



Connecticut Science Fair

Quinnipiac University

March 15 - 19, 2011

Regular Fair Winners

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

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

Sorted by:
- Fair Category
- Finalist standing in regular fair (1st, 2nd, etc)
- Project number

Life Sciences - High School Individual

Woodbridge Amity Regional High School Deborah Day

3090 Effective Information Communication to Teens

Student(s) **Joan Kim** Grade 12 Town Bethany

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 Annual Mtg
- Alexion Biotechnology Awards --- Finalist - Biotechnology Senior High - CSF Medallion & Acrylic Award Souvenir

Hamden Hamden High School Sonia Beloin

3022 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

New Haven Hopkins School Way Pung

3081 Effects of L-Theanine on Drosophila Melanogaster

Student(s) **Kingston Pung** Grade 11 Town Madison

- Pfizer Life Sciences Awards --- 3rd Place- Life Sciences Senior High- \$200 & trophy

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

Hamden Sacred Heart Academy Mrs. Brownell

3016 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

Glastonbury Glastonbury High School Diane Pintavalle

3013 Anticancer property of major goat milk fatty acids and delineating their mechanisms of action

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,

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

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

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,

Westport Staples High School Dr. Aaron Steiner

3027 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

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

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 Mr. Raymond Turek

3043 Super Weed: Allelopathic Inhibition of Garlic Mustard (*Alliaria Petiolata*) on Germination and Growth of Native Zinnia Seeds

Student(s) Julie M. Zeller **Grade** 11 **Town** Bethel

- 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, Acrylic award

New Milford New Milford High School Ms. Reed

3050 Methicillin-Resistant Staphylococcus Aureus (MRSA) in New Milford High School

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

Hamden Sacred Heart Academy Sr. Mary Jane Paoletta

3053 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

Glastonbury Glastonbury High School Diane Pintavalle

3062 Comparisons of Aortic Stiffness using a Hooke's law Derived Spring Constant Between Aneurysm and Non-Aneurysm Groups

Student(s) Rahul Sehgal **Grade** 12 **Town** Rocky Hill

- Pfizer Life Sciences Awards --- Finalist - Life Science Senior High - 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

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

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

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

Life Sciences - High School Teams

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

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

Selahaddin S. Ozkan Grade 11 Town Putnam

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

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

3506 The Effects of Ingested Substances on Embryonic Development

Student(s) **Mary Kuchenbrod** Grade 11 Town Granby

Carolyn House Grade 12 Town Simsbury

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

Shelton Shelton High School Ms. Hayes

3508 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

Life Sciences - Middle School 7th Grade

Greens Farms Greens Farms Academy Dr. Freeman

2032 Algae Biofuels

Student(s) **Lydia Picoli** Grade 7 Town Wilton

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

Norwalk The Montessori Middle School David Lavallee

2026 Would A Spill Damage The Glow

Student(s) **Thomas Rosiello** **Grade 7** **Town** Weston

- Pfizer Life Sciences Awards --- 1st Place- Life Sciences 7th grade- \$200 & trophy and Invitation to Compete Broadcom MASTERS
- Alexion Biotechnology Awards --- 1st Place- Biotechnology 7th grade- \$300 & trophy

Windsor Madina Academy Mehwish Amin

2002 A Novel Approach to Oil Spill Cleanup: Wood Chips

Student(s) **Sofija Gjonbalaj** **Grade 7** **Town** Manchester

- Pfizer Life Sciences Awards --- 2nd Place- Life Sciences 7th grade- \$100 & trophy and Invite to Compete Broadcom MASTERS
- 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

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

Life Sciences - Middle School 8th Grade

Newtown St. Rose of Lima School Marde Dimon

2514 Improved Process for Bioremediation of Oil Contaminated Seawater

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

Westport Coleytown Middle School Jodi Rieman

2526 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

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

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

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

Windsor Madina Academy Mehwish Amin

2501 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

Life Sciences - Middle School Teams

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

Southington DePaolo Middle School Mr. Young

1016 Is Fresh Water Safe To Drink?

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

Pawcatuck St. Michael School Michael DeNoia

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

Student(s) **Victoria L. Johnson** **Grade 7** **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

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

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

Physical Sciences - High School Individual

Greenwich Greenwich High School Andrew Bramante

6069 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
- eesmarks/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

Wallingford Choate Rosemary Hall Dr. Rachel Gritzer

6028 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

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

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 Mr. Andrew Bramante

6054 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

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

Connecticut Science Fair

2011 Regular Fair Winners

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

Bridgeport Bridgeport Aquaculture School Mr. Shadle

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

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

Norwich Norwich Free Academy Mr. Robert V Johnson

6029 Impact of Turbine Design on Renewable Energy Storage System Efficiency

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 Award
- 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

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

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

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 --- 3rd 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

Greenwich Greenwich High School Andy Bramante

6051 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

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

Greenwich Greenwich High School Mr. Andrew Bramante

6066 Synthesis of Hot Electron Carrier Lead Selenide Nanocrystals and Thin Film Layers using 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
- eesmarks/CT Energy Efficiency Fund Future Sustainability Awards --- High School Finalist - Medallion and 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

Glastonbury Glastonbury High School Diane Pintavalle

6076 Non-Metal Redox Kinetics: Acid-catalyzed Reaction of N-chloro-N-methylacetamide with Sulfite and Hydrogen Sulfite Ion

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

Physical Sciences - High School Teams

Putnam Putnam Science Academy Serdar Haytiyev

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

Woodbridge Amity Regional High School Deborah Day

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

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

Hamden Sacred Heart Academy Mrs. Pamela Brownell

6505 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

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

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

Norwalk Norwalk High School Dr. Munrow

6509 Polyphenols from Pomegranates

Student(s) **Hayley N. Prescott** **Grade** 12 **Town** Norwalk
Sabrina Church **Grade** 12 **Town** Norwalk

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

Shelton Shelton High School Mrs. Pickett

6510 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

Physical Sciences - Middle School 7th Grade

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

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
- eesmarks/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

Windsor Madina Academy Aisha Seyal

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

Student(s) **Sithy A. Mahamoon** **Grade** 7 **Town** Windsor

- 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

Connecticut Science Fair

2011 Regular Fair Winners

[SchTown] [School] [Teacher]
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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

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

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

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

East Haven East Haven Academy Mrs. Staires

5006 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

Guilford E.C. Adams Middle School Ms. Meyerjack

5028 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

Hebron Oei Homeschool Ellen McHugh

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

Student(s) **Maura C. Oei** Grade 7 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
- 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

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

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

Westbrook Westbrook Middle School Mrs. Lepore

5042 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

East Granby East Granby Middle School Mr. Langan

5049 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

Newtown St. Rose of Lima School Mrs. Dimon

5055 (Vitamin) C How Sweet It Is

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

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** **Town** Branford

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

Physical Sciences - Middle School 8th Grade

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, Plaque, 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

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

[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

Norwalk The Montessori Middle School David Lavallee

5554 Airlift Water Pumping

Student(s) Eric Smith **Grade 8** **Town** Norwalk

- Dominion's Millstone Power Station Physical Sciences Awards --- 4th Place- Physical Sciences 8th Grade Ind. - trophy, invite to compete Broadcom MASTERS
- Barnes Aerospace Applied Technology Awards --- 3rd Place Middle School - \$100 and Trophy, Medallion
- eesmarks/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

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

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

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

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

Fairfield Our Lady of the Assumption/Holy Family Kathy Almeida

5553 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

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

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

Physical Sciences - Middle School Teams

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

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, Plaque, Backpack and Annual Report

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

Stamford Trailblazers Academy Jessica Maneyapanda

4020 Breezin' By

Student(s) **Tatyana L. Geneste** **Grade 8** **Town** Stamford

Sidney Y. Turnier **Grade 8** **Town** Stamford

- 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

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

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