



**Conn. Science & Engineering Fair**  
**Quinnipiac University**  
**March 4 - 16, 2024**

**Top Category Winners**

**High School Physical Sciences Team**

Jingyuan Zhang Choate Rosemary Hall Wallingford  
Xiyin Yang  
*AgriBotanical: An Intelligent Continuum-Maneuver Robot for Monitoring and Managing Arboreal Wild Bee Colonies*

**High School Physical Sciences**

Meiyin Ren Westminster School Simsbury  
*Dual-Degree-of-Freedom Pneumatic Shoulder Rehabilitation Device Based on Flexible Materials*

**8th Grade Physical Sciences**

Mikah Kaalund Central Middle School Greenwich  
*The Synergistic Improvement of Indoor Air HEPA-Filtration using Concurrent Dehumidification*

**7th Grade Physical Sciences**

Dylan Karpf Greens Farms Academy Westport  
*Novel Radiation Shielding for Radiation Therapy and Arabidopsis on Mars*

**Middle School (Grades 7 & 8) Physical Sciences Team**

Rithvik Suren Academy of Aerospace and Engineering Windsor  
Aarav Chevva  
*Combining Optical Wireless Communications (OWC) and Neuromorphic Architecture for Large-Scale Computations*

**High School Life Sciences Team**

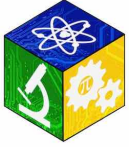
Samarth Basanth South Windsor High School South Windsor  
Tejbir Litt  
*MushBox: In Situ Biodegradation of Municipal Solid Waste through Mycoremediation via Mycelium and Cellulosic Waste Integration*

**High School Life Sciences**

Ashley Malkin Greenwich High School Greenwich  
*Development and In vitro Verification of a Polymersome for Blood-Brain Barrier Transport Through a Novel Machine Learning Model*

**8th Grade Life Sciences**

Tyler Malkin Central Middle School Greenwich  
*Development of a Simple Salivary Rapid Diagnostic for the Detection of Iodine Deficiencies*



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**7th Grade Life Sciences**

Besjana Veliu

ACES at Chase

Waterbury

*Reducing Lycorma delicatula, Lantern Fly, Infestation: Using Essential Oils to Address Crop Damage and Food Shortages.*

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**Middle School (Grades 7 & 8) Life Sciences Team**

Kabir Rokkam

Middlebrook School

Wilton

Shushruth Balaji

*BEAT THE PEAT - RICE HUSK, THE SUSTAINABLE AND ECO-FRIENDLY ALTERNATIVE TO PEAT MOSS*

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