



2020 CATEGORY WINNERS



[Animal Science & Plant Sciences]

Place	First Name	Last Name	Grade	School	Project Title
1st	Sara	Ramaiah	12	Mentor High School - Mentor	Water Usage and Leaf Venation Structures in Rhododendron Species and Hybrids
2nd	Giancarlo	Cefaratti	7	St Anselm - Chesterland	A Decoupled Aquaponics System Improves the Production, Yield and Quality of Microgreens within the Brassicaceae and Asteraceae Families vs. a Traditional Coupled Aquaponics System
3rd	Vishwum	Kapadia	7	The University School : College Prep - Chagrin Falls	The Taste of Healthy Food Choices

[Behavioral and Social Sciences]

Place	First Name	Last Name	Grade	School	Project Title
1st	Sarah	Ochocki	12	Mentor High School - Mentor	Expressive Vocabulary Acquisition in Students with Neurodevelopmental Disorders
2nd	Elizabeth	Stevenson	11	Mentor High School - Mentor	Examining Socioeconomic Trends in Post-Industrial Rust Belt Cities with Historic and New Markets Tax Credit Investment
3rd	Anna	Welch	7	St Brendan - North Olmsted	Music and Concentration

[Biomedical Engineering & Biomedical and Health Sciences & Translational Medical Science]

Place	First Name	Last Name	Grade	School	Project Title
1st	Zuha	Jaffar	11	Hathaway Brown - Shaker Heights	Localized Dual Cancer Drug Delivery From Affinity Based Devices
2nd	Sohum	Kapadia	11	The University School : College Prep - Chagrin Falls	Dimensions and Geometry of the Mitral and Tricuspid Valves in Normal and Diseased States
3rd	Nathan	Mu	10	The University School : College Prep - Chagrin Falls	Developing EDTA-polymerized Cyclodextrin as a Drug-Delivering Polymer For Use in a Coronary Drug-Eluting Stent Coating

[Chemistry]

Place	First Name	Last Name	Grade	School	Project Title
1st	Elena	Nemeckay	12	Mentor High School - Mentor	The Dermatological Implications of Athletic Compression Attire
2nd	Lucy	Chmura	11	St Vincent St Mary - Akron	Nanoparticle Suspensions: An Examination of Alkali Metal Chloride Electrolytes on Titanium Dioxide Surface Potential
3rd	Emily	Cseh	12	Mentor High School - Mentor	The Effectuality of BLOC in Forensic Data Collection



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[Earth and Environmental Science & Environmental Engineering]

Place	First Name	Last Name	Grade	School	Project Title
1st	Andrew	Smith	12	Mentor High School - Mentor	An analysis of environmentally sustainable alternative components to concrete
2nd	Abem	Fetene	10	The University School : College Prep - Chagrin Falls	Carbon Sequestration
3rd	Ruth	Adams Gemmell	8	St Vincent De Paul - Akron	Gobble, Gobble, Gone! Eliminating Hepatotoxins Caused by Cyanobacteria: A Study of the Grazing Habits of Paramecium Caudatum on Microcystis Aeruginosa in a Eutrophic Environment

[Energy: Sustainable Materials and Design & Materials Science]

Place	First Name	Last Name	Grade	School	Project Title
1st	Andrew	Ciccotelli	11	St Vincent St Mary - Akron	The synthesis of helical polymer containing a ROTC complex
2nd	Laney	King	10	St Vincent St Mary - Akron	The Effect of Surface Chemistry on the Wet Self-Cleaning Ability of Gecko-Inspired Synthetic Adhesives
3rd	John	Shin	9	Hawken School - Chesterland	Enhancing Graphene & Carbon Fiber Electrochemical Supercapacitors with Electrolytes and Redox Agents

[Engineering Mechanics & Robotics and Intelligent Machines & Systems Software & Embedded Systems & Computational Biology and Bioinformatics]

Place	First Name	Last Name	Grade	School	Project Title
1st	Aditya	Kalahasti	10	Solon High School - Solon	Analyzing patterns of gene expression in inflamed microglia stimulated with a pro-inflammatory molecule (TNF Alpha)
2nd	Vincent	Chen	11	The University School : College Prep - Chagrin Falls	Using Blockchain to Streamline the College Application Process
3rd	Harbir	Dass	9	The University School : College Prep - Chagrin Falls	Torsional Stiffness of a Competition Go Kart Frame



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[Microbiology & Cellular and Molecular Biology & Biochemistry]

Place	First Name	Last Name	Grade	School	Project Title
1st	Sunay	Rastogi	11	The University School : College Prep - Chagrin Falls	THE ROLE OF SERPINB3 ON GLIOBLASTOMA CANCER STEM CELLS
2nd	Cyril	Andrews	10	The University School : College Prep - Chagrin Falls	The Utility of Biomarkers in 1p/19q Co-deleted Fibrillary Astrocytomas
3rd	Sraavya	Anne	11	Mayfield High School - Cleveland	Biophysical Studies of the Variable Domain (VD) of Dynamin Related Protein 1 (Drp1)

[Physics and Astronomy]

Place	First Name	Last Name	Grade	School	Project Title
1st	Zoltan	Kotrebai	8	St Paschal Baylon - Cleveland	Energy Efficiency of LED Lighting (Investigating the Reasons for LED Light Source Efficiency Over Incandescent Light Sources and Calculating the Savings from Switching to an all LED Household)
2nd	Adam	Khan	8	Stanton Middle School - Kent	Model Rocket Nose Cone Aerodynamics
3rd	Nathan	Smith	8	Immaculate Heart Of Mary - Cuyahoga Falls	Do Tennis Racket Dampeners Affect How Far the Tennis Ball will Travel?