

2012 Category Winners

Behavioral and Social Sciences

1st Place	Nathan	Sulecki	Mentor H. S.	11	Measuring the Effect of Emotional Music on Sensory Channels
2nd Place	Adam	Ben-Porath	N.I.H.F. StemSchool	8	Reading Comprehension: A Comparison of Digital vs. Print Media
3rd Place	Brad	Jasko	Hudson H. S.	9	Developing Fingerprints

Biochemistry

1st Place	Kanithra	Chandra Sekaran	Solon H. S.	10	Spectral Analysis Of The Lipid & Fatty Acid Composition Of Cyanobacteria- Can it be a good dietary supplement or biodiesel resource?
2nd Place	Nassima	Bouhenni	Hudson H. S.	9	Investigation of Protein Differences in Red and Green Grapes (Vitis vinifera)
3rd Place	David	Chen	Solon M. S.	8	Will Horseradish Enzymes Enhance the Ability of Stain Remover Liquids?

Botany

1st Place	Karl	Rybka	St. Vincent - St. Mary H. S.	9	Hydroponics vs. Soil
2nd Place	Joshua	Mclaughlin	Incarnate Word Academy	7	Does Classical Music have a Positive Effect on Plant Growth?
3rd Place	Abby	Coury	Our Lady of the Elms	7	Phototropism: Do Plants Really Grow Toward Light

Chemistry

1st Place	Krish	Shah	Westlake H. S.	10	In Vitro Electrochemical Detection of Nitric Oxide Release From Biological Cells
2nd Place	Jielu	Wang	Hudson H. S.	9	Corrosion Rates of Steel
3rd Place	Abrar	Alniemi	St. Vincent - St. Mary H. S.	11	Modifying Microgel Characteristics via Starting Molecular Weight

Earth and Space Science

1st Place	Bharath	Katragadda	Solon H. S.	9	Which Fuel is More Efficient in a Polymer Electrolyte Membrane : Methanol or Hydrogen and Oxygen?
2nd Place	Rahul	Rambhatla	Solon M. S.	8	The Effect of Household Chemicals on Soil Erosion
3rd Place	Lauren	Huang	Solon M. S.	8	Do Different Metropolitan Environments Affect Wind Speed?

Engineering

1st Place	Will	Jack	Hudson H. S.	11	The Use of an Inertial Electrostatic Confinement Fusion Reactor as a Source for Medical Radioisotopes
2nd Place	John	Friess	St. Vincent - St. Mary H. S.	12	Electrospinning to Improve the Efficiency of Biomedical Devices
3rd Place	Isabella	Sparhawk	St. Vincent - St. Mary H. S.	11	Shatterproof Coating for Touch Screens

Environmental Science

1st Place	Mitchell	Pallaki	St. Raphael School	8	The Optimal Wind Farm Configuration Analysis
2nd Place	Marija	Rowane	Beaumont H. S.	10	Determining the Presence of Environmental Toxins found in Freshwater Sources in the Great Cleveland Area
3rd Place	Natalie	Zaba	Solon M. S.	8	The Power of the Sun: In What Ways do Variations of Light and Environmental Conditions Impact the Energy Output of Photovoltaic Cells?

Mathematics

1st Place	Anna	Libertin	Beaumont H. S.	10	The "Golden" Art of Music
2nd Place	Krisztian	Kosa	Hudson H. S.	9	The Beauty of Fractal C: The Mandelbrot Set
3rd Place	Anna	Grushetsky	Beaumont H. S.	11	Mathematical Relationships in Nature

Medicine and Health

1st Place	John	Hurley	St. Vincent - St. Mary H. S.	10	Tissue Engineering of Tendon Using Polymer Scaffolds
2nd Place	Avinash	Danda	Mentor H. S.	11	Ezrin: A Therapeutic Target for the Treatment of Diffuse Large B-cell Lymphoma
3rd Place	Vinayak	Kurup	Birchwood School	7	Practical Heart Health Snapshot for Children using Anthropometric and Physical Activity Measurements

Microbiology

1st Place	Annie	OBrien	Hudson H. S.	9	Comparison of Bacterial Transformation Efficiency with Heat Shock vs Electroporation
2nd Place	Jeffrey	Lidawer	Solon M. S.	8	Will The Salinity of The Pacific Ocean Effectively Combat And Kill Bacteria?

Physics

1st Place	Christopher	DiPuccio	St. Joseph School	7	Penetration of Beta Particles through Liquids
2nd Place	Layla	Nosek	West Geauga H. S.	10	Sympathetic Vibrations in Pianos
3rd Place	Rebecca	Ilic	Solon M. S.	8	What's Poppin' - Which Oil Pops the Most Kernels?
3rd Place	Matt	Rakovec	Incarnate Word Academy	7	Can the Strength of an NdFeB, SmCo, AlNiCo, and Ceramic Magnet be Altered with Temperature?

Zoology

1st Place	Heather	Eaken	Stanton M. S.	7	How Does Temperature Affect the Growth and Development of Painted Lady Butterflies?
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Polymer

1st Place	John	Friess	St. Vincent - St. Mary H. S.	12	Electrospinning to Improve the Efficiency of Biomedical Devices
2nd Place	Derek	Whiddon	St. Vincent - St. Mary H. S.	10	Production of Compact Polymer Nanofibers for Acoustic Dampening
3rd Place	Nicholas	Neill	St. Vincent - St. Mary H. S.	11	The Effect of Carbohydrate Base on a Polymer Wound Applicant with Various Levels of Polyethyleneglycol Diacrylate