

## 2019 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>Elementary School Biology</i>			
Outstanding	Ellery Gordon, Gwen Gordon	<i>Wide Open</i>	Garrison School
Outstanding	Charlie Heim, Amara Samson	<i>Train, Trick or Treat</i>	Garrison School
Outstanding	Jonathan Wacaser	<i>Which Food Does My Cat Like the Best?</i>	Putnam Valley Elementary
Outstanding	Youanna Tenisa	<i>Which Bread Molds the Fastest?</i>	Patricia Dichiaro Elementary School
Excellent	Zareena Diola	<i>How Do Our Seeds Grow?</i>	PEARLS
Excellent	Marcus Lau	<i>Megalodon</i>	Putnam Valley Elementary
Excellent	Luke Runge	<i>DNA</i>	Patricia Dichiaro Elementary School
<i>Elementary School Chemistry</i>			
Outstanding	Sara Bowden	<i>Saline Solution!!</i>	School 30
Outstanding	Max Cea, Osborne Ringstad	<i>Oxidation</i>	F.E. Bellows
Outstanding	Noel Zachariah	<i>How Does Temperature Affect Reaction Time?</i>	PEARLS
Outstanding	Adeline Leisengang, Matilda Regnier	<i>Boatopolis</i>	Putnam Valley Elementary
Excellent	Mckenna Richy	<i>Rainbow Density</i>	Richard .J. Bailey
Excellent	Isabelle Coletti, Summer Scrocca	<i>Double Trouble with Bubbles</i>	Putnam Valley Elementary
Excellent	Elizabeth Garbrah-Arthur	<i>Got Milk / Got Plastic</i>	PEARLS
Excellent	Aiden Davenport, Shane Ineson	<i>Instant Ice</i>	Richard .J. Bailey
<i>Elementary School Earth/Space Sciences</i>			
Outstanding	Sydney Healey	<i>Effect of Temperature on Ball Bouncing</i>	F.E. Bellows
<i>Elementary School Engineering &amp; Technology</i>			
Outstanding	Gabriel Gherardi	<i>Boat Experiment</i>	Putnam Valley Elementary
Outstanding	Bianca Manfred	<i>Robot</i>	Garrison School
Outstanding	Jacob Vadalkkan, Hayden Subhas	<i>Balloon Powered Car</i>	PEARLS
Outstanding	Dalia Mansell, Sela Rozov	<i>Changing Photo Changes People's Interest</i>	F.E. Bellows
Outstanding	Annie Kasanin, Virginia Latorre	<i>Who is Smarter? Alexa, Siri or Google</i>	F.E. Bellows
<i>Elementary School Environment</i>			
Outstanding	Sam Sposato	<i>Hydropower</i>	Putnam Valley Elementary
<i>Elementary School Health &amp; Medicine</i>			
Outstanding	Kara Noble	<i>Iron in My Cereal</i>	PEARLS
Outstanding	Melanie Kramer, Sheena Haviland	<i>How Size and Quantity Affect Food Choices</i>	F.E. Bellows
Outstanding	Andrew Vasquez	<i>How Does Smoking Affect Your Lungs?</i>	Patricia Dichiaro Elementary School
Outstanding	Delina Gritz	<i>Model of the Heart, Effect of Music on Heart Rate</i>	Prospect Hill School
Outstanding	Bianca Canonico, Sage Abbey	<i>Colors Affect Mint Ice Cream</i>	F.E. Bellows
Outstanding	Nina Lomot, Ava Patrillo	<i>Mood Meter</i>	Putnam Valley Elementary
Excellent	Logan Runge	<i>How Do Certain Medicines Affect Bacteria?</i>	Patricia Dichiaro Elementary School
Excellent	Alex Eichen	<i>Work It Out!</i>	School 30
Excellent	Dina Abdullah, Jenny Alarcon	<i>Soft Drinks and Bones</i>	Richard .J. Bailey
<i>Elementary School Physics</i>			
Outstanding	Brent Davenport, Konrad Burnett	<i>Measuring Impact Energy--Domino Chains</i>	Richard .J. Bailey
Outstanding	Viana Mondelli	<i>Sound Waves</i>	Putnam Valley Elementary
Outstanding	Gregory Leykin	<i>Electromagnet</i>	Patricia Dichiaro Elementary School
Outstanding	Xavier Nicolas	<i>Light to Bright...Need a Pencil</i>	PEARLS
Outstanding	Nicholas Zottoli	<i>Sound Visualization</i>	Putnam Valley Elementary
Outstanding	Owen Wagner	<i>Steam Ship</i>	F.E. Bellows
Excellent	Brandon Lakes	<i>Which Baseball Bat Hits the Ball Farthest?</i>	School 30
Excellent	Tammy Zhang	<i>How Far Can a Paper Plane Fly?</i>	F.E. Bellows
Excellent	Bailey Cavalluzzi	<i>A Battery that Makes Cents</i>	PEARLS
Excellent	Yara Baker	<i>Homopolar Motor</i>	Patricia Dichiaro Elementary School
Excellent	Harrison Stern, Brady Mcinerney	<i>Bubbleology</i>	PEARLS

## 2019 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>Middle School Biology</i>			
1	Dylan Arouh	How Does Scent Affect Memory?	F.E. Bellows
2	Joel Alexander, Yazen Amer	"Fungus Among Us" Chemotaxis in Physarum Polycephalum	PEARLS
2	Irene Basu	The War Against the Greatest Germ Sanctuary: Which Brand Will Win?	Pelham MS
3	Derek Ryan	What is the Effect of Different Amounts and Types of UV Irradiation on Yeast Survival and Growth.	Rye Neck MS
3	Ethan Felenstein	The Effect of Beverages on the Human Reflex Arc	Rye Neck MS
<i>Middle School Chemistry</i>			
2	Spencer Elliot, Harry Holtman	Can Potatoes Charge Batteries?	F.E. Bellows
3***	Adrina Tiju	What are the Effects of pH on Lead Testing?	PEARLS
<i>Middle School Earth/Space Sciences</i>			
1***	Gillian Cornell, Maureen Henshaw, Kristen Hansen	Did You Feel That?	George Fischer MS
2	Lilly Fauci	Optimal Number of Goldfish Hydroponics	F.E. Bellows
3	Kyle Ryan	How is the Ability of Soil to Buffer Acid Precipitation and Enable Plant Growth Affected by Repeated Exposure to Acid Precipitation?	Rye Neck MS
<i>Middle School Engineering &amp; Technology</i>			
1**	Jaime Latorre, Matthew Steeves	The Amazing Shape of Paper	Rye Neck MS
2**	Krishna Kumanan	Methods and Techniques for Swift Home Fire Detection	Mildred E Strang
3***	James Biolchini	Blowing in the Wind	Mahopac MS
3***	Jeremie Thinat	Harnessing Electricity from Tides	Rye Neck MS
***	Veebhu Shah	Improving Light and Energy Access by Hacking a Solar Powered Circuit.	Mildred E Strang
<i>Middle School Environment</i>			
1**	Julia Whalen	Can Household Cleaners be Bad for Bacteria, Good for Us and Good for the Earth?	Mildred E Strang
2***	Tristan Tyler	What's in Your Soil?	Mildred E Strang
3	Samantha Bernstein, Anisha Musti	The Fabrication of Microbial Fuel Cells that Utilize Decaying Organic Material to Generate Electricity	Edgemont Jr/Sr HS
3	Ella Grann	What is the Effect of Silver Nanoparticles on Daphnia Magna?	Rye Neck MS
<i>Middle School Health &amp; Medicine</i>			
1**	Gwenyth Gallagher, Eliana Fabrizi	Get Your Groove On: How Does Music Affect the Behavior of Children Ages 1-10 Medically Diagnosed with A.D.H.D?	St. Augustine
2**	Leah Sherbansky	Thermal Imaging and Health	Pelham MS
3***	Titli Bandyopadhyay	An Innovative Method to Screen Metal Nano-Particles for Targeted Drug Delivery	George Fischer MS
<i>Middle School Math &amp; Computers</i>			
1**	Ara Beigi	Measurement of Physical Properties	John Jay MS
2**	Skandan Gurumurthy	Efficacy of Statistical Image Analysis in Differentiating Glioblastoma Cells	Edgemont Jr/Sr HS
3***	Thomas Karintholil	Browser Wars – Performance Matters	Mildred E Strang
<i>Middle School Physics</i>			
1**	Caitlin Liu	Does the Number of Panels a Soccer Ball Has Affect Its Bounciness and Distance It Travels?	Garrison School
2***	Jackson Mcguire, Byron Wilson	Variables Leading to Successful Arrow Penetration	John Jay MS
3	Paige Demino	Roller Coaster Physics: How Does the Height of the Initial Drop Change the Roller Coaster's Velocity?	St. Augustine
<i>Middle School Psychology</i>			
1*	Amanda Scholz, Beatrice Herbstman	How Does Age Affect Your Perception of Stereotypes?	Farragut MS
2***	Isabel Palacios Ferrer	Mathematical Music	Rye Neck MS
3	Ronak Das	The Correlation Between Time Spent on Social Media and Productivity in 6th Graders?	Lakeland Copper Beech MS
* 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			
The Susan Schaeff Handelman Award for Scholastic Excellence in Science & Technology for Top Middle School Presented to RYE NECK MS			

## 2019 Tri-County Science & Technology Fair Award Winners

AWARD	NAME	PROJECT TITLE	SCHOOL
<i>High School Biology</i>			
1*	Alanna Moskowitz	<b>The Effect of Mutant IDH3 on the Development of Cancer</b>	Yorktown HS
2***	Gayatri Ratakonda	<i>The Effect of MacroH2A Absence on Chromatin Modifications in Mammary Tumors</i>	Yorktown HS
3	Hannah Farley	<i>NR2F1 is a Key Regulator of Quiescence in Uveal Melanoma</i>	Yorktown HS
<i>High School Chemistry</i>			
2	Danielle Bucci	<i>Quantification and Chemical Analysis of Leachate from Bisphenol A-free Baby Bottles after Exposure to Microwave Stress</i>	Harrison HS
<i>High School Clinical/Social Psychology</i>			
1	Jake Szeszko	<i>An fMRI Investigation of the Relationship Between Habituation and Amygdala Activation in Patients with Borderline Personality Disorder and Suicidal Behavior</i>	Westlake HS
2	Emma Guarnieri	<i>The long term effects of elementary school Dual Language programs on high school academic achievement and grit</i>	Sleepy Hollow HS
2	Maanya Ravichandran	<i>Assessment of Cognitive Functioning of Geriatric Patients with Type 2 Diabetes Mellitus in a Lower Socioeconomic Setting</i>	Ardley HS
3	Constance Ferragu	<i>Emotion Perception with Averted and Direct Gaze in Autistic, Schizophrenic and Typical Populations</i>	Scarsdale HS
3	Hailey Kissner	<i>Examining Morphological Associations of the Visual System Related to the Reading Ability of Young Children</i>	Hendrick Hudson HS
<i>High School Earth-Space Sciences</i>			
2	Alexandra Rivera	<i>A Step in Understanding Glacial Flow: Exploring the effects of entrained insoluble debris on mechanical properties of polycrystalline ice</i>	Ardley HS
3	Aaron Cohen	<i>A Novel Method for Characterization of the Molecular Composition of Asteroids</i>	New Rochelle HS
<i>High School Engineering &amp; Technology</i>			
1***	Isabella Piacentino	<i>Robotic vs. Human Arms</i>	North Salem HS
2	Spencer Schutz	<i>Automated Mechanical Exfoliation for the Controlled Production of Graphene</i>	Yorktown HS
2	Abhinav Kumar	<i>Energy Transfer Using the Rotation of a Magnet</i>	Rye Country Day School
3	Rachel Joseph	<i>Optimization of Thermal Hydrolysis for Increased Biogas Generation in Wastewater Treatment</i>	Somers HS
<i>High School Environment</i>			
1**	Sarah Siemers	<b>Application of a Dynamic Flux Chamber to Measure Volatilized Mercury and Trace Gas Emissions</b>	Somers HS
2	Ben Bassett	<i>Prediction of Crop Success Using Multivariate Analysis of Climate Factors</i>	Fox Lane HS
2	Stella Vercesi	<i>The Effect of Seawalls on Caretta caretta Sea Turtle Nesting</i>	Sleepy Hollow HS
3	Olivia Eng	<i>A Deforestation Investigation: The Effect of Deer Herbivory on Tree Regeneration from Beaver Stumps</i>	Westlake HS
3	Caleb Levitt	<i>A New Method for Understanding Plant Evolution: Developing Phylogenetic Trees Using a Qualitative Pollen Morphology Matrix</i>	Westlake HS
3	Sara Mc Sweeney	<i>The Effect of Abscisic Acid on the Drought Tolerance of Arabidopsis thaliana, a Dose Response Study</i>	Harrison HS
<i>High School Health &amp; Nutrition</i>			
1**	Kathryn-Alexa Kennedy	<b>A Novel Product: Nutrient Delivery Targeted Toward Lactating Mothers in Areas of the World Where Malnutrition is Prevalent</b>	Mahopac HS
2	Maura Kelly-Yuoh	<i>The Effect of Maternal Nutrient Intake on Infants: Choline and Placental Macronutrient Metabolism in Gestational Diabetes-Complicated Pregnancies</i>	New Rochelle HS
2	Elizabeth Mioli	<i>Students' Perception and Knowledge of Concussions</i>	Rye Neck HS
3	Grace Ryan	<i>The Effect of Knee Flexion on Fatigue and Stride Frequency in High School Athletes</i>	Sleepy Hollow HS
<i>High School Math &amp; Computers</i>			
1	Andrew Lu	<i>Mobile RGBD Obstacle Detection Platform for the Blind and Visually Impaired</i>	Yorktown HS
2	Theodore Grossberndt	<i>A Novel Approach to Latent Behavioral-Linguistic Trait Derivation Using Factor Analysis</i>	Fox Lane HS
3	Lily Nguyen	<i>Public Debt as a Determinant of Economic Growth</i>	White Plains HS

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AWARD	NAME	PROJECT TITLE	SCHOOL
<i>High School Medicine and Medical Science &amp; Technology</i>			
1**	Samantha Livingston	<i>Identifying mutational diseases caused by a change in the phosphorylation state of tyrosine</i>	Sleepy Hollow HS
2**	Madeleine Lopane	<i>The Impact of Paired Brain and Spinal Cord Stimulation When Examining Crossed Axons Above the Lesion In Cervical Spinal Cord Injury</i>	Somers HS
3***	Hammad Hassan	<i>Targeted inhibition of a novel MALT1 and MAPK signaling network suppresses B cell lymphoma growth</i>	Ossining HS
<i>High School Physiological/Experimental Psychology</i>			
1***	Ziqing Xu	<i>Evaluating Susceptibility to Depression Through a Chronic Social Defeat Stress Model</i>	Ardsley HS
2	Nicole Pereira	<i>The Effect of Valproic acid on Blaberus Discoidalis Cockroaches' Memory and Social Behavior.</i>	Rye Neck HS
3	Robert Lusthaus	<i>An Investigation of Capital Conviction Rates by Race in 2016</i>	Somers 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>			