

Connecticut Science & Engineering Fair

Quinnipiac University

March 3 - 15, 2025

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

Final Judging Results

Award Legend

Plaque Winners = 1, 2, ...
Medalists = m
Winners = w

Applied Technology Awards

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

Middle School

Westport Greens Farms Academy Mathieu Freeman

5523 P8 Investigating Modified Dental X-Rays in Novel Digital Computed Radiography Imaging for Emergency Medical Services
Award 1 Student(s) Dylan Karpf Grade 8 Town Westport

- * Stanley Black & Decker Applied Technology Awards --- 1st Place Middle School - \$200 and Plaque, Medallion
- * Pepsico Engineering Awards --- Finalist - Engineering Middle School - CSF Medallion
- * Alexion Biotechnology Awards --- Finalist - Biotechnology 8th grade - CSF Medallion
- * Thermo Fisher Scientific Junior Innovators Challenge --- Nomination to compete in the Thermo Fisher Scientific JIC for selected top MS winners
- * Lemelson Early Inventor Award --- Certificate & \$100 cash award from Lemelson Foundation
- * IEEE William R. Wessman Awards --- \$100 Honorable Mention

Greenwich Western Middle School Andrew Bramante

5502 P8 Integration of Photoluminescent Manganese-doped ZnS Nanocrystals
Award 2 Student(s) Alexandra Rothstein Grade 8 Town Greenwich

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 3rd Place- Physical Sciences 8th Grade Ind, - \$100 & trophy
- * Stanley Black & Decker Applied Technology Awards --- 2nd Place Middle School - \$150 and Plaque, Medallion
- * EnergizeCT Alternative & Renewable Energy Awards --- 1st Place Middle School - \$200 Cash and Trophy
- * Alexion Biotechnology Awards --- Finalist - Biotechnology 8th grade - CSF Medallion
- * Kiev Family Awards --- 2nd place - \$150 - For Excellence in Engineering Middle School

Salisbury Indian Mountain School Sonya Friel

1011 LT Microneedle constructs for cutaneous slow-release insulin and GLP-1 in diabetes mellitus
Award 3 Student(s) Tianyu Xie Grade 8 Town Lakeville
Yiheng Zhao Grade 8 Town Lakeville

- * Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- Finalist - Life Sciences Middle School Team - CSF Medallion
- * Stanley Black & Decker Applied Technology Awards --- 3rd Place Middle School - \$100 and Plaque, Medallion
- * Alexion Biotechnology Awards --- Finalist - Biotechnology 8th grade - CSF Medallion

Avon Talcott Mountain Academy Hannah Marye

5508 P8 The impact of 3D-printed low-cost quadrupedal robots using swarm mechanics on highway litter cleaning services
Award m Student(s) Kwabena Addai - Boateng Grade 8 Town East Hartford

- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * Infosys Foundation Computer Science Awards --- Middle School Finalist - Medallion

Bridgeport Geraldine Johnson Kelly Mulligan Mulligan

2523 L8 Seeing the Unseen: Smart Glasses that Brings Sight to the Blind
Award m Student(s) Mariam Yousf Grade 8 Town Bridgeport

- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * Pepsico Engineering Awards --- 3rd Place- Engineering MS \$100 & trophy



Connecticut Science & Engineering Fair

Quinnipiac University

March 3 - 15, 2025

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

Final Judging Results

Award Legend

Plaque Winners = 1, 2, ...
Medalists = m
Winners = w

Applied Technology Awards

[SchTown] [School] [Teacher]

[Proj#] [FCat] [Project Title]

Enfield Chiaravalle Academy C Tim Coleman

4019 PT Operating A Hydroponic System Using Rainwater

Award m

Student(s) Zoha Shamsi

Grade 8 **Town** Suffield

Antonina Borodii

Grade 8 **Town** Enfield

- * Petit Family Foundation Women in Science & Engineering Awards --- 3rd Place- Middle Schools- \$100 / trophy
- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * EnergizeCT Future Sustainability Awards --- 1st Place Middle School - \$200 Cash and Trophy

Greenwich Central Middle School Andrew Bramante

5513 P8 Neutralization of Ocean Acidification, and Promotion of Additional Atmospheric CO₂ Sequestration, via a Melamine-PTFE-Mg(OH)₂ Floatable Sponge

Award m

Student(s) Tian-yi Chen

Grade 8 **Town** Greenwich

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 5th Place- Physical Sciences 8th Grade Ind. - trophy
- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * Alexion Biotechnology Awards --- 2nd Place Biotechnology 8th grade - \$150 & trophy

Greenwich Eastern Middle School Andrew Bramante

5511 P8 Field and Lawn Run-off Removal of Nitrates and Phosphates via an Iron & Calcium Fortified Biochar

Award m

Student(s) Ellie Mao

Grade 8 **Town** Riverside

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 1st Place- Physical Sciences 8th Grade Ind.- \$200 & trophy
- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * Connecticut Science Teachers Association's Marty Tafel Student Research Award --- Physical Sciences 8th Grade - \$500 and invite to CSTA Award Banquet
- * Alexion Biotechnology Awards --- 5th Place Biotechnology 8th grade- trophy
- * Thermo Fisher Scientific Junior Innovators Challenge --- Nomination to compete in the Thermo Fisher Scientific JIC for selected top MS winners

Greenwich Greenwich Catholic School Timothy Koppe

4015 PT MedAssist (Smart medicine storage)

Award m

Student(s) Artem Perekhodko

Grade 7 **Town** stamford

Jose Miguel Bowles

Grade 7 **Town** Greenwich

Ben Ballester

Grade 7 **Town** Stamford

- * Stanley Black & Decker Applied Technology Awards --- Middle School Finalist - Medallion
- * Zepke Awards --- \$120 - For the Best Use of Electronic Circuitry- Middle School
- * Connecticut Invention Convention "Next Step Inventors" --- Next Step Inventor Trophy & Invitation to compete at the 2025 Invention Convention, May 3



Connecticut Science & Engineering Fair

Quinnipiac University

March 3 - 15, 2025

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

Final Judging Results

Award Legend

Plaque Winners = 1, 2, ...
Medalists = m
Winners = w

Applied Technology Awards

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

High School

Stamford King School Victoria Schulman

6104 PS A Voice Controlled Robotic Arm for Assisting Complex Surgical Tasks
Award 1 Student(s) Dillon Maltese Grade 11 Town Greenwich

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 3rd Place- Physical Sciences Senior High Individual - \$100 & Plaque
- * Stanley Black & Decker Applied Technology Awards --- 1st Place High School - \$300 and Plaque, Medallion
- * Alexion Biotechnology Awards --- Finalist - Biotechnology Senior High - CSF Medallion
- * Office of Naval Research- U.S. Navy / U.S. Marine Corps --- High School- Certificate, \$75.00 gift card given by ONR

Windsor The Loomis Chaffee School Koby Osei-Mensah

6002 PS A Stroke of Genius: Applying Smart Wearable Technology to Record and Improve Freestyle Stroke in Competitive Swimmers
Award 2 Student(s) George Mirgorodskiy Grade 11 Town San Mateo

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- * Stanley Black & Decker Applied Technology Awards --- 2nd Place High School - \$200 and Plaque Medallion
- * Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- * Electric Boat Management Association Science and Engineering Research Awards --- Top Prize in Nautical Research - \$200 Cash for top project that has innovative nautical applications

Wallingford Choate Rosemary Hall Shiyao Gu

6086 PS A Novel Fishbone-Shaped Smart Glove for Stroke Patients
Award 3 Student(s) Jingyan Liu Grade 9 Town Shanghai

- * Petit Family Foundation Women in Science & Engineering Awards --- 2nd Place High School \$200 / plaque
- * Stanley Black & Decker Applied Technology Awards --- 3rd Place High School - \$ 100 and Plaque, Medallion
- * Jon Chapitis Memorial Award --- Jon Chapitis Spirit of Innovation Award - HS \$200
- * Biophysical Society --- Biophysics Award- \$100

Cheshire Cheshire Academy Breanna Craft

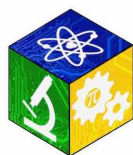
6013 PS A Tracking System.
Award m Student(s) Deanna Dixon Grade 11 Town Cheshire

- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- * Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion
- * Society of Women Engineers - Hartford Section --- Scientific Calculator

Greenwich Greenwich High School Andrew Bramante

6097 PS Development of Hybrid Servo-Pneumatic Lower-Body Exoskeleton for use as a Mobility Assistance Device
Award m Student(s) Isaac Bell Grade 11 Town Riverside

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- 5th Place- Physical Sciences Senior High Individual - Plaque
- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Alexion Biotechnology Awards --- 3rd Place Biotechnology Senior High - \$100 & plaque



Connecticut Science & Engineering Fair

Quinnipiac University

March 3 - 15, 2025

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

Final Judging Results

Award Legend

Plaque Winners = 1, 2, ...
Medalists = m
Winners = w

Applied Technology Awards

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

Hamden Hamden Hall Country Day School Robert Link

3134 LS Development and experimentation of an AI algorithm alongside a Near-Infrared LED device to assist in venipuncture.

Award m **Student(s)** Neev Makin **Grade** 11 **Town** Hamden

- * Connecticut Science Fair Association Life Science Awards with The Jackson Laboratory --- Finalist - Life Science Senior High - CSF Medallion
- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Lunch with a Patent Attorney --- Lunch with a Patent Attorney
- * Jon Stone Memorial Award --- Jon Stone Award for Innovative Engineering- \$100

Windsor The Loomis Chaffee School Larry Brackney

6520 PST Alternative Drivetrain System for Better Efficiency in FIRST Tech Challenge Robots

Award m **Student(s)** Emma Chu **Grade** 11 **Town** Ludlow
Yejoon Kwon **Grade** 11 **Town** Saratoga

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior Team - CSF Medallion
- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Infosys Foundation Computer Science Awards --- Senior High Finalist - Medallion
- * Pepsico Engineering Awards --- Finalist - Engineering High School - CSF Medallion

Windsor The Loomis Chaffee School Koby Osei-Mensah

3130 LS Bioremediation of PFAS: Integrating Oyster Shell Waste from Connecticut's Oyster Trail

Award m **Student(s)** Hyeonho Kim **Grade** 9 **Town** Windsor

- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Connecticut Association of Conservation and Inland Wetlands Commissions Environmental Sciences Awards --- HS Finalist - CSF Medallion
- * Stockholm Junior Water Prize --- Certificate, \$25 gift card by CSEF, possible advance to further competition

Woodbridge Amity Regional High School Lindsay McCarthy

6017 PS Developing a Wireless, Discreet, Precise, and Painless Piezoelectric Micropump System for Diabetes Patients

Award m **Student(s)** Joy Deng **Grade** 11 **Town** Orange

- * Connecticut Science Fair Association Physical Science Awards with CMS Dorothy Minervino --- Finalist - Physical Sciences Senior High - CSF Medallion
- * Stanley Black & Decker Applied Technology Awards --- Senior High Finalist - Medallion
- * Alexion Biotechnology Awards --- Finalist - Biotechnology Senior High - CSF Medallion
- * Society of Women Engineers - Hartford Section --- Scientific Calculator
- * University of Hartford Scholarships --- University of Hartford Scholarship - For Excellence in Engineering or Technology, Grade 11 only - \$30,000 (\$7,500/year)
- * University of Connecticut Academic Excellence Scholarship --- Academic Excellence Scholarship - (amount undefined) to a junior
- * Jon Stone Memorial Award --- Jon Stone Award for Innovative Engineering- \$100