

## Category Awards by Place

Award	CertificateName School	Grade	Title	Teacher
<b>Grand Award</b>				
	Clara Wagner Saginaw Arts & Sciences Academy	12	Investigating Tuned Magneto-Rheological Reservoirs, Compression Systems, and S	Dr. Allan
	Katharine Shao Detroit Country Day Upper	11	The Effect of Mechanical Compression on Cancer Cell Proliferation	John Dougherty
<b>First Place</b>				
	Arushi Arora Novi Senior High School	11	Utilizing the WGCNA package in R to Identify Biomarkers for Infantile Spasms	James Didio
	Richard Yang Troy High School	11	Optimization of Electro Pulsing on 3Y-TZP Ceramic Water Filter Sintering	Rebecca Brewer
<b>Second Place</b>				
	Aarushi Ganguly Greenhills	9	Bayesian probability technique to estimate Schizophrenia genes	Catherine Renaud
	Arsalan Khan Dearborn Center for Math, Science & Tech	10	The Effect of SAP's on Soil Moisture and Plant Height -Solving The Drought Cri	Brian Taylor
	Aarzo Mahajan Saginaw Arts & Sciences Academy	12	The Effects of Heavy Metal Contamination on Various Aquatic Organisms	Mr. Matthew Miller
	Tina Pakko Dearborn Center for Math, Science & Tech	10	Wind Noise Reduction Device for the Hearing Impaired	Brian Taylor
<b>Third Place</b>				
	Samuel Maher Arthur Hill High School	11	The construction of a price reduced 3D printed turbidity meter	Mark Hellebucyk
	Grace Macomber Saginaw Arts & Sciences Academy	12	Toward Making Extrudable, Water-Soluble Plastic From the Shells of Gulf Shrimp	Matthew Miller

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	Madeleine Yang Detroit Country Day Upper	10	High-dimensional Single-cell Cytometry Analysis of Cancer Stemness	Ross Arseneau
	Ajay Arora Novi Senior High School	10	Strong Matching Preclusion of the Generalized Petersen Graph	James Didio
	Darla Martinez Saginaw Arts & Sciences Academy	10	Biocompatibility of 3-D Printed Plastics with Staphylococcus epidermidis in Hy	Matthew Miller
	Kiana Sadri Detroit Country Day Upper	12	Testing Biodegradable Compounds in Rubber Tire Formulations	Marc Fazio
	Julia Shen Detroit Country Day Upper	10	Eco-Friendly Lithium-ion Battery Reuse via Intelligent Energy Harvesting	Rami Baroodi
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Fourth Place				
	Marinos Bernitsas Northville High School	9	Do Fish Hold the Secret to Hydrokinetic Energy Harnessing?	Karin Nelson
	Arundhathy Suresh Pioneer HS	10	Mechanism by Which Holy Basil Protects Human Cells Against Pneumonia.	Dustin Quandt
	Malini Mukherji Notre Dame Prep. High School	11	Determining light-source location using Machine Learning and Solar Cells	Jocelynn Yaroch
	Rohit Mital Indus Center for Academic Excellence -HS	9	Mat Innovation for Mounting Ceramic Substrates	Rahul Mital
	Zaid Haque Saginaw Arts & Sciences Academy	11	Testing the Geometrical and Chemical Structure of Methylbutenol Synthase: Find	Matthew Miller
	Brandon Davis Saginaw Arts & Sciences Academy	10	Reducing Carbon Emissions From A Coal Burning Plant	David Allan
	Georgia Ziegler Dearborn Center for Math, Science & Tech	10	The Effects of Copper Sulfate on the Health and Growth of Dracena Sanderiana	Brian Taylor
	Katherine Garber Dearborn Center for Math, Science & Tech	10	Electronic Tap Board	Deena Alam-parks
	Collin Wang Detroit Country Day Upper	10	Measuring Expression for Novel Variations in Enhancers using STARR-seq Data	Gillian Vonseeger