






	Name	School	Title
	Divye Arora-Jain	<i>Montour High School, Coraopolis, PA</i>	Deep Learning for Adult Self-Report Score Prediction via Brain Networks
	Khadija Ayub	<i>Gwinnett School of Mathematics, Science, and Technology, Lawrenceville, GA</i>	Optimizing Inhibition for the Novel PPI: MYC & MKK3
	Samiel Azmaien	<i>Gwinnett School of Mathematics, Science, and Technology, Lawrenceville, GA</i>	Neural Network Analysis of MRI Scans for FND Diagnosis
	Brianna Boakye	<i>Academy of Health Sciences @ Prince George's Community College, Largo, MD</i>	Examining the Relationship Between Nicotine Dependency and Significant Problems with Sleep Disturbance
	Ana Cabrera-Isaza	<i>CROEM High School, Mayaguez, Puerto Rico</i>	Model-free Forecasting Method with Pareto Efficient Configuration



Kelly Chambers

*Lincoln High School,
Ypsilanti, MI*

Deguelin Promotes Longevity through *C. elegans* Flavin-Containing Monooxygenase-4



Jayda Cheeks

Michigan State University, East Lansing, MI

Microbial changes in pancreatic tissue during pancreatic ductal adenocarcinoma



Katie Chen

Gwinnett School of Mathematics, Science, and Technology, Lawrenceville, GA

Novel CRISPR-Cas9 Delivery for Chronic Myeloid Leukemia



Hans Cid Garcia

Prince George's Community College, Largo, MD

Exploring the Association Between Nicotine Dependency and Significant Problems with Sleep Disruption



Pithiya D' Costa

Fordham University, Bronx, NY

Examining the effect of aging on the functional capabilities of skeletal stem and progenitor cells (SSPCs)



Lucy Day

Arizona State University, Tempe, AZ

Investigating Environmental Influences on the Presence of the FCyRIIa Polymorphism in Conjunction with Dengue Virus



Rianne Delos Santos

*Gwinnett School of Math, Science, and Technology.
Lawrenceville, GA*

Java Moss Filtration: Mitigating HABs in the Chattahoochee River



Pahan Dewasurendra

*Del Norte High School,
San Diego, CA*

Modeling Sleep Replay Behavior of Human Brain Improves Performance of Artificial Neural Networks in Sequential Learning Tasks and Limited Data Scenarios



Teresa Fang

North Carolina School of Science and Mathematics, Durham, NC

Using High-Resolution GPS to Develop Dynamical Iceberg Melt Model for Sermilik Fjord, Greenland



Raymond Feng

Monta Vista High School, Cupertino, CA

Detecting Music Enjoyment Level Using Electroencephalogram Signals and Machine Learning Techniques



Maria Girgis

Worcester Polytechnic Institute, Worcester, MA

The Effects of Statins and Antipsychotics on iPSC Derived Astrocytes



Lucy Gomes

University of Maryland College Park

Examining the Relationship Between Nicotine Dependency and Significant Problems with Experiencing Panic or Anxiety



Mariah Harris *Pittsburgh CAPA 6-12,
Pittsburgh, PA*

Tourniquet Use in a Pediatric Trauma Cohort.



Janya Jagan *Cypress High School,
Cypress, CA*

Beta Waves Monitoring for the Prognosis of Seizures in Epileptic Pediatric Patients



Dominique Joseph *Prince George's
Community College,
Largo, MD*

"Examining Relationship Between Nicotine Dependency and Experiencing Significant Problems in Mental Health"



Ellen Jun *State College Area High
School, State College,
PA*

Cracking the Genetic Blueprint: An Analysis of of the Genomes of Puerto Rican Parrots for Egg Production Proteins



Maya Kalra *Carroll Senior High
School, Southlake, TX*

Finding the Optimal IFN Response For Oncolytic Virus Treatment

Krishi Kanani *Jordan High School,
Fulshear, TX*

Pavement and its impact on the patellar health of Color Guard Members



Douaa Kessai *Qatar University, Doha, Qatar*

Modulation of Autophagy in Lung Cancer Cells by Monoacylglycerol Cell Lipase Inhibitors.

Reese Ketner *Pottsville Area High School, Pottsville, PA*

The Secret Life of Soil



Joshua Kim *Valley Christian High School, San Jose, CA*

Evaluation of Various Machine Learning Methods on Identification of Cancer of Unknown Primary



Kien Lau *Yale University, New Haven, CT*

Developing and Evaluating Methods of Generating and Applying Polygenic Scores in a Diverse Cohort of 64K Participants



Jade Lee *Westview High School, San Diego, CA*

Exploring the effect of extracellular vesicles on matrix metalloproteinases in aortic smooth muscle cells



Yutian Li *Brookline High School, Brookline, MA*

Somatic Point Mutation Detection & Mutation Burden Analysis in Human Brain Single-Cell Datasets



Kristy Luk

Hong Kong International School, Hong Kong

Optimizing COVID-19 Sewage Surveillance by Mixed-Integer Linear Programming



Alisha Mahmood

Cambridge Rindge and Latin School, Cambridge, MA

Developing a Morphological Profiling Panel for Mouse Kidney



Hari Manchi

North Carolina School of Science and Mathematics, Durham, NC

Chemical recycling of PLA into lactide using a 1,1,3,3-tetramethylguanidinium zinc chloride catalyst



Grace McNamara

North Carolina School of Science and Mathematics, Durham, NC

Synthesizing a PEDOT/Alginate Scaffold With Carbon Nanotube Inclusions to Match the Physical and Electrical Properties of Myocardial Tissue



Yetunde Ogungbola

Tallahassee Community College, Tallahassee, FL

ASSESSMENT OF THE UTILIZATION OF CONTRACEPTIVE AMONG REPRODUCTIVE WOMEN IN PRIMARY HEALTH CARE CENTERS IN OGBOMSO NORTH LOCAL GOVERNMENT, OYO STATE, NIGERIA



Keren Oh

Gwinnett School of Math Science and Technology, Lawrenceville, GA

Automating Reflectance Confocal Diagnoses



Amy Okonkwo

North Carolina School of Science and Math, Durham, NC

Genetically Modifying Wild Type K12 E. coli for the MtrC Gene for Production of Cytochrome C and Microbial Fuel Cell Application



Nancy Osei

Worcester Technical High School, Worcester, MA

Optimizing Nuclear Isolation of Mouse Brain for Genomic Methods



Ella Owigho

North Carolina School of Science and Mathematics, Durham, NC

Targeting Mitochondrial Function to Improve Neurofunction in Parkinson's Disease Models of Caenorhabditis Elegans



Rachael Owolabi

Gwinnett School of Mathematics, Science, and Technology, Lawrenceville, GA

Microalgae for Cellulose Degradation in Biofuel Applications



Minh Pham

UCLA, Los Angeles, CA

Effect of Education on Health Outcomes in Watts



Rishabh Rastogi

Loveless Academic Magnet High School, Montgomery, AL

In vitro Study of Genepin Loaded Chitosan Nanoparticles against HeLa Cells



Oluwademila de Salako

*Covenant University,
Otta Ogun State, Nigeria*

ENHANCING ELECTRIC POWER TRANSMISSION INFRASTRUCTURE FOR SUSTAINABLE DEVELOPMENT IN IKORODU, LAGOS STATE, NIGERIA: CHALLENGES AND OPPORTUNITIES



Ramin Sarkar

*Gwinnett School of
Mathematics, Science,
and Technology,
Lawrenceville, GA*

Treatment Analysis for Alzheimer's Disease Using *Caenorhabditis elegans* as a Model



Eshani Sharma

*Gwinnett School of
Mathematics, Science,
and Technology,
Lawrenceville, GA*

The Effect of Digital Nudging on Learning



Neha Singaravelan

*University of Alabama at
Birmingham*

Identifying Secondary Metabolites in *Aspergillus Heteromorphus* and *Magnaporthe Grisea* and the Overproduction of Cytochalasans



Shivali Singh

*Gwinnett School of
Mathematics, Science
and Technology.
Suwanee, GA*

Identifying Novel Prognostic Biomarkers in Pancreatic Cancer



Samyutha Talagadadevi

*Coppell High School,
Coppell, TX*

Mathematical Model of an Early Cancer Detection System



Roha Thomas *Decatur High School,
Federal Way, WA*

Osteoblast Marker Genes are Enriched at Bone Mineral Density (BMD)-Associated Loci



Ayan Trivedi *Illinois Mathematics and
Science Academy,
Aurora, IL*

Synthesis of a Benzoxazole derivatives to be used for the treatment of tropical Leishmaniasis



**Eleanor
Trobradovic** *Gwinnett School of
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and Technology.
Suwanee, GA*

Comparing Heat-Resistant Properties of Cellulose & K-Carrageenan Bioplastics

**Mila
Wolkowitz** *Illinois Mathematics and
Science Academy,
Aurora, IL*

Synthesis of Amide Derivatives as Preclinical Drug Candidates for Visceral Leishmaniasis



Allison Wong *Gwinnett School of
Mathematics, Science,
and Technology, Lilburn,
GA*

Preventing Heat Stress Through a Hydrogel-Integrated Textile



Dylan Xianto *Illinois Mathematics and
Science Academy,
Aurora, IL*

Leishmaniasis and its Potential Treatments Through Synthesis and Computation



Tisya Yadav

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Coppell, TX*

Oncolytic Virus and the IFN Response



**Christina
Zhang**

*Williams College,
Williamstown, MA*

Small Molecule Substitutions of Lignin-based Molecules