

## 2016 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>Elementary School Biology</i>			
Outstanding	Derek Ryan	What is the effect of ph and temperature on the activity of the lactose enzyme?	F.E. Bellows
Outstanding	Gwen Gordon	How does a chick breathe in its shell?	Garrison School
Excellent	Mongezi Mkentane	Vision Mission	School 30
Excellent	Ariday Vera Galicia	Affect of Light on a Bean Plant	School 30
Excellent	Elsbeth Darhansoff	How Much Energy?	Garrison School
<i>Elementary School Chemistry</i>			
Outstanding	Shuya Watanabe	Does more sugar make water heavier?	F.E. Bellows
Excellent	Amir Correa	How Much Iron is In Your Cereal?	PEARLS
Excellent	Toby Freeman	Do Crystals Grow at Different Temperatures?	PEARLS
<i>Elementary School Earth/Space Sciences</i>			
Excellent	Dylan White	Does color affect temperature?	F.E. Bellows
<i>Elementary School Engineering &amp; Technology</i>			
Outstanding	Tyler Sergio	Minecraft vs. the real world	F.E. Bellows
Outstanding	Jillian August, Morgan Murphy	Using Your Noodle	Garrison School
Excellent	Hanzalah Farooqui	Can You Make a Hovercraft?	PEARLS
Excellent	Chase Nugent	Paper Airplanes	Garrison School
<i>Elementary School Environment</i>			
Outstanding	Grace Proano	Beach Erosion	PEARLS
Excellent	Kyle Ryan	What is the effect of acid rain on rocks and on construction materials?	F.E. Bellows
<i>Elementary School Health &amp; Medicine</i>			
Outstanding	Joel Alexander	What Do Soft Drinks Do To Your Teeth?	PEARLS
Excellent	Halle Gellman, Samantha Golub	Does music affect your pulse rate?	F.E. Bellows
Excellent	Nailah Lazala	Growing Bacteria	School 30
<i>Elementary School Math &amp; Computers</i>			
Excellent	Mac Lake	The psychological attraction to Mind Craft	Garrison School
<i>Elementary School Physics</i>			
Outstanding	Grace Gordon	The Silence of the Bells	Garrison School
Outstanding	Audrey McElhatton	The Slippery Jig	PEARLS
Outstanding	Elliott Thomas	Can Hot Water Freeze Faster Than Cold? Exploring the mpemba effect.	Thomas Jefferson Elementary School
Excellent	Jasmine Wallis	Crystal Radio	Garrison School
Excellent	Spencer Boxford, Angel Estrada	How does the angle of a catapult affect how far a projectile travels?	F.E. Bellows
Excellent	Angel Cuevaa	Does Temperature Affect How High a Tennis Ball Will Bounce?	Thomas Jefferson Elementary School
Excellent	Jack Jimenez, Andrew Sinnott	Does the Amount of Air in a Soccer Ball Affect How Far It Will Go When Kicked?	Thomas Jefferson Elementary School

## 2016 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>Middle School Biology</i>			
1	Peter Nicholas *	UV-C Disinfection	Rye Neck Middle School
2	Ammara Mehkri **	Code Blue	PEARLS
3	Brianna Ernest, Olivia Koehnlein	Fingerprinting	School 30
<i>Middle School Chemistry</i>			
2	Liam McClain ***	The effect of sodium hydroxide on CO <sub>2</sub>	Rye Neck Middle School
2	Jacob Anderson, Ethan Felenstein	Mentos vs. Altoids: Which is "cooler"?	F.E. Bellows
3	Jessica Hooper	What makes it Fizz?	John Jay Middle School
3	Alek Maasik	Corroding Metals	Garrison School
<i>Middle School Earth/Space Sciences</i>			
1	Deryn Hurst **	Tracking Geomagnetic Storms	PEARLS
<i>Middle School Engineering &amp; Technology</i>			
1	Kevin Horan, Nate Wolfe, Kevin Heffernan	Repelling	George Fischer Middle School
2	Stella Higgins, Savina Jannetti ***	Invisible Signals	PEARLS
3	Chris Brown	Reinventing the Wheel: Independent Electromagnetically Switchable Driver	Rye Country Day School
<i>Middle School Environment</i>			
1	Swaneet Jha **	Biofuel From Cow Dung	PEARLS
2	Lucy Friedman	Do changes in the size and structure mesh filters influence the efficiency of harvesting water from fog?	Rye Neck Middle School
3	Kianna Chabert	Natural and Clean Water	School 30
<i>Middle School Health &amp; Medicine</i>			
1	Mateo Yepes	Is Your House Really Clean?	George Fischer Middle School
3	Shyla Singh	Caffeine Catastrophe or Nicotine Nightmare	Edgemont Jr/Sr HS
3	Kathleen O'Sullivan	Robot Revolution	George Fischer Middle School
<i>Middle School Math &amp; Computers</i>			
2	Anna McKee, Ariana Boswell	Telepathic Twins	George Fischer Middle School
3	Selwyn George, Jason Said	Want to Make a Video Game?	PEARLS
<i>Middle School Physics</i>			
3	Sophia Maron Schaeffer	Can You Lift a Car With 2 Phone Books?	PEARLS
3	Jeremie Thinat	Do frisbees with holes in the middle fly farther than ones without holes?	F.E. Bellows
<i>Middle School Psychology</i>			
1	Chelsea Seidel, Sara Makulec	Is Texting Like Talking or Writing?	Farragut Middle School
2	Naomi Young ***	The correlation between 7th graders self-esteem and bullying	Rye Neck Middle School
3	Owen Steck	Do Fears Change With Age?	PEARLS
* Judge Edith Miller Excellence in Education Award for Top Middle School Award (Advances as nominee to Broadcom Masters competition)			
** Advances as nominee to Broadcom MASTERS competition			
*** Alternate for Broadcom MASTERS			

## 2016 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>High School Biology</i>			
1	Samuel Goldman **	<b>Phenotypes and Potential Genetic Interactions of the Centrosomal Protein of 309 kDa (CP309) in <i>Drosophila melanogaster</i> Muscle</b>	Scarsdale HS
2	Stephanie Zhang ***	<i>The Effects of Gene Knockdown of Fhos, Act5C, and Gelsolin [31205]on Neurotoxicity with the Expression of Alpha-Synuclein</i>	Fox Lane HS
3	Ambika Venkatakrisnan ***	<i>Using Weighted Gene Co-expression Network Analysis to Identify Modules Corresponding to the Insulinoma and Pancreatic Islet Samples</i>	Scarsdale HS
N/A	Katie Miles ***	<i>The effects of FBN1 mutations on the extracellular matrix of cardiomyocytes</i>	Sleepy Hollow HS
<i>High School Chemistry</i>			
2	Nathan Goldrich	<i>Water Uptake by the Human Sodium/Multivitamin Transporter (hSMVT)</i>	Edgemont HS
3	Arjun Chatteraj	<i>Quantification of Styrene Migrations from Polystyrene under Real-Life Conditions</i>	Dobbs Ferry High School
<i>High School Earth-Space Sciences</i>			
2	Asha Grossberndt	<i>The Effects of Substrate Roughness on Lava Flow Velocity</i>	Fox Lane HS
3	Sergio Flores	<i>The Effects of Loop Quantum Gravity Theory on Supermassive and Normal Black Holes</i>	White Plains HS
<i>High School Engineering &amp; Technology</i>			
1	Michael Grant ***	<i>The Development of Super Storm Protective Infrastructure</i>	Dobbs Ferry High School
2	Abigail Bonilla	<i>Protecting museum artifacts by finding baseline limits for allowable sound induced vibrations</i>	White Plains HS
3	Varun Wadhwa	<i>An Inexpensive, Efficient, Multi-Platformed Neural Networking Algorithm to Track Eye Movement for Mechanical Applications.</i>	Rye Country Day School
<i>High School Environment</i>			
1	Josephine Weidner	<i>An Assessment of Eutrophication in a Tributary Stream of the Hudson River</i>	Dobbs Ferry High School
2	Isabella Brizzi	<i>Testing for the Most Effective Condition to Remediate Oil Spills Using a Baffled Flask Test, with the use of the Corexit 9500 Dispersant</i>	Hendrick Hudson HS
3	Signe Forsingdal	<i>The Effect of Habitat Fragmentation on the Movements of <i>Eurycea bislineata</i></i>	Scarsdale HS
<i>High School Health &amp; Medicine</i>			
1	Rory O'Brien *	<b><i>The Effects of Spinal Cord Lesion on Motor Cortex Activity</i></b>	<b>Yorktown HS</b>
2	Federico Pollevick ***	<i>A Psychological and Physical Impact of Beverage Consumption on Performance</i>	Dobbs Ferry High School
3	Lauren Singer	<i>IGF-1 Secretagogue as a Potential Treatment for Social Memory Deficits associated with SHANK3-Deletion Autism</i>	Scarsdale HS
3	Shane Tomaino	<i>Optimizing Human Energy: Water purification and transport in Africa</i>	Rye Country Day School
<i>High School Math &amp; Computers</i>			
1	Bailey Winston	<i>Sabermetrics: The importance of advanced measures of player performance in building a successful Major League Baseball team</i>	Byram Hills HS
2	Alexander Paskov	<i>Decoding DNA through the Extraction of N-Gram Data</i>	Edgemont HS
3	Ronin Sharma	<i>Analysis of Factors Leading to the Allergenicity of Proteins</i>	Ardsley HS
<i>High School Psychology</i>			
1	Hannah Brown **	<b><i>The Structural and Functional Alterations to the Brains of Rat Pups as a Result of Early Life Abuse and Neglect</i></b>	<b>Dobbs Ferry High School</b>
2	Eshana Weerasinghe ***	<i>A Further Investigation of Backward Aftereffects in the Conventional Adaptation Paradigm</i>	Edgemont HS
3	Maya Carvalho-Evans	<i>Improving Working Memory: Using Cognitive Training in Children</i>	Sleepy Hollow HS
<b>* Marilyn Reiner Science in Education Award for Top High School Award (Advances to State Level Competition)</b>			
<b>** Advances to the State Level Competition - NYS Science Congress</b>			
<b>*** Alternate for Science Fair Congress</b>			