

# 2014 Category Winners

## Behavioral & Social Sciences

	Name		Grade	School	Title
1st Place	Gani	Perez	10	Hudson High School	The Effect of Subliminal Bias on Judgement and Perception
2nd Place	Rohit	Rambhatla	8	Solon Middle	Which genre of music will have the highest short term memory retention?
3rd Place	Johnathan	Ben-Porath	7	NIHF Stem Middle	The Relation of Stress and Spatial Memory

## Biochemistry

	Name		Grade	School	Title
1st Place	Yun	Cao	10	Hudson High School	The Effect of Diets on the Contents of Sweat
2nd Place	Jane	Bozsik	11	St. Vincent- St. Mary	Effect of Scaffold Stiffness of Schwann cell Gene Expression
3rd Place	Mariah	Costa	11	St. Vincent- St. Mary	Mimicking Host Defense Peptides

## Botany

	Name		Grade	School	Title
1st Place	Andras	Juhasz	8	Incarnate Word Academy	Saving the Soybean Plant by altering aphid microbiota flora
2nd Place	Alexandria	Oliverio	9	St. Vincent- St. Mary	Constructing an Algae Bioreactor to Remove Excess Environmental CO2 and Produce a Nutritional Sustainable Food Source
3rd Place	Jane	Rybka	9	St. Vincent- St. Mary	Aeroponics vs. Soil

## Chemistry

	Name		Grade	School	Title
1st Place	Ashley	Elston	11	Mentor High	The effects of oxidation and contamination on synthetic and conventional motor oil
2nd Place	Andrew	Wahlstrom	11	Mentor High	The effect of Catalysts on the Decomposition of Sodium Borohydride
3rd Place	Timothy	Fornadel	7	St. Rita	Packing Predicament

## Computer Science and Mathematics

	Name		Grade	School	Title
1st Place	Krisztian	Kosa	11	Hudson High School	STEM Management System: A Web-Based Implementation To Simplify Project Management
2nd Place	Danny	Kim	10	Hudson High School	Efficient Data Transfer Through Visible Light Communication (VLC)
3rd Place	Andrew	Suchan	10	Hudson High School	Comparing the Effectiveness of Brute Force, Dictionary Attacks, and Rainbow Tables

## Earth & Space Science

	Name		Grade	School	Title
1st Place Team	Brendan Joey	Burke Mroz	8	St. Raphael	It's Not Rocket Science...Or Is It?
2nd Place	Mai	Lor	7	Roswell Kent Middle School	Short-Grass, Dirt, And Asphalt Surface Temperature: Effect of Albedo

## Engineering and Technological Design

	Name		Grade	School	Title
1st Place	Kimberly	Gliebe	12	Mentor High	Synthesis of organic Materials for Photovoltaics
2nd Place	Zeynep	Ozgur	9	Hudson High School	MedMinder Smart Medicine Box
3rd Place	Johnathon	Mileski	11	St.Vincent- St. Mary	Interactions of single-chain polymers on a substrate

## Environmental Science

	Name		Grade	School	Title
1st Place	Natalie	Petit	9	St. Vincent- St. Mary	Effects of Watershed Imperviousness on Stream Macroinvertebrates
2nd Place	Adelyn	Klimek	8	Hathaway Brown	Designing the Most Efficient Solar Still for Saltwater to Freshwater Conversion
3rd Place	Abby	Garling	6	St. Raphael	A Stinky Solution

## Medicine and Health

	Name		Grade	School	Title
1st Place	Grace	Nemeckay	11	Mentor High	An in vitro Tumor Capillary Model that Mimics the Real Life Tumor Microenvironment: Development and Assessment
2nd Place	Pranav	Iyer	8	Solon Middle	Vertical Impact Forces on the Knee while Running on Varying Gradients
3rd Place	Marija	Rowane	12	Beaumont High	Oral Probiotic Effectiveness Against Gastrointestinal Bacteria

## Microbiology

	Name		Grade	School	Title
1st Place	Alena	Madar	9	Hudson High School	The effects of chemicals leaching from railroad ties on the microbial communities in soil
2nd Place	Olivia	Kline	7	Perry Middle School	Effectiveness of Hand Sanitizer and Liquid Soap Against Methicillin-Resistant Staphylococcus Aureus
3rd Place	Gabriella	Delprete	7	St. Rita	Sudsy Situation

## Physics

	Name		Grade	School	Title
1st Place	Alexander	Weber	11	St. Vincent- St. Mary	Utilizing Molecular Dynamics Simulations of Crystalline Poly(3-hexylthiophene) to Study Water Diffusion
2nd Place	Pauline	Povitsky	8	Solon Middle	Enhancing Night Vision
3rd Place Team	Klaudia Anna	Kosa Faust	5	East Woods Elementary	Who needs Glass When You Have JELLO?