy			
<b>Student(s) Sofia DiLeo</b>			<b>Grade 12</b>	<b>Town</b>	Westport	
<b>Westport</b>	Staples High School	Amy Parent				
3039	LS	1	Effect of Coenzyme Q10 and Epigallocatechin Gallate on Alpha-Synuclein Aggregation in Caenorhabditis elegans to Treat Parkinson's Disease			
<b>Student(s) Leah Dombrow</b>			<b>Grade 11</b>	<b>Town</b>	Westport	
<b>Westport</b>	Staples High School	Amy Parent				
3068	LS	3	Evaluating Caffeine and the Antioxidant Chlorogenic Acid on Depression in a Drosophila Model			
<b>Student(s) Hayley Epstein</b>			<b>Grade 11</b>	<b>Town</b>	Westport	
<b>Westport</b>	Staples High School	Amy Parent				
3013	LS	2	The Mechanisms Underlying the Mitigating Effects of Vitamin D Supplementation on Duchenne Muscular Dystrophy in C. elegans			
<b>Student(s) Nolan Francis</b>			<b>Grade 12</b>	<b>Town</b>	Westport	

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Westport	Staples High School	Amy Parent	3139	LS	1	Discovering Novel Targets for the FMN Riboswitch to Test the Utility of Computational RNA-folding Methods to Address Multidrug Antibiotic Resistance
			<b>Student(s)</b>		<b>Jay Hari</b>	<b>Grade 12 Town Westport</b>
Westport	Staples High School	Amy Parent	3077	LS	2	The activation of SKN-1 via the RNAi knockdown of wdr-23 to reduce oxidative stress from microplastics in Caenorhabditis elegans.
			<b>Student(s)</b>		<b>William Kwong</b>	<b>Grade 11 Town Westport</b>
Westport	Staples High School	Amy Parent	3190	LS	3	Effect of Stevia on A $\beta$ -Associated Toxicity in Drosophila melongaster
			<b>Student(s)</b>		<b>Ana Losic</b>	<b>Grade 12 Town Westport</b>
Westport	Staples High School	Amy Parent	3158	LS	2	Evaluating Toxicity of Natural and Synthetic Dyes in Caenorhabditis elegans: Identifying Safer Options for Consumables
			<b>Student(s)</b>		<b>Vani Punia</b>	<b>Grade 11 Town westport</b>
Westport	Staples High School	Amy Parent	3186	LS	1	Comparing deep learning architectures with multispectral imaging for early detection of Black Cutworms on Bush Beans
			<b>Student(s)</b>		<b>Ezra Schwartz</b>	<b>Grade 12 Town Westport</b>
Westport	Staples High School	Amy Parent	3063	LS	2	Can Your Diet Protect Against Microplastics? Discovering the Impact of Probiotic E. coli Strains on Microplastic-Induced Toxicity in C. elegans
			<b>Student(s)</b>		<b>Sienna Schwartz</b>	<b>Grade 11 Town Westport</b>
Westport	Staples High School	Sanjay Ranka	6106	PS	3	Lightweight Pill Recognition System with Machine and Deep Learning
			<b>Student(s)</b>		<b>Sahil Vora</b>	<b>Grade 11 Town Westport</b>
Westport	Staples High School	Amy Parent	3018	LS	3	Enhancing Superoxide Dismutase Stability Through Synthesis With Mesoporous Silica Nanoparticles Tested in C. elegans to Determine Its Potential Role in Breast Cancer Treatments
			<b>Student(s)</b>		<b>Elise Yan</b>	<b>Grade 11 Town Westport</b>

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**Wilton** Middlebrook School Janica Bagosy  
 4016 PT 3 High-Speed Trains: How Maglev and Hyperloop Systems Are Modifying Transportation  
**Student(s)** Miya Bu Grade 8 Town Wilton  
 Jayden Mak Grade 8 Town Wilton

**Wilton** Middlebrook School Janica Bagosy  
 1026 LT 3 How does pH affect plant growth  
**Student(s)** Aishani Dibouliya Grade 8 Town Wilton  
 Julia Zubarev Grade 8 Town Wilton

**Wilton** Middlebrook School Nancy Wakeham  
 4012 PT 1 Green Walls: The Power of Plant-Based Materials for Home Cooling  
**Student(s)** Wesley Marley Grade 7 Town Wilton  
 Arrin Suri Grade 7 Town Wilton

**Wilton** Middlebrook School Jessica Garcia  
 5514 P8 1 Treat Them Proteins! Using Technology to Help Damaged Enzymes  
**Student(s)** Tanush Nareddy Grade 8 Town Wilton

**Wilton** Middlebrook School Nancy Wakeham  
 4003 PT 2 Microplastics in daily life! An experimental study of exposure pathways and filtration solutions.  
**Student(s)** Smruthi Natarajan Grade 7 Town Wilton  
 Penelope Calo Grade 7 Town Wilton

**Wilton** Middlebrook School Janica Bagosy  
 2519 L8 2 Smart Bandages for Dogs,  
**Student(s)** Owen O'Dea Grade 8 Town Wilton

**Wilton** Middlebrook School Leah Pariso  
 4002 PT 2 Dual Axis Automatic Solar Tracker  
**Student(s)** Aarya Patel Grade 7 Town Wilton  
 Aaryan Patel Grade 7 Town Wilton

**Wilton** Middlebrook School Jessica Garcia  
 5519 P8 1 How Microplastics in Water Affects Cymatics  
**Student(s)** Jiya Praveen Grade 8 Town Wilton

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<b>Wilton</b>	Middlebrook School	Allison Norful	1031	LT	3	Human Versus Machine: Can Two Kids and a Quantum Computer Beat a "Magic: The Gathering" Professional?	Student(s) <b>Avery Schay</b>	Grade 7	Town Wilton
							<b>Jack Richardson</b>	Grade 7	Town Wilton
<b>Wilton</b>	Middlebrook School	Janica Bagosy	5525	P8	1	Smart Plant Care: Using Automation and AI	Student(s) <b>Pratap Sharma</b>	Grade 8	Town Wilton
<b>Wilton</b>	Wilton High School	Nomita Ramchandani	6026	PS	2	OleoFoam: A Magnetically Controlled Oleophilic Foam for Targeted Oil Absorption	Student(s) <b>Arav Gupta</b>	Grade 10	Town Wilton
<b>Wilton</b>	Wilton High School	Matthew Hoyt	6087	PS	2	Improving Space Weather Forecasting Through Multivariate Machine Learning Analysis for SPE (Solar Particle Event) Prediction.	Student(s) <b>Ishanvi Jaiswal</b>	Grade 11	Town Wilton
<b>Windsor</b>	Academy of Aerospace & Engineering	Lili Aramli	3116	LS	2	Analysis of CYP2D6 Genetic Variation Using TaqMan qPCR to Predict Drug Metabolizer Phenotype	Student(s) <b>Vanessa Bell</b>	Grade 12	Town Windsor
<b>Windsor</b>	Academy of Aerospace & Engineering	Konda Chevva	6101	PS	1	FAB-HEX : Fractal Shaped Additive and Bio-inspired Heat Exchanger	Student(s) <b>Aarav Chevva</b>	Grade 10	Town Ellington
<b>Windsor</b>	Academy of Aerospace & Engineering	Lili Aramli	3160	LS	1	The Investigation of Pro-Inflammatory Immune Cells Triggered By Exercise and Their Effect On Reproductive Cancer Tumor Models	Student(s) <b>Ana-Marlene Davis</b>	Grade 9	Town Broad Brook
<b>Windsor</b>	Academy of Aerospace & Engineering	Lili Aramli	6041	PS	3	Using House Air Filters for Energy Harvesting and Utilization in Everyday Life	Student(s) <b>Dylan Gao</b>	Grade 10	Town Coventry

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<b>Windsor</b>	Academy of Aerospace & Engineering	Joshua Madore	6093	PS	2	Optimizing the Efficiency of Solar Cells using Enhanced Cooling Techniques.	<b>Student(s)</b> Palaniappan Manikandan	<b>Grade</b> 10	<b>Town</b> Ellington
<b>Windsor</b>	Academy of Aerospace & Engineering	Lili Aramli	6118	PS	3	Health-Track AI	<b>Student(s)</b> Aaditya Sadhvani	<b>Grade</b> 10	<b>Town</b> Ellington
<b>Windsor</b>	Academy of Aerospace & Engineering	Lili Aramli	6107	PS	2	Next-Generation Interplanetary Rovers: Embedded Neuromorphic Artificial Intelligence Control For Autonomous & Adaptive Terrain Exploration	<b>Student(s)</b> Rithvik Suren	<b>Grade</b> 10	<b>Town</b> Ellington
<b>Windsor</b>	Madina Academy	Jemilat Salami-Oyenuga	1012	LT	1	Photoprotection of yeast, fact or fiction: Studying the effect of Ultraviolet ray C on the proliferation of Saccharomyces Cerevisiae via analysis in vitro cultivation	<b>Student(s)</b> Salma Hassan	<b>Grade</b> 8	<b>Town</b> Avon
							Tajriyan Khan	<b>Grade</b> 8	<b>Town</b> Agawam
							Sohyla Hassan	<b>Grade</b> 8	<b>Town</b> Avon
<b>Windsor</b>	Madina Academy	Basma Sallam	3508	LST	2	Not All Collagen Concentration Is The Same: A Gel Strength Investigation	<b>Student(s)</b> Zaynab Khawaja	<b>Grade</b> 10	<b>Town</b> Agawam
							Aleeza Ehmada	<b>Grade</b> 10	<b>Town</b> Manchester
							Noor Hassan	<b>Grade</b> 10	<b>Town</b> Avon
<b>Windsor</b>	Madina Academy	Jemilat Salami-Oyenuga	1019	LT	1	Restoring Dead-Zones: The Role of High-Oxygen-Producing Vegetation in Assisting to Reduce Aquatic Hypoxia	<b>Student(s)</b> Enaaya Mohammed	<b>Grade</b> 8	<b>Town</b> Windsor
							Nabaad Abdulkadir	<b>Grade</b> 8	<b>Town</b> Plantsville
							Musfira Bhuiyan	<b>Grade</b> 8	<b>Town</b> Windsor
<b>Windsor</b>	Madina Academy	Jemilat Salami-Oyenuga	5516	P8	2	Which Popsicle Stick Bridge Holds The Most Weight	<b>Student(s)</b> Yusuf Nemlaghi Nemlaghi	<b>Grade</b> 8	<b>Town</b> Windsor

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<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	6027	PS	2	Continual Learning with Elastic Weight Consolidation for Human Tree Person Test Frameworks	Student(s) <b>Ria Sunwoo An</b>	Grade 11	Town Windsor
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	6021	PS	2	Generation of a Uniform, Ultra-high Temperature, and Stable Plasma for Material Innovation	Student(s) <b>Ethan Feng</b>	Grade 11	Town South Windsor
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	3051	LS	1	Next-Generation E-Skin for Real-Time Monitoring to Prevent Livestock Disease Outbreak	Student(s) <b>Hyeonho Kim</b>	Grade 10	Town Windsor
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	6122	PS	1	LISTEN – A Robotic Leak Identification System using TDNN and ENhanced Acoustic Features for Pipeline Detection	Student(s) <b>Jiaxuan Li</b>	Grade 11	Town Cupertino
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	3165	LS	2	Bayesian Optimization Enables Ultra-Rapid and Accurate DNA Detection Using qPCR	Student(s) <b>Ethan Liu</b>	Grade 10	Town Farmington
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	6116	PS	2	Stair-Climbing Delivery Robot for Medical Logistics in Hospitals	Student(s) <b>Enhua Ma</b>	Grade 10	Town Medina
<b>Windsor</b>	The Loomis Chaffee School	Zhaoyang Huang	3071	LS	3	HTT-HDAC Axis links Major Depressive Disorder and Alzheimer’s Disease: A Transformer-Based Multi-Omics Dissection	Student(s) <b>Yuechen Wang</b>	Grade 10	Town Windsor
<b>Windsor</b>	The Loomis Chaffee School	Fahmeed Sheehan	3024	LS	3	How to Make Extra-curriculum Activities Work: Listening to Student Perspectives on Motivation and Outcomes	Student(s) <b>Calvin Weng</b>	Grade 11	Town New York

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**Windsor** The Loomis Chaffee School Fahmeed Sheehan

3019 LS 2 Can Dead Bacteria Clean Up Our Gardens? Using EPS-Rich Biomass and Biochar to Lower Soil Lead Below 200 ppm

**Student(s)** Li-An Ye **Grade** 9 **Town** San Jose

**Woodbridge** Amity Regional High School Sarah Reeves

6058 PS 1 Designing a Hybrid Ultrasound and Ambient RF Wireless Charging System for a Pacemaker While Minimizing Misalignment Loss

**Student(s)** Karishma Balamurugan **Grade** 11 **Town** Orange

**Woodbridge** Amity Regional High School Sarah Reeves

6506 PST 2 Real-Time Integration of a Compact Intracranial Pressure (ICP) Sensor to Benchmark NeuroProbe, a Multimodal Brain Monitoring Device, via Arduino-Based Data Translation

**Student(s)** Akshay Bulsara **Grade** 12 **Town** Bethany  
Jacob Storeygard **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Sarah Reeves

3198 LS 2 Developing a Predictive App for E. Coli and Enterococcus Quantification Driven by Nitrate and Nitrite Using Rainfall and Land-Use Regression Models

**Student(s)** Chloe Chang **Grade** 11 **Town** Orange

**Woodbridge** Amity Regional High School Sarah Reeves

3103 LS 3 Unilateral Leg Press Cross Education Training Effects on Strength, Endurance, and Movement Velocity in Trained Male High School Students

**Student(s)** Jason Liang **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Sarah Reeves

6024 PS 3 Simulating Droplet Breakup in Obstacle Arrays Using the Deformable Particle Model

**Student(s)** Nicholas Lu **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Sarah Reeves

3180 LS 1 Determining the Accuracy of Biomarker TNF- $\alpha$  in Predicting Ketamine Treatment Outcomes for Veterans with PTSD & MDD

**Student(s)** Mila Mejnartowicz **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Sarah Reeves

3081 LS 3 Identifying EEG Markers of Neonatal Hypoxia Through Electroencephalography

**Student(s)** Ashwin Menon **Grade** 12 **Town** Woodbridge

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**Woodbridge** Amity Regional High School Sarah Reeves

3174	LS	2	Detecting Psychosis Onset in CHR Individuals Using NLP-Based Speech Transcript Analysis
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**Student(s)** Mihir Nandy **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Lindsay McCarthy

6048	PS	2	Developing a Fast Response Aerosol Optical Depth Monitor for Continuous Information on Ambient Particulate Matter
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**Student(s)** Armaan Shrivastav **Grade** 11 **Town** Orange

**Woodbridge** Amity Regional High School Lindsay McCarthy

6012	PS	2	Developing a Bio-Hybrid Luminescent Solar Concentrator Using Carbon Quantum Dots, Natural Fluorophores, and Kaolin Powder for Enhanced Solar Energy Harvesting
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**Student(s)** Aryan Shrivastav **Grade** 11 **Town** Orange

**Woodbridge** Amity Regional High School Lindsay McCarthy

3127	LS	1	Investigating the Impact of BRCA1/2 Co-Expression Gene Silencing on Chemotherapy Efficacy in Ovarian Cancer
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**Student(s)** Charlotte Stannard **Grade** 12 **Town** Bethany

**Woodbridge** Amity Regional High School Sarah Reeves

3047	LS	2	Investigating the Association Between LEPR Expression in Breast Cancer (BC) Tumors with BC Survival, Stratified by Menopausal Status and Age
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**Student(s)** Joseph Vatner **Grade** 12 **Town** Woodbridge

**Woodbridge** Amity Regional High School Lindsay McCarthy

3137	LS	1	In Vitro Assessment of Lactase Production Activity, Efficiency, and Survivability of L. acidophilus in Non-Dairy Carriers
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**Student(s)** Mingze Weng **Grade** 12 **Town** Orange

**Woodbridge** Amity Regional High School Sarah Reeves

3145	LS	2	Using Mathematical Algorithms to Optimize the Efficiency of an Inverse Computational Modeling Approach to Uncover how Mutations are Affecting Cardiac Muscle Contraction
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**Student(s)** Sage Wong **Grade** 12 **Town** Orange

**Woodbridge** Amity Regional High School Sarah Reeves

6077	PS	2	Assessing [OIII] Outflows and Feedback Efficiency in Nearby Type 1 Quasars
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**Student(s)** Tony Zhang **Grade** 12 **Town** Woodbridge

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**Woodbridge** CT-STEM Foundation Sarah Reeves

3171 LS 1 Investigating the Impact of Governance Effectiveness on Economic Crisis Resilience: A

**Student(s)** David Babic **Grade** 10 **Town** Woodbridge

**Woodbridge** CT-STEM Foundation Lindsay McCarthy

6001 PS 3 Developing a Climate Finance Vulnerability Index for Connecticut to Identify Communities with High Climate Risk and Disproportionately Low Recovery Funding

**Student(s)** Jordan Chen **Grade** 11 **Town** Woodbridge

**Woodbridge** CT-STEM Foundation Lindsay McCarthy

6084 PS 3 Developing an Ambient-Light Lock-In UV Fluorescence Imaging System for Enhanced Forensic Evidence Detection

**Student(s)** Emma Imanov **Grade** 11 **Town** Orange

**Woodbridge** CT-STEM Foundation Christine Leventhal

3153 LS 1 Classification of Migraine Subtypes Using Machine Learning: A Study of Data Bias

**Student(s)** Kehara Morton **Grade** 12 **Town** Darien