



ABRCMS

ePoster Spring Symposium
for Emerging Scientists

April 25, 2024 | Virtual



ABRCMS 2024 ePoster Spring Symposium Awards

Oral Presentation Awards

- **Anjishnu Debnath**, *Scripps Ranch High School (CA)*, “Optimization of Lipid Coatings on Porous Silicon Nanoparticles to Enhance Drug Delivery”
- **Chisom Duru**, *North Carolina School of Science and Mathematics (NC)*, “Using Bromelain Application to Inhibit the Spread of the Tobacco Mosaic Virus and Promote Tissue Regeneration in Red Bell Pepper Plants”
- **Alyssa Hernandez**, *Illinois Mathematics and Science Academy*, Synthesis of Potential Treatment for Mycetoma
- **Parv Mahajan**, *Gwinnett School of Mathematics Science and Technology (GA)*, “Segmenting Generative Adversarial Networks: A Novel Approach”
- **Roxio Ortiz**, *School for Advanced Studies-Homestead (FL)*, “Observation of Interactions Between Human Proteins and HIV Reverse Transcriptase Using Python Software Applications”

- **Shaurya Patni**, *Mass Academy of Math and Science @ WPI (MA)*, “Utilizing Methotrexate and Dimethyl fumarate on the STING Pathway Modulation to alleviate symptoms of Crohn's disease”
- **Lily Peinhardt**, *University of Texas at Dallas*, “The Effects of Age, Sex, and VNS on Repetitive Behavior Seen in Valproic Acid Model”
- **Prisha Rai**, *High Technology High School (NJ)*, “Utilizing a Novel VAE Pipeline for Tau Inhibitor Screening Validated in *Drosophila Melanogaster* Alzheimer’s Models”
- **Agastya Sarmah**, *Sharon High School (MA)*, “Identifying Potential Biomarkers for Liver Hepatocellular Carcinoma Using Bioinformatics: a Study Utilizing Cancer Datasets”
- **Onur Tercioglu**, *North Carolina School of Science and Mathematics (NC)*, “Facile Preparation of a Cost Effective Bi Doped SnO₂ Catalyst for the CO₂ Electroreduction Reaction”
- **Alua Zhanuzakova**, *The High School for Math, Science and Engineering (NY)*, “Dissecting the Role of BRCA1-associated Protein 1 (Bap1) in Embryonic Skin Development”
- **Michelle Zhou**, *Newark Charter School (DE)*, “Effects of Inflammation on Blood-Brain Barrier Permeability”

Poster Awards

- **Kelly Chambers**, *Lincoln High School*, “Deguelin Promotes Longevity through *C. elegans* Flavin-Containing Monooxygenase-4”
- **Neha Singaravelan**, *University of Alabama at Birmingham*, “Identifying Secondary Metabolites in *Aspergillus Heteromorphus* and *Magnaporthe Grisea* and the Overproduction of Cytochalasans”
- **Keren Oh**, *Gwinnett School of Math, Science, and Technology*, “Automating Reflectance Confocal Diagnoses”
- **Rianne Delos Santos**, *Gwinnett School of Math, Science, and Technology*, “Java Moss Filtration: Mitigating HABs in the Chattahoochee River”
- **Khadija Ayub**, *Gwinnett School of Math, Science, and Technology*, “Optimizing Inhibition for the Novel PPI: MYC & MKK3”

- **Lucy Day**, *Arizona State University*, “Investigating Environmental Influences on the Presence of the FCyRIIa Polymorphism in Conjunction with Dengue Virus”
- **Yutian Li**, *Brookline High School*, “Somatic Point Mutation Detection & Mutation Burden Analysis in Human Brain Single-Cell Datasets”
- **Kien Lau**, *Yale University*, “Developing and Evaluating Methods of Generating and Applying Polygenic Scores in a Diverse Cohort of 64K Participants”
- **Eshani Sharma**, *Gwinnett School of Math, Science, and Technology*, “The Effect of Digital Nudging on Learning”
- **Pithiya D' Costa**, *Fordham University*, “Examining the effect of aging on the functional capabilities of skeletal stem and progenitor cells (SSPCs)”
- **Raymond Feng**, *Monta Vista High School*, “Detecting Music Enjoyment Level Using Electroencephalogram Signals and Machine Learning Techniques”
- **Jayda Cheeks**, *University of Michigan*, “Microbial changes in pancreatic tissue during pancreatic ductal adenocarcinoma”
- **Mila Wolkowitz**, *Illinois Mathematics and Science Academy*, “Synthesis of Amide Derivatives as Preclinical Drug Candidates for Visceral Leishmaniasis”
- **Kristy Luk**, *Hong Kong International School*, “Optimizing COVID-19 Sewage Surveillance by Mixed-Integer Linear Programming”
- **Samyutha Talagadadevi**, *Coppell High School*, “Mathematical Model of an Early Cancer Detection System”
- **Roha Thomas**, *Decatur High School and Highline Community College*, “Osteoblast Marker Genes are Enriched at Bone Mineral Density (BMD)-Associated Loci”
- **Jade Lee**, *Westview High School*, “Exploring the effect of extracellular vesicles on matrix metalloproteinases in aortic smooth muscle cells”
- **Ramin Sarkar**, *Gwinnett School of Math, Science, and Technology*, “Treatment Analysis for Alzheimer's Disease Using *Caenorhabditis elegans* as a Model”