

- VJAS **high school** papers accepted for presentation at the 2023 Symposium May 6, 2023.
- The list is sorted first by category, then by school, and finally by paper title.
- Paper titles were exported directly from information entered into Reviewr.

Round 2 Botany (BOT)	Blacksburg High School	Wang Andrew Effects of Transcription Factor WUSCHEL on the Regeneration of Arabidopsis thaliana
Round 2 Botany (BOT)	Central Virginia Governor's School	Earsing Jamie The Effect of Copper Pollution on Glycine Max
Round 2 Botany (BOT)	Central Virginia Governor's School	Harrison Sarah Lawson The Effect of Caffeine on the Growth and Development of Glycine max
Round 2 Botany (BOT)	Central Virginia Governor's School	Mahajan Aashay The Effect of Water Stress on the Weight of Poaceae
Round 2 Botany (BOT)	Central Virginia Governor's School	Tasker Jacob The Effect of Inorganic and Organic Fertilizers on Glycine max Biomass and Nutrient Composition
Round 2 Botany (BOT)	Chesapeake Bay Governor's School	Lowery Chessa Arbuscular Mycorrhizal Fungi as Plant Probiotics
Round 2 Botany (BOT)	Clover Hill High School	Colasurdo Parker The Effect of Simulated Acid Rain on the Growth of Nitrogen-Fixing Clover Plants, Pre-Inoculated with Rhizobium Bacteria

Round 2 Botany (BOT)	Clover Hill High School	Cosner Landon The Effect of Various Types of Homemade Fertilizer, Applied to Soil from Four Different Virginia Counties, on Pole Bean Plant Growth
Round 2 Botany (BOT)	Clover Hill High School	Criss, KC on The Effect of Different Roasts of Coffee Grounds, Added to Soil, on Cilantro Growth
Round 2 Botany (BOT)	Clover Hill High School	Gaffney Gretchen The Effect of Different Types of Magnesium on Calendula Plant Growth
Round 2 Botany (BOT)	Clover Hill High School	Patel Ansh The Effect of Light Color on the Transpiration Rate of Kalanchoe pinnata
Round 2 Botany (BOT)	Clover Hill High School	Raman Rohan The Effect of Varying Ratios of Bio-Enzymes Produced by Fermentation on Tomato Plant Height, Number of Leaves, and Weight of Fruit
Round 2 Botany (BOT)	Governor's School @ Innovation Park	Cheema Manreet, Moreno Alahna, Siddique Laiba- The Effect of Arbuscular Mycorrhizal Fungi on Perennial Ryegrass and Flax Greens Grown in Soil with Varying Concentrations of Microplastics
Round 2 Botany (BOT)	Mills E Godwin High School	Bhimjiani Bansi The Effect of Dietary Supplements on Agrobacterium tumefaciens in Pansies

Round 2 Botany (BOT)	Mills E Godwin High School	Haq Mishaal The Effect of Isopropyl Alcohol on Seed Scarification
Round 2 Botany (BOT)	Mills E Godwin High School	Jethava Ayan, The Effect of Time in Magnetic Field on Dill Plant Growth
Round 2 Botany (BOT)	Mills E Godwin High School	Malik Zainah The Effect of Different Fertilizers on the Growth of Hydroponic Basil Plants
Round 2 Botany (BOT)	Mills E Godwin High School	Nareddy Tanvi The Effect of Water Conductivity on Vigna radiata Germination Speed
Round 2 Botany (BOT)	Mills E Godwin High School	Siddabattula Siddarth The Effect of Mycorrhiza Concentration on Soil
Round 2 Botany (BOT)	Mills E Godwin High School	Sooda Saanvi The Effect of Household Fertilizers alongside Gibberellins on Fenugreek Height
Round 2 Botany (BOT)	Mills E Godwin High School	Sriniaiyer Sudarshan The Effect of Different Light Intensities on Raphanus Sativus Plant Growth

Round 2 Botany (BOT)	Washington-Liberty High School	Coleman Jacob At What Acidity Level Does the Germination Rate of Pinto Bean Seeds Decline Below 50%?
Round 2 Botany (BOT)	Washington-Liberty High School	Edsall Alba- The effect of the percentage of polystyrene microplastics in soil on the root length of Raphanus sativus plants
Round 2 Botany (BOT)	Washington-Liberty High School	Wearmouth Isla The Effect of Aquaponic Farming, in Comparison to Nitrate- Fertilized Soil, on the Growth of Lettuce Plants

Round 2 Chemistry (CHM)	Arlington Tech	Cheng Shangwen The Effect of Natural vs Synthetic Dye on Color Intensity on the Violet Wavelength
Round 2 Chemistry (CHM)	Central Virginia Governor's School	Goff Abby A Comparison of the Durability of Commercial Glues and a Wheat Protein-Based Adhesive
Round 2 Chemistry (CHM)	Central Virginia Governor's School	Uhl Amelia The Effect of Price on Microplastic Content in Water Bottles
Round 2 Chemistry (CHM)	Clover Hill High School	Bodman Maggie The Effect of Polaroid Photo Development Temperature on Speed at Which Photos Reach Full Saturation
Round 2 Chemistry (CHM)	Clover Hill High School	Cairns Andrew The Effect of Various Materials Used in the Composition of Golf Balls on the Distance the Ball Travels, When Putted
Round 2 Chemistry (CHM)	Clover Hill High School	Dickerson Dylan The Effect of the Protein/Sugar Ratio on the Browning of the Maillard Reaction in Cakes Baked with Whey Protein
Round 2 Chemistry (CHM)	Clover Hill High School	Dillon Liana The Effect of Several Methods of Water Treatment (Boiling and Activated Alumina) on Resultant Fluoride Levels in Fluoridated Tap Water
Round 2 Chemistry (CHM)	Clover Hill High School	Jacocks Spencer The Effect of Different Behr Price Points on the Stain Resistance of the Paint
Round 2 Chemistry (CHM)	Clover Hill High School	Sneed Sophia The Effect of Cadmium-Based Paint, Exposed to Various Humidity Levels, on Change in Color of a Painting, Measured Using ImageJ Software
Round 2 Chemistry (CHM)	Collegiate School	Gross, Jordan Hydropower's Effect on Greenhouse Gas Emissions
Round 2 Chemistry (CHM)	Governor's School @ Innovation Park	Paulk, Caitlin - Creation of Alginate Beads to find Optimal Release of Catalase with Stimuli Responsive Capabilities
Round 2 Chemistry (CHM)	Individual	Kyle Edwin A Novel High-throughput Screening Method to Identify Fluoride-ion-conducting Materials
Round 2 Chemistry (CHM)	Mills E Godwin High School	Akbar Zahra The Effect of Active Carbon on the Amount of Chlorine Present in Water
Round 2 Chemistry (CHM)	Mills E Godwin High School	Bandla Shriya The Effect of Different NPK Fertilizers on Sunflower Growth
Round 2 Chemistry (CHM)	Mills E Godwin High School	Shariff Asiya The Effect of Plasticizer on pH of SODIS Purified Water

Round 2 Chemistry (CHM)	Ocean Lakes High School	Labert, Reagan- Comparison and Analysis of the Compositions of Commercial Kombucha Products
Round 2 Chemistry (CHM)	Roanoke Valley Governor's School	Richards Seth The Bioremediation of Perfluorooctanoic Acid by Pseudomonas putida
Round 2 Chemistry (CHM)	Southwest Virginia Governor's School	Ebel Emma Testing Hand Sanitizer Alcohol Levels with Gas Chromatography
Round 2 Chemistry (CHM)	Southwest Virginia Governor's School	Mitchell, Eden of Differences in the Presence of Aluminium, Lead, and Arsenic in Foundation for Various Skin Shades
Round 2 Chemistry (CHM)	Wakefield High School	Vekony Sophia Electrophoresis: Building a Chamber for Identifying DNA
Round 2 Chemistry (CHM)	Washington-Liberty High School	Chahil Tara The Effect of Different Natural Juices Based on pH, on the Electrolyte Concentration
Round 2 Chemistry (CHM)	Washington-Liberty High School	Floom Kate The Effect of the Amount of Red 40 in a Beverage on the Relative Luminance of the Substance
Round 2 Chemistry (CHM)	Washington-Liberty High School	Freeman Anna The Effect of the Amount of Gelling Agent on both Vegan and Non-Vegan Marshmallows
Round 2 Chemistry (CHM)	Washington-Liberty High School	Hellman Arianna The Effect of Different Methods of Insulation and Cooking on the Height of Cake Domes
Round 2 Chemistry (CHM)	Washington-Liberty High School	Kopylev Rina the Effect of Candle Wax Material on Burn Rate and Soot Production

Round 2 Engineering (EGR)	Blacksburg High School	Ali, Aun, GPUs vs. CPUs with Deep Neural Networks and Matrix Multiplication
Round 2 Engineering (EGR)	Blacksburg High School	Sridhar Sriya Utilizing Flow Cytometry to Evaluate the Sanitization of a 96 Well Plate by the Opentrons Liquid Handling Robot
Round 2 Engineering (EGR)	Central Virginia Governor's School	Carwile Hayden An Analytical Study of Water Hammer and the Effect of Different Valves
Round 2 Engineering (EGR)	Central Virginia Governor's School	Cossman Haley The Effect of Different Forms of Plastic Waste on The Compressive Strength of Concrete
Round 2 Engineering (EGR)	Central Virginia Governor's School	Davis Devon The Effect of Shielding Materials on Blocking Gamma Radiation
Round 2 Engineering (EGR)	Central Virginia Governor's School	Gallagher Mason The Effect of the Wind Turbine Blade Angle on Energy Production
Round 2 Engineering (EGR)	Central Virginia Governor's School	Hunley Lincoln The Effect of Interior Padding Material on the Impact Absorption of American Football Helmets

Round 2 Engineering (EGR)	Central Virginia Governor's School	Mason Micajah The Effect of Degradation on a Full Synthetic versus a Conventional Motor Lubricant's Tribological Performance
Round 2 Engineering (EGR)	Central Virginia Governor's School	Meyer Catherine The Effect of Electrical Resistance on the Energy Output from a Hydropower Turbine
Round 2 Engineering (EGR)	Central Virginia Governor's School	Milhorn Erika The Effect of Vertical Oscillation and Cycles per Minute on the Effective Detection of a 24 GHz Device
Round 2 Engineering (EGR)	Central Virginia Governor's School	Morford Cooper Which Green Insulation is the Most Practical when Considering Cost, Thermal Efficiency, and Embodied Carbon?
Round 2 Engineering (EGR)	Central Virginia Governor's School	Morris Layton What Car Windshield Angle Produces Maximum Image Sharpness?
Round 2 Engineering (EGR)	Central Virginia Governor's School	Southall Benjamin The Effect of Humidity on Solar Panel Efficiency
Round 2 Engineering (EGR)	Central Virginia Governor's School	Spickard Abigail Effect of Heat Dissipation Techniques on Peltier Device Based Atmospheric Water Generator Performance

Round 2 Engineering (EGR)	Central Virginia Governor's School	Wynnyk Georgianna The Effect of Different Eco-Friendly Oil Treatments on the Strength of Pine Wood
Round 2 Engineering (EGR)	Central Virginia Governor's School	Yarbrough Sam The Effect of Blade Angle on Water Turbine Energy Production
Round 2 Engineering (EGR)	Chesapeake Bay Governor's School	Allen Ema Enhancing Sustainability in Parking Areas
Round 2 Engineering (EGR)	Chesapeake Bay Governor's School	Baldwin Paige Development and Testing of a New Method for measuring nearshore Turbidity- the 3D Coastal Comparator
Round 2 Engineering (EGR)	Clover Hill High School	Hedrick Christopher The Effect of Ratio of Ash to Cement, When Used to Make Cement Brick, on the Compressive Strength of the Brick
Round 2 Engineering (EGR)	Clover Hill High School	Shindler Grant The Effect of Propeller Design on Amount of Net Force
Round 2 Engineering (EGR)	Governor's School @ Innovation Park	Aklil, Hanna - The Creation of Longer Lasting ConcreteAn Analysis on the Infusion of Bacteria and Aggregates Into Cement Concrete to Increase Durability at Varying Temperatures by Examining the Substances Following Water Absorption

Round 2 Engineering (EGR)	Individual	Chaudhuri Pooshan Study of the movement of Superparamagnetic Iron Oxide coated Cucumis sativus cell clusters in presence of a Magnetic Field
Round 2 Engineering (EGR)	Individual	Narayanan Prakash Dhruv Exploring the perception of Blockchain technology through sentiment analysis of media content
Round 2 Engineering (EGR)	Individual	Rao, Samvrit & BOREAS: Innovating Respiratory Care Through Telemedicine
Round 2 Engineering (EGR)	Individual	Zhou Brian Using Novel Constraint-Guided Models to Predict Kinematic Gait Outcomes on an Underwater Flapping Fin Propulsion System
Round 2 Engineering (EGR)	John Randolph Tucker High School	Vithoulkas Tess The Effect of Different Filtration Methods on the Amount of Microplastics in Drinking Water
Round 2 Engineering (EGR)	Mills E Godwin High School	Avrutin Maxim Study of Diodes Made of Different Semiconductor Materials as Temperature Sensors
Round 2 Engineering (EGR)	Mills E Godwin High School	Xu Joyce A microfluidic paper-based bioreceptor utilizing colorimetric properties for detection of D-Glucopyranose in epidermal sweat

Round 2 Engineering (EGR)	Ocean Lakes High School	Gregoriou, Nicholas- Brass Instrument Mouthpiece Design and Lip Reed Acoustics
Round 2 Engineering (EGR)	Ocean Lakes High School	Race, Robert- Effects of Thermodynamic Processes on Aerospace Materials and their Properties
Round 2 Engineering (EGR)	Washington-Liberty High School	Anderson Karin The Effect of Metallic Foil and Different Geometric Shapes on Light Reflection
Round 2 Engineering (EGR)	Washington-Liberty High School	Bierman Micah The Effect of Various Soundproofing Materials on Decibel Level
Round 2 Engineering (EGR)	Washington-Liberty High School	Gupta Krish - Aquatic Plants based Water Filtration
Round 2 Engineering (EGR)	Washington-Liberty High School	Hemsch Emma The Effect of the Catholyte on the Power Produced by a Microbial Fuel Cell
Round 2 Engineering (EGR)	Washington-Liberty High School	Kambhampaty Kedar Effect of Algorithm Choice on Automated Face-Detection in Images of Occluded Faces

Round 2 Environmental & Earth Science (ENV)	Arlington Tech	Eichers Julian The Effect of Harmful Algal Blooms on the Population of North Atlantic Right Whales
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Alderson Anna The Effect of Lumbricus terrestris on Zinc Contaminated Soil
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Barnett Drew The Effects of Pollution Source on Microplastic Concentration in the James River Watershed
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Cantrell Jacob The Effect of Lead Acetate on D. Magna Population Stability
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Dodge Anna The effect of Lemna minor vs. Eichhornia crassipes on the remediation of crude oil from water.
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Heimbach Payton The Effect of Triclosan on The Mortality Rate of Daphnia Magna
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Loos Wesleigh The Effect of Heat Stress on Solanum lycopersicum L.
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Morford Riley Comparing Biosorption Capabilities of Lead (II) Acetate Trihydrate by Spirulina platensis and Chlorella vulgaris
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Puckett Kennedy Changes in Pyrocystis fusiformis Bioluminescence According to Light Intensity
Round 2 Environmental & Earth Science (ENV)	Central Virginia Governor's School	Ziegler Sofia The Effect of Artificial Turf Field Usage on Particulate Matter in the Air
Round 2 Environmental & Earth Science (ENV)	Chesapeake Bay Governor's School	Graulich Erik The Effect of Biocide Type and Concentration on Hull Fouling and Exposed Estuarine Crustaceans

Chesapeake Bay Governor's School	Harrow Courtney Finding A New Home For Chesapeake Bay Oyster Spat
Chesapeake Bay Governor's School	Haydon Holly Iron and Copper Concentration Effects on Brine Shrimp Hatching and Mortality
Chesapeake Bay Governor's School	Mayer Joshua Comparing the Growth, Mass, and Survival Rate of Oysters Raised Using the Standard and RAS Methods
Chesapeake Bay Governor's School	Miller Kayleigh The Impact of Shoreline Hardening on Nearshore Fish Populations
Chesapeake Bay Governor's School	Morris, Khalia, Impact of Beaver Dam on Water Quality
Chesapeake Bay Governor's School	Valdez Julissa Comparing Detergents Impacts on Brine Shrimp Hatching and Survival
Clover Hill High School	Albathigi Eissa The Effect of Number of Plants in a Model Room on the Temperature of the Room
Clover Hill High School	Freer Flora The Effect of Water Depth in the Swift Creek Reservoir on the Amount of Microplastics Collected at Various Depths
Collegiate School	Andews William Effect of Different Fertilizers on the Vegetative Propagation of Allium cepa and to Address Food Waste and Climate Change
Collegiate School	Ascoli Andrew Hidden Contribution of Sodium Sulfate on Cyanobacteria and Eutrophication
Collegiate School	Smith Caroline Effect of Chemical Fertilizers on the Biofertilizer Water Fern, Azolla: A Research Study on a Phosphorus-limited and Nitrogen-fixing Mutualism
	Chesapeake Bay Governor's School Clover Hill High School Clover Hill High School Collegiate School Collegiate School

Round 2 Environmental & Earth Science (ENV)	Collegiate School	Thomason Brandon Effects of Ecologically Relevant Concentrations of Microplastics on Photosynthetic Pigments of Nannochloropsis microalgae
Round 2 Environmental & Earth Science (ENV)	Governor's School @ Innovation Park	Lateef, Hamza - Mapping Changes in Particulate Pollution and Plant Health in the Indian Sub- Continent During the COVID-19 pandemic
Round 2 Environmental & Earth Science (ENV)	Governor's School @ Innovation Park	Patel, Aarav - Research of The Novel Production of Organic-Based Amino Acid Incorporated COâ,, Absorbing Hydrogels
Round 2 Environmental & Earth Science (ENV)	Hampton Roads Academy	Erwin Chelsea Detection of Microplastics in the Virginia Peninsula
Round 2 Environmental & Earth Science (ENV)	Individual	Rizvi Zahra Flowing into the Future: Addressing Urbanization's Impact on Water Quality in the Chesapeake Bay
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Bharambe Radhika The Effect of Copper Sulfate on Invertase Activity
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Eubanks Annie The Effect of Ammonium Hydroxide on Freshwater Algal Biomass
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	George Sherlin The Effect of Various Antioxidants on the Growth of Medicago sativa in a Saline Environment
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Kambham Rishab The Effect of Air Particle Size on Air Filter Efficiency
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Kamujula Anika The Effect of Varying Concentrations of Copper on Spirulina Growth
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Korrapati Nihita The Effect of Various Water Contaminants on the Corrosion of Iron

Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Lal Shreya The Effect of Exposure to Activated Sludge Bacteria on PET
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Madison Mussatt The Effect of Ultraviolet Filter Chemicals on Planarian Health
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Makineni Grihith The Effect of Different Filters on Substance Amount in Water
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Nanduru Ananya The Effect of Titanium Dioxide (TiO2) on the Levels of Dissolved Oxygen Produced by Thalassiosira
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Nguyen Quynh Using Activated Charcoal Powder as an Eco-Friendly Sorbent for Oil Spillage Treatment
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Rao Aarushi The Effect of Metallic and Biopolymer Coagulents on Microplastic Extraction in Water
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Royster Lucas The Effect of Organic Pesticides on the Ladybug Hippodamia convergens
Round 2 Environmental & Earth Science (ENV)	Mills E Godwin High School	Subramanian Srinidhi, The Effect of Differing Water Sources on the Efficiency of TSP Flocculant
Round 2 Environmental & Earth Science (ENV)	Mountain View High School	Zakriya Emaad The Effect of Various Particle Pollutants and Organic Air Filters on the Efficiency of a Photovoltaic Cell
Round 2 Environmental & Earth Science (ENV)	Roanoke Valley Governor's School	Callis Jefferson The Effect of Redlining on Soil Microbial Diversity
Round 2 Environmental & Earth Science (ENV)	Southwest Virginia Governor's School	Dunford Shane The Cathodic Corrosion Protection Capabilities of Sacrificial Anodes in Coastal Areas

Round 2 Environmental & Earth Science (ENV)	Southwest Virginia Governor's School	Hendrix Jacey Is the Radford Army Ammunition Plant Polluting the New River?
Round 2 Environmental & Earth Science (ENV)	Southwest Virginia Governor's School	Paine James Testing the Efficacy of an Aquatic Aerator
Round 2 Environmental & Earth Science (ENV)	Southwest Virginia Governor's School	Wilder Jack Testing the Public's Knowledge About Commonly Foraged Mushrooms
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Adhi Roayba The Effect of Food-Grade Flocculants on the Aggregation of Simulated Microplastics in Polystyrene-Contaminated Water
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Ariunbayasgalan Maral The Effect of Different Levels of Moisture in Grass on the Absorption Rate
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Bartl Alex Effect of Modifying Sorbents on Oil Sorption
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Cozette Olivia The Effect of Different Locations of the Susquehanna River relative to the Conowingo Dam on the Concentrations of Different Chemicals
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Eberly Lincoln Effect of Acid Rain on Limestone
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Merritt Phobe The Effect of Acid Rain on Microgreen Radish Seed Germination
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	O'Casey Siobhan The Effect of Oysters on the Filtration of Water
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Ortuno Evelyn Finding a Buffer Solution to Protect Limestone from Acidic Rain

Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Pickard Elle Determination of Per- and Polyfluoroalkyl Substances, Nitrates, and Phosphates in Different Locations on the Potomac River
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Sagatov Alina What Time Period Creates the Most Amount of Biofuel in the Least Amount of Time
Round 2 Environmental & Earth Science (ENV)	Washington-Liberty High School	Shapiro Frances The Effect of Type of Cover Crop on Water Runoff and Soil Erosion
Round 2 Environmental & Earth Science (ENV)	Yorktown High School	Roncka Madeleine The Effect of the Type of Water on the Turbidity
Round 2 Environmental & Earth Science (ENV)	Yorktown High School	Silva Leila The Effect of Green Roofing on Solar-Cell Performance

Round 2 Mathematics: Theoretical & Modeling (MTM)	Central Virginia Governor's School	Qi Hannah Diagnosis of Melanoma Skin Cancer Using Convolutional Neural Networks
Round 2 Mathematics: Theoretical & Modeling (MTM)	Central Virginia Governor's School	Yadala Venkata Naga Sai Kaushik Modeling the Eradication and Spread of Poliomyelitis in Relation to Hesitancy in Vaccine Acceptance
Round 2 Mathematics: Theoretical & Modeling (MTM)	Individual	Kumar Devesh Coolidge: A Novel Regularization Method to Revolutionize Neural Networks
Round 2 Mathematics: Theoretical & Modeling (MTM)	Individual	Pendyal Anooshka Optimizing Quantum Annealing to Advance Graph Coloring Algorithms
Round 2 Mathematics: Theoretical & Modeling (MTM)	Mills E Godwin High School	Naveen Philip FASFA: A Novel Next-Generation Backpropagation Optimizer
Round 2 Mathematics: Theoretical & Modeling (MTM)	Mills E Godwin High School	Pal Ayush The Effect of Genetic Sequence Vectorization Methods on the Accuracy of Promoter Sequence Classification using NLP Techniques
Round 2 Mathematics: Theoretical & Modeling (MTM)	Mills E Godwin High School	Schwehr Zachary Brain Tumor Segmentation and Classification Based on Deep Learning, Attention Mechanisms, and Energy-Based Uncertainty Predictions
Round 2 Mathematics: Theoretical & Modeling (MTM)	Mills E Godwin High School	Tadinada Abhinav Optimization of Distance Heuristics for Use in a Conflict-Based Search Path-Finding Algorithm
Round 2 Mathematics: Theoretical & Modeling (MTM)	Southwest Virginia Governor's School	Montgomery Oscar Effects of School Size on Cross Co1untry Runners' Speed
Round 2 Mathematics: Theoretical & Modeling (MTM)	Southwest Virginia Governor's School	Reitzel Davis Exploring Collatz Conjecture

Round 2 Medicine & Health (MDH)	Blacksburg High School	Akanmu Mercy Differences in the physical and structural changes during microglial activation in pediatric and adult glioma models.
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Brown James Correlation of Different Exercises to Performance Level in Rock Climbing
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Gagen Avery The Antimicrobial Efficacy of Various Active Ingredients in Face Washes on Propionibacterium acnes
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Kelso Myah The Effect of Phenacetin Exposure on Fruit Fly Reproduction
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Kim Sean The Effect of Diphenhydramine Hydrochloride on the Regeneration of Dugesia dorotochephala
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Nelson Megan The Effect Penicillin has on Staphylococcus epidermidis Versus Homeopathic Ingredients
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Robinson Sara Comparing the Effectiveness of Tylenol Products on Dissolving Time
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Saleh Jenna The Effect of Foods that Mimic ACE inhibitors on Flame Cell Function of Dugesia dorotocephala
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Sangle Saniya
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Wesley Emily The Effect of Different Amounts of Caffeine Consumption on the Amount and Quality of Sleep
Round 2 Medicine & Health (MDH)	Central Virginia Governor's School	Wood Lilly A Mutigenerational Study Regarding the Effects of Titanium Dioxide on the Reproductive Rates of Drosophila melanogaster
Round 2 Medicine & Health (MDH)	Chesapeake Bay Governor's School	Rader Sydney A Study on the Potential of Vitamin D Deficiency in Adolescents
Round 2 Medicine & Health (MDH)	Clover Hill High School	Cairns Nathan The Effect of Material Color and Type of Material on Amount of UV Radiation Blocked
Round 2 Medicine & Health (MDH)	Clover Hill High School	Mandalapu, Sarayu The Effect of Various Water Resistant Sunscreen Formulas on UV Protection Underwater, Evidenced by the Amount of Color Change in UV Beads After 10 Minutes
Round 2 Medicine & Health (MDH)	Clover Hill High School	Merkel Benjamin The Effect of Spray Sunscreen vs. Lotion Sunscreen on the Change in RGB of UV Beads

Round 2 Medicine & Health (MDH)	Clover Hill High School	Pritchett Coston The Effect of Zanfel vs. Homemade Herbal Poultice on Percentage of Remaining Urushiol
Round 2 Medicine & Health (MDH)	Clover Hill High School	Wittman Alejandra The Effect of Various Types of Padding Materials, Inside a Baseball Helmet, on Percentage of Times a Simulated Brain Ruptures Inside the Helmet, and on Force of Impact Measured Inside the Helmet
Round 2 Medicine & Health (MDH)	Collegiate School	Craig Stan Effect of Speech Targets Used by Stutterers to Achieve Fluency on the Reactions of Non-Stutterers
Round 2 Medicine & Health (MDH)	Governor's School @ Innovation Park	Dehring, Milania - Dugesia dorotocephala as a novel animal model to replicate abstinence-related withdrawal symptoms after prenatal nicotine exposure in neonates
Round 2 Medicine & Health (MDH)	Governor's School @ Innovation Park	Moussavi, Layla - Modeling the Effect of Hyperglycemia on Fertility of Caenorhabditis elegans
Round 2 Medicine & Health (MDH)	Governor's School @ Innovation Park	Prem, Isha - The Effects of Zinc, Aluminum, & Iron on the Behavior of PTL-1 Caenorhabditis Elegans and Alzheimer's Disease
Round 2 Medicine & Health (MDH)	Individual	Ambati Vidya, Haloperidol inhibits Inflammasome Activation and Reduces the Risk of Rheumatoid Arthritis
Round 2 Medicine & Health (MDH)	Individual	Kumar Deepanshi The Effect of Different Concentrations of Polypropylene and Polyethylene Microplastics on the Heart Rate of Daphnia Magna.
Round 2 Medicine & Health (MDH)	Individual	Kumar Nitya The Effect of Different Concentrations of liquid Melatonin on the heart rate of Daphnia magna
Round 2 Medicine & Health (MDH)	Individual	Pendyal Anooshka Utilizing Machine Learning and Tissue Specificity as Markers in Acute Myeloid Leukemia
Round 2 Medicine & Health (MDH)	Individual	Yeeun Lee The Impact of Binge Ethanol During Adolescence on Myelin Related Gene Expression
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Huizar Evan The Effect of Acute Exercise on Human Hearing
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Jagels Sophia The Effect of Alternative Natural Laxatives on Stomach Acid pH
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Jose Jerin The Effect of Added Carotenoids on Bacterial Resistance in C. elegans
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Nayak Aarushi The Effect of Glucose as a Dietary Additive on the Lifespan of C. Elegans

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Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Sarkar Nishorgo Effects of Diosgenin, a Regulator of Inflammation, on Inflammatory Markers in Hepatocellular Carcinoma Cells
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Shah Nisarg The effect of different neurotransmitter and drug concentrations on the reuptake of APP+ in different neurotransporters
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Shah Yana Data Analysis of Interpretation Errors Made When Reading CT Angiograms of the Head and Neck
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Singh Tanish Application of a Deep Learning Model for Effective Diagnosis of Osteosarcoma
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Sureshkumar Ashna The Effect of Petroleum Jelly on Transepidermal Water Loss
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	The Effect of Patient Age on Bracket Failures
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Vanga Nivriti Differential De Novo Sphingolipid Synthesis Protein Expression in NPC1 Mouse Brain Tissue
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Vasudev Vimridh The Effect of Varying pH using Betaine HCl on the Digestive Catalytic Assimilation of a Gastric Acid Solution
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Yang Emily The Effect of Sphingolipid Biosynthesis Inhibitors on Cell Viability
Round 2 Medicine & Health (MDH)	Mills E Godwin High School	Yuan Annie The Effect of Ascorbic Acid on DNA Methylation in HCT-116 Cells
Round 2 Medicine & Health (MDH)	Ocean Lakes High School	Li, Rockwell -Swim Smart, Swim Fast: Development and application of a Fitbit app for swim technique study
Round 2 Medicine & Health (MDH)	Southwest Virginia Governor's School	Patel Ariya A Novel Lateral Flow Immunoassay for the Dectection of Parvovirus B19 Antigens in Urine
Round 2 Medicine & Health (MDH)	Southwest Virginia Governor's School	Tawney Andy Repeat Lengths of RS3 Alleles Associated with the Rate of Health-Related Risky Behavior in Young Adults
Round 2 Medicine & Health (MDH)	Wakefield High School	Bartrum Olivia Analysis of Anti-Inflammatory Compounds in Drug Absorption and Calculated Transdermal Permeability Utilizing the Parallel Artificial Membrane Permeability Assay
Round 2 Medicine & Health (MDH)	Washington-Liberty High School	Madison Kaitlin The Enzymatic Activity of Lactase VJAS Paper

Round 2 Medicine & Health (MDH)	Washington-Liberty High School	Mohanty Anna The Effect of Axon Diameter on Heart Rate Variability
Round 2 Medicine & Health (MDH)	Washington-Liberty High School	South Caroline The Effect of Over-The-Counter Medicine Coating on the Release Time in a Low pH Environment
Round 2 Medicine & Health (MDH)	Washington-Liberty High School	Spahr Janhvi and The Effect of Pandemics on Life Expectancy in Different Regions of the World Since 1950
Round 2 Medicine & Health (MDH)	Yorktown High School	Dieguez Kenshu The Impact of the Type of Pre-Trained CNN Model on the Accuracy of Classifying COVID-19 from Lung X-Rays

Round 2 Microbiology & Cell Biology (MCB)	Blacksburg High School	Gilmore Carson Effect of Conjugated Linoleic Acid on Structure of Skeletal Muscle
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Chen Jason Got Milk?: Comparing the Acid Production of Bifidobacterium infantis when Grown in Different Milks
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Hinton Tyler The Effect of Various Disinfectant Methods on the Decline of Escherichia coli
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Kicklighter Josephine Comparing the Effectiveness of Herbal Remedies on the Growth of Streptococcus gallolyticus
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Peacock Andy Studying Impacts of Glass and Plastic Reusable Water Bottles on Microbial Growth
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Sloan Ryan The Effect of Common Athletic Materials on the Growth of Staphylococcus epidermidis
Round 2 Microbiology & Cell Biology (MCB)	Central Virginia Governor's School	Tolbert Mary Comparing the Effectiveness of Antibiotics on the Growth of the Bacteria E. coli
Round 2 Microbiology & Cell Biology (MCB)	Chesapeake Bay Governor's School	Haydon Haley Which Disinfectant Product is Most Effective in Removing Bacteria?
Round 2 Microbiology & Cell Biology (MCB)	Chesapeake Bay Governor's School	Seamster Makayla Efficacy of different topical antibiotics against bacteria from Chesapeake Bay water
Round 2 Microbiology & Cell Biology (MCB)	Clover Hill High School	Hunter Audrey The Effect of Various Types of Disinfectants, Applied to Bacterial Samples, on the Portion of the Plate Covered by Growth, Over Time

Round 2 Microbiology & Cell Biology (MCB)	Clover Hill High School	Wang Matthew The Effect of Brewing Time on the Capability of Green Tea to Suppress Growth of the Number of Fusobacterium nucleatum Colonies
Round 2 Microbiology & Cell Biology (MCB)	Governor's School @ Innovation Park	Lakshmanan, Maanini - Exploring A Novel Enterobactin Solution In An Iron-Rich Environment With Lactobacillus Acidophilus And Escherichia Coli To Increase Absorption Of Ferric Ions To Help Mitigate Iron Deficiency
Round 2 Microbiology & Cell Biology (MCB)	H-B Woodlawn Secondary Program	Beaumont Nicola The Effect of Salinity on the Growth of Chlorella
Round 2 Microbiology & Cell Biology (MCB)	Individual	Kim Keira The Effect of Polymer Type on Biodegradation Success by the Fungus Aspergillus flavus
Round 2 Microbiology & Cell Biology (MCB)	Individual	Kriesh Tivare Effect of Switching Magnetic Fields on the Growth Behaviors of Gram-Negative Escherichia Coli Bacteria
Round 2 Microbiology & Cell Biology (MCB)	Individual	Parashar, Aanandi Effect of AGX-51 on Proliferation and Differentiation of Cells with Pulmonary Fibrosis
Round 2 Microbiology & Cell Biology (MCB)	Individual	Shah Aashka Studying the Role of Epigenetic Regulators in the Recovery of Triple-Negative Breast Cancer
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Chandran Ria The Effect of Various Cleansers on Acne (Escherichia coli)
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Dang Andrew The Effect of Water Concentration on Bacteria Growth
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	lyer Samyukta The Effect of Natural Antibiotics on the Inhibition of Escherichia. coli Growth

Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Nath Sattwik The Effect of Different Compounds on Planaria Regeneration
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Nguyen Alexandra The Effect of SPF Moisturizer on S. epidermidis Growth
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Wadnerkar Pari The Effect of Riboflavin on the Growth of Staphylococcus Epidermis
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Zhang Alice The Effect of Subculture Times on the Phenotypic Changes of Primary Aortic Smooth Muscle Cells
Round 2 Microbiology & Cell Biology (MCB)	Mills E Godwin High School	Zhou Monona Investigating the Dynamics of Heat Shock Factors on its Protective Role against Neurodegeneration
Round 2 Microbiology & Cell Biology (MCB)	Ocean Lakes High School	Dimaranan, Cedrick -Redesigning the Kirby-Bauer Agar Standards to Improve the Efficacy of Antibiotic Detection
Round 2 Microbiology & Cell Biology (MCB)	Roanoke Valley Governor's School	Baldwin Emma: The Effects of Aminoglycoside & Beta-Lactam Antibiotics onâ€< S. marcescens
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Ackleson Emma The Effect of Medical Scrub Compositions on the Conduciveness for Bacterial Growth
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Brodsky Anna The Effect of Sound Frequency on the Growth of E. coli K-12
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Goody Claire The Effect of the Type of Mouthwash on the Inhibition of Escherichia coli. (E coli.)

Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Hanke Helen The effect of mouthwash alternatives on the zone of inhibition of Staphylococcus salivarius
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Hassen Nadia The Effects of Toothpaste on Bacterial Growth
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Lach-Hab Nadia Effect of E. coli Treatment Type on E. coli Zone of Inhibition
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Maxwell Daisy Evaluating the Potential of Herb-derived Essential Oils as Natural Antimicrobials
Round 2 Microbiology & Cell Biology (MCB)	Washington-Liberty High School	Smaragdis John The Effect of Different Concentrations of Isopropyl Alcohol in Homemade Hand Sanitizer on Reducing the Growth of Bacteria Commonly Present on Hands

Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Kennedy Ava Grace The Effect of the Angle of Attack on a Prototype Airfoil
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Lewis Delaney The Effect of Infill Percentages on the Structural Integrity to Mass of Material Ratio
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	McKinney Ronan The Effect of Positioning Within a Galaxy on Star Formation
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Mhaskar Aryan
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Ramsey Sarah Determining the Most Effective Shin Guard Brands Against Impact
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Schietinger Colby The Relationship Between Radio Sources and HCN Regarding Star Formation
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Tibbs Stephen The Relationship Between Fluid Density, Sound Frequency, and Amplitude
Round 2 Physics & Astronomy (PHY)	Central Virginia Governor's School	Webb Joshua The Effect of Cleat Upper Material on Ball Velocity
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Barker Maggie The Effect of Strike Location of a Tennis Ball on a Tennis Racquet on the Distance a Tennis Ball Travels

Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Ceglarz Susanna The Effect of Various Brands of Chalk Used in Gymnastics on the Amount of Friction the Chalk Provides
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Foster Benjamin The Effect of Various Types of Tennis Court Surfaces on the Height of a Tennis Ball Bounce
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Frankenberry Henry The Effect of Brand of Tennis Balls on Height of Ball Bounce
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Ho Xavier The Effect of Various Types of Rosin on Degree of Deviation from Perfect Pitch, Using a Viola
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Lee Luri The Effect of Angles of Lighting, Hitting a Painting, on the Difference in Color (px), Analyzed Using ImageJ Software
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Neely Hannah The Effect of Depth of a Lacrosse Stick Pocket on the Speed a Lacrosse Ball Travels
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Rawls Kathleen The Effect of Using Various Types of Rock Climbing Chalk, Applied to Simulated Skin, on the Static Coefficient of Friction Between the Chalked Skin and a Rock
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Singleton Christian The Effect of Drumstick Material on Pitch and Length of a Sustained Note
Round 2 Physics & Astronomy (PHY)	Clover Hill High School	Zhou Jingtong The Effect of Various 3D Printed Shoe Tread Patterns on the Amount of Force Required to Move the Patterns across both Dry and Wet Surfaces

Round 2 Physics & Astronomy (PHY)	Collegiate School	Siminiceanu Eva How Tennis Ball Spin Affects Horizontal Distances Traveled Before and After Bouncing
Round 2 Physics & Astronomy (PHY)	Mills E Godwin High School	Morris Kelsey The Effect of Swimsuit Material on Water Resistance
Round 2 Physics & Astronomy (PHY)	Mills E Godwin High School	Sharma Camellia The Effect of Dispensing Mechanism on Drop Precision
Round 2 Physics & Astronomy (PHY)	Mills E Godwin High School	Viswanath Anish Replicating Mechanical Turbulence with Different Factors
Round 2 Physics & Astronomy (PHY)	Roanoke Valley Governor's School	Louvet Nicholas The Effect of Different Eddy Current Brake Designs on the Efficiency of Bike Braking
Round 2 Physics & Astronomy (PHY)	Wakefield High School	Vena Allegra The effect of Altitude on Muon Flux
Round 2 Physics & Astronomy (PHY)	Wakefield High School	Wiley Claire Effect of Temperature on Tennis Ball Bounce
Round 2 Physics & Astronomy (PHY)	Washington-Liberty High School	Monroy Sebastian The Effect of Flap Deflection Angle on an Airplane's Takeoff Time and Speed
Round 2 Physics & Astronomy (PHY)	Yorktown High School	Miller Andrew The Effect of a 3d Print's Extrusion Temperature on its Compression Strength

Round 2 Psychology (PSY)	Blacksburg High School	Christensen_Caoilainn_Comparative Content and Engagement Analysis of Credentialed and Non-Credentialed Nutrition Professionals on Instagram
Round 2 Psychology (PSY)	Central Virginia Governor's School	Brigman Abi Childhood Emotional Abuse as a Predictor for Low Self-Esteem as an Adult
Round 2 Psychology (PSY)	Central Virginia Governor's School	Callahan Sam Relationships Between Gender and Human Perception
Round 2 Psychology (PSY)	Central Virginia Governor's School	Gheen Ryan The Effect of Social and Economic Political Extremity on Conspiracy Beliefs
Round 2 Psychology (PSY)	Central Virginia Governor's School	Le Eva The Effect of Language in Music on High School Students' Focus Ability
Round 2 Psychology (PSY)	Central Virginia Governor's School	Mann IvyElizabeth The Effect of COVID-19 Quarantines on High School Student Extroversion
Round 2 Psychology (PSY)	Central Virginia Governor's School	Mistretta Isabelle The Effect of Speaker Accent on Listener Perceptions of Intelligence and Solidarity
Round 2 Psychology (PSY)	Central Virginia Governor's School	Peterson Katherine Effect of Music Genre on Working Memory
Round 2 Psychology (PSY)	Central Virginia Governor's School	Whaley Claire How Music in Different Keys Can Comparatively Help to Reduce Stress Levels
Round 2 Psychology (PSY)	Central Virginia Governor's School	Zhang Jenny The Effect of Parental Separation on how Their Child Will be in Interpersonal Relationships

Round 2 Psychology (PSY)	Chesapeake Bay Governor's School	Gaines Layla The Effect Color has on Memory
Round 2 Psychology (PSY)	Chesapeake Bay Governor's School	Gwathmey Laila The Effects of Age and Distance on Your Color Cognition
Round 2 Psychology (PSY)	Southwest Virginia Governor's School	Barnette Laken Evaluating Comfort Levels in Teenage Patients When Talking to a Physician About Sensitive Topics
Round 2 Psychology (PSY)	Southwest Virginia Governor's School	Clark Allison Scientific Reading Comprehension and Confidence of Scores on Tests
Round 2 Psychology (PSY)	Southwest Virginia Governor's School	Faulkner Jasmine How does performing impossible tasks affect high achieving high school students' confidence in performing simpler tasks?
Round 2 Psychology (PSY)	Southwest Virginia Governor's School	Lucas Jordan Will the Rate of Sexual Violence and the Resources a School Provides for It Influence Your College Decision?
Round 2 Psychology (PSY)	Southwest Virginia Governor's School	Perdue Sophie Gender Differences in Perception Using the Rorschach Inkblot Methods

Round 2 Statistical Analysis & Inferences (SAI)	Central Virginia Governor's School	Coleman Jackson The Effect of Public Transit Ridership on Carbon Dioxide Emissions
Round 2 Statistical Analysis & Inferences (SAI)	Central Virginia Governor's School	Kirkwood Isabel How the Inaccessibility of Feminine Hygiene Products Affects Low-Income Communities
Round 2 Statistical Analysis & Inferences (SAI)	Central Virginia Governor's School	Xiao William Accessibility to Urgent Care Services for Disadvantaged Populations An Analysis of Healthcare Disparities
Round 2 Statistical Analysis & Inferences (SAI)	Individual	Lim Daniel Can online schools replace traditional brick-and-mortar schools? Implications from the examination of the relationship between course modality (online vs. in-person) and the SOL pass rates of high schools in Virginia
Round 2 Statistical Analysis & Inferences (SAI)	Individual	Patel Shantanu, Effects of COVID-19 on Mathematical Learning Among Multilingual Students
Round 2 Statistical Analysis & Inferences (SAI)	Individual	Saxena, Yash - Optimizing A Deep Learning Model for the Prediction of Electric Field Induced by Transcranial Magnetic Stimulation for Traumatic Brain Injury Patients
Round 2 Statistical Analysis & Inferences (SAI)	Mills E Godwin High School	Mandal Ankita Prediction4Protection: A Mobile Machine Learning Web Application in the Prediction of Heart Disease
Round 2 Statistical Analysis & Inferences (SAI)	Ocean Lakes High School	Bock, Karstan -Gamification on User's Accuracy and Efficacy on an Online Educational Tool
Round 2 Statistical Analysis & Inferences (SAI)	Ocean Lakes High School	Goodove, Drew -Logistic Regression of State Governmental Regulatory Stances on Cryptocurrency

Round 2 Statistical Analysis & Inferences (SAI)	Ocean Lakes High School	Hovanessian, Ralitsa- Optimizing Cancer Identification and Prognosis based on DNA Methylation Biomarkers through Machine Learning
Round 2 Statistical Analysis & Inferences (SAI)	· · ·	Banks Hope Overdose Mortality Rates and the Correlation with Poverty Levels and Populations of Persons Drawing from SSDI or SSI in West Virginia
Round 2 Statistical Analysis & Inferences (SAI)	Southwest Virginia Governor's School	Cassell Alexis Brand Name vs. Name Brand Products
Round 2 Statistical Analysis & Inferences (SAI)	Southwest Virginia Governor's School	Wiscarson, Eli - Comparing Giles to Other Counties by Location and Population

Round 2 Zoology (ZOO)	Central Virginia Governor's School	Callahan Victoria The Effects of Caffeine and Caffeine Withdrawals on Reaction Time
Round 2 Zoology (ZOO)	Charles Colgan High School	Lateef Rania Food for Thought: Can Intermittent Fasting Induced Ketosis Ameliorate Dementia by Decreasing Tau Hyperphosphorylation and Neuroinflammation in Drosophila melanogaster?
Round 2 Zoology (ZOO)	Governor's School @ Innovation Park	Nally, Madison - Feasting Fruit Flies: Evaluating the Effect of Selected Ayurvedic Plant Extracts on the Mood, Memory, and Fertility of Drosophila melanogasterâ€∢
Round 2 Zoology (ZOO)	Individual	Badhrayan Aditya Analysis of Aspartame Consumption Rates via Drosophila Melanogaster Utilizing a Modified Capillary Feeding Assay (CaFE)
Round 2 Zoology (ZOO)	Mills E Godwin High School	Anand Shriyaa & The Effect of LED Lights on the Hatching Rate of Artemia
Round 2 Zoology (ZOO)	Mills E Godwin High School	Blaszak Bridget The Effect of The Herbicides Diuron and Bromacil on the Survival Rate of Marine Tardigrades in a Saltwater Solution
Round 2 Zoology (ZOO)	Mills E Godwin High School	Chatterjee Rimil The Effect of Various Microplastics on the Heart Rate of Daphnia magna
Round 2 Zoology (ZOO)	Mills E Godwin High School	Lionberger Samantha The Effect of the Color of Light on the Intensity of Tapetum Lucidum
Round 2 Zoology (ZOO)	Mills E Godwin High School	Ngo Melody The Effect of Aspartame on the Feeding Rate of Daphnia Magna Exposed to an Appetite Suppressant

Round 2 Zoology (ZOO)	Mills E Godwin High School	Rudraraju Aarush-The Effect of Amino Acids on Microplastic Consumption rate by Daphnia Magna
Round 2 Zoology (ZOO)	Ocean Lakes High School	Vu, Jenny- Planarian (Dugesia dorotocephala) Memory Retention after the Removal and Regeneration of the Cerebral Ganglia and Various Percentages of Body Tissue
Round 2 Zoology (ZOO)	Roanoke Valley Governor's School	Smith Brett The Phylogenetic Relationship of Ctenophores with Respect to Other Basal Metazoan Clades