Morgan State University-Science-Mathematics-Engineering Fair 2023

Middle School Winners
Physical Science

Honorable Mention
Name: Joseph Manalad
Project Title: How Does Aircraft Design Affect Flight Speed?
School: Hamilton Elementary / Middle School
Grade: 6

Honorable Mention
Name: Desiree Foster
School: James McHenry Elementary/Middle School
Grade: 6

4th Place
Name: Marcus Johnson
Project Title: Hearing Sounds in Space
School: James McHenry Elementary/Middle School
Grade: 8

3rd Place
Name: Kieran Coughlin
Project Title: Deflate Gate Testing
School: Hamilton Elementary / Middle School
Grade: 6

2nd Place
Name: Logan Fulbright
Project Title: Carbon Cleanse
School: Homeschool-Classical Conversations
Grade: 7

1st Place
Name: Khalila Richards
Project Title: Chemical vs Electrical Reactions
School: James McHenry Elementary/Middle School
Grade: 6

Morgan State University-Science-Mathematics-Engineering Fair 2023

Middle School Winners
Biological Science

Honorable Mention
Name: Asjia Gardner
Project Title: What type of powder picks up the fingerprint the best?
School: Dickey Hill Elementary Middle School
Grade: 8

4th Place
Name: Kacynthia Harison
Project Title: How Do You Make the Best Cookies
School: Thomas Jefferson Elementary/Middle School
Grade: 8

3rd Place
Name: Skye O'Brien
Project Title: CALORIMETER
School: Dickey Hill Elementary Middle School
Grade: 8

2nd Place
Name: Mekayla Jackson
Project Title: What Bacteria Causes Acne on the Face
School: Thomas Jefferson Elementary/Middle School
Grade: 8

1st Place
Name: Aliona Penniston
Project Title: All Alone in The Moonlight: Music & Memory
School: Mount Royal Elementary Middle School
Grade: 7

Morgan State University-Science-Mathematics-Engineering Fair 2023

Middle School Winners
Earth and Environmental Science

Honorable Mention
Name: Fiona Sheehan
Project Title: Floods
School: James McHenry Elementary/Middle School
Grade: 6

Honorable Mention
Name: Cecilia Soko
Project Title: Which will grow?
School: James McHenry Elementary/Middle School
Grade: 8

4th Place
Name: Naimen Evans
Project Title: Tornado in a Box
School: Thomas Jefferson Elementary/Middle School
Grade: 7

3rd Place
Name: Keith James
Project Title: Purify Water with Charcoal
School: Thomas Jefferson Elementary/Middle School
Grade: 7

2nd Place
Name: Nico Singh
Project Title: An ex-stream-ly interesting phenomenon
School: Mount Royal Elementary Middle School
Grade:7

1st Place
Name: Joshua Adler
Project Title: The Dead Sea 2.0
School: Francis Scott Key Elementary/Middle School
Grade: 6

Morgan State University-Science-Mathematics-Engineering Fair 2023

Middle School Winner
Mathematics and Computer Science

1st Place
Name: Zephaniah Noor
School: Hamilton Elementary/Middle School
Grade: 7

Middle School Winners
Engineering

4th Place
Name: Marwan El-Kamary
Project Title: Which Lego Gun Mechanism Shoots the Farthest and is Most Durable?
School: Roland Park Elementary/Middle School
Grade: 6

3rd Place
Name: Jordan Harris
Project Title: Design a Helping Hand
School: Thomas Jefferson Elementary/Middle School
Grade: 7

2nd Place
Name: James Korn
Project Title: Magnet Dice for Inexperienced Rollers
School: Mount Airy Christian Academy
Grade: 8

1st Place
Name: Evan Mosier
Project Title: Bridge competition
School: Roland Park Elementary/Middle School
Grade: 7

Morgan State University-Science-Mathematics-Engineering Fair 2023

Middle School Winners
Team Project

3rd Place
Name: Ashton Melo-Artega and John Williams
Project Title: Hide-N-Sniff
School: Francis Scott Key Elementary/Middle School
Grade: 6

2nd Place
Name: Colin Durbin and Ryan Kashnow
Project Title: Crystal Growth
School: Francis Scott Key Elementary/Middle School
Grade: 6

1st Place
Name: Ayan Kabaria, Ananya Kumbhare and Nikhil Sreekanth
Project Title: Farming Technology to Increase Solar Efficiency
School: Clarksville Elementary/Middle School
Grade: 6

Morgan State University-Science-Mathematics-Engineering Fair 2023

High School Winners
Biological Science

Honorable Mention

Name: Benjamin Kilma
Project Title: Investigating the factors affecting the movement of turtles
School: Mergenthaler Vocational Technical High School
Grade: 9

Name: Ishani Ghosh
Project Title: Saturated lipid mediated abrogation of neurogenesis: a new paradigm for therapeutic implication in traumatic brain injury among obese and high lipid index individuals
School: Centennial High School
Grade: 11

Name: Dhruv Veda
Project Title: Altering the Landscape of Migraine Treatment: An Inquiry into the Use of Vagal Nerve Stimulation as an Alternative to Commonly Prescribed Triptans and Ergotamines
School: Centennial High School
Grade: 9

4th Place

Name: Yuki Lin
Project Title: Understanding how enoxolone inhibits HNF4a and reduces lipoproteins
School: Baltimore Polytechnic Institute
Grade: 12

3rd Place

Name: Iris Zheng
Project Title: Activity of E. coli CRISPR-Cas System on Insertion and Deletion Off-Target Sites
School: Baltimore Polytechnic Institute
Grade: 12

Morgan State University-Science-Mathematics-Engineering Fair 2023

High School Winners
Biological Science

2nd Place
Name: Nicholas Santiago
Project Title: Expression of Gal3 within Mouse and Human Models of Alzheimer's Disease
School: Baltimore Polytechnic Institute
Grade: 12

1st Place
Name: Jason Wang
Project Title: Higher serum testosterone level was associated with a lower risk of prediabetes in US adults: findings from nationally representative data
School: Marriotts Ridge High School
Grade: 11

Morgan State University-Science-Mathematics-Engineering Fair 2023

High School Winners
Earth and Environmental Science

Honorable Mention

Name: Martin Meister
Project Title: Mapping Seagrass Density in the Chesapeake Bay using Sentinel-2 Remote Sensing Data on Google Earth Engine
School: Centennial High School
Grade:10

Name: Kaif Rehman
Project Title: Analysis of Small Shelly Fossils and Ocean Chemistry of the Early Cambrian period in the Poleta Formation
School: Baltimore Polytechnic Institute
Grade:12

2nd Place

Name: Mara Coughlin
Project Title: Phenolic Content's Correlation to Harmful Algal Blooms in a Natural Setting
School: Baltimore Polytechnic Institute
Grade: 12

1st Place

Name: Julio Gabriel Alumbro
Project Title: Comparison of Composition Studies of Exoplanets
School: Baltimore Polytechnic Institute
Grade: 12

High School Winner
Physical Science

Honorable Mention

Name: William Grant
Project Title: Investigating Relationships Between AGN Output and the ISM
School: Baltimore Polytechnic Institute
Grade: 12

Morgan State University-Science-Mathematics-Engineering Fair 2023

High School Winners
Mathematics and Computer Science

3rd Place

Name: William Gao
Project Title: Combating Health Inequities with Globalized AI: Designing a Resource-Efficient and Privacy-Preserving Federated Diagnostic System for Metastatic Breast Cancer with Applications in Developing Countries
School: Centennial High School
Grade: 11

2nd Place

Name: Samuel Tesfai
Project Title: Early Detection of Parkinson's Disease Using Audio-Based Machine Learning Techniques: A Pipeline for Mel Spectrogram Classification to Improve Diagnostic Accuracy
School: C. Milton Wright High School
Grade: 11

1st Place

Name: Louis Lapp
Project Title: Integrating Fourier Transformation and Residual Learning for Arctic Sea Ice Forecasting
School: Baltimore Polytechnic Institute
Grade: 11

High School Winners

Team Project

Honorable Mention

Names: Amy Akpala and Olivia Alder
Project Title: The Marble Express
School: Parkville High School
Grade: 9

Name: Chauncey Adams and Christian Gayadeen
Project Title: The CO2 Capture Conundrum
School: Mergenthaler Vocational Technical High School
Grade: 9

Morgan State University-Science-Mathematics-Engineering Fair 2023

High School Winners
Engineering

4th Place
Name: Mia Urban
Project Title: How Mudskippers Move in Amphibious Environments
School: Baltimore Polytechnic Institute
Grade: 12

3rd Place
Name: Jayden Slater
Project Title: Model Rocketry Inaptitude: Developing A Practical Transonic Model Rocket Nozzle
School: Edgewood High School
Grade: 11

2nd Place
Name: Larry Djatang
Project Title: Structural Battery Airframe (for the enhancement of autonomous aircraft).
School: Reservoir High School
Grade: 11

1st Place
Name: Eesha Sagiraju
Project Title: The End of Chemo & the Future of Cancer Treatment? Using DNA Origami to Design a Nanocarrier for the Targeted Delivery of Monoclonal Antibodies
School: Charter School of Wilmington
Grade: 10

Morgan State University-Science-Mathematics-Engineering Fair 2023

OVERALL WINNERS

Name: Louis Lapp
School: Baltimore Polytechnic Institute
Grade: 11

and

Name: Jason Wang
School: Marriotts Ridge High School
Grade: 11

Morgan State University-Science-Mathematics-Engineering Fair 2023

Public Health Service 2023 Awards
Middle School Winners – Medal & Certificate

3rd Place
Name: Tyler Pierce
Project Title: Can we defy gravity?
School: Chesapeake Montessori
Grade: 7

2nd Place
Name: Vasyl Dail
Project Title: How the Height of the Vehicle Affects Its Speed
School: Hamilton Elementary / Middle School
Grade: 7

1st Place
Name: McLuhan Conway
Project Title: "The Koyaanisqatsi" and The Bay Out of Balance
School: Hamilton Elementary / Middle School
Grade: 7

Meritorious Recognition: Medals

Name: Corion Simmons
Project Title: Soda Preferences in Different Genders
School: The Empowerment Academy
Grade: 8

Name: Mekayla Jackson
Project Title:
School: Thomas Jefferson Elementary/Middle School
Grade: 8

Name: Regan McCray
Project Title: Thermodynamics- Heat Vs. Bounce
School: Hamilton Elementary / Middle School
Grade: 8

Name: Cassidy Quaerna
Project Title: How do different types of magnets effect plant growth?
School: Hamilton Elementary / Middle School
Grade: 7

Morgan State University-Science-Mathematics-Engineering Fair 2023

Public Health Service 2023 Awards
High School Winners – Medal & Certificate

3rd Place
Name: Samuel Tesfai
Project Title: Early Detection of Parkinson's Disease Using Audio-Based Machine Learning Techniques: A Pipeline for Mel Spectrogram Classification to Improve Diagnostic Accuracy
School: C. Milton Wright High School
Grade: 11

2nd Place
Name: Iris Zheng
Project Title: Activity of E. coli CRISPR-Cas System on Insertion and Deletion Off-Target Sites
School: Baltimore Polytechnic Institute
Grade: 12

1st Place
Name: Eesha Sagiraju
Project Title: The End of Chemo & the Future of Cancer Treatment? Using DNA Origami to Design a Nanocarrier for the Targeted Delivery of Monoclonal Antibodies
School: Charter School of Wilmington
Grade: 10

Morgan State University-Science-Mathematics-Engineering Fair 2023

Meritorious Winners -Medals

Name: Sarah Patterson
Project Title: Exploring Adverse Childhood Experiences Among Men Who Have Sex With Men
School: Baltimore Polytechnic Institute
Grade: 12

Name: Kristine Won
Project Title: Reducing Nitrogen Levels in the Chesapeake Bay By Increased Usage of Bioplastics
School: Centennial High School
Grade: 11

Name: Yuki Lin
Project Title: Understanding how enoxolone inhibits HNF4a and reduces lipoproteins
School: Baltimore Polytechnic Institute
Grade: 12

Name: Holland Low
Project Title: The Impacts of Modulating Reaction Time on Active Sensing in Weakly Electric Fish
School: Baltimore Polytechnic Institute
Grade: 12

Name: Edwin Wu
Project Title:
School:
Grade: 11

Name: Martin Meister
Project Title:
School:
Grade: 10

Morgan State University-Science-Mathematics-Engineering Fair 2023

Special Award 2023
Society of Women Engineers - Baltimore Washington Section (SWE-BWS)
Promising Engineer

Name: Eesha Sagiraju
Project Title: The End of Chemo & the Future of Cancer Treatment? Using DNA Origami to Design a Nanocarrier for the Targeted Delivery of Monoclonal Antibodies
School: Charter School of Wilmington
Grade: 10

Name: Larry Djatang
Project Title: Structural Battery Airframe (for the enhancement of autonomous aircraft)
School: Reservoir High School
Grade: 11

Name: Lakiya Rose
Project Title: Bacterial Colonies vs Disinfectant
School: The Empowerment Academy
Grade: 8

Name: Naimen Evans
Project Title: Tornado in a Box
School: Thomas Jefferson Elementary/Middle School
Grade: 7

Name: Ayan Kabaria, Nikhil Sreekanth and Ananya Kumbhare
Project Title: Farming Technology to Increase Solar Efficiency
School: Community Team
Grade: 6

Name: Kacynthia Harrison
Project Title: How Do You Make the Best Cookies
School: Thomas Jefferson Elementary/Middle School
Grade: 8

Name: Skye O'Brien
Project Title: CALORIMETER
School: Dickey Hill Elementary Middle School
Grade:8

Name: Asi'ja Gardner
Project Title: What type of powder picks up the fingerprint the best?
School: Dickey Hill Elementary Middle School
Grade: 8

Morgan State University-Science-Mathematics-Engineering Fair 2023

Name: Kamari Starkes and Khyanna Preston
Project Title: Which Fruit Can We Extract The Most DNA From?
School: Dickey Hill Elementary Middle School
Grade: 7

Name: Mekayla Jackson
Project Title: What Bacteria Causes Acne on the Face
School: Jefferson Elementary/Middle School
Grade: 8

Name: Caitlin Forst
Project Title: A Muffin for All Seasons: A Study of Gluten and Oat Muffins
School: Mount Airy Christian Academy
Grade: 8

Name: Jordan Harris
Project Title: Design a Helping Hand
School: Jefferson Elementary/Middle School
Grade:7

Name: Nico Singh
Project Title: an Ex-Stream-ly Interesting pHenomenon
School: Mount Royal Elementary Middle School
Grade:7

Name: Chelsea Manning
Project Title: Beans Vs. Radishes
School: Jefferson Elementary/Middle School
Grade: 8

Name: Haija Dolo
Project Title: Colors of the Electromagnetic Spectrum
School: James McHenry Elementary/Middle School
Grade: 6

Name: Khalila Richards
Project Title: Chemical vs Electrical Reactions
School: James McHenry Elementary/Middle School
Grade: 6

Name: Desiree Foster
Project Title: All About Sound
School: James McHenry Elementary/Middle School
Grade: 6