

# Montgomery County Science Research Competition- General Award Script - All Divisions

## **Grade 12**

### **Biochemistry**

#### **2nd Place**

Lucy Wang - Methacton High School - Grade 12

12-BCM-002 - Myofibroblast transcriptome changes in Colitis

#### **1st Place**

Aayush Kevadia - Germantown Academy Upper School - Grade 12

12-BCM-003 - Effect of Modulating Biotinylation Parameters on Avidin Binding

### **Chemistry**

#### **1st Place**

Daniil Salimov - Upper Dublin High School - Grade 12

12-CHM-001 - Changing the World's Energy Production

### **Computer Science**

#### **2nd Place**

Varun Singh - Lower Moreland High School - Grade 12

12-CMP-006 - Exploring Different Methods of Decrypting a Vigenere Cipher

#### **1st Place**

Maehul Bhandary - Methacton High School - Grade 12

12-CMP-001 - Analyzing Various Compression Techniques on Genetic Data

Samuel Wang - Germantown Academy Upper School - Grade 12

12-CMP-003 - Rapid Cardiac Screening Using Deep Learning

### **Engineering**

#### **1st Place**

Vrishti Yadav - North Penn High School - Grade 12

12-ENG-001 - Smart Exoskeleton Knee Brace for ALS Patients

### **Environmental Science**

#### **Honorable Mention**

Aayati Patel - Methacton High School - Grade 12

12-ENV-004 - The Trend Between Land Surface Temperature and Albedo

#### **3rd Place**

Sarah Beth Sandifer - Germantown Academy Upper School - Grade 12

12-ENV-001 - The Effect of Microplastic on Freshwater Algae Productivity

#### **2nd Place**

Sameeksha Panda - Methacton High School - Grade 12

12-ENV-005 - Mutagenicity & ROS Formation In Tire-Chemicals 6PPD & 6PPD-Q

#### **1st Place**

Alana Lewis - Cheltenham High School - Grade 12

12-ENV-003 - Effect of Microplastic Exposure on Health of Begonias

### **Medicine & Health**

#### **1st Place**

Kayla D'Eletto - Germantown Academy Upper School - Grade 12

12-MED-001 - Mitochondrial Disease

### **Microbiology**

#### **2nd Place**

Matthew Uppani - Methacton High School - Grade 12

12-MIC-002 - Treating Cytotoxicity Caused by Oxidative Stress

**1st Place**

Clara Zhu - Harriton High School - Grade 12

12-MIC-003 - Effects of Classical Music on Probiotic Colonization and Mouse Behavior

**Physics****1st Place**

Joseph Richards - Germantown Academy Upper School - Grade 12

12-PHY-001 - Effectiveness of Topical Agents Blocking Ionizing Radiation

**Zoology****1st Place**

Raina Bandekar - Germantown Academy Upper School - Grade 12

12-ZOO-001 - Factors that Predispose Canines to CCL Injury using MLR Analysis

**Grade 11****Behavior & Social Science****Honorable Mention**

Shriya Srikoti - North Penn High School - Grade 11

11-BEH-005 - Is Neurological Dominance Exhibited Unilaterally?

**3rd Place**

Karen Zhou - Upper Dublin High School - Grade 11

11-BEH-004 - Fluctuations of Heart Rate Caused by Different Music Genres

**2nd Place**

Lucy Fassler - Germantown Academy Upper School - Grade 11

11-BEH-003 - Study Time Displacement vs. Test Taking Performance

**1st Place**

Joshua Kim - Upper Dublin High School - Grade 11

11-BEH-006 - Does Scent Really Improve Memorization?

**Biochemistry****2nd Place**

Liya Zhang - Methacton High School - Grade 11

11-BCM-001 - Impact of Various Processing Methods on Ascorbic Acid Content in Fruit

**1st Place**

Jaeseok Yoon - The Hill School - Grade 11

11-BCM-002 - Intraoral Vitamin D Toothpaste Formulation with Polysorbate 80 and DMSO

**Chemistry****2nd Place**

John Akladus - Methacton High School - Grade 11

11-CHM-002 - The Efficacy of Potassium Metabisulfite as a Preservative

**1st Place**

Gus Platt - Upper Dublin High School - Grade 11

11-CHM-001 - Effects of Effects of NaHCO<sub>3</sub> on Hydrogen Creation Through Electrolysis

**Computer Science****3rd Place**

Sam Schneider - Upper Dublin High School - Grade 11

11-CMP-002 - Optimizing Usage of Recipe Generators to Mitigate Food Waste

**2nd Place**

Mario Toscano - Germantown Academy Upper School - Grade 11

11-CMP-004 - Using Neural Networks for Art Verification

**1st Place**

Liam Resnick - Lower Moreland High School - Grade 11

11-CMP-001 - Optimising Multidimensional Scheduling with Heuristic-based Satisfiability Solvers

## **Earth & Space Science**

### **2nd Place**

Julia Lee - Lower Moreland High School - Grade 11

11-E&S-002 - Effects of Condensation Covers on Solar Stills

### **1st Place**

Mia Peng - Lower Moreland High School - Grade 11

11-E&S-001 - Heavy Metals: Adverse Effects on Our Oceans

## **Engineering**

### **2nd Place**

Lucas Philip - Germantown Academy Upper School - Grade 11

11-ENG-001 - Analyzing Sweat Molecules Using Microfluidic Technology

### **1st Place**

Arnav Tiwari - Methacton High School - Grade 11

11-ENG-003 - Graphene Augmented PV Cells For Fossil Fuel Independence

## **Environmental Science**

### **Honorable Mention**

Nanditha Patil - Methacton High School - Grade 11

11-ENV-004 - Assessing Chemical Durability & Biodegradability of Starch & Protein Bioplastics

### **3rd Place**

Anna Weatherwax - North Penn High School - Grade 11

11-ENV-002 - Phytoremediation Capabilities of Canola Plants on AMD Contaminated Soil

### **2nd Place**

SydneyBlu Garcia-Yao - Harriton High School - Grade 11

11-ENV-007 - Modeling Stream Microplastics and Effects of Anthropogenic & Watershed Factors

### **1st Place**

Saranya Anantapantula - North Penn High School - Grade 11

11-ENV-001 - Meta-Analysis, Experimentation & Robotics Towards Effective Algal Bloom Control

## **Mathematics**

### **3rd Place**

Bryan Wu - Souderton High School - Grade 11

11-MTH-002 - Predicting Airline Delays

### **2nd Place**

Samantha Kostacos - Germantown Academy Upper School - Grade 11

11-MTH-003 - Shot Analysis and Probability of Winning a Basketball Game

### **1st Place**

Nidhi Ram - Lower Moreland High School - Grade 11

11-MTH-001 - Modeling Dengue Cases Using Weather Factors

## **Medicine & Health**

### **3rd Place**

Saloni Bhatia - Germantown Academy Upper School - Grade 11

11-MED-006 - Vegetable Juice Effect on Tooth Health

### **2nd Place**

Zara Bhatt - Germantown Academy Upper School - Grade 11

11-MED-004 - Efficacy of Low-Cost Hearing Aids vs. Service Delivery Models

### **1st Place**

Anyang Yang - Lower Moreland High School - Grade 11

11-MED-001 - Effects of Thyroid Hormone on Medulloblastoma Progression

## **Microbiology**

**Honorable Mention**

Kaavya Rao - Methacton High School - Grade 11  
11-MIC-003 - Development After Disinfectant

**3rd Place**

Brianna Geist - Germantown Academy Upper School - Grade 11  
11-MIC-001 - Testing Disinfectants on Phone Cases with Microban

**2nd Place**

Angela Wang - Methacton High School - Grade 11  
11-MIC-004 - The Chilling Truth

**1st Place**

Aditya Pasumarthi - Methacton High School - Grade 11  
11-MIC-002 - Essential Oils: The Special Agents

**Physics****1st Place**

Nathan Hong - Upper Dublin High School - Grade 11  
11-PHY-001 - Materials' Affect on Travel of Sound With Varying Frequency

**Zoology****1st Place**

Anthony DiFranco - Germantown Academy Upper School - Grade 11  
11-ZOO-001 - Effect of Human Vocal Intonation on Bird Behavior

**Grade 10****Behavior & Social Science****2nd Place**

Larry Zhan - Germantown Academy Upper School - Grade 10  
10-BEH-003 - The Effects of Audio-Visual Stimuli and Reptition on Memory

**1st Place**

Elizabeth Hercek - Souderton High School - Grade 10  
10-BEH-001 - Mental Health Knowledge's Impact On Mental Health Education  
Winston Sun - Germantown Academy Upper School - Grade 10  
10-BEH-002 - The Effect of Emotional Attachment on Adolescent Resilience

**Biochemistry****3rd Place**

Jianna Kim - Germantown Academy Upper School - Grade 10  
10-BCM-004 - Quantitative Effects of pH on Plant Antimicrobial Peptide Activity

**2nd Place**

Katie Young - Methacton High School - Grade 10  
10-BCM-001 - Acne Alleviation

**1st Place**

Yueyi Bao - The Hill School - Grade 10  
10-BCM-002 - Investigation of Potential PARP-1 Inhibitors as Drugs for Alzheimer's Disease

**Botany****2nd Place**

Roma Reddy - Germantown Academy Upper School - Grade 10  
10-BOT-002 - Pathogenicity of Staphylococcus Aureus on Plant Microbiomes

**1st Place**

Lance Yang - Upper Dublin High School - Grade 10  
10-BOT-001 - Bacterial Symbiosis to Improve Hydroponic Legume Growth

**Chemistry****2nd Place**

Elena Lin - Germantown Academy Upper School - Grade 10  
10-CHM-002 - Electropolishing 316L Tri-Clamp Caps for Pharmaceutical Vessels

**1st Place**

Glenn Xavier - North Penn High School - Grade 10  
10-CHM-001 - Testing Different Methods to Purify Water

**Computer Science**

**2nd Place**

Katherine Song - Germantown Academy Upper School - Grade 10  
10-CMP-002 - The Dewey Decimal System of Clothes

**1st Place**

Luke Hu - Germantown Academy Upper School - Grade 10  
10-CMP-001 - Sleep Quality Predictions Using Fitbit and Deep Learning

**Earth & Space Science**

**2nd Place**

Eileen Wang - Germantown Academy Upper School - Grade 10  
10-E&S-003 - Relationship between Planets' Rings and Roche Limits

**1st Place**

Roy Zhao - Germantown Academy Upper School - Grade 10  
10-E&S-004 - Analysis of Urban Heat-Induced Rainfall in Philadelphia

**Engineering**

**Honorable Mention**

Owen Blamey - Methacton High School - Grade 10  
10-ENG-001 - Air Quality Improvement

**3rd Place**

Taryn DiFranco - Germantown Academy Upper School - Grade 10  
10-ENG-004 - The Effect of Heavy Backpacks and Incorrect Use on Posture

**2nd Place**

Jiayi Li, Muhan Yao - The Hill School - Grade 10  
10-ENG-003 - The Autonomous Tracking Bionic Whale-Shark

**1st Place**

Zeshen Chen - The Hill School - Grade 10  
10-ENG-002 - Stroke Rehabilitation Crutch Robot with Auto-Follow and Fall Alarming System

**Environmental Science**

**3rd Place**

Misimi Owolabi - Germantown Academy Upper School - Grade 10  
10-ENV-003 - Effects of Types and Amounts of Selenium in the Soil

**2nd Place**

Cate Haigh - Souderton High School - Grade 10  
10-ENV-001 - Phytoremediation and Oil Polluted Soil

**1st Place**

Alycia Steck - Germantown Academy Upper School - Grade 10  
10-ENV-002 - Biostim: From Freshwater to Seawater Oil Spill Remediation

**Mathematics**

**1st Place**

Dylan Wen - Methacton High School - Grade 10  
10-MTH-001 - The Pythagorean Expectation's Relationship to Soccer

**Medicine & Health**

**3rd Place**

Haruka Weir - North Penn High School - Grade 10  
10-MED-002 - A Study of the Most Efficient Treatment Method for the CFTR Mutation

**2nd Place**

Vedika Deshpande - North Penn High School - Grade 10  
10-MED-001 - Cannabis-induced metabolic changes in immune cells

**1st Place**

Aidan Gor - Germantown Academy Upper School - Grade 10  
10-MED-003 - Hippocampal volumetry for diagnosing Alzheimer's Dementia

**Microbiology**

**2nd Place**

Ada Leeds - Germantown Academy Upper School - Grade 10  
10-MIC-002 - The Effect of Various Acne Medications on Clearing Acne

**1st Place**

Srija Chaudhuri - Upper Dublin High School - Grade 10  
10-MIC-001 - Tracking DNA Mutation Durability After Genetic Modification

**Physics**

**1st Place**

Brinda Dass - Lower Moreland High School - Grade 10  
10-PHY-001 - CT Densitometry based Predictive Model to Quantify Hair

**Zoology**

**2nd Place**

Avantika Manna - Souderton High School - Grade 10  
10-ZOO-001 - The Effect of Red Dye 40 on Drosophila

**1st Place**

Sanya Bandekar - Germantown Academy Upper School - Grade 10  
10-ZOO-002 - Prevalence Patterns and Parameters in Patients with FLUTD

**Grade 9**

**Behavior & Social Science**

**Honorable Mention**

Alan Jiang - Upper Dublin High School - Grade 9  
09-BEH-005 - Legibility of Chinese characters as drawings

**3rd Place**

Anastasia Owens - Cheltenham High School - Grade 9  
09-BEH-001 - Does Sleep Affect Academic Performance?

**2nd Place**

Sophie Dubois - Souderton High School - Grade 9  
09-BEH-002 - Intro VS Extrovert, Hows Their Non-Verbal Language Differ?

**1st Place**

Adelina Cutrona - Souderton High School - Grade 9  
09-BEH-003 - The Age of Taste

**Botany**

**2nd Place**

Yash Verma - Pennbrook Middle School - Grade 9  
09-BOT-001 - Growing Plants In Microgravity

**1st Place**

Yuktha Bungatavula - Souderton High School - Grade 9  
09-BOT-002 - The Effects of Vitamins on Plant Growth

**Computer Science**

**1st Place**

Shivam Joshi-Awasthi - Pennfield Middle School - Grade 9  
09-CMP-001 - Robotic Book Reader

**Engineering****Honorable Mention**

Roman Guagnozzi - Souderton High School - Grade 9  
09-ENG-001 - Which Type of Quadrupedal Animal's Leg to Body Mass Ratio is the Most Stilt Stable?

**3rd Place**

Aarav Kevadia - Germantown Academy Upper School - Grade 9  
09-ENG-005 - Robotic Hand for People with Arthritis

**2nd Place**

Ridhi Revalli - Pennfield Middle School - Grade 9  
09-ENG-003 - What Insulation Works Best In Winter?

**1st Place**

Pranati Jammalamadaka - Souderton High School - Grade 9  
09-ENG-002 - Impact of Salinity Levels on Power Output of Blue Energy

**Environmental Science****Honorable Mention**

Niharika Inampudi - Souderton High School - Grade 9  
09-ENV-003 - How do Metals in soil affect soil pH?

**3rd Place**

Devon Geist - Germantown Academy Upper School - Grade 9  
09-ENV-004 - Removing Silver Nanoparticles from Pond Life

**2nd Place**

Kevin Lim - Upper Dublin High School - Grade 9  
09-ENV-002 - How Humidity Affects Intonation of Double Bass Instrument

**1st Place**

Riya Mehta - Souderton High School - Grade 9  
09-ENV-001 - Effective Bioremedies for Microplastic Pollution in Soil

**Mathematics****2nd Place**

Noah Utain - Souderton High School - Grade 9  
09-MTH-001 - What Sudoku Solving Method is the Fastest?

**1st Place**

Steven Tunison - Germantown Academy Upper School - Grade 9  
09-MTH-002 - Analyzing the Return Rates of the DOW, the DOGs, and the CATs

**Medicine & Health****2nd Place**

Rasika Sivakumar - Methacton High School - Grade 9  
09-MED-001 - Future of Regenerative Medicine: Cell Reprogramming Using Transcription Factors

**1st Place**

Gabriel Meinstein - Germantown Academy Upper School - Grade 9  
09-MED-002 - Mask Effectiveness

**Microbiology****3rd Place**

Gracie Quigley - Souderton High School - Grade 9  
09-MIC-003 - Will it Clean?

**2nd Place**

Praneel Jammalamadaka - Souderton High School - Grade 9  
09-MIC-002 - Does Neem Oil Create a Stable Environment for Bacteria

**1st Place**

Victoria Puente - Souderton High School - Grade 9  
09-MIC-001 - Bacteriophage... A Natural Killer

**Physics**

**1st Place**

Carter Rembert - Methacton High School - Grade 9  
09-PHY-001 - Best Angles for Planetary Defense

**Zoology**

**1st Place**

Navya Vysyaraju - Souderton High School - Grade 9  
09-ZOO-001 - Comparing Swarming Insects' Static Electricity to Storm Clouds

**Grades 6-8**

**Behavior & Social Science**

**Honorable Mention**

Adhara Reddy - Arcola Middle School - Grades 6-8  
MS-BEH-003 - Hard Candies= Better Performances on Assessments  
Lincoln Woodward - Wyndcroft Middle School - Grades 6-8  
MS-BEH-004 - Does crowd noise affect performance in sports?

**3rd Place**

Campbell Neese - Wyndcroft Middle School - Grades 6-8  
MS-BEH-006 - How Does Listening to Music With or Without Lyrics Affect Work Quality?

**2nd Place**

Maya Herrlinger - Indian Valley Middle School - Grades 6-8  
MS-BEH-014 - What Would You Do: Your Classmate is Cheating!

**1st Place**

Tessa Homa - Cedarbrook Middle School - Grades 6-8  
MS-BEH-009 - He looks just like you! Does a baby look like its parents?

**Biochemistry**

**Honorable Mention**

Hayah Waliyud-Din - French International School of Philadelphia - Grades 6-8  
MS-BCM-012 - Luminol

**3rd Place**

Morohkaut Thach - Cedarbrook Middle School - Grades 6-8  
MS-BCM-002 - Mineral Madness: High V.S Poor Nutrient Water on Plants.

**2nd Place**

Emerson Kellie - Wyndcroft Middle School - Grades 6-8  
MS-BCM-007 - Examining Acid-Base Reactions for Longer Refrigeration of Blueberries

**1st Place**

Yashvi Patel - Pennbrook Middle School - Grades 6-8  
MS-BCM-003 - Feel The Burn: Be Sun Safe!

**Botany**

**Honorable Mention**

Nori Huynh - Cedarbrook Middle School - Grades 6-8  
MS-BOT-007 - Picky Plants: What Color of Light are Plants Drawn To?  
Natalia Momplaisir - French International School of Philadelphia - Grades 6-8  
MS-BOT-013 - Crossing PDNA (plant DNA)

**3rd Place**



Nicholas Abraham - Indian Valley Middle School - Grades 6-8  
MS-BOT-012 - What Fertilizer Works Best On Plants? Synthetic vs. Natural

**2nd Place**

Siddarth Sankar - Arcola Middle School - Grades 6-8  
MS-BOT-010 - How To Kill a (Invasive)Plant

**1st Place**

Jeremy Evans - Indian Valley Middle School - Grades 6-8  
MS-BOT-004 - Effect of Radiation Levels on Seed Germination and Growth

**Chemistry**

**Honorable Mention**

Emilie Brown - Indian Crest Middle School - Grades 6-8  
MS-CHM-010 - The effect of yeast proofing on bread height and weight  
Elyse Mousley - French International School of Philadelphia - Grades 6-8  
MS-CHM-013 - The bomb.com  
Vivienne Profy - French International School of Philadelphia - Grades 6-8  
MS-CHM-002 - Cleaning Up Coins

**3rd Place**

Joseph Bieryla - Cedarbrook Middle School - Grades 6-8  
MS-CHM-007 - Is your Water Clean Enough? Activated Carbon and Filters.

**2nd Place**

Levi Yinger - Wyndcroft Middle School - Grades 6-8  
MS-CHM-005 - Witch black paint has the most light absorption?

**1st Place**

Joshua Owens - Cedarbrook Middle School - Grades 6-8  
MS-CHM-008 - So many species of wood, but which would make the best bow?

**Computer Science**

**3rd Place**

Devesh Waghmare - Pennfield Middle School - Grades 6-8  
MS-CMP-002 - Enigma of Alzheimer's App

**2nd Place**

Reid Blamey - Arcola Middle School - Grades 6-8  
MS-CMP-003 - The Affect of Graphics Cards on Computer Science

**1st Place**

Matthew Gabriel - Indian Valley Middle School - Grades 6-8  
MS-CMP-004 - Whose passwords are more secure, humans' or robots'?

**Consumer Science**

**Honorable Mention**

Frida Brodsky - Cedarbrook Middle School - Grades 6-8  
MS-CSR-009 - A Tasty Dilemma: What Flour Type Makes the Densest Muffins?  
Lucas Martinez - French International School of Philadelphia - Grades 6-8  
MS-CSR-003 - What features uses the most battery in an electric car?

**3rd Place**

Nia Mayrant - Cedarbrook Middle School - Grades 6-8  
MS-CSR-010 - Don't Eat That! : 5 Second Rule Different Surfaces

**2nd Place**

Cole Powers - Cedarbrook Middle School - Grades 6-8  
MS-CSR-008 - "Vowel" Language: Letter Ratios and Wordle Success Rates

**1st Place**

Aimal Ahmad - Indian Valley Middle School - Grades 6-8

MS-CSR-001 - Bleach vs Different Hair Types

## **Earth & Space Science**

### **3rd Place**

Seth Gerdeman - Wyndcroft Middle School - Grades 6-8

MS-E&S-002 - How do climate elements and grass types impact soil erosion?

### **2nd Place**

Luke Huang - Indian Valley Middle School - Grades 6-8

MS-E&S-004 - What Method of Terraforming is Best at Preventing Erosion?

### **1st Place**

Haasini Matta - Indian Valley Middle School - Grades 6-8

MS-E&S-001 - Fertilizers Affecting Waterways

## **Engineering**

### **Honorable Mention**

Shannen Lu - French International School of Philadelphia - Grades 6-8

MS-ENG-001 - Fins and Hydrodynamics

### **3rd Place**

David Gandy - Indian Valley Middle School - Grades 6-8

MS-ENG-011 - Is Insulation Made of Recycled Materials Such as Plastic Water Bottles and Cotton T-shirts Better Than Traditional Insulation for Homes?

### **2nd Place**

Emma Bousquet - French International School of Philadelphia - Grades 6-8

MS-ENG-010 - Testing Layers of Winter Insulation

### **1st Place**

Jeffrey Fan - Arcola Middle School - Grades 6-8

MS-ENG-008 - Smart, Self-Adjusting Solar Panels

## **Environmental Science**

### **Honorable Mention**

Ryan Markus - Indian Valley Middle School - Grades 6-8

MS-ENV-006 - What is the Best Salt/Vinegar Based Weedkilling Solution

### **3rd Place**

Laura Charles - Indian Valley Middle School - Grades 6-8

MS-ENV-009 - Different Plant Fertilizers in Hydroponic Systems

### **2nd Place**

Hafsah Hameedi - French International School of Philadelphia - Grades 6-8

MS-ENV-004 - Can ocean water grow plants?

### **1st Place**

Condoleezza Oyesola - Indian Crest Middle School - Grades 6-8

MS-ENV-005 - What is the effect of water filtration on drinkability?

## **Mathematics**

### **Honorable Mention**

Eva Lorenzi - French International School of Philadelphia - Grades 6-8

MS-MTH-004 - Cymatic Sand

### **3rd Place**

Amelia Escobar - St. Teresa of Calcutta School - Grades 6-8

MS-MTH-002 -  $3 \times 3 \times 3 =$  Rubik's Cube

### **2nd Place**

Dylan Wu - Indian Valley Middle School - Grades 6-8

MS-MTH-003 - What is the Strategy to Win a Game of Chopsticks

**1st Place**

Cormac Lake - Wyndcroft Middle School - Grades 6-8

MS-MTH-001 - What is the Best Way for a Beginner to Solve a Rubick's Cube

**Medicine & Health****3rd Place**

Zachary Rowe - Cedarbrook Middle School - Grades 6-8

MS-MED-002 - Roaring Stopping Scoring: Crowd Noise vs Free Throws

**2nd Place**

Noelle Ryan - Cedarbrook Middle School - Grades 6-8

MS-MED-005 - Sweet Dreams: Age on Dream Recall

**1st Place**

Vedanth Iyengar - Pennfield Middle School - Grades 6-8

MS-MED-003 - Health Effects of E-Cigarettes

**Microbiology****Honorable Mention**

Angeline Wilson - Indian Crest Middle School - Grades 6-8

MS-MIC-003 - What is the effect of bacterial combinations on bacterial pigmentation?

**3rd Place**

Ian McDowell - French International School of Philadelphia - Grades 6-8

MS-MIC-007 - Airflow and the Prevention of COVID

**2nd Place**

Ashae Branch-Huston - Cedarbrook Middle School - Grades 6-8

MS-MIC-004 - What duration of UV-C exposure will kill the most bacteria?

**1st Place**

Cameron Cauffman - Arcola Middle School - Grades 6-8

MS-MIC-006 - Algae: Our Clean Energy Source?

**Physics****Honorable Mention**

Jeffrey Qin - Arcola Middle School - Grades 6-8

MS-PHY-012 - Wind Power

**3rd Place**

Isabella Sherry - St. Teresa of Calcutta School - Grades 6-8

MS-PHY-004 - Color Wars

**2nd Place**

Grace Byard - Cedarbrook Middle School - Grades 6-8

MS-PHY-006 - Musical Plants: Classical music affects bean plant growth

**1st Place**

Johnny Raisch - Cedarbrook Middle School - Grades 6-8

MS-PHY-007 - Is bigger better? Paper Size and Airplanes.

**Zoology****3rd Place**

Madison Truskowski - Indian Valley Middle School - Grades 6-8

MS-ZOO-003 - Is it Possible to Train a Horse to Trailer Easily in 10 Training Sessions?

**2nd Place**

Noah Leigh - Wyndcroft Middle School - Grades 6-8

MS-ZOO-002 - What Signs do Crickets Show to Different Temperatures?

**1st Place**

Lillian Lorenc - Indian Valley Middle School - Grades 6-8

## **General Awards Note**

**The following have been promoted to DVSF. You will receive notification from them.**

**A - D Fair 1st, 2nd, 3rd will go to DVSF**

**MS Fair 1st and 2nd will go to DVSF**