

# Connecticut Science Fair **Quinnipiac University** March 15 - 19, 2011

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

#### Regular Fair Winners

[SchTown]

[School]

[Teacher]

[Proj#]

[Project Title]

Sorted by:

- Fair Category

- Finalist standing in regular fair (1st, 2nd, etc)

- Project number

Bethel Bethel High School Mr. Raymond Turek

3033 Truth has Dirty Hands? Dirty Hands have the Truth

Student(s) Madhumita Das

Grade 11 Town Bethel

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

Bethel Bethel High School Ray Turek

6006 Can Bacteria Withstand the Power of UV Light?

Student(s) Brian Michalka

Grade 11 Town Bethel

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award

Bethel Bethel High School Mr. Raymond Turek

Super Weed: Allelopathic Inhibition of Garlic Mustard (Alliaria Petiolata) on Germination and Growth of Native Zinnia Seeds Grade 11 Town Bethel

Student(s) Julie M. Zeller

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

• Audubon Connecticut & Arch Chemicals Environmental Awards --- HS Finalist - Audubon gifts, CSF Medallion, Arylic award

Bridgeport Bridgeport Aquaculture School Mr. Kirk Shadle

3507 The Isolation and Analysis of Crude Proteins of the Bacteria Xenorhabdus nematophila

Student(s) Thao Ngoc T. Nguyen

Grade 12 Town Bridgeport

Tobin J. Kulangara

Grade 12 Town Bridgeport

Pfizer Life Sciences Awards --- 1st Place- Life Sciences Senior High Team- \$500 (split) & trophy

Bridgeport Bridgeport Aquaculture School Mr.Shadle

A Model Diesel Spill and Its Impact on Biological Oxygen Demand 6013

Student(s) Taylor A. Sambrook

Grade 12 Town Trumbull

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award

Bridgeport Longfellow School Mr. Hyland

5540 Wind Power

Student(s) Rami M. Kharbouch

Grade 8 Town Bridgeport

 Dominion's Millstone Power Station Physical Sciences Awards --- 2nd Place- Physical Sciences 8th Grade Ind. -\$200 & trophy, invite to compete Broadcom MASTERS

Cheshire St. Bridget School Mr. Kerry Martens

5502 What is the best packaging material for protecting a given object?

Student(s) Nicholas J. Indorf Grade 8 Town Wallingford

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 8th Grade - CSF Medallion & Acrylic Award

#### 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Danbury Broadview Middle School D. Rovnak

4014 Earthquake

Student(s) Evan L. Coco Grade 8 Town Danbury

Tyler Amaral Grade 8 Town Danbury

• Dominion's Millstone Power Station Physical Sciences Awards --- 2nd Place- Physical Sciences MS Team- \$100 each & trophy, invite to compete Broadcom MASTERS

- Goodrich ISR Awards for Excellence In Engineering --- 3rd Place- Engineering Middle School \$100 Cash & trophy
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plague, Backpack and Annual Report

**Danbury** Danbury High School Marsha Turek

3024 Biological Control of Ticks to Prevent Lyme Disease Using Entomopathogenic Nematodes

Student(s) Ryan D. Kerr

Grade 10 Town Danbury

- Pfizer Life Sciences Awards --- Finalist Life Science Senior High CSF Medallion & Acrylic Award
- Alexion Biotechnology Awards --- 1st Place- Biotechnology Senior High- Trip to compete at Intel ISEF, \$500 & trophy,

Danbury St. Joseph School Mrs. Jennifer Page

2519 Outbreak! Predicting the modes and transmission rates of a human viral epidemic

Student(s) Janine A. Kerr

Grade 8 Town Danbury

- Pfizer Life Sciences Awards --- 3rd Place- Life Sciences 8th grade- \$100 & trophy and Invite to Compete Broadcom MASTERS
- ATOMIC (Associated Teachers of Mathematics In CT) Mathematics Awards with People's United Bank --- 3rd Place Middle School - Trophy , \$100 from People's United Bank
- Alexion Biotechnology Awards --- 2nd Place- Biotechnology 8th grade- \$200 & trophy and Invitation Compete in Broadcom MASTERS

Danbury St. Peter/Sacred Heart School Mr. Greg Capone

5034 A-MAZE-ing Robots: Data structures, Algorithms, and Modern Robotics

Student(s) Gabriel A. Correa

Grade 7 Town Danbury

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences 7th Grade CSF Medallion & Acrylic Award
- Computer Science Awards --- 3rd Place Middle School- \$100, Trophy, Medallion
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award

East Granby East Granby Middle School Mr. Langan

Helmet Impact Study - Which type of sports helmet absorbs the most impact?

Student(s) Gavin S. McConnell

**Grade** 7 **Town** East Granby

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award

East Haven East Haven Academy Mrs. Staires

When I Change The Type of Antacid, How Many Milliliters of Stomach Acid Will Be Neutralized?

Student(s) Sarah E. Harkins

Grade 7 Town East Haven

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences 7th Grade CSF Medallion & Acrylic Award
- Quinnipiac University Scholarships --- \$20,000, 4 year scholarship to Quinnipiac University for Middle School Student

Fairfield Our Lady of the Assumption/Holy Family Kathy Almeida

What type of rock makes efficient flooring in different rooms of your home?

Student(s) Marleena S. Reed Grade 8 Town Bridgeport

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 8th Grade - CSF Medallion & Acrylic Award

5006

#### 2011 Regular Fair Winners

[SchTown] [School] [Teacher] [Proj#] [Project Title] Glastonbury Glastonbury High School Ms. Pintavalle 3028 RodA, a Component of the Prokaryotic Cytoskeleton, As a Potential Antibacterial Drug Target Student(s) Kaitavjeet Chowdhary Grade 10 Town Glastonbury Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award Glastonbury Glastonbury High School Diane Pintavalle 6027 A Surprising Geometric Transformation Student(s) Chung Su Hong Grade 12 Town Glastonbury Dominion's Millstone Power Station Physical Sciences Awards --- 3rd Place- Physical Sciences Senior High Individual - \$200 & trophy ATOMIC (Associated Teachers of Mathematics In CT) Mathematics Awards - with People's United Bank --- 1st Place High School- \$150 from ATOMIC, Trophy, \$500 from People's United Bank United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack and Annual Report Glastonbury Glastonbury High School Diane Pintavalle Anticancer property of major goat milk fatty acids and delineating their mechanisms of action 3013 Student(s) Amoolya V. Narayanan Grade 12 Town Glastonbury Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award Alexion Biotechnology Awards --- 2nd Place- Biotechnology Senior High- \$400 & trophy, Glastonbury Glastonbury High School Diane Pintavalle Non-Metal Redox Kinetics: Acid-catalyzed Reaction of N-chloro-N-methylacetamide with Sulfite and Hydrogen Sulfite Ion 6076 Student(s) Akilesh V. Potti Grade 12 Town Glastonbury Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award Glastonbury Glastonbury High School Diane Pintavalle Comparisons of Aortic Stiffness using a Hooke's law Derived Spring Constant Between Aneurysm and Non-Aneurysm 3062 Groups Student(s) Rahul Sehgal Grade 12 Town Rocky Hill Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award Greens Farms Greens Farms Academy Dr. Freeman 6037 Characterization of Nickel and Copper Complexes Student(s) Kaitlyn N. Morio Grade 12 Town Westport Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award Greens Farms Greens Farms Academy Dr. Freeman 2032 Algae Biofuels Student(s) Lydia Picoli Grade 7 Town Wilton **Greenwich** Greenwich High School Andrew Bramante 3020 Exploration of the GastroIntestinal Health Benefits of Anthocyanins in Blackcurrant Berries Student(s) Philip W. Geske Grade 11 Town Riverside Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Greenwich Greenwich High School Andrew Bramante

[6040] Electrified Nanoscale Architecture in Mixed Matrix Membranes as a Means of Rapid Throughput Water Sterilization

Student(s) Will B. Hallisey Grade 11 Town Greenwich

 Dominion's Millstone Power Station Physical Sciences Awards --- 4th Place- Physical Sciences Senior High Individual - trophy

- Audubon Connecticut & Arch Chemicals Environmental Awards --- 1st Place HS- \$500, Trophy, Audubon gifts
- Goodrich ISR Awards for Excellence In Engineering --- 3rd Place- Engineering Senior High \$200 & trophy

Greenwich Greenwich High School Andrew Bramante

Optimization of a Microbial Fuel Cell Structure to Drive a Bioelectrochemically-Assisted Wastewater Treatment Reactor

Student(s) Ryota Ishizuka

Grade 11 Town Cos Cob

- Dominion's Millstone Power Station Physical Sciences Awards --- 1st Place Physical Sciences Senior High Individual - \$500 & trophy, trip to compete at Intel ISEF
- Barnes Aerospace Applied Technology Awards --- 1st Place High School \$500 and Trophy, Medallion and lunch with intellectual property attorney
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- 2nd Place High School \$300 Cash and Trophy
- eesmarts/CT Energy Efficiency Fund Future Sustainability Awards --- High School Finalist Medallion and Acrylic Award
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack 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 Senior - \$1,000 cash, Solid Silver Medal of Excellence, invite to CASE Annual Mtg

Greenwich Greenwich High School Mr. Andrew Bramante

Synthesis of Hot Electron Carrier Lead Selenide Nanocrystals and Thin Film Layers using a a Novel Vitamic C Reduction

Student(s) Victoria R. Leto

Grade 11 Town Greenwich

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences Senior High CSF Medallion & Acrylic Award
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- High School Finalist Medallion, Year Pass to CT Science Center
- eesmarts/CT Energy Efficiency Fund Future Sustainability Awards --- High School Finalist Medallion and Acrylic Award

Greenwich Greenwich High School Mr. Andrew Bramante

Visible Illumination of Ferroelectric BiFeO3 Thin Films to Produce a Polarization-Dependent Bulk Photovoltaic Effect

Student(s) James P. O'Sullivan Grade 11 Town Old Greenwich

- Dominion's Millstone Power Station Physical Sciences Awards --- 5th Place- Physical Sciences Senior High Individual - trophy
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering High School CSF Medallion & Acrylic Award
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack and Annual Report

Greenwich Greenwich High School Andy Bramante

Purification of Biofuel Syngas via Methanation of CO2 with a Raney Nickel-Aluminum Alloy

Student(s) Nicholas M. Ornitz Grade 11 Town Old Greenwich

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences Senior High CSF Medallion & Acrylic Award
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- High School Finalist Medallion, Year Pass to CT Science Center

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Greenwich/Riverside Eastern Middle School Brian Carstens

5009 A Cost-Effective, Eco-Friendly Weather Monitoring UAV.

Student(s) Paul J. Hansel Grade 7 Town Old Greenwich

- Dominion's Millstone Power Station Physical Sciences Awards --- 4th Place- Physical Sciences 7th Grade Ind. trophy, invite to compete Broadcom MASTERS
- Barnes Aerospace Applied Technology Awards --- 2nd Place Middle School \$200 and Trophy, Medallion
- Computer Science Awards --- Middle School Finalist Medallion, Acrylic Award
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award

Guilford E.C. Adams Middle School Ms. Meyerjack

The Effect of Salt on the Amount of Hydrogen Produced by the Electrolysis of Water

Student(s) Sean J. Hackett Grade 7 Town Guilford

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award

Hamden Hamden High School Dr. Demetrios T. Braddock

3070 Protein Engineering of NPP4 into NPP2

Student(s) Bonnie E. Hawkins Grade 12 Town Hamden

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

Hamden High School Sonia Beloin

Role of MyD88 in DNA Damage Response

Student(s) Yiyuan Hu Grade 11 Town Hamden

Pfizer Life Sciences Awards --- 2nd Place- Life Sciences Senior High- \$300 & trophy, Trip to compete at Intel ISEF

Hamden Sacred Heart Academy Mrs. Brownell

Role of Karyogamy Genes in Nuclear Pore Complex Assembly

Student(s) Dominika A. Bajguz Grade 12 Town Naugatuck

Pfizer Life Sciences Awards --- 5th Place- Life Sciences Senior High- trophy

Hamden Sacred Heart Academy Sr. Mary Jane Paolella

The Effect of Escherichia Coli in the Female Genital Tract

Student(s) Amanda P. Kelly Grade 12 Town Shelton

• Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

Hamden Sacred Heart Academy Mrs. Pamela Brownell

The Structural Feasibility of Pykrete

Student(s) Raeanne Nuzzo Grade 10 Town North Haven
Yasmine Shreiteh Grade 10 Town Guilford

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior Team - CSF Medallion & Acrylic Award

Hartford Classical Magnet School Thomas Holloway

6508 Green Your PC

Student(s) Haley B. Troy Grade 11 Town Manchester

Jordan S. Kunzika Grade 11 Town Hartford

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior Team - CSF Medallion & Acrylic Award

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Hartford Grtr Hartford Academy of Math and Science Dr. Lili Aramli

The Effects of Ingested Substances on Embryonic Development 3506

Student(s) Mary Kuchenbrod Town Granby **Carolyn House** Grade 12 Town Simsbury

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High Team - CSF Medallion & Acrylic Award

Hebron Oei Homeschool Ellen McHugh

Prototype Design of an Electricity Generating Shoe Utilizing a Pumped Air Turbine. 5030

Student(s) Maura C. Oei

Town Hebron

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences 7th Grade CSF Medallion & Acrylic Award
- Barnes Aerospace Applied Technology Awards --- Middle School Finalist Medallion and acrylic award
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- 3rd Place Middle School \$100 Cash and Trophy

Grade 7

- eesmarts/CT Energy Efficiency Fund Sustainable Resources and Practices Awards --- 3rd Place Middle School -\$200 Cash and Trophy
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award

Madison Our Lady of Mercy School Mrs. Rosalie Zonder

5059 Burning Calories: How Much Energy is Stored in Different Types of Food

Student(s) Helena Bui Grade 7

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award

Madison Our Lady of Mercy School Rosalie Zonder

If Fire Prevention Is Your Intention, the Right Alarm Will Help You Avoid Harm 4025

Student(s) Andrew R. Muckle Grade 8 Town Madison

Michael M. Simoniello Grade 8 Town Killingworth

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Science sJr Team - CSF Medallion & Acrylic Award

Madison Our Lady of Mercy School Rosalie Zonder

1018 Will They Survive...

Student(s) Kevin O'Brien Grade 8 Town Guilford Liam Lynders Grade 8 Town Guilford

- Pfizer Life Sciences Awards --- 1st Place- Life Sciences MS Team- \$100 each & trophy and Invite to Compete **Broadcom MASTERS**
- Audubon Connecticut & Arch Chemicals Environmental Awards --- 3rd Place MS-\$100, Trophy, Audubon gifts

Manchester East Catholic High School Ms. Holly Noble

6050 Development of a Composite Clay Polymer Sponge for Remediation of Oil Contaminated Water.

Student(s) Theresa A. Oei Grade 12 Town Hebron

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences Senior High CSF Medallion & Acrylic Award
- Barnes Aerospace Applied Technology Awards --- 3nd Place High School \$ 200 and Trophy, Madllion
- eesmarts/CT Energy Efficiency Fund Future Sustainability Awards --- 1st Place High School \$800 Cash, Trophy, and Trip to Compete I-SWEEEP, Houston
- Goodrich ISR Awards for Excellence In Engineering --- 1st Place Engineering Senior High \$500 & trophy

Connecticut Science Fair 2011 Regular Fair Winners [SchTown] [School] [Teacher] [Proj#] [Project Title] Middlebury Memorial Middle School Mrs. Sachs 2011 The Relationship Between Different Methods of Thawing and Bacterial Growth on Chicken. Student(s) Walter J. Manuel Grade 7 Town Southbury Pfizer Life Sciences Awards --- 3rd Place- Life Sciences 7th grade- \$100 & trophy and Invite to Compete Broadcom **MASTERS**  Alexion Biotechnology Awards --- 4th Place- Biotechnology 7th grade- trophy New Britain Sacred Heart School Mrs. Kornas 5003 Football Helmet Safety Student(s) Robert A. Ebrahimi Grade 7 Town New Britain Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award New Haven Hopkins School Way Pung Effects of L-Theanine on Drosophila Melanogaster 3081 Student(s) Kingston Pung Town Madison Grade 11 Pfizer Life Sciences Awards --- 3rd Place- Life Sciences Senior High- \$200 & trophy New Milford New Milford High School Ms. Reed Methicillin-Resistant Staphylococcus Aureus (MRSA) in New Milford High School 3050 Student(s) Toni Viola Grade 11 Town New Milford Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award Alexion Biotechnology Awards --- 5th Place- Biotechnology Senior High- trophy Newtown St. Rose of Lima School Mrs. Dimon (Vitamin) C How Sweet It Is 5055 Student(s) Matthew Pelisson Grade 7 Town Sandy Hook Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award Newtown St. Rose of Lima School Marde Dimon Improved Process for Bioremediation of Oil Contaminated Seawater 2514 Student(s) Haley M. Ryan Grade 8 Town Newtown

- Pfizer Life Sciences Awards --- 1st Place- Life Sciences 8th grade- \$300 & trophy and Invite to Compete Broadcom MASTERS
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- 2nd Place Middle School \$200 Cash and Trophy
- Goodrich ISR Awards for Excellence In Engineering --- 1st Place- Engineering Middle School \$300 Cash & trophy
- Connecticut Science Teachers Association's Marty Tafel Student Research Award --- Life Science 8th Grade \$500 and invite to CSTA Award Banquet
- Alexion Biotechnology Awards --- 1st Place- Biotechnology 8th grade- \$300 & trophy and Invitation Compete in Broadcom MASTERS

Norwalk Norwalk High School Dr. Munrow

Polyphenols from Pomegranates

Student(s) Hayley N. Prescott

Sabrina Church

Grade 12

Town Norwalk

Town Norwalk

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior Team - CSF Medallion & Acrylic Award

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Norwalk The Montessori Middle School David Lavallee

2026 Would A Spill Damage The Glow

Student(s) Thomas Rosiello

Town Weston

Town Norwalk

 Pfizer Life Sciences Awards --- 1st Place- Life Sciences 7th grade- \$200 & trophy and Invitation to Compete **Broadcom MASTERS** 

Grade 7

Alexion Biotechnology Awards --- 1st Place- Biotechnology 7th grade- \$300 & trophy

Norwalk The Montessori Middle School David Lavallee

5554 Airlift Water Pumping

Student(s) Eric Smith

Dominion's Millstone Power Station Physical Sciences Awards --- 4th Place- Physical Sciences 8th Grade Ind. -

trophy, invite to compete Broadcom MASTERS

Grade 8

- Barnes Aerospace Applied Technology Awards --- 3rd Place Middle School \$100 and Trophy, Medallion
- eesmarts/CT Energy Efficiency Fund Sustainable Resources and Practices Awards --- 2nd Place Middle School -\$300 Cash and Trophy
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award

Norwalk West Rocks Middle School Ms. Delong

5549 Slingshot Science

Student(s) Daniel K. Lott

Grade 8 Town Norwalk

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 8th Grade - CSF Medallion & Acrylic Award

Norwich Norwich Free Academy Mr. Robert V Johnson

Impact of Turbine Design on Renewable Energy Storage System Efficiency 6029

Student(s) Ian D. Dakers

Grade 11 Town Bozrah

- Dominion's Millstone Power Station Physical Sciences Awards --- Finalist Physical Sciences Senior High CSF Medallion & Acrylic Award
- eesmarts/CT Energy Efficiency Fund Future Sustainability Awards --- High School Finalist Medallion and Acrylic
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering High School CSF Medallion & Acrylic Award
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack and Annual Report

Orange Southern Connecticut Hebrew Academy Mrs. Karen Howell

2521 Quantitative Analysis of Hypoxia and Its' Causes in Long Island Sound's Estuary

Student(s) Boruch S. Hecht

Grade 8 Town Norwalk

- Pfizer Life Sciences Awards --- 4th Place- Life Sciences 8th grade- trophy and Invite to Compete Broadcom **MASTERS**
- Alexion Biotechnology Awards --- 3rd Place- Biotechnology 8th grade- \$100 & trophy and Invitation Compete in Broadcom MASTERS

Orange Southern Connecticut Hebrew Academy Mrs. Karen Howell

4005 Analysis of non-heme iron's rate of cell absorption, and effect of iron's enhancers and inhibitors on cell absorption.

Student(s) Rivka Kantor Grade 7 Town Westport

Bracha E. Hecht Grade 7 Town Orange

- Dominion's Millstone Power Station Physical Sciences Awards --- 1st Place- Physical Sciences MS Team- \$100 each & trophy, invite to compete Broadcom MASTERS
- Alexion Biotechnology Awards --- 2nd Place- Biotechnology 7th grade- \$200 & trophy

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Orange Southern Connecticut Hebrew Academy Mrs. Karen Howell

5550 Quantitative Analysis of Bisphenol A, Effect on Simulated Cell and Skin Absorption, and Effect of Chelator

Student(s) Menachem T. Meltzer Grade 8 Town New Haven

- Dominion's Millstone Power Station Physical Sciences Awards --- 3rd Place- Physical Sciences 8th Grade Ind. \$100 & trophy, invite to compete Broadcom MASTERS
- Alexion Biotechnology Awards --- 4th Place- Biotechnology 8th grade- trophy and Invitation Compete in Broadcom **MASTERS**

Orange Southern Connecticut Hebrew Academy Mrs. Karen Howell

5518 The Buffering Capacity of Various Types of Soils and Grasses on Acid Rain

Student(s) Moshe Y. Piekarski Grade 8 Town Hamden

- Dominion's Millstone Power Station Physical Sciences Awards --- 5th Place- Physical Sciences 8th Grade Ind. trophy, invite to compete Broadcom MASTERS
- Audubon Connecticut & Arch Chemicals Environmental Awards --- MS Finalist Audubon gifts, CSF Medallion, Acrylic award
- Alexion Biotechnology Awards --- Finalist Biotechnology 8th grade CSF Medallion & Acrylic Award Souvenir

Pawcatuck St. Michael School Michael DeNoia

1005 What's the Deal With Organic Food? Examining Herbicides in Chickpeas.

Grade 7 Student(s) Victoria L. Johnson Town Pawcatuck

Adeline S. Visscher Grade 7 Town Mystic

- Pfizer Life Sciences Awards --- 3rd Place- Life Sciences MS Team- trophy and Invite to Compete Broadcom **MASTERS**
- Alexion Biotechnology Awards --- Finalist Biotechnology 7h grade CSF Medallion & Acrylic Award Souvenir

Putnam Putnam Science Academy Ahmet Hakan Duman

3513 Utilizing Autumn Foliage as an Alternative Energy Source and as an Absorbing Agent for Oil Spills

Student(s) Ozkan Cil Grade 12 Town Putnam Town Putnam Selahaddin S. Ozkan Grade 11

Fehmi E. Agaoglu Grade 11 Town Putnam

- Pfizer Life Sciences Awards --- 2nd Place- Life Sciences Senior High Team- \$300 (split) & trophy
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- High School Finalist Medallion. Year Pass to CT Science Center
- Alexion Biotechnology Awards --- Finalist Biotechnology Senior High CSF Medallion & Acrylic Award Souvenir

Putnam Putnam Science Academy Serdar Haytiyev

Using Citrus Fruit Peels as Environmentally Friendly and Low Cost Bio-Sorbents to Effectively Remove Phenol from 6516

Industrial Wastewater

Student(s) Yusuf Yilmaz Grade 12 Town Putnam Fadil A. Sencan Grade 12 Town Putnam Abdurrahman Cam Grade 12 Town Putnam

 Dominion's Millstone Power Station Physical Sciences Awards --- 1st Place- Physical Sciences Senior High Team-\$500 (split) & trophy

Ridgefield East Ridge Middle School Mrs. Sullivan

4017 Ferrofluid Student(s) Craig W. Burke Grade 8 Town Ridgefield Matthew S. Marcon Grade 8 Town Ridgefield

 Dominion's Millstone Power Station Physical Sciences Awards --- 3rd Place- Physical Sciences MS Team- trophy. invite to compete Broadcom MASTERS

#### 2011 Regular Fair Winners

[SchTown] [School] [Teacher] [Proj#] [Project Title] Ridgefield East Ridge Middle School Deborah Sullivan 1001 Just How Toxic Are Aerosols? Student(s) Adeleine Hupy Grade 8 Town Ridgefield Olivia Miloro Grade 8 Town Ridgefield Pfizer Life Sciences Awards --- Finalist - Life Sciences Middle School Team - CSF Medallion & Acrylic Award Rye, NY Rye Country Day School Dr. Mary Krasovec 3003 Development and Characterization of a Novel Listeria-Caspase-3 DNA Vaccine to Eradicate Metastatic Breast Cancer Student(s) Swathi Krishnan Grade 12 Town Stamford Pfizer Life Sciences Awards --- 1st Place- Life Sciences Senior High- \$500 & trophy, Trip to compete at Intel ISEF H. Joseph Gerber Medal of Excellence, an award of the Connecticut Academy of Science and Engineering in partnership with CCAT --- Life Sciences Senior - \$1,000 cash, Solid Silver Medal of Excellence, invite to CASE Alexion Biotechnology Awards --- Finalist - Biotechnology Senior High - CSF Medallion & Acrylic Award Souvenir Shelton Shelton High School Mrs. Pickett Eggs-traordinary Strength Student(s) John D. Hunter Grade 9 Town Shelton Kristian R. Schif Grade 9 Town Shelton Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior Team - CSF Medallion & Acrylic Award Shelton Shelton High School Ms. Haves The True Green Fuel Of the Future: Algae Student(s) Adam P. Zhitomi Grade 10 Town Shelton Samanth E. Dimas Grade 10 Town Shelton Pfizer Life Sciences Awards --- Finalist - Life Science Senior High Team - CSF Medallion & Acrylic Award United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack and Annual Report Southington DePaolo Middle School Mr. Young Is Fresh Water Safe To Drink? 1016 Student(s) Mack R. Golos Grade 8 Town Southington Jake T. Moise Grade 8 Town Southington Pfizer Life Sciences Awards --- 2nd Place- Life Sciences MS Team- \$100 each & trophy and Invite Compete **Broadcom MASTERS Southington** St. Thomas School Mrs. Pelczar 5033 Pullin' with Pulleys Student(s) Jameson C. Kief Grade 7 Town Plantsville Dominion's Millstone Power Station Physical Sciences Awards --- 1st Place- Physical Sciences 7th Grade Ind. - \$200 & trophy, invite to compete Broadcom MASTERS Southington St. Thomas School Mrs. Pauline Pelczar 5519 Cleaning up Oil Spills. Student(s) Ryan A. Mills Grade 8 Town Southington Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 8th Grade - CSF

Medallion & Acrylic Award

2011 Regular Fair Winners [SchTown] [School] [Teacher] [Proj#] [Project Title] Southington St. Thomas School Mrs. Pelczar 5050 Well Depth and Contamination Student(s) Caleigh M. Waskowicz Grade 7 Town Southington Dominion's Millstone Power Station Physical Sciences Awards --- 5th Place- Physical Sciences 7th Grade Individual trophy Stamford Trailblazers Academy Jessica Maneyapanda 4020 Breezin' By Town Stamford Student(s) Tatyana L. Geneste Grade 8 Sidney Y. Turnier Grade 8 Town Stamford Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Science sJr Team - CSF Medallion & Acrylic Award Stratford St. Mark School Philip Flynn 5560 Cosmic Rays: Comparing the Frequency of Muon Strikes with Heliospheric and Atmospheric Variables Student(s) Emily M. Robertson Grade 8 Town Stratford Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 8th Grade - CSF Medallion & Acrylic Award Wallingford Choate Rosemary Hall Lawrence Stowe 3066 Biodegradation of Polylactide Nanoweb Electrospun for Freshwater Harmful Algal Bloom Removal Student(s) Joshua S. Kim Grade 11 Town Wallingford Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award Audubon Connecticut & Arch Chemicals Environmental Awards --- 3rd Place HS-\$100, Trophy, Audubon gifts Goodrich ISR Awards for Excellence In Engineering --- Finalist - Engineering High School - CSF Medallion & Acrylic Award Wallingford Choate Rosemary Hall Dr. Rachel Gritzer Modeling proton reduction catalyzed by a novel nickel electrocatalyst with density functional theory Student(s) Shubhro Saha Grade 12 Town Avon Dominion's Millstone Power Station Physical Sciences Awards --- 2nd Place- Physical Sciences Senior High Individual - \$300 & trophy, trip to compete at Intel ISEF

West Hartford St. Brigid School Jennifer Bernaiche

5001 Clash of the Diapers

Student(s) Blake T. Greenslade Grade 7 Town Newington

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award

West Hartford St. Timothy Middle School Mrs. Christine Simao-Breen

5538 Aerodynamics: A Study in the Improvement of Auto Body Aerodynamic Efficiency

Student(s) Sean Oleasz Grade 8 Town West Simsbury

- Dominion's Millstone Power Station Physical Sciences Awards --- 1st Place- Physical Sciences 8th Grade Ind.- \$300 & trophy, invite to compete Broadcom MASTERS
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plague, Backpack and Annual Report
- Connecticut Science Teachers Association's Marty Tafel Student Research Award --- Physical Science 8th Grade -\$500 and invite to CSTA Award Banquet

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Westbrook Westbrook Middle School Mrs. Lepore

Which Material is more Conductive? (PVC, Copper, or Galvanized Steel)

Student(s) Polina M. Weber Grade 7 Town Westbrook

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences 7th Grade - CSF Medallion & Acrylic Award

Weston Weston High School Ms. Lauren Hauser

3065 Prevention of Cardiovascular Disease: The Antiseptic Effect of Syzygium aromaticum on Periodontal Disease

Student(s) Sagar N. Kaushik

Grade 12 Town Weston

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

Westport Coleytown Middle School Jodi Rieman

Association of Polymorphisms in Rheumatoid Arthritis and Juvenile Rheumatoid Arthritis Susceptibility Genes

Student(s) Malin S. Hovstadius Grade 8 Town Westport

 Pfizer Life Sciences Awards --- 2nd Place- Life Sciences 8th grade- \$200 & trophy and Invite to Compete Broadcom MASTERS

Alexion Biotechnology Awards --- Finalist - Biotechnology 8th grade - CSF Medallion & Acrylic Award Souvenir

Westport Staples High School Dr. Aaron Steiner

An Approach to Treating Sensorineural Hearing Loss through the Identification and Characterization of Mechanosensory Hair Cell Progenitors in the Zebrafish Lateral Line

Student(s) Joshua M. Greenberg Grade 12 Town Westport

Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - CSF Medallion & Acrylic Award

Westport Staples High School Dr. Nick Morgan

6074 Modeling an Optimal Receiver for a Binary Quantum Channel Using Information Theory

Student(s) Yuri D. Lenskiy Grade 12 Town Westport

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award

- ATOMIC (Associated Teachers of Mathematics In CT) Mathematics Awards with People's United Bank --- 3rd Place High School Trophy, \$200 from People's United Bank
- Computer Science Awards --- 3rd Place High School- \$200, Trophy, Medallion
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering High School CSF Medallion & Acrylic Award

Westport Staples High School Dr. Nicholas Morgan

6039 Computational Investigation of Astrophysical Nuclear Reaction Rate Dominance

Student(s) Rachel A. Myers Grade 12 Town Westport

 Dominion's Millstone Power Station Physical Sciences Awards --- Finalist - Physical Sciences Senior High - CSF Medallion & Acrylic Award

Windsor Madina Academy Mehwish Amin

The Effect of pH on the Electrical Output of a Microbial Fuel Cell

Student(s) Aasiya M. Ahmed Grade 8 Town Tolland

- Pfizer Life Sciences Awards --- 5th Place- Life Sciences 8th grade- trophy and Invite to Compete Broadcom MASTERS
- eesmarts/CT Energy Efficiency Fund Sustainable Resources and Practices Awards --- Middle School Finalist -Medallion and Acrylic Trophy
- United Technologies Corporation Awards --- \$500 in UTC Common Stock, Plaque, Backpack and Annual Report

## 2011 Regular Fair Winners

[SchTown] [School] [Teacher]

[Proj#] [Project Title]

Windsor Madina Academy Mehwish Amin

2002 A Novel Approach to Oil Spill Cleanup: Wood Chips

Student(s) Sofija Gjonbalaj Grade 7

- Pfizer Life Sciences Awards --- 2nd Place- Life Sciences 7th grade- \$100 & trophy and Invite to Compete Broadcom
- Barnes Aerospace Applied Technology Awards --- Middle School Finalist Medallion and acrylic award
- Audubon Connecticut & Arch Chemicals Environmental Awards --- MS Finalist Audubon gifts, CSF Medallion, Acrylic award

#### Windsor Madina Academy Aisha Seyal

A novel water filtration and disinfection system designed using a salad spinner, dynamo and high intensity light emitting 5041 diodes (LED) for use in developing countries. Grade 7

Student(s) Sithy A. Mahamoon

Town Windsor

Town Manchester

- Dominion's Millstone Power Station Physical Sciences Awards --- 3rd Place- Physical Sciences 7th Grade Ind. \$100 & trophy, invite to compete Broadcom MASTERS
- Barnes Aerospace Applied Technology Awards --- 1st Place Middle School \$300 and Trophy, Medallion
- Audubon Connecticut & Arch Chemicals Environmental Awards --- 1st Place MS \$300, Trophy, Audubon gifts
- Goodrich ISR Awards for Excellence In Engineering --- Finalist Engineering Middle School CSF Medallion & Acrylic Award

#### Woodbridge Amity Regional High School Deborah Day

Effective Information Communication to Teens 3090

Student(s) Joan Kim Grade 12 Town Bethany

#### Woodbridge Amity Regional High School Ms. Deborah Day

3056 Interactions Between Robot, Adult, and Child in the Task of Secret-Telling

Student(s) Jenny J. Liu Grade 12 Town Orange

Pfizer Life Sciences Awards --- 4th Place- Life Sciences Senior High- trophy

#### Woodbridge Amity Regional High School Deborah Day

The Effect of Fertilization and Environmental Factors on Water Quality in the Upper Cove River Watershed 6503

Student(s) Zelun Wang Grade 11 Town Orange **Danielle Eldracher** Grade 12 Town Woodbridge

 Dominion's Millstone Power Station Physical Sciences Awards --- 2nd Place- Physical Sciences Senior High Team-\$300(split) & trophy

#### Woodstock Woodstock Middle School Mrs. Carter

5046 What are the effects of pH and temperature on the efficiency of ethanol production from biomass?

Student(s) Deanna L. Guilani Grade 7 Town Woodstock Valley

- Dominion's Millstone Power Station Physical Sciences Awards --- 2nd Place- Physical Sciences 7th Grade Ind. -\$100 & trophy, invite to compete Broadcom MASTERS
- CT Clean Energy Fund Alternative/Renewable Energy Awards --- 1st Place Middle School \$300 Cash and Trophy
- eesmarts/CT Energy Efficiency Fund Sustainable Resources and Practices Awards --- 1st Place Middle School -\$500 Cash and Trophy
- Alexion Biotechnology Awards --- 5th Place- Biotechnology 7th grade- trophy