

2013 Category Winners

Behavioral & Social Sciences					
1st Place	Nathan	Sulecki	Mentor High School	12	The Effect of Musical Preference on the Stress-decreasing Ability of Music
2nd Place	Jesse	Stinson	Mentor High School	11	The Effect of Irrelevant Sound on Context Dependent Memory in Reinstatement Testing
3rd Place	Cole	Clampffer	Hudson High School	9	Packaging: A Dieter's Worst Nightmare
Biochemistry					
1st Place	Nicholas	Neill	St. V-M High School	12	The Creation of Polymeric Micelles for the Use as a Drug Delivery System
2nd Place	Megan	Jones	Beaumont School	12	The Effect of Multiple Enzymatic Layers on the Stationary and Rotating Disk Electrodes of Glucose Biosensors
3rd Place	Elena	Ciolti	Perry Middle School	6	Pacifier Drop
Botany					
1st Place	David	DeSalvo	St. Raphael School	7	The Effect of Light on Aquatic Plants
2nd Place	Karl	Rybka	St. V-M High School	10	Aquaponics vs. Hydroponics
3rd Place	Elizabeth	Stanitz	Beaumont School	11	From Your Garden to Your Gas Tank
Chemistry					
1st Place	Mario	Volpe	St. V-M High School	11	Infusing Epoxy with Carbon Nano-Tubes
2nd Place	Emily	Baker	St. V-M High School	12	Superhydrophobic Polymer Surfaces
3rd Place	Liam	Squire	St. Joseph	7	Most Cost Efficient AA Battery Between Types of Rechargeable Batteries and a Disposable Battery
Computer Science and Mathematics					
1st Place	Anna	Grushetsky	Beaumont School	12	Is Our Forest A Fractal?
2nd Place	Angel	Estrada	Hudson High School	10	An App designed for finding the perfect handle heights
3rd Place	Krisztian	Kosa	Hudson High School	10	Observing Fractal Behaviors in Liquid Crystals
Earth & Space Science					
1st Place	Jacob	Brawley	Stanton Middle School	6	Soil Liquefaction
2nd Place	Bharath	Katragadda	Solon High School	10	Which fuel cell is more efficient in long term scenarios: Hydrogen-Oxygen or Methanol
Engineering and Technological Design					
1st Place	Vincenzo	Volpe	St. V-M High School	12	Biomedical Engineering: Wound-Healing Applicant Inspired by Spider Silk
2nd Place	Isabella	Sparhawk	St. V-M High School	12	Antimicrobial Silver Nanoparticle Coating for Touch Screen Devices
3rd Place	John	Hurley	St. V-M High School	11	Electrospinning of a Random and Aligned Poly-L-Lactic Acid (PLLA) Polymer Scaffold for Tendon Repair
Environmental Science					
1st Place	Emily	Pallaki	St. Raphael School	6	The Effect of Lenses on Solar Energy Production
2nd Place	Max	Liu	Solon Middle School	8	Solar Tracker Vs. Adjustable Panels
3rd Place	Michael	Chmura	St. Hilary School	7	The Effect of pH on Biodigester Efficiency
Medicine and Health					
1st Place	Iulia	Barbur	Hudson High School	10	The Estimated Exposure of A First-grader, Dog, and Baby to the Phthalate Family of Esters
2nd Place	Patrick	McFarland	Sacred Heart of Jesus	8	Can You Eat Before a Lipid Test?
3rd Place	Andrew	Wang	Shaker Heights High School	11	A Disposable Micro-Sensor For Detecting Advanced Glycation End Products (AGEs): a Biomarker of Diabetic Complications
Microbiology					
1st Place	Kartik	Sastry	Hudson High School	10	How Much is Too Much?- The Effect of Extracellular Matrix Proteins on Wound Healing
2nd Place	David	Johanson	Hudson High School	10	RNA Expression of Double Strand Break repair mechanisms in Deinococcus radiodurans when under oxidative stress
3rd Place	Sophia	Judge	St. Hilary School	7	Double Dipping
Physics					
1st Place	Yeji	Kim	Hudson High School	10	Stress Relaxation on a Tennis String Measured Through Pitch Variation
2nd Place	Nathan	Gutarts	Solon Middle School	8	Radiation Leakage of Cell Phones and Cordless Phones
3rd Place	Catherine	Horvath	St. Hilary School	7	The Effect of Using Different Transport Methods on the Force of Friction
Zoology					
1st Place	Hope	Roberts	St. V-M High School	9	The Effects of Artificial Sweeteners on Painted Lady Butterflies
2nd Place	Bryan	Borodkin	St. V-M High School	9	The Effect of Fertilizer Pollution on Daphnia
3rd Place	Heather	Walker	Mentor High School	11	The Effect of Sensory Enrichment of North American River Otters
Polymer					
1st Place	Jielu	Wang	Hudson High School	10	Water Absorbent Polymer
2nd Place	Preston	Hollopeter	St. V-M High School	11	Revolutionizing the World with Recyclable Rubber
3rd Place	John	Hurley	St. V-M High School	11	Electrospinning of a Random and Aligned Poly-L-Lactic Acid (PLLA) Polymer Scaffold for Tendon Repair