



Connecticut Science & Engineering Fair

Quinnipiac University

March 4 - 16, 2024

Special Award Winners

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

All special award winners are required to attend the awards ceremony on Saturday. Be sure to acknowledge by going to the CHECK-IN page.

[SchTown] [School] [Teacher]
[Proj#] [FCat] [Project Title]

Avon Avon High School 0

3508 LST Defining the Significance of Inflammation in Atherosclerosis by Examining Cross-Cohort Transcriptomics Using R and Deep Learning Programs

Student(s) Phydena Liu
Lauren Zhang

Grade 10 **Town** Avon
Grade 11 **Town** Darien

Avon Talcott Mountain Academy 0

5009 P7 The Aura Project: Landing Rockets at a Model Scale

Student(s) Kwabena Addai - Boateng

Grade 8 **Town** East Hartford

Avon Talcott Mountain Academy 0

2520 L8 The Boreabrush

Student(s) Oliver Lind

Grade 8 **Town** Harwinton

Bridgeport Blackham School 0

4002 PT Hovercraft The New Transportation

Student(s) Sebastian Suarez
Jayden Perez

Grade 7 **Town** Bridgeport
Grade 7 **Town** Bridgeport

Bridgeport Bridgeport Regional Aquaculture Center 0

3015 LS Non-Thermal Induction of Heat Shock Protein 90 to Mitigate Early Oncogenesis With Preserved HSR

Student(s) Chloe Atkins

Grade 12 **Town** Stratford

Bridgeport Bridgeport Regional Aquaculture Center 0

6060 PS Magnetohydrodynamic (MHD) Salt Water Generator: Harnessing energy from flowing salt water without moving parts

Student(s) Samuel DiVasto

Grade 12 **Town** Trumbull

Bridgeport Bridgeport Regional Aquaculture Center 0

6070 PS Synthesis of Conductive Optical Lenses with Variable Refractive Indices: The Kerr Effect

Student(s) Cole Galla

Grade 12 **Town** Trumbull

Bridgeport Bridgeport Regional Aquaculture Center 0

3077 LS Utilizing Fucus distichus alginates to develop an enhanced aerosol treatment for Cystic Fibrosis

Student(s) Mia Nierenberg

Grade 12 **Town** Stratford

Bridgeport Bridgeport Regional Aquaculture Center 0

3134 LS Acoustic Noise Pollution Affecting Reproduction, Communication, and Behavior of Brine Shrimp

Student(s) Anne Taylor

Grade 12 **Town** Fairfield

Bridgeport Fairchild Wheeler Biotechnology 0

3069 LS Shoots vs. Roots: The Effect of Hormone Treated Media on Lettuce Growth

Student(s) Naomi Rosen

Grade 12 **Town** Fairfield

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Bridgeport Fairchild Wheeler Biotechnology 0

| | | |
|--------------------------|-----|---|
| 3520 | LST | Testing the Efficacy of Biochar Source Materials in Filtering Heavy Metal Pollution from the Housatonic River in CT |
| Student(s) Angeline Tran | | Grade 12 Town Shelton |
| Phi Uanino | | Grade 12 Town Shelton |

Bridgeport Waltersville School 0

| | | |
|-----------------------------|----|---|
| 4008 | PT | Does Municipal/Household Infrastructure Affect the Quality of Drinking Water in Bridgeport, CT? |
| Student(s) Andrea Villatoro | | Grade 7 Town Bridgeport |
| Genesis Reilly | | Grade 7 Town Bridgeport |

Bristol St. Matthew School 0

| | | |
|----------------------|----|--|
| 5004 | P7 | Which Drink Has the Most Electrolytes? |
| Student(s) Lily Chou | | Grade 7 Town Bristol |

Cheshire Cheshire High School 0

| | | |
|-------------------------------|----|---|
| 6045 | PS | A Torticollis Tilt Alerting Device using MPU6050 Sensor, Vibration motor, and iOS and Android App Built Using Flutter |
| Student(s) Suchita Srinivasan | | Grade 10 Town Cheshire |

Cheshire Dodd Middle School 0

| | | |
|-------------------------|----|---|
| 5509 | P8 | The Irrigator- a sustainable solution for gardening |
| Student(s) Olivia Dixon | | Grade 8 Town Cheshire |

Danbury Westside Middle School Academy 0

| | | |
|-----------------------|----|--|
| 1025 | LT | The Effect of Different Types of Grass on Soil Erosion |
| Student(s) Sayam Dand | | Grade 8 Town Danbury |
| Kylie Capone | | Grade 8 Town Danbury |
| Ayme Calero | | Grade 8 Town danbury |

Danbury Westside Middle School Academy 0

| | | |
|----------------------------------|----|--|
| 4007 | PT | The Effectiveness of Different Distillation Methods for Desalination |
| Student(s) Siddanth Ramakrishnan | | Grade 7 Town Danbury |
| Patrick Madden | | Grade 7 Town Danbury |

Danbury Westside Middle School Academy 0

| | | |
|--------------------------------------|----|---|
| 4012 | PT | Building a Versatile Air Sensor That Can Detect PM10 & PM2.5 in the Air |
| Student(s) Sarvesh Ram Sankarnarayan | | Grade 8 Town Danbury |
| Gabrielle Anderson | | Grade 8 Town Danbury |
| Eleftherios Amperidis | | Grade 8 Town Danbury, Ct |

Darien Darien High School 0

| | | |
|-----------------------|----|---|
| 6082 | PS | Simulating CMB temperature signal to analyze the effects of noise |
| Student(s) Bo-Jun Qin | | Grade 12 Town Darien |

Darien Darien High School 0

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|--------------------------|----|---|
| 6064 | PS | An Investigation of Stone Reusual Construction Techniques Used in the Anasazi Community From 800-1200 AD In Southwestern United States Based on Stone Length-Width Ratios |
| Student(s) Evelyn Trudel | | Grade 12 Town Darien |

Conn. Science & Engineering Fair

Special Award Winners

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Ellington Ellington High School 0

6074 PS Developing an Adaptable Metal Casting Mold Using Soft Robotics

Student(s) Thomas Gerlach

Grade 9

Town Ellington

Enfield Chiaravalle Academy 0

4022 PT Using Solar to Generate Electricity.

Student(s) Keenan Cieslak

Grade 8

Town Monson

Beau Dugas

Grade 8

Town Enfield

Michael Bielanski

Grade 8

Town Enfield

Enfield Chiaravalle Academy 0

1026 LT How Does Different Types of Food Affect A Chicks' Growth and Learning Ability?

Student(s) Zoha Shamsi

Grade 7

Town Suffield

Leah Caswell

Grade 7

Town Enfield

Marin Czerwicz

Grade 7

Town Agawam

Farmington Farmington High School 0

6054 PS Steeping Towards Safety: Addressing Mycotoxin Risks in Coffee and Tea

Student(s) Rhea Doshi

Grade 9

Town Farmington

Farmington Farmington High School 0

3511 LST The impact of different levels of spf on the pigmentation of one's skin

Student(s) Lauren Jeong

Grade 11

Town Farmington

Lydia Kim

Grade 11

Town Farmington

Farmington Farmington High School 0

6068 PS Origami-Inspired Paper-Based Multiplex Device for Water Contamination Monitoring

Student(s) Jiayi Liu

Grade 11

Town Farmington

Greenwich Brunswick School 0

6015 PS Inertial Navigation Control System: Use of Reaction Wheels as an in-flight Steering Mechanism for Rockets

Student(s) Thomas Armstrong

Grade 11

Town Greenwich

Greenwich Brunswick School 0

6522 PST The Efficiency of Toroidal Propellers on Plane Engines and Boat Propellers

Student(s) Thomas Carney

Grade 10

Town New Canaan

Pierce Crosby

Grade 10

Town Greenwich

Greenwich Brunswick School 0

3507 LST Using Mineral Packed Liposomes to Increase Plant Growth in Arid Environments

Student(s) Henry Johnson

Grade 11

Town Riverside

Tucker Spiess

Grade 11

Town Old Greenwich

Greenwich Brunswick School 0

6510 PST Biodegradable Mylar: A Materials Investigation to Reduce Marine Life Fatalities.

Student(s) Sean Mensi

Grade 9

Town Katonah

Lincoln O'Donohue

Grade 10

Town Old Greenwich

Conn. Science & Engineering Fair

Special Award Winners

[SchTown] [School] [Teacher]
[Proj#] [FCat] [Project Title]

Greenwich Brunswick School 0

| | | |
|-----------------------------------|-----|--|
| 6516 | PST | Water Testing with Ease: Creation of a handheld device for Water Analysis in Recently Flooded Areas. |
| Student(s) William Pallone | | Grade 10 Town Rye |
| Townsend Bancroft | | Grade 10 Town Greenwich |

Greenwich Central Middle School 0

| | | |
|---------------------------------|----|---|
| 5514 | P8 | The Synergistic Improvement of Indoor Air HEPA-Filtration using Concurrent Dehumidification |
| Student(s) Mikah Kaalund | | Grade 8 Town Greenwich |

Greenwich Central Middle School 0

| | | |
|----------------------------------|----|---|
| 2507 | L8 | Modeling of Fairfield County Fresh-water and Estuary Waterways, to Highlight Contamination of their Ecosystems/Environments |
| Student(s) Briar Lissauer | | Grade 8 Town Greenwich |

Greenwich Central Middle School 0

| | | |
|----------------------------------|----|--|
| 5504 | P8 | Simple Filtration of Fertilizer-ion Water Contaminants via Implementation of Phosphate and Nitrate Absorbency Pads |
| Student(s) Caroline Stowe | | Grade 8 Town Greenwich |

Greenwich Eastern Middle School 0

| | | |
|--------------------------------|----|--|
| 2501 | L8 | Design of a Smart-Bandage to provide lasting Itch-Relief and Healing for an Insect Bite. |
| Student(s) Lily Bittman | | Grade 8 Town Greenwich |

Greenwich Eastern Middle School 0

| | | |
|------------------------------------|----|---|
| 5502 | P8 | Shedding Light on the Prevalence of Harmful Butylated Hydroxytoluene Preservative in Artificially Formulated Dog Foods. |
| Student(s) Mackensey Wilson | | Grade 8 Town Old Greenwich |

Greenwich Greenwich Country Day School 0

| | | |
|-----------------------------------|----|---|
| 3016 | LS | Antidepressant-response biomarkers in adolescents: a confirmational study using EEG |
| Student(s) Solomon Hochman | | Grade 12 Town Riverside |

Greenwich Greenwich High School 0

| | | |
|----------------------------------|----|---|
| 6053 | PS | Reduced Carbon Dioxide Emission and Increased Energy Efficiency Via a Newly-Designed Superconductive Cryogenic Brushless DC Motor |
| Student(s) Ishan Ambastha | | Grade 11 Town Riverside |

Greenwich Greenwich High School 0

| | | |
|------------------------------|----|---|
| 3113 | LS | Implementation of a Multi-Objective Genetic Algorithm to Optimize Resource Allocation in Disease Prevention |
| Student(s) Isaac Bell | | Grade 10 Town Riverside |

Greenwich Greenwich High School 0

| | | |
|--------------------------------|----|--|
| 3025 | LS | Sonic Repulsion of Purple Sea Urchins to Reduce Degradation of Nascent Nereocystis luetkeana Forests |
| Student(s) Owen Benison | | Grade 11 Town riverside |

Greenwich Greenwich High School 0

| | | |
|------------------------------------|----|---|
| 6081 | PS | Genetic Engineering of Cryobacterium to Increase Silica Content and Enhance the Glacial Albedo of Black Arctic Oceans |
| Student(s) Justin Bernstein | | Grade 11 Town Greenwich |

[SchTown] [School] [Teacher]
[Proj#] [FCat] [Project Title]

Greenwich Greenwich High School 0

3122 LS Rapid Detection of Pulmonary Fibrosis via Eu(TTA)3 Phen, and Rhodamine-6G-Cinnamaldehyde, Dual-Sensor Luminescent Diagnostic

Student(s) Lauren Huang

Grade 11 **Town** Old Greenwich

Greenwich Greenwich High School .12

3071 LS Fabrication of a Europium-based Magnetic Nanosensor for the Detection of D-Serine in Early-onset Alzheimers

Student(s) Ava Jackson

Grade 11 **Town** Old Greenwich

Greenwich Greenwich High School 0

6058 PS Detection of Nanoplastics within Complex Environmental and Food Resource Matrices via Machine Learning

Student(s) Henry Jin

Grade 10 **Town** Greenwich

Greenwich Greenwich High School 0

3003 LS Iron-Fortified Cornhusk Biochar Flocculation of Pondwater Phosphates, to Reduce Invasive Macrophyte Growth

Student(s) Neil Pendkar

Grade 9 **Town** Old Greenwich

Greenwich Greenwich High School 0

3020 LS Oral Delivery of Anticoagulant Dabigatran via a Mg-Micromotor Encapsulant Within a Gastric-Resistant Tablet for Ischemic Stroke Treatment

Student(s) Lula Wang

Grade 9 **Town** Old Greenwich

Greenwich Greenwich High School 0

6019 PS Reinforcement Learning Optimization of Placement of Public Vehicle Charging Stations using a Novel Parking Demand Model

Student(s) Marley Wies

Grade 10 **Town** Old Greenwich

Hamden Hamden Hall Country Day School 0

3096 LS Edhelper: The Application of Artificial Intelligence in the Aid of Neurodivergent Children

Student(s) Andrei Balas

Grade 10 **Town** Cheshire

Hamden Hamden Hall Country Day School 0

6512 PST Using Quantum-assisted Machine Learning in Maize Yield Prediction through Environmental Patterns.

Student(s) Helena Chaine

Grade 11 **Town** Orange

Yue Zhuo

Grade 12 **Town** Hamden

Linda Chen

Grade 10 **Town** Woodbridge

Hamden Hamden Hall Country Day School 0

6025 PS Deep learning based drug response prediction algorithm about synergistic and antagonistic responses of cell lines and drug combos.

Student(s) Jiahui Chen

Grade 11 **Town** New Haven

Hamden Hamden Hall Country Day School 0

3061 LS The effect of deforestation on soil erosion at Sleeping Giant Park

Student(s) Kaleb Fiore

Grade 10 **Town** Southington, CT

Hamden Hamden Hall Country Day School 0

3017 LS Effect of Hydroxyapatite Encapsulation on the Transdermal Diffusion and Photodegradation of Avobenzone and Octinoxate to Enhance Sunscreen Safety

Student(s) Sophia Vash

Grade 10 **Town** Fairfield CT

Conn. Science & Engineering Fair

Special Award Winners

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[Proj#] [FCat] [Project Title]

Hamden Sacred Heart Academy 0

| | | |
|--|----|---|
| 3117 | LS | The Effect of Sound Pollution on the Physical Behavior of Armadillidium Vulgare |
| Student(s) Danyella Lanche-Flores | | Grade 12 Town West Haven |

Kent Kent School 0

| | | |
|-------------------------------|----|---|
| 6032 | PS | CardioXNet: Representation Learning for Accurate Cardiovascular Disease Diagnosis from X-ray Images |
| Student(s) Jiwon Hwang | | Grade 10 Town Kent |

Manchester Manchester High School 0

| | | |
|-------------------------------|----|--|
| 3138 | LS | Determining the incidence of Beech Leaf Disease symptom severity based on overwintering nematode abundance in Fagus grandifolia buds |
| Student(s) Dina Watson | | Grade 12 Town Manchester |

Manchester Saint James School 0

| | | |
|--------------------------------|----|------------------------------------|
| 5007 | P7 | Affect of Color on Heat Absorption |
| Student(s) Saanvi Sethi | | Grade 7 Town Manchester |

Mansfield Edwin O Smith High School 0

| | | |
|------------------------------------|----|---|
| 6005 | PS | Why Does My Neighborhood Have Less Trees Than Yours? Geospatial Modeling of Urban Tree Cover Inequalities in Connecticut Cities |
| Student(s) Hiruni Witharana | | Grade 10 Town Storrs |

Milford Platt Technical High School 0

| | | |
|-----------------------------------|-----|---------------------------------|
| 3502 | LST | NatureCare Project |
| Student(s) Diogo Gaudencio | | Grade 12 Town bridgeport |
| Yossias Mulualem | | Grade 12 Town ansonia |
| Maritza Portillo | | Grade 12 Town west haven |

Montville Saint Bernard School 0

| | | |
|------------------------------|----|---|
| 6011 | PS | Making Football Safer With The Smart Helmet |
| Student(s) Palmer Noe | | Grade 10 Town East Lyme |

New Haven Engineering and Science University Magnet School 0

| | | |
|-------------------------------------|----|--|
| 3118 | LS | Implementing the Usage of Nontoxic Sand and Bacterial Filtration in the Enhanced Degradation of Emerging Contaminants in Aqueous Solutions |
| Student(s) Sahithi Aliminate | | Grade 9 Town Milford |

New Haven Engineering and Science University Magnet School 0

| | | |
|-----------------------------------|----|---|
| 3126 | LS | Advanced Hybrid Water Treatment Systems: A Comparative Study of Membrane Filtration, Adsorption, and Photocatalysis for Comprehensive Contaminant Removal |
| Student(s) Saket Aliminate | | Grade 10 Town Milford |

New Haven Engineering and Science University Magnet School 0

| | | |
|------------------------------------|----|--|
| 6052 | PS | Synthesis of Porous Polymer Sponge Matrix using Modified Sodium Alginate Clay Compound for Adsorptive Removal of Microplastics and Oil from Contaminated Water |
| Student(s) Snigtha Mohanraj | | Grade 11 Town Ansonia |

New Haven Sound School 0

| | | |
|-----------------------------------|-----|--|
| 6511 | PST | Potential Impact of Watershed Runoff and Tidal Inundation on the Hydrologic Profile of a Coastal March |
| Student(s) Cora FitzGerald | | Grade 11 Town Guilford |
| Tamzin Maines | | Grade 11 Town Old Saybrook |

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New Haven Worthington Hooker School 0

| | | |
|--------------------------------|----|---|
| 1020 | LT | Biodegradable Hydrogels: Improving our Agriculture's Sustainability |
| Student(s) Sofia Janiga | | |
| Grade 8 | | |
| Town New Haven | | |
| Azalea Deener | | |
| Grade 8 | | |
| Town New Haven | | |

Norwich Norwich Technical High School 0

| | | |
|------------------------------------|-----|---|
| 3526 | LST | Cultivating Green Growth: Harnessing Electroculture for Sustainable Gardening Practices |
| Student(s) Sophia Caballero | | |
| Grade 11 | | |
| Town Norwich | | |
| Alejandra Cardona | | |
| Grade 11 | | |
| Town New London | | |

Norwich Norwich Technical High School 0

| | | |
|-----------------------------------|----|---|
| 6066 | PS | A Mathematical Analysis of the Variables Impacting the Performance of Wind Turbines as the Energy Converts from Kinetic to Mechanical to Electrical |
| Student(s) Leah Kozerefski | | |
| Grade 9 | | |
| Town Gilman | | |

Redding CT STEM Fair 0

| | | |
|-------------------------------|----|---|
| 3052 | LS | Determining the Ability of Different Mosses and Plants to Remove Algae Causing Phosphates and Nitrates From Water |
| Student(s) Emma Cannon | | |
| Grade 11 | | |
| Town New Canaan | | |

Salisbury The Hotchkiss School 0

| | | |
|-----------------------------|----|--|
| 6103 | PS | A Resilient & Cost-Effective Prosthetic Device Tailored for the Accelerated Growth of Children |
| Student(s) Sia Reddy | | |
| Grade 10 | | |
| Town Avon | | |

Simsbury Westminster School 0

| | | |
|-------------------------------|----|---|
| 6043 | PS | Dual-Degree-of-Freedom Pneumatic Shoulder Rehabilitation Device Based on Flexible Materials |
| Student(s) Meiying Ren | | |
| Grade 11 | | |
| Town Simsbury | | |

South Windsor South Windsor High School 0

| | | |
|---------------------------------|-----|---|
| 6501 | PST | The Use of Piezoelectric Technology for a more Efficient and Cost-Effective Approach to Electronics Cooling |
| Student(s) Adithya Anand | | |
| Grade 11 | | |
| Town South Windsor | | |
| Jason Thokchom | | |
| Grade 11 | | |
| Town South Windsor | | |

South Windsor South Windsor High School 0

| | | |
|---------------------------------|----|---|
| 6035 | PS | A novel approach to a biomimetic undersea generator aided by triboelectric nanogenerators to harness natural ocean currents |
| Student(s) Pranay Kakkar | | |
| Grade 11 | | |
| Town South Windsor | | |

South Windsor South Windsor High School 0

| | | |
|---------------------------------|----|--|
| 6013 | PS | Scientific understanding of solar physics with image based neural networks |
| Student(s) Pragyan Yadav | | |
| Grade 12 | | |
| Town South Windsor | | |

Southington Joseph A. Depaolo Middle School 0

| | | |
|--------------------------------|----|---|
| 2514 | L8 | Global Warming Management through Utilization of naturally occurring resources such as Eggshell-Derived Calcium Carbonate in Global Warming Reduction |
| Student(s) Esra Agirman | | |
| Grade 8 | | |
| Town Southington | | |

Stamford King School 0

| | | |
|--------------------------------|----|---|
| 6097 | PS | DETICKT IT: A Machine Learning-Based Application for Real-Time Tick Identification and Spatiotemporal Disease Risk Assessment |
| Student(s) Antonia Kolb | | |
| Grade 12 | | |
| Town New Canaan | | |

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Special Award Winners

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[Proj#] [FCat] [Project Title]

| | | | | | | | | |
|--------------------|---------------------------|---|------|-----|--|---|------------------------------------|--|
| Stamford | King School | 0 | 6078 | PS | Utilizing Ground and Space-Based Sensors to Track Trajectories of Vehicles/Dangerous Objects and Monitor Climate Change/Environmental Issues | Student(s) Ryan Wempen | Grade 12 | Town Stamford |
| Stonington | St. Michael School | 0 | 5501 | P8 | Determining the Impact of pH on Seashell Dissolution | Student(s) Addison Cadmus | Grade 8 | Town Pawcatuck |
| Stonington | St. Michael School | 0 | 5008 | P7 | Expensive Fails or, Long Lasting Nails | Student(s) Maeve Nicholas | Grade 7 | Town Stonington |
| Stratford | St. Mark School | 0 | 2513 | L8 | Implicit Gender Bias | Student(s) Julianne Gonzalez | Grade 8 | Town Stratford |
| Stratford | St. Mark School | 0 | 4020 | PT | Does Color Affect the Way taste is perceived? | Student(s) Maeve McCloskey Stella Testo | Grade 7 Grade 7 | Town Stratford Town Stratford |
| Trumbull | Christian Heritage School | 0 | 6102 | PS | Vision Through AI: Assisting the Visually Impaired By Building AI Smart Glasses | Student(s) Daylin Jerome | Grade 11 | Town Bridgeport |
| Trumbull | Christian Heritage School | 0 | 2517 | L8 | Do Storm drains keep trash out of water ways? | Student(s) Juliette Schwartz | Grade 8 | Town Shelton |
| Trumbull | Christian Heritage School | 0 | 6037 | PS | Text to Speech and Speech to Text App for the Hearing Impaired | Student(s) Noah Scrofani | Grade 11 | Town Trumbull |
| Wallingford | Choate Rosemary Hall | 0 | 6051 | PS | Properties of Certain Quadrilaterals of Triangle Centers | Student(s) Kay Yeon Lee | Grade 11 | Town Wallingford |
| Wallingford | Choate Rosemary Hall | 0 | 6502 | PST | Construction of a Low-cost, Accurate Liquid Handling Device with 3D Printing for Polymerase Chain Reaction | Student(s) Calvin Moon Jeffrey Moon | Grade 12 Grade 11 | Town Wallingford Town Wallingford |
| Wallingford | Choate Rosemary Hall | 0 | 6525 | PST | AgriBotanical: An Intelligent Continuum-Maneuver Robot for Monitoring and Managing Arboreal Wild Bee Colonies | Student(s) Jingyuan Zhang Xiying Yang | Grade 11 Grade 11 | Town Wallingford Town Wallingford |

Conn. Science & Engineering Fair

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Waterbury ACES at Chase 0

| | | |
|-----------------------------------|----|---|
| 1007 | LT | Creating Safe Sunscreens For Coral Reefs With The Best U.V. Protection. |
| Student(s) Emily Ambrosini | | Grade 7 Town Watertown |
| Taylor Boscarino | | Grade 7 Town Thomaston |

Waterbury ACES at Chase 0

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|---------------------------------|----|------------------------------------|
| 5503 | P8 | The Bag that Saved the Homeless |
| Student(s) Evaleise Diaz | | Grade 8 Town Meriden |

Waterbury ACES at Chase 0

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|---------------------------------|----|---|
| 5005 | P7 | What Design of Mesh Water Filtration Device Most Effectively Removes Microplastics? |
| Student(s) Jacob Godfrey | | Grade 7 Town Waterbury |

Waterbury ACES at Chase 0

| | | |
|------------------------------|----|--------------------------------------|
| 2511 | L8 | Leaf Light Chlorophyll light bulb |
| Student(s) Toren Lott | | Grade 8 Town Waterbury |

Westport Greens Farms Academy 0

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|-------------------------------|----|---|
| 5014 | P7 | Novel Radiation Shielding for Radiation Therapy and Arabidopsis on Mars |
| Student(s) Dylan Karpf | | Grade 7 Town Westport |

Wilton Middlebrook School 0

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|-------------------------------|----|--|
| 5010 | P7 | Wireless Power Transfer - Future of Energy |
| Student(s) Ishan Chugh | | Grade 7 Town Wilton |

Wilton Wilton High School 0

| | | |
|------------------------------------|----|---|
| 3059 | LS | A Novel AI-Driven Approach for Tracking and Managing Invasive Plant Species |
| Student(s) Shriya Natarajan | | Grade 10 Town Wilton |

Wilton Wilton High School 0

| | | |
|--------------------------------|----|---|
| 3065 | LS | The Influence of Natural and Man-Made Substrata on Intertidal Community Structure |
| Student(s) Nandan Raman | | Grade 11 Town Wilton |

Windsor Academy of Aerospace and Engineering 0

| | | |
|-------------------------------|----|---|
| 6009 | PS | Reinforcing the Cybersecurity of Medical Data via Software Countermeasures against Malware in Heart Monitoring Technology |
| Student(s) Sujay Chava | | Grade 11 Town Ellington |

Windsor Academy of Aerospace and Engineering 0

| | | |
|--------------------------------------|----|---|
| 6002 | PS | Integrating Piezoelectric Sensors and Photovoltaic Material in an Artificial Energy-Harvesting Model Tree |
| Student(s) Laasya Chintapalli | | Grade 11 Town Farmington |

Windsor Academy of Aerospace and Engineering 0

| | | |
|--------------------------------|----|---|
| 4019 | PT | Using Vortex Hydropower Turbines to Harvest Electrical Energy |
| Student(s) Marcus Davis | | Grade 8 Town Broad Brook |
| Dylan Gao | | Grade 7 Town Coventry |

Windsor Academy of Aerospace and Engineering 0

| | | |
|----------------------------------|----|---|
| 3004 | LS | Therapeutic Potential of Antibody Drug Conjugates Targeting The Expression of Trophoblast Cell-Surface Antigen 2 (TROP-2) On High Grade Serous Epithelial Ovarian Carcinoma |
| Student(s) Ana-Lois Davis | | Grade 12 Town Broad Brook |

[SchTown] [School] [Teacher]
[Proj#] [FCat] [Project Title]

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|-------------------|--------------------------------------|--|----------|------|-------------|
| Windsor | Academy of Aerospace and Engineering | 0 | | | |
| 3054 | LS | Optimizing Laterite Soil Microbial Fuel Cells for Community-Centric Electricity Generation in Tropical Underdeveloped Regions | | | |
| Student(s) | | Namyanzi Edwards | Grade 11 | Town | New Britain |
| Windsor | Academy of Aerospace and Engineering | 0 | | | |
| 4011 | PT | Using Piezoelectric Sensors to Harvest Energy from Automobile Tires and the Road Surface | | | |
| Student(s) | | Palaniappan Manikandan | Grade 8 | Town | Ellington |
| | | Duke Clotney | Grade 8 | Town | Hartford |
| Windsor | Academy of Aerospace and Engineering | 0 | | | |
| 4004 | PT | Integrating Pelton Turbines Into Industrial Pipes to Harvest Energy | | | |
| Student(s) | | Aaditya Sadhvani | Grade 8 | Town | Ellington |
| | | Roshan Kumar | Grade 8 | Town | Ellington |
| Windsor | Academy of Aerospace and Engineering | 0 | | | |
| 4001 | PT | Combining Optical Wireless Communications (OWC) and Neuromorphic Architecture for Large-Scale Computations | | | |
| Student(s) | | Rithvik Suren | Grade 8 | Town | Ellington |
| | | Aarav Chevva | Grade 8 | Town | Ellington |
| Windsor | The Loomis Chaffee School | 0 | | | |
| 6044 | PS | A Deep Semi-Supervised Domain Generalization Approach for Epileptic Seizure Prediction using Electro Encephalography (EEG) | | | |
| Student(s) | | Sunwoo An | Grade 9 | Town | Seoul |
| Woodbridge | Amity Regional High School | 0 | | | |
| 6010 | PS | Creation of an Environment-Adaptive Reaction Algorithm Implemented on a Novel Smart Fluidic Servo Actuator to Provide a Sense of Pseudo-Exproprioception and Exteroception | | | |
| Student(s) | | Aditi Bhattamishra | Grade 12 | Town | Orange |
| Woodbridge | Amity Regional High School | 0 | | | |
| 6020 | PS | Developing and Testing a Laminar Airfoil Utilizing Computational Fluid Dynamics to Implement Into General Aviation | | | |
| Student(s) | | Alejandro Huber | Grade 12 | Town | Woodbridge |
| Woodbridge | Amity Regional High School | 0 | | | |
| 6098 | PS | Modeling Interactions Between the Neocortex and the Basal Ganglia During Temporal Sequential Learning Using a Hierarchical Temporal Memory Artificial Neural Network | | | |
| Student(s) | | Annika Yun | Grade 12 | Town | Orange |