



# Connecticut Science Fair

## Quinnipiac University

### March 13 - 17, 2012

### Special Award Winners

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

**All special award winners are required to attend the awards ceremony on Saturday. Be sure to acknowledge by going to the CHECK-IN page.**

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

**Avon** Talcott Mountain Academy Tom Noonan

2509 L8 Do Ambient Temperatures Affect Bat Mortality?

Student(s) **Gwynne Domashinski**

Grade 8 Town West Suffield

**Bethel** Bethel High School Sharon Bly

6025 PS Methods of Cleaning up an Oil Spill

Student(s) **Elizabeth Locke**

Grade 10 Town Bethel

**Bethel** Bethel Middle School Mr. Reynolds

4029 PT How Does Combining Metals Lead to Rust Development

Student(s) **Jessica MacIntyre**

Grade 7 Town Bethel

**Kallan Hook**

Grade 7 Town Bethel

**Bozrah** Fields Memorial School Mrs. E. Brown

5532 P8 Greener Cleaner? Testing the Level of Phosphates in Everyday Cleaners

Student(s) **Megan Lavallee**

Grade 8 Town Bozrah

**Bozrah** Fields Memorial School Mrs. E Brown

5021 P7 What variables affect the grasp efficiency of a robotic arm?

Student(s) **Emily O'Connor**

Grade 7 Town Bozrah

**Bozrah** Fields Memorial School Mrs. E Brown

2534 L8 Password Security

Student(s) **Connor Provost**

Grade 8 Town Bozrah

**Bozrah** Fields Memorial School Mrs. E Brown

2503 L8 Tereido Navalis - A Population Density Study

Student(s) **Nicholas Tatro**

Grade 8 Town Bozrah

**Bridgeport** Bridgeport Aquaculture School Mr. Shadle

6031 PS The Investigation of the Role of Methylating Bacteria in the Reintroduction Of Mercury into Long Island Sound

Student(s) **Allison Haley**

Grade 12 Town Shelton

**Bridgeport** John Winthrop School Mr. Walsh

2530 L8 GMO or no GMO

Student(s) **Timothy Graham**

Grade 8 Town Bridgeport

**Bridgeport** Park City Prep Charter School Mrs. Vicky Boudreau

5006 P7 Are some magnetic materials more temperature dependent than others?

Student(s) **Chanelle Negron**

Grade 7 Town Bridgeport

**Danbury** Danbury High School Mr. LaRosa

3084 LS The Biological Control of Zebra Mussels Using the Marine Natural Product Aaptamine.

Student(s) **Janine Kerr**

Grade 9 Town Danbury

# Connecticut Science Fair

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[SchTown] [School] [Teacher]  
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**Danbury** St. Joseph School Mrs. Page  
2030 L7 How Does Caffeine Effect the Heart  
**Student(s) Wes Gannon** **Grade 7** **Town** Danbury

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**Danbury** St. Joseph School Mrs. Page  
5005 P7 Designing an Effective Dye-Sensitized Solar Cells  
**Student(s) Martha Haddad** **Grade 7** **Town** Danbury

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**Danbury** St. Joseph School Mrs. Page  
5032 P7 Ocean Wave and Tide Energy Project  
**Student(s) James Parris** **Grade 7** **Town** Brookfield

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**Danbury** St. Peter-Sacred Heart Upper School Dr. Greg Capone  
5538 P8 Making Wind Turbines Quieter and More Efficient  
**Student(s) Sarah Eriksson** **Grade 8** **Town** Naugatuck

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**East Granby** East Granby Middle School Mr. Langan  
5039 P7 How Much Vitamin C Is In An Orange  
**Student(s) Jolie Berger** **Grade 7** **Town** East Granby

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**East Granby** East Granby Middle School Mr.Langan  
2016 L7 Rain...Runoff...Ramifications?  
**Student(s) Jonathan Kelly** **Grade 7** **Town** East Granby

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**Fairfield** Fairfield College Preparatory School Dr. Lewis  
6008 PS Novel Fiber Optic Dye Sensitized Solar Cell Aided by the Biosynthesis of Diatom Frustules  
**Student(s) Kyle Ryan** **Grade 11** **Town** Trumbull

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**Fairfield** Fairfield Warde High School Andrew Bramante  
6045 PS A Hidden Treasure; Dehumidification of Air Improves Indoor Air Quality  
**Student(s) Sofia Bramante** **Grade 10** **Town** Fairfield

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**Fairfield** Our Lady of the Assumption School Mrs. Kathy Almeida  
5524 P8 Do Brightly Colored Roofs Reduce Thermal Radiation?  
**Student(s) Patrick Agonito** **Grade 8** **Town** Fairfield

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**Fairfield** Our Lady of the Assumption School Kathy Almeida  
2540 L8 The Effects of De-Icing Salts and Chemical Compounds on Adiantum pedatum  
**Student(s) Amanda Gerstenfeld** **Grade 8** **Town** Fairfield

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**Fishers Island** Fishers Island School Carol Giles  
3009 LS The Effect of Dance on Mood and Mental Acuity  
**Student(s) Katie McCarthy** **Grade 11** **Town** North Stonington

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**Forestville** St. Matthew School Danielle Ricci  
2537 L8 Make a Mummy Out of Me  
**Student(s) George Pittman** **Grade 8** **Town** Bristol

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**Glastonbury** Smith Middle School Mr. Falcigno  
5528 P8 On the Application of Electrochemical Double Layer Capacitors  
**Student(s) Paul Han** **Grade 8** **Town** Glastonbury

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**Greens Farms** Greens Farms Academy Dr. Mathieu Freeman

6056 PS Production of High Quality Ceramic Coatings for Turbine Applications by Freeze Spray Deposition

**Student(s)** Kishan Patel

**Grade** 12 **Town** Westport

**Greens Farms** Greens Farms Academy Dr. Mathieu Freeman

6052 PS Paper Batteries: A Viable Lithium Ion Battery Technology

**Student(s)** William Picoli

**Grade** 12 **Town** Wilton

**Greenwich** Brunswick School Dana Montanez

6004 PS The Efficiency of Air Multiplication Technology versus the Efficiency of Bladed Fan Technology

**Student(s)** Spencer McDonough

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

**Greenwich** Brunswick School Dana Montanez

3012 LS Pseudoscience or Agriculturally Beneficial: The Effect of Magnetic Water on the Growth of Legumes

**Student(s)** Ashish Ramachandran

**Grade** 10 **Town** Stamford

**Greenwich** Greenwich Academy Ann Decker

3072 LS Assessment of Lepidoptera Host Plant Preference at Mass Audubon's Felix Neck Wildlife Sanctuary

**Student(s)** Elizabeth Wolf

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

**Greenwich** Greenwich High School Andrew Bramante

6021 PS Remediation of Heavy Metals from River Water via a Novel Lemna minor Activated On-line Filtration System

**Student(s)** Nicholas Dorian

**Grade** 12 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

6079 PS Recovery of Light Hydrocarbon Fuels from PETE Recycling with Concurrent Reduction in the Recyclable Footprint

**Student(s)** Clara Eizayaga

**Grade** 11 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

6049 PS An Organic Thin Film Transistor and Elastic Organic Solar Cell Based Electronic Skin for Biochemical and Tactile Sensing

**Student(s)** Ryota Ishizuka

**Grade** 12 **Town** Cos Cob

**Greenwich** Greenwich High School Andrew Bramante

6063 PS Simplified Detection of Aromatic Nitroamine Pesticides using Bee Venom Luminescence

**Student(s)** Brittney Lew

**Grade** 11 **Town** Riverside

**Greenwich** Greenwich High School Andrew Bramante

3042 LS Mycoremediation of PCB Soil Contaminants with Pleurotus Ostreatus

**Student(s)** Mallory Madfes

**Grade** 11 **Town** Greenwich

**Greenwich** Greenwich High School Andrew Bramante

3008 LS Which Intestinal Bacteria is Best? A study of the Effectiveness of Single and Multi-Strain Probiotics.

**Student(s)** Antony Manokhin

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

**Greenwich** Greenwich High School Andrew Bramante

3045 LS The Compatibility Between Pure 2-D Sericin Membranes and Cell Growth

**Student(s)** Jed McKinney

**Grade** 11 **Town** Old Greenwich

# Connecticut Science Fair

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**Greenwich** Greenwich High School Andrew Bramante

3070 LS Non-Invasive Dissipation of 2,4-D Pesticide in Standing Water Using Iris Versicolor  
Student(s) Anne Merrill Grade 10 Town Old Greenwich

**Greenwich** Greenwich High School Andrew Bramante

6032 PS Design of a Smart Brick with Improved Insulation and Intuitive Reflection of Sunlight  
Student(s) Lindsey Noskin Grade 11 Town Greenwich

**Guilford** Guilford High School Mr. Cuddy

3032 LS EMDR:Successfully Treating PTSD  
Student(s) Allison Breeze Grade 9 Town Guilford

**Guilford** Guilford High School Mr. Cuddy

6036 PS Finding the Perfect Basketball Shot  
Student(s) Alyssa Devin Grade 9 Town Guilford

**Guilford** Guilford High School Mr. Curtis

3022 LS The Effect of Sodium Chloride on Heart Rate  
Student(s) Luke Malinowski Grade 9 Town Guilford

**Hamden** Hamden High School Sonia Beloin

3061 LS Role of MyD88 in DNA Damage Response  
Student(s) Yiyuan Hu Grade 12 Town Hamden

**Hamden** Hamden High School Sonia Beloin

3093 LS Are High School Band Students at Risk for Hearing Damage?  
Student(s) Jacob Zavatore-Veth Grade 9 Town Hamden

**Hamden** Sacred Heart Academy Dr. Christophy

6524 PST The Toxic Truth About Paint: The Effects of VOCs on Paint Quality  
Student(s) Emma Dragan Grade 10 Town Orange  
Sienna DeMaio Grade 10 Town Bethany

**Hamden** Sacred Heart Academy Dr. Elizabeth Christophy

3075 LS A Study of "Ebb and Flo" Aquaponics as the Most Effective Growing System for Romaine Lettuce as Compared to a Hydroponic and an Organic, Soil-Based, Growing System  
Student(s) Olivia Kelly Grade 10 Town Shelton

**Hartford** Classical Magnet School Ms.Paula Koenig

5044 P7 Aerodynamics  
Student(s) Holly Weldon Grade 7 Town South Windam

**Hartford** Hartford Magnet Trinity College Academy Mrs. Penny Parmelee

5533 P8 Fermi Action  
Student(s) Maya Ernest Grade 8 Town Windsor

**Hartford** Hartford Magnet Trinity College Academy Mrs.Parmelee

5549 P8 Rust Above The Rest  
Student(s) Kevin Paradis Grade 8 Town East Harford

# Connecticut Science Fair

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**Hartford** Hartford Magnet Trinity College Academy Mrs. Parmelee

5018	P7	Angling For Energy
<b>Student(s)</b> Amrit Parmanand		<b>Grade 8</b> <b>Town</b> Ellington

**Hebron** Oei Home School Mrs. Ellen Oei

5525	P8	Development of a Prototype Pendulum Wave Energy Conversion Device
<b>Student(s)</b> Maura Oei		<b>Grade 8</b> <b>Town</b> Hebron

**Kensington** St. Paul School Bethany Perzanowski

2013	L7	THE ECO-FRIENDLY DIAPER: LANDFILL DESIGN. "The Type of Cloth Versus the Rate of Decomposition"
<b>Student(s)</b> Elizabeth Lopreiato		<b>Grade 7</b> <b>Town</b> New Britain

**Madison** Daniel Hand High School Madhuparna Roychoudhury

6517	PST	Can you charge your phone wirelessly? Cordless electricity transmission by piezoelectric excitation via low frequency acoustic waves.
<b>Student(s)</b> Shayan Roychoudhury		<b>Grade 9</b> <b>Town</b> Madison
Wesley Kimmel		<b>Grade 10</b> <b>Town</b> Madison

**Madison** Our Lady of Mercy School Rosalie Zonder

4004	PT	Disappearing Act
<b>Student(s)</b> Clara Bechtold		<b>Grade 7</b> <b>Town</b> Madison
Clare Gagliano		<b>Grade 7</b> <b>Town</b> Madison

**Manchester** East Catholic High School Ms. Holly Noble

6002	PS	Polyvinylidene Fluoride (PVDF) Piezoelectric Generator: A Novel Approach to Harvesting Vibrations from Human Respiration to Power Biological Implant Devices
<b>Student(s)</b> Bridget Oei		<b>Grade 10</b> <b>Town</b> Hebron

**Manchester** St. Bridget School Kim Maysonet

5502	P8	The Stirling Engine and the Effect of Temperature Differential on Engine Performance
<b>Student(s)</b> Nicole Robitaille		<b>Grade 8</b> <b>Town</b> Manchester

**Middletown** Xavier High School Manoj Rahematpura

6515	PST	Testing the Viability of Adaptive Winglet Technology to Improve Fuel Efficiency on Midsize Commercial Airliners using Computational Fluid Dynamics
<b>Student(s)</b> Christopher Muckle		<b>Grade 12</b> <b>Town</b> Madison
Miraj Rahematpura		<b>Grade 12</b> <b>Town</b> Middletown
Mario Chris		<b>Grade 11</b> <b>Town</b> Storrs

**New Britain** Sacred Heart School Miss Kornas

4005	PT	Egg-ceptional Packaging Material
<b>Student(s)</b> Maximilian Muller		<b>Grade 8</b> <b>Town</b> Berlin
Briana Muller		<b>Grade 7</b> <b>Town</b> Berlin

**New Haven** Betsy Ross Arts Magnet School Mrs. Cichus

2022	L7	One Dog's Poop, Another Man's Treasure.
<b>Student(s)</b> Brian Brigham		<b>Grade 7</b> <b>Town</b> Orange

**New Haven** Cooperative Arts & Humanities High School Shelia Martin-Corbin

6071	PS	Battle Of The Solvents-thin Layer Chromatography
<b>Student(s)</b> Mairead Brennan		<b>Grade 9</b> <b>Town</b> New Haven

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[SchTown] [School] [Teacher]  
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**New Haven** Worthington Hooker Middle School Douglas Jones

2033 L7 The Clean Water Project  
Student(s) **Yogasai Gazula** Grade 7 Town New Haven

**Newtown** St. Rose of Lima School Mrs. Dimon

5025 P7 The Investigation of the Presence of Caffeine in Groundwater and Sewage  
Student(s) **Grace Herrick** Grade 7 Town Sandy Hook

**Newtown** St. Rose of Lima School Mrs. Marde Dimon

1012 LT The Effect of Electromagnetic Fields on Scenedesmus Algae Cells  
Student(s) **Katerina Ringes** Grade 8 Town Sandy Hook  
**Marina Renzi** Grade 8 Town Newtown

**Norwalk** The Montessori Middle School Carolyn Ogden-Stenerson

5521 P8 Experimental Evaluation of Techniques for Protecting Users from Malware Attacks  
Student(s) **Samyukt Kumar** Grade 8 Town Stamford

**Norwalk** The Montessori Middle School Carolyn Stenerson

2023 L7 Hydroponic Tomatoes  
Student(s) **Olivia Pritchard** Grade 7 Town Fairfield

**Norwalk** West Rocks Middle School Sue Delong

2506 L8 Balance  
Student(s) **Vivain Conley** Grade 8 Town Norwalk

**Norwich** Norwich Free Academy Mrs. Jones

6016 PS Utilizing a Robotic Turning Mechanism to Focus on the Sun in Order to Maximize the Efficiency of a Parabolic Trough Water Heating System  
Student(s) **Remington Carle** Grade 11 Town Norwich

**Orange** Southern Connecticut Hebrew Academy Mrs. Howell

4010 PT Analysis and Bioavailability of Chemical Dyes Versus Natural Dyes with their Antioxidant Benefits.  
Student(s) **Chana Piekarski** Grade 7 Town Hamden  
**Esther Caroline** Grade 7 Town New Haven

**Orange** Southern Connecticut Hebrew Academy Mrs. Karen Howell

2543 L8 Phytoremediation: Removal of metal pollutants from contaminated soil and effect of chelators  
Student(s) **Alex Russell** Grade 8 Town New Haven

**Orange** Southern Connecticut Hebrew Academy Karen J Howell

2507 L8 Analysis of Local Watershed and River Contaminated Sediments, and Effect on River and Long Island Sound Waters  
Student(s) **Hadassah Sessel** Grade 8 Town Orange

**Pawcatuck** St. Michael School Mr. DeNoia

1019 LT The Mighty Houseplant  
Student(s) **Kelly Giffault** Grade 7 Town Stonington  
**Paige Giffault** Grade 7 Town Stonington

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**Pawcatuck** St. Michael School Mr. DeNoia

4017	PT	"Block that Sound"	
<b>Student(s)</b>	<b>Sarah Hillegass</b>	<b>Grade 8</b>	<b>Town</b> Stonington
	<b>Kate Peglow</b>	<b>Grade 8</b>	<b>Town</b> Old Mystic

**Plantsville** John F. Kennedy Middle School Pepin

4015	PT	The Windy 500: The Test of Drag and Down Force on Rear Spoilers	
<b>Student(s)</b>	<b>Emily Maciejewski</b>	<b>Grade 8</b>	<b>Town</b> Plantsville
	<b>Laura Koba</b>	<b>Grade 8</b>	<b>Town</b> Southington

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

1017	LT	The Effects of Global Warming on Marine Life	
<b>Student(s)</b>	<b>Kimberly Stafko</b>	<b>Grade 7</b>	<b>Town</b> Southington
	<b>Alexa Maddalena</b>	<b>Grade 7</b>	<b>Town</b> Southington

**Putnam** Putnam Science Academy Serdar Haytiyev

6510	PST	Efficient and Practical Approach to Removal of BTEX from Industrial Waste Water by Using Tea Waste	
<b>Student(s)</b>	<b>Rejepmuhammet Gurbannazarov</b>	<b>Grade 10</b>	<b>Town</b> Putnam
	<b>Kerem On</b>	<b>Grade 10</b>	<b>Town</b> Putnam

**Putnam** Putnam Science Academy Serdar Haytiyev

6503	PST	Effective Removal of BTEX from Industrial Wastewater by Using Banana Peels as an Environmentally Friendly and Low-Cost Bio-Sorbent	
<b>Student(s)</b>	<b>Serik Tukupov</b>	<b>Grade 11</b>	<b>Town</b> Putnam
	<b>Vali Gasimov</b>	<b>Grade 11</b>	<b>Town</b> Putnam
	<b>Humza Ahmed</b>	<b>Grade 11</b>	<b>Town</b> Tolland

**Redding** Joel Barlow High School Katherine Nuzzo

6076	PS	Surfactants: Emulsification Effects of Synthetic, Microbial and Plant-Derived Surfactants	
<b>Student(s)</b>	<b>Morgan Jordan</b>	<b>Grade 12</b>	<b>Town</b> Easton

**Ridgefield** East Ridge Middle School Mr. Bozzuto

2520	L8	Musical Sociology: The Placebo Effect in Action	
<b>Student(s)</b>	<b>Gwendolyn Ellis</b>	<b>Grade 8</b>	<b>Town</b> Ridgefield

**Ridgefield** East Ridge Middle School Ms. Sullivan

4002	PT	Determining Amount Of Sugar, Salt, and Alcohol in a Water Solution with a Laser Pointer	
<b>Student(s)</b>	<b>Martin Herlihy</b>	<b>Grade 8</b>	<b>Town</b> Ridgefield
	<b>Brendan Donnelly</b>	<b>Grade 8</b>	<b>Town</b> Ridgefield

**Shelton** Shelton High School Mrs. Dunham

6066	PS	Revolutionizing Cancer Treatment: A Simulation of Nanocarriers Using Swarm Intelligence for Targeted Cancer Cells	
<b>Student(s)</b>	<b>Rigel Mahmood</b>	<b>Grade 10</b>	<b>Town</b> Shelton

**Southington** Joseph A. DePaolo Middle School Mrs. Brostrom

5007	P7	Distracted Driving	
<b>Student(s)</b>	<b>Michael Freeman</b>	<b>Grade 7</b>	<b>Town</b> Southington

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**Stafford Springs** St. Edward School Mrs. Napolitano

5509 P8 Digital Pinhole Cameras and the Effect of Aperture Size on Image Sharpness

**Student(s) Amy Agro**

**Grade 8**

**Town Somers**

**Stafford Springs** St. Edward School Mrs. Donna Napolitano

5519 P8 Flammability and Fabric Softener

**Student(s) Lindsay Albert**

**Grade 8**

**Town Stafford Springs**

**Storrs** E. O. Smith High School Jon Swanson

3017 LS Determination of evolutionary relationships among coral species by comparison of nuclear and mitochondrial DNA markers

**Student(s) Jonas Burkhard**

**Grade 10**

**Town Mansfield Center**

**Storrs** E. O. Smith High School Robert Pirrie

6026 PS Membranes for Biochemical Separations

**Student(s) Paula Chen**

**Grade 11**

**Town Storrs**

**Stratford** Harry B. Flood Middle School Mr. Gorski

4016 PT Linear Accelerator

**Student(s) Chris Kovach**

**Grade 8**

**Town Stratford**

**Dhruva Chagi**

**Grade 8**

**Town Stratford**

**Stratford** St. Mark School Phillip Flynn

5012 P7 Go With The Flow: Applying Darcy's Law to the Flow of Groundwater

**Student(s) Gabriella Larizza**

**Grade 7**

**Town Stratford**

**Stratford** St. Mark School Mr. Flynn

5523 P8 Measuring the Speed of Light Using a Microwave

**Student(s) Cheyenne Perez**

**Grade 8**

**Town Stratford**

**Stratford** St. Mark School Mr. Phil Flynn

5022 P7 A Bright Idea: Comparing the Efficiency of Incandescent, CFL, and LED Light Bulbs

**Student(s) Megan Robertson**

**Grade 7**

**Town Stratford**

**Trumbull** Christian Heritage School Mrs. Oshin

4022 PT How do acids effect cupcake size?

**Student(s) Lindsey Augustin**

**Grade 8**

**Town Stratford**

**Josie Bentlage**

**Grade 8**

**Town Shelton**

**Trumbull** Christian Heritage School Dan Cote

6053 PS The general equation of the sum of power series

**Student(s) Xiaofei Yu**

**Grade 11**

**Town Shelton**

**Watertown** The Taft School Mr. Michael McAloon

3062 LS From Shape Recognition to Multi-Calculus Thinking: Study of Geometric Perception and Spatial Cognition in Early Alzheimer's Disease Patients

**Student(s) Xinhe Zheng**

**Grade 11**

**Town Watertown**



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**West Hartford** American School for the Deaf Mary Laporta

3501 LST Beluga Behavior Study

**Student(s)** Dazjahnique Parker **Grade** 11 **Town** Ansonia  
 Faye Frez-Albrecht **Grade** 11 **Town** Canton  
 Lynette Saucier **Grade** 11 **Town** Bristol

**West Hartford** St. Timothy Middle School Mrs. Breen

5542 P8 Killer Waves

**Student(s)** Stephen Gosselin **Grade** 8 **Town** West Hartford

**Westbrook** Westbrook Middle School Ms. Lepore

2025 L7 Think Fast

**Student(s)** Jason Matunas **Grade** 7 **Town** Westbrook

**Westport** Staples High School Dr. Nicholas Morgan

6033 PS NGC 2194: Clues to Stellar Evolution

**Student(s)** Kim Adler **Grade** 11 **Town** Westport

**Westport** Staples High School Dr. Michele Morse

3033 LS Chaos in Bacterial Growth with Sinusoidal Temperature Cycles

**Student(s)** Michael Menz **Grade** 11 **Town** Westport

**Westport** Staples High School Alfred J. Scheetz

3046 LS Optogenetic Interrogation of Prefrontal Cortex Dopamine D1 Receptor-Containing Neurons as a Technique to Restore Timing: A Novel Approach to Treat Prefrontal Disorders

**Student(s)** John Solder **Grade** 12 **Town** Westport  
**Grade** **Town**

**Westport** Staples High School Dr. Nick Morgan

3037 LS The Application of the Photosynthetic Hydrogen Production of *C. reinhardtii* in Hydrogen Fuel Cells

**Student(s)** Jay Tsai **Grade** 12 **Town** Westport

**Wilton** Middlebrook School Norman Kendra

5516 P8 Material Density vs. Angle of Refraction

**Student(s)** Mishil Nana **Grade** 8 **Town** Wilton

**Windsor** Madina Academy Aisha Seyal

2527 L8 Manufacturing and Biodegrading Bioplastics: Observing the speed of biodegradation of potato, rice, tapioca and corn starch based plastics.

**Student(s)** Muhammad Ali **Grade** 8 **Town** Windsor

**Windsor** Madina Academy Aisha Seyal

2515 L8 Polypropylene Oil Magnets: A comparison of this novel approach using ferrofluids to established methods of oil spill removal including OEMs, woodchips, hay, and compost.

**Student(s)** Ayesha Khan **Grade** 8 **Town** Windsor

**Woodbridge** Amity Regional High School Deborah Day

6044 PS The Power of Domes Geodesic Domes Versus Flat Panels: Solar Efficiency

**Student(s)** Daniel Giebisch **Grade** 9 **Town** Woodbridge

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**Woodbridge** Amity Regional High School Deborah Day

6006 PS Effect of Indexing String Length On Speed and Memory Usage for Digital Karyotyping Query Algorithms

**Student(s)** Jordan Henck

**Grade** 11 **Town** Woodbridge

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**Woodbridge** Amity Regional High School Deborah Day

6030 PS Significance of Supernovae on Nearby Near-Supernova White Dwarves

**Student(s)** Ehsan Khan

**Grade** 11 **Town** Bethany