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## Quinnipiac University

March 10 - 14, 2015

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### Final Judging Results

#### United Technologies Corporation Awards

<p><b>Award Legend</b></p> <p>Trophy Winners = 1, 2, ...</p> <p>Medalists = m</p> <p>Winners = w</p>
--

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

**Greenwich** Greenwich High School Andrew Bramante

6101 PS

Low Grade Waste Heat Recovery and Carbon Sequestration using an Innovative Reverse Electrodialysis (RED) and Pressure Retarded Osmosis (PRO) System

**Award**

**Student(s)** Ethan Novek

**Grade** 10 **Town** Greenwich

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 1st Place - Physical Sciences Senior High Individual - \$500 & Plaque, trip to compete at Intel ISEF
- Energize CT/eesmarts Future Sustainability Awards --- 1st Place High School - \$800 Cash, Plaque, and Trip to Compete I-SWEEEP, Houston
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack, Book, and Annual Report
- H. Joseph Gerber Medal of Excellence, an award of the Connecticut Academy of Science and Engineering in partnership with CCAT --- Physical Sciences 1st HS \$1,000, Solid Silver Medal of Excellence, invite to CASE Annual Mtg
- Office of Naval Research- U.S. Navy / U.S. Marine Corps --- High School- Certificate, \$75.00 gift certificate
- MIT Club of Hartford K-12 Initiative --- For excellence in science & technology of energy related research, high school, \$100 cash award



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### Final Judging Results

## UCONN Academic Excellence Scholarship

#### Award Legend

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

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

**Hartford** Greater Hartford Academy of Math & Science Dr.Aramli

3039 LS Zeolite Zaps Cancer Cells

**Student(s)** Jacqueline Klepinger

**Grade** 11 **Town** Wethersfield

- CASE Urban School Challenge Awards with Travelers --- Senior High Finalist - Medallion and acrylic award
- Quinnipiac University Scholarships --- \$20,000, 4 year scholarship (\$5000 per year) to Quinnipiac University for HS Student & \$500 cash
- University of Connecticut Academic Excellence Scholarship --- Academic Excellence Scholarship - \$5000 a year for each of four academic years- \$20,000 total



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 Winners = w

## UTC Aerospace Systems Awards for Excellence in Engineering

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

### Middle School

**Danbury** St. Joseph School Mrs. Reilly

5054 P7 Development of a technique to detect explosive residue for use in avoiding terrorism threats.

**Award** Student(s) **Bradley Kerr** Grade 7 Town Danbury

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 5th Place- Physical Sciences 7th Grade Individual - trophy
- Barnes Aerospace Applied Technology Awards --- 3rd Place Middle School - \$100 and Trophy, Medallion
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering

**Orange** Southern CT Hebrew Academy Karen Howell

5512 P8 Design, build and program a robot using an Arduino Mega 2560 R3 through an Android app to cheer up or relax children at a hospital

**Award** Student(s) **Ben Bruder** Grade 8 Town New Haven

- Barnes Aerospace Applied Technology Awards --- 2nd Place Middle School - \$200 and Trophy, Medallion
- Xerox Computer Science Awards --- 2nd Place Middle School - \$200, Trophy and Medallion
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering

**Plantsville** J.F. Kennedy Middle School Mrs. Pepin

2010 L7 "Pore" My Way to Cleaner Water: The use of flocculants and porous ceramic pots for purifying drinking water in developing countries

**Award** Student(s) **Matthew Maciejewski** Grade 7 Town Plantsville

- Pfizer Life Sciences Awards --- 1st Place- Life Sciences 7th grade- \$200 & trophy and Invitation to Compete Broadcom MASTERS
- Energize CT/eesmarts Sustainable Resources and Practices Awards --- 1st Place Middle School - \$500 Cash and Trophy
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack, Book, and Annual Report
- Alexion Biotechnology Awards --- 1st Place- Biotechnology 7th grade- \$300 & trophy
- Ricoh Corporation/Society for Science & the Public --- Certificate, Lapel Pin, \$50 gift card to Amazon given by CSEF
- Talcott Mountain Science Center --- Founder's Award - \$450 Saturday Mentorship Course at TMSC - Middle School Phys Science
- The Children's Museum --- 1 family 4-Pack of Admission Passes to the Children's Museum
- Milton Fisher Science Fair Award for Innovation and Creativity --- For Excellence in Creativity and Innovation by a High School student, \$200 cash



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### Final Judging Results

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 Winners = w

## UTC Aerospace Systems Awards for Excellence in Engineering

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

### High School

**Greenwich** Greenwich High School Andy Bramante

3096 LS Temperature-Independent, Portable, and Rapid Field Detection of Ebola via a Silk-Derived Lateral-Flow System

**Award** Student(s) **Olivia Hallisey** Grade 10 Town **Greenwich**

- Pfizer Life Sciences Awards --- 1st Place- Life Sciences Senior High- \$500 & Plaque, Trip to compete at Intel ISEF
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- H. Joseph Gerber Medal of Excellence, an award of the Connecticut Academy of Science and Engineering in partnership with CCAT --- Life Sci. Senior 1st HS- \$1,000, Solid Silver Medal of Excellence, invite to CASE Annual Mtg
- Alexion Biotechnology Awards --- 1st Place- Biotechnology Senior High- Trip to compete at Intel ISEF, \$1000 & plaque,
- Connecticut Invention Convention "Next Step Inventors" --- \$50 gift certificate & invitation to present at CT Invention Convention as "CIC Next Step Inventors"

**Greenwich** Greenwich High School Andy Bramante

3114 LS A Novel Antibody-Functionalized Graphene Transistor Lab-On-A-Chip for Selective Detection of Malaria Pathogens

**Award** Student(s) **Paul Hansel** Grade 11 Town **Old Greenwich**

- Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- Alexion Biotechnology Awards --- 5th Place- Biotechnology Senior High- \$100 & plaque
- Milton Fisher Science Fair Award for Innovation and Creativity --- For Excellence in Creativity and Innovation by a Middle School student, \$100 cash

**Greenwich** Greenwich High School Andrew Bramante

6101 PS Low Grade Waste Heat Recovery and Carbon Sequestration using an Innovative Reverse Electrodialysis (RED) and Pressure Retarded Osmosis (PRO) System

**Award** Student(s) **Ethan Novek** Grade 10 Town **Greenwich**

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 1st Place - Physical Sciences Senior High Individual - \$500 & Plaque, trip to compete at Intel ISEF
- Energize CT/eesmarts Future Sustainability Awards --- 1st Place High School - \$800 Cash, Plaque, and Trip to Compete I-SWEEEP, Houston
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack, Book, and Annual Report
- H. Joseph Gerber Medal of Excellence, an award of the Connecticut Academy of Science and Engineering in partnership with CCAT --- Physical Sciences 1st HS \$1,000, Solid Silver Medal of Excellence, invite to CASE Annual Mtg
- Office of Naval Research- U.S. Navy / U.S. Marine Corps --- High School- Certificate, \$75.00 gift certificate
- MIT Club of Hartford K-12 Initiative --- For excellence in science & technology of energy related research, high school, \$100 cash award



**Connecticut Science & Engineering Fair**  
**Quinnipiac University**  
**March 10 - 14, 2015**

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**Final Judging Results**

**UTC Aerospace Systems Awards for Excellence in Engineering**

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 Winners = w

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

**Greenwich** Greenwich High School Andrew Bramante

6087 PS Application of Manganese-Based Ionic Liquid for Optimized Performance of Non-aqueous / Aqueous Redox Flow Batteries

**Award** Student(s) **Nicholas Szabo** **Grade 11** **Town** Glenville

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 3rd Place- Physical Sciences Senior High Individual - \$200 & Plaque
- Barnes Aerospace Applied Technology Awards --- 2nd Place High School - \$300 and Plaque Medallion
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering
- Office of Naval Research- U.S. Navy / U.S. Marine Corps --- High School- Certificate, \$75.00 gift certificate



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### Final Judging Results

**Award Legend**  
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## Xerox Computer Science Awards

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

### Middle School

**Bozrah** Fields Memorial School Evelyn Brown

5507 P8 Music Metrics and Fractals: Analyzing Different Genres of Digitized Music to Identify Input Metrics for Programming Fractal Representations of the Music with Mathematica

Award 1 Student(s) Genevieve Buckridge Grade 8 Town Bozrah

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 3rd Place- Physical Sciences 8th Grade Ind, - \$100 & trophy, invite to compete Broadcom MASTERS
- People's United Bank Mathematics Awards - with ATOMIC --- 1st Place Middle School- \$150 from ATOMIC, and Trophy, \$300 from People's United Bank
- Xerox Computer Science Awards --- 1st Place Middle School - \$300, Trophy and Medallion
- Connecticut Association for the Gifted --- Leonardo Davinci 7-8 Grade \$50 Gift Certificate
- Stanley Lessoff Award for Excellence In Analytical Technique --- \$100 Cash and Plaque

**Orange** Southern CT Hebrew Academy Karen Howell

5512 P8 Design, build and program a robot using an Arduino Mega 2560 R3 through an Android app to cheer up or relax children at a hospital

Award 2 Student(s) Ben Bruder Grade 8 Town New Haven

- Barnes Aerospace Applied Technology Awards --- 2nd Place Middle School - \$200 and Trophy, Medallion
- Xerox Computer Science Awards --- 2nd Place Middle School - \$200, Trophy and Medallion
- UTC Aerospace Systems Awards for Excellence in Engineering --- \$1,000 cash and plaque for excellence in engineering

**Avon** Talcott Mountain Academy Alyson Tockstein

5522 P8 Thermodynamics of the Stirling Cycle: Testing the Effects of the Relative Temperature Difference on Stirling Engine Output

Award 3 Student(s) Varun Aggarwal Grade 8 Town South Glastonbury

- Xerox Computer Science Awards --- 3rd Place Middle School- \$100, Trophy, Medallion

**Bethany** Amity Reg Middle School, Bethany Campus Mr. Kevin Berean

4033 PT BabyBot: Creating a Robot to Soothe a Crying Infant

Award m Student(s) Neha Sudhir Grade 8 Town Woodbridge  
 Rosie Du Grade 8 Town New Haven  
 Allison Fischman Grade 8 Town Woodbridge

- Connecticut Science & Engineering Fair Physical Sciences Awards --- Finalist - Physical Science sJr Team - CSF Medallion & Acrylic Award
- Xerox Computer Science Awards --- Middle School Finalist - Medallion, Acrylic Award
- Meyerand Young Woman Scientist Awards --- \$300 cash - Middle School, Physical Sciences





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### Xerox Computer Science Awards

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

**Bethany** Amity Reg Middle School, Bethany Campus Kevin Berean

4017 PT The Sensing Cane

Award m

Student(s) Kate Yuan

Grade 8 Town Woodbridge

Catalina Betancur

Grade 8 Town Woodbridge

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 3rd Place- Physical Sciences MS Team-trophy, invite to compete Broadcom MASTERS
- Barnes Aerospace Applied Technology Awards --- 1st Place Middle School - \$300 and Trophy, Medallion
- Xerox Computer Science Awards --- Middle School Finalist - Medallion, Acrylic Award
- American Society of Safety Engineers, CT Valley Chapter --- \$100 grade 7-8 project
- ISA - International Society for Automation --- 2nd - \$75 award

**Bethel** St. Mary School Mrs. McDonald

5043 P7 A Matter of Facts: Designing a Math App to Help Kids Learn Their Math Facts

Award m

Student(s) Kevin Legnard

Grade 7 Town Bethel

- People's United Bank Mathematics Awards - with ATOMIC --- 2nd Place Middle School- \$100 from ATOMIC, and Trophy, \$200 from People's United Bank
- Xerox Computer Science Awards --- Middle School Finalist - Medallion, Acrylic Award



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## Xerox Computer Science Awards

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

### High School

**Woodbridge** Amity Regional High School Deborah Day

6509 PST Echocardiogram-Based Wireless Left Ventricular Assist Device (LVAD) with Mobile Application Monitoring and Control

**Award** 1 **Student(s)** Daniel Giebisch **Grade** 12 **Town** Woodbridge  
 Noah Gallant **Grade** 12 **Town** Bethany

- Connecticut Science & Engineering Fair Physical Sciences Awards --- 2nd Place- Physical Sciences Senior High Team- \$300(split) & Plaque
- Xerox Computer Science Awards --- 1st Place High School - \$400, Plaque, Medallion
- Intel Excellence in Computer Science Award --- \$200 & certificate
- IEEE, Connecticut Section --- \$100 Honorable Mention
- University of New Haven High School Awards in Engineering & Science --- \$100 For High School Project in Computer Science

**Bristol** St. Paul Catholic High School Mr Alberti

6076 PS Novel Approches of Making Human to Robot Interaction Possible for the Handicapped.

**Award** 2 **Student(s)** Kamila Krawczuk **Grade** 9 **Town** New Britain

- Xerox Computer Science Awards --- 2nd Place High School - \$300, Plaque, Medallion
- Intel Excellence in Computer Science Award --- \$200 & certificate
- Leask/Francoeur Family Awards --- Award for excellence and innovation in electrical engineering or computer science - \$200 cash

**Putnam** Putnam Science Academy Serdar Haytiyev

6071 PS Designing a Braille E-Book For the Visually Impaired and Blind People

**Award** 3 **Student(s)** Abdulkadir Yilmaz **Grade** 11 **Town** Putnam

- Connecticut Science & Engineering Fair Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award
- Barnes Aerospace Applied Technology Awards --- Senior High Finalist - Medallion and acrylic award
- Xerox Computer Science Awards --- 3rd Place High School- \$200, Plaque, Medallion
- Connecticut Association for the Gifted --- Leonardo Davinci 9-12 Grade \$50 Gift Certificate
- ISA - International Society for Automation --- 3rd - \$50 award
- Leask/Francoeur Family Awards --- Award for excellence and innovation in electrical engineering or computer science - \$200 cash
- Education Connection- Center for 21st Century Skills Awards --- \$100 For innovative use of technology to advance science or engineering
- Connecticut Invention Convention "Next Step Inventors" --- \$50 gift certificate & invitation to present at CT Invention Convention as "CIC Next Step Inventors"

**Avon** Avon High School Galuska

6025 PS Program your Diet

**Award** m **Student(s)** Nivedha Natchiappan **Grade** 10 **Town** Avon

- Xerox Computer Science Awards --- Senior High Finalist - Medallion, Acrylic Award



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#### Xerox Computer Science Awards

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 Trophy Winners = 1, 2, ...  
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 Winners = w

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

**Glastonbury** Glastonbury High School Ms. Pintavalle

6073 PS Chef NAO: The Humanoid Cooking Robot

Award **m** Student(s) **Kiele Sacco** Grade 12 Town Glastonbury

- Xerox Computer Science Awards --- Senior High Finalist - Medallion, Acrylic Award

**Ridgefield** Ridgefield High School Patrick Hughes

6047 PS The Effect of Different Checkerboard Sizes on Steady State Visually Evoked Potentials

Award **m** Student(s) **Randy Deng** Grade 12 Town Ridgefield

- Xerox Computer Science Awards --- Senior High Finalist - Medallion, Acrylic Award
- Connecticut Association of Physics Teachers --- \$100 Senior project
- IEEE, Connecticut Section --- \$100 Honorable Mention

**Salisbury** Salisbury School Tobias Ayer

6014 PS The physics of the space elevator construction.

Award **m** Student(s) **Kyungmin Lee** Grade 11 Town Salisbury

- People's United Bank Mathematics Awards - with ATOMIC --- 3rd Place High School - Plaque, \$200 from People's United Bank
- Xerox Computer Science Awards --- Senior High Finalist - Medallion, Acrylic Award
- Barker Mohandas Award for Transportation Research --- \$200 Cash & Plaque for Excellence in Transportation Related Research- High School

**Woodbridge** Amity Regional High School Deborah Day

6082 PS Creating a Semantic Search Engine with Voice Integration

Award **m** Student(s) **David Wang** Grade 11 Town Bethany

- Xerox Computer Science Awards --- Senior High Finalist - Medallion, Acrylic Award
- U.S. Coast Guard Research and Development Center --- Summer internship to conduct research aboard ship or at a USCG base + \$50 Amazon Gift Card given by CSEF.