

High School Accepted Papers

2024 VJAS Symposium

May 4, 2024



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BOT - Botany

Submission Name	First Name	Last Name
Alberti Victoria The Effect of Compliments and Insults on Plant Growth	Victoria	Alberti
Bill Thomas, Yang Leslie, Urine as a Nitrogen Source for Lepidium sativum: Creation of a Novel Synthetic Solid Urine Testing Model and Product	Thomas	Bill
Bupp Taylor, The Effect of Chemical Fertilizer vs. Rabbit Manure on Grass Growth	Taylor	Bupp
Collins Audrey Testing Honey's Antifungal Properties on the Development of Tomato Wilt (Fusarium oxysporum)	Audrey	Collins
Crosby Lindley The Effect of Agricultural Pesticides on the Early Growth and Development of Z. mays	Lindley	Crosby
Dang Andrew The Effect of Different Macronutrient Supplements on Radish Plant Growth	Andrew	Dang
DeWitt Nicholas The effect of drought on the emergence rate of Glycine Max	Nicholas	DeWitt
Ellis Abigael The Effect of Applying Various Types of Sunscreen to the Leaves of Devil's Ivy Plants on the Number of Discolored (Brown Spotted/Yellowed) Leaves, the Number of Fallen Leaves, and the Length of the Roots, Over Time	Abigael	Ellis
Harwood Natalie Mycorrhizal Fungi and their Relationship with Plant Productivity and Carbon Decomposition	Natalie	Harwood
Hensley Madison Comparing Sister Cropping to Various Fertilizers Indoor and Outdoor	Madison	Hensley
Jeyasingh Daniella-The Effect of Arbuscular Mycorrhizal Fungi on Asclepias Syriaca growth in Acidic Soil	Daniella	Jeyasingh
Krzyzanowski Anna Salinity Effects on the Growth of Atlantic White Cedar	Anna	Krzyzanowski
Lennon Lilly, The Effect of Soil Additive on Basil Growth	Lilly	Lennon
Makineni Grihith, The Effect of Pest Control on Plants Infested by Pests.	Grihith	Makineni
Melton Katelyn Administering Helium to Dandelions, White Clover, Kentucky Bluegrass, and Broadleaf Plantains to Observe Possible Herbicidal Effects	Katelyn	Melton
Methari Anwitha The Effect of nutrient dense waters on height of radish microgreens.	Anwitha	Methari
Murphy Liam The effect of water placement on root growth	Liam	Murphy
Nelson Leighton The Effect of Bioremediating Ammonium Nitrate on Lemna minor	Leighton	Nelson

Submission Name	First Name	Last Name
Nyffeler Megan The Effect of Herbicides on Photosynthetic Rate	Megan	Nyffeler
Olihnenco Abigail The Effect of Relative Humidity on Thyme Growth	Abigail	Olihnenco
Pabis Scott The Effects of Growth Restrictions on Raphanus sativus	Scott	Pabis
Patel Dharya The Effect of Natural Fertilizers on Beanstalk Plant Height	Dharya	Patel
Radtke Tyler The Effect of the Percentage of Surface Area Coverage of Water Lilies in Walton's Lake on pH, Dissolved Oxygen, and Turbidity Per Plot	Tyler	Radtke
Richardson Graham, The Effect of Chemical Solutions on Pinto Bean Growth	Graham	Richardson
Royster Lucas The Effect of Poa pratensis Height on Soil Temperature	Lucas	Royster
Siddabattula Siddarth The Effect of Mycorrhiza on Trigonella foenum-graecum in Acidified Soil	Siddarth	Siddabattula
Sooda Saanvi A Comparison of Solute Concentration of Aqueous Fertilizer on Stem Elongation of Hydroponic Fenugreek	Saanvi	Sooda
Thornton Catherine How Different Colors of LED Lighting Affect Growth in Wheat Crops	Catherine	Thornton
Shruthi Tirunahari The Effect of Overcrowding on Crop Production	Shruthi	Tirunahari
Vasudev Vimridh Exploring the Impact of Arbuscular Mycorrhizal Fungi Presence on Spring Onion Growth Under Environmental Stress Factors	Vimridh	Vasudev
Vasudev Aditi The Effect of Hydroponic Nutrient Additives on Tomato Growth	Aditi	Vasudev
Veerapaneni Srivedha The Effect of Banana Stem Covering on Ripening Time	Srivedha	Veerapaneni
Vinjanampati Gauri The Effect of Rhizobia on Vigna radiata Growth in Acidified Soil	Gauri	Vinjanampati
Zahra Meraal The Effect of Organic and Inorganic Fertilizers in Field Corn Plants Vitamin C Concentration	Meraal	Zahra

CHM - Chemistry

Submission Name	First Name	Last Name
Archer Folasade The Effect of Using Baking Powder versus Different Types of Yeast, as a Leavening Agent, on the Height and Density of Madeleines	Folasade	Archer
Bukin Nikolai The Effect of Heating on Emission of Microplastics	Nikolai	Bukin
Dore Kellan The Effect of Amount of Time Exposed to Ultraviolet Light on Acrylic Paint Drying Time	Kellan	Dore
Flores Abigail Lynn The Effect of Painting Oak Wood with Three Different Colors of Acrylic Paint, and Exposing the Paintings to Sunlight, Artificial Light, and No Light on the Difference in RGB Values Over Time	Abigail Lynn	Flores
Fulcher Riley, The Effect on the Carbon Dioxide Levels of Saccharomyces cerevisiae When Used With Various Sugars	Riley	Fulcher
Gogineni Shayni The Effect of Testing the Glucose Levels in Four Different Types of Fruit, Before and After Cooking the Fruits, on the Resultant Glucose Levels in each Type of Fruit	Shayni	Gogineni
Greer Meredith The Effect of Using Cage Free, Free Range, Pasture-Raised, and Caged Eggs in a Cupcake Recipe on the Resultant Density of the Cupcake	Meredith	Greer
Heath Clara The Effect of Microwave Popcorn Popping Time and Power Level on the Percentage of Popped, Unpopped, and Burned Kernels	Clara	Heath
Hoerter Ruby The Concentration of Vitamin C In Non-Organic and Organic Fruits and Vegetables	Ruby	Hoerter
Kalore Anaya, The Effect of Different Soils on Metal Corrosion	Anaya	Kalore
Kannure Manasvi The Effect of Aloe Vera on Inhibition of Steel Corrosion	Manasvi	Kannure
Kaur Avani The Effect of Natural Phenolic Compounds on Reducing Oxidative Stress	Avani	Kaur
Malik Zainah The Effect of Lipase on the Degradation of Different Microplastics	Zainah	Malik
Martin Cole The Effect of Ripeness of Banana (Days Since Purchase) on the Height of Banana Bread	Cole	Martin
Mathew Ana-The Effect of Various Novel Adsorbents on Methylene Blue Adsorption	Anya	Mathew
Modi Aditya Effect of Various Teas and Remedies on Neutralizing Stomach Acid	Aditya	Modi
Nareddy Tanvi The Effect of UVB Light Radiation on the Photodegradation of β -carotene	Tanvi	Nareddy

Submission Name	First Name	Last Name
Pillai Neha The Effect of Road Salt on the Corrosion of Automobile Parts	Neha	Pillai
Sagini Ryan The Effect of Various Chemical Agents on the Permeability of Latex Gloves	Ryan	Sagini
Shah Vidhi The Effect of Various Sweeteners, Used in a Kombucha Recipe, on the pH of the Kombucha, Over Time	Vidhi	Shah
Strang Kyler The Effect of Battery Charge on Battery Reactivity	Kyler	Strang
Talajia Disha Nutritional Content of Bananas Over Periods of Time	Disha	Talajia
Woo Julianne The Effect of Chlorine Concentration of the Water that Hair is Soaked in on the Change in Color of the Hair	Julianne	Woo

COM - Computational Biology

Submission Name	First Name	Last Name
Beasley Connor Metagenomic Analysis of the Microbial Biodiversity in Soil of Mountain Balds in Appalachia	Connor	Beasley
Gandhari Ashrita Minimizing In-Vitro Fertilization Failures by Utilizing Artificial Intelligence to Evaluate the Health of Human Embryos	Ashrita	Gandhari
Ganesh Taarun In silico design of a multi-epitope-based vaccine against the Rocio virus	Taarun	Ganesh
Jaddu Shriya SeizAlert: A Deep-Learning Enabled System for Non-Invasive Pre-Ictal Seizure Prediction	Shriya	Jaddu
Jaddu Sidh Investigating the Factors Affecting the Spread of the Opioid Epidemic Using Machine Learning	Sidh	Jaddu
Kulkarni Rohit Adversarially-Driven Generation of De Novo Proteins for Therapeutic Drug Design	Rohit	Kulkarni
Sabharwal Yashvir NephroNet: A Novel Program for Identifying Renal Cell Carcinoma and Generating Synthetic Training Images with Convolutional Neural Networks and Diffusion Models	Yashvir	Sabharwal
Shea Brennan The Effect of Various Mutation Rates in an AI Pathfinding Experiment on Number of Generations Until Path to the Finish Line was Found	Brennan	Shea
Yashvanth Singamaneni Anisotropic Protein Secretions: Using Computer Vision to reveal insights into macrophages infected with Mycobacterium Tuberculosis	Yashvanth	Singamaneni
Sweeney Aidan How to Detect AI in Order to Promote Academic Integrity	Aidan	Sweeney

EGR - Engineering

Submission Name	First Name	Last Name
Achanta Sriman NN-based Deep Learning Skin Cancer Classification Using Dermoscopic Images	Sriman	Achanta
Ashman Chris The Effect of Cyanoacrylate on the Elasticity Modulus of PVA Hydrogels for Cartilage Repair	Christopher	Ashman
Bahrambegi Cyrus Analyzing Sustainable Energy Production Using Anaerobic Cellular Respiration from Microorganisms Derived from a Modified Microbial Fuel Cell System	Cyrus	Bahrambegi
Barron Asher The Effect of Varied Load Resistance on the Power Produced By a Hydroelectric Turbine	Asher	Barron
Bothra Sanaya The Effect of Transcranial Magnetic Stimulation on the Resistivity of a Fiber Based Synaptic Devices	Sanaya	Bothra
Bradshaw Ava Effect of Maximum Plantar Flexion Angle of a Transtibial Prosthesis on Unilateral Amputee Gait Symmetry	Ava	Bradshaw
Cabral Alexander The Effect of Acoustic Horn Exit Hole Size on the Volume of the Exiting Soundwave	Alexander	Cabral
Canada Tripp, The Effect of the Leading Edge on the Lift-to-Drag-Ratio of an Airfoil	Tripp	Canada
Cohen Gabriel An Investigation Into the EEG Capabilities of the Star Wars Force Trainer II	Gabriel	Cohen
Fitzgerald Joseph The Effect Of Fiberglass on the Freeze-Thaw Change in Compressive Strength of Pervious Concrete	Joseph	Fitzgerald
Gitta Abhinav Cataract Detection with Machine Learning	Abhinav	Gitta
Goodwin Savannah The Effect of Bridge Deck Structure on Resistance to Downward Loading Force	Savannah	Goodwin
Grohs Zach The Effects of Gasoline Additives on the Efficiency of Internal Combustion Engines	Zach	Grohs
Guo Calvin The Effect of Salt Water Fuel Cell Wall Spacing on the Generation of Energy	Calvin	Guo
Hasan Zayd Designing A Compact Cost-Effective Bioprinting Platform	Zayd	Hasan
Haskin Andrew The Effect of the Application of Various Chemical Additives, onto the Golf Club, on the Distance the Ball Travels, Spin Rate, and Launch Angle	Andrew	Haskin

Submission Name	First Name	Last Name
Jansen Hannah Impact of Toroidal Propeller Design on Unmanned Aerial Vehicle Acoustic Signature and Aerodynamic Performance	Hannah	Jansen
Kambham Rishab The Effect of Electrode Location on Brain Activity	Rishab	Kambham
Larimer Laura, The Effect of Wind Speed, in a Wind Tunnel, on Amount of Damage to Model Houses, Measured by Number of House Pieces Removed During Simulated Wind Storm	Laura	Larimer
Layman, Carson The Correlation Among Rotor Diameters and Wind Turbine Power Generation	Carson	Layman
Li Alexander, Enhancing Driving Safety Via Real Time Suppression of Radar Interference	Alexander	Li
Miller Madeline Developing a Method for Aquaculture of a Local Polychaete Worm to Replace Imported Bloodworms	Madeline	Miller
Morin Andrew The Effect of Various Soundproofing Materials and Various Decibel Levels on the Number of Decibels that Pass Through the Materials	Andrew	Morin
Penumudi Aashritha SpecuSafe: A Non-invasive and Intelligent Approach to Cervical Examinations	Aashritha	Penumudi
Phillips Margaret The Effect of Price on Cello String Performance	Margaret	Phillips
Pisolkar Kiran The Effect of Sand Composition on the Amount of Heat Stored For Potential Use as a Sand Battery	Kiran	Pisolkar
Ploch Sebastian The Electromagnetic Shielding Capability of Different Materials	Sebastian	Ploch
Putnam Linus The Effects of Differing pH Water on Concrete's Compressive Strength	Linus	Putnam
Sambangi Sriharsha-Synergizing Scaffold Micro-Architectures and Mechanical Stimuli to Enhance Engineered Tissue Growth	Sriharsha	Sambangi
Shah Sanay, The Effect of Parameter Count on Aerial Trash Detection Accuracy	Sanay	Shah
Sisson Isabella The Effect of Different Paint Colors on the Rate of Heating/Cooling of Water over Time	Isabella	Sisson
Stickle Alec The Effect of Stride Length on Piezoelectric Generation While Walking	Alec	Stickle
Sunilkumar, Aditya The Effect of Sidepod Type on Vehicle Performance	Aditya	Sunilkumar
Uddin Zaara, Amaya Rocha Ninette, Ben Chouikha Yaseen CO-Clean: Filtering Emissions for a Better Future	Zaara	Uddin

Submission Name	First Name	Last Name
Vithoukass Tess The Effect of Different Solar Still Condenser Shapes on the Rate of Distillation	Tess	Vithoukass
Whitmore Cullen Microscopic Analysis of Decay Potential of Dental Implants in Vinegar	Cullen	Whitmore
Williams Kyler Effects of Supportive Insoles on Foot Pressure and Performance During Soccer Movements	Kyler	Williams
Wilt Kallen The Effect of Brand of Tennis Shoes on Difference in Tread Depth Over Time After Simulation of Running	Kallen	Wilt
Yeri Varun The Effect of Various Dielectric Composites on Observed Capacitance in a Capacitor	Varun	Yeri
Yi Anna Comparing the Changes in Temperature of Sustainable Insulation Materials	Anna	Yi

ENV - Environmental and Earth Science

Submission Name	First Name	Last Name
Abdelbagi Amna The Effect of Different Levels of Salt Concentration on Plant Growth	Amna	Abdelbagi
Ackleson Emma The Effect of Pseudomonas fluorescens and Bacillus cereus on the Degradation of Microplastics.	Emma	Ackleson
Aggarwal Swati Evaluating Homemade and Industrial Rust Removers on Steel Metal	Swati	Aggarwal
Ahmad Sajeela The Effect of Toxic and Green Detergent on Red Worms (Eisenia Fetida)	Sajeela	Ahmad
Alsheikh Khadeejah, Minter Kayla, Weeks Willow PUTATIVE TOXINS AND THEIR EFFECT ON CYCLOPS COPEPODS IN THE CHESAPEAKE BAY	Khadeejah	Alsheikh
Althaus Joshua The Effect of Pyrethrin-Based Pesticide on Pill Bug Activity	Joshua	Althaus
Amundson Clara, The Effect of Smoke from Various Burnt Materials on the Height Difference of Cat Grass	Clara	Amundson
Anderson Marianna The Effect of Ocean Acidification on the Photosynthetic Efficiency of Dictyota dichotoma and Halimeda opuntia	Marianna	Anderson
Badcock Colin The Effect of Varying Amounts of Hydrilla on its Ability to Filter Polluted Water, Based on pH, Dissolved Oxygen Levels, and Nitrogen and Phosphorus levels, Over Time	Colin	Badcock
Biddlecomb Nathalie The Effect of Varying Baits Used in Crab Pots on the Quality of Crabs Caught	Nathalie	Biddlecomb
Camp Zoe Does The Presence Macroalgae Influence The Growth of Eastern Oysters	Zoe	Camp
Douglass Taylor, Alternative Natural Air Filter Media Impact on Air Quality	Taylor	Douglass
Eubanks Annie The Effect of Superabsorbent Polymer Composition on Water Retention of Hydrogels	Annie	Eubanks
Falgui Bridget The Effect of Heavy Metal Concentration (Lead (II) Nitrate) on Daphnia magna Heart Rate	Bridget	Falgui
Tristan Fields The effect of A. platensis-containing water-like growth mediums on pH variation	Tristan	Fields
Frias Abigail The Effect of Types of Wood, Soaked in Water for Prolonged Periods of Time, on the Difference Between the Initial Circumference and Final Circumference and the Difference Between the Initial Weight and the Final Weight	Abby	Frias
Gitre Xavier The Impact of Environmental Methylmercury Exposure on the Feeding Rates of Invertivorous Passerines	Xavier	Gitre

Submission Name	First Name	Last Name
Haq Mishaal The Effect of Activated Carbon on the Quantity of Chlorine in Water	Mishaal	Haq
Hendrix Jacey Testing the Effects of the Sunscreen Ultraviolet Filter Oxybenzone on the Freshwater Plant <i>Lilaeopsis brasiliensis</i>	Jacey	Hendrix
Hospodar Libbie Examining Autochthonous Alternatives to Tropical Coconut Coir for Shoreline Engineering	Libbie	Hospodar
Jacob Riya, Gaddam Siri, Enhancing the Nutritive Content of Brassica Oleracea Using a Fruit Material Fortified Nutrient Solution	Riya	Jacob
Judy Emily The Effects of Different Types of Sunscreen on the Growth of a Dinoflagellate Mixture	Emily	Judy
Khan Amina The Filtration of Microplastics Using Lemna Minor	Amina	Khan
Kildoo Davis, A Cost-Based Risk Assessment of Climate Events for the Southeastern US	Davis	Kildoo
Kirubaharan Diyaa The Effect of Sunscreen on Heart Rate of <i>Daphnia Manga</i>	Diyaa	Kirubaharan
Lahmers Sage Relationship Between Below Ground Biomass and Soil Organic Matter: a Case Study in Mt Tabor, Blacksburg	Sage	Lahmers
Leo Layla The Impact of Livestock Antibiotics on Marsh Microbes	Layla	Leo
Logan Taylor, The Effect of Temperature Stress on the Filtration Rate of 3 Different Bivalves	Taylor	Logan
Matos Emma The Effect of an Adsorbent Raw Bamboo Filter on a Sustainable Removal of Methylene Blue Dyes from Wastewater	Emma	Matos
Micket Camryn, Fighting Global Warming's Evil Twin: A Study on Alkalinity and Calcium Buffering Capacity in the Lower Chesapeake Bay	Cameron	Micket
Murphy Caitlin Exploring the Use of Reclaimed Eutrophic Water for Growing Butterhead Lettuce (<i>Lactuca sativa</i> var. <i>capitata</i>) in a Hydroponic System	Caitlin	Murphy
Nayak Aarav The Effect of Different Oil Filters on Oil Filtered	Aarav	Nayak
Sophia Ng The Effect of Pollution History in Different Bodies of Water on pH and Wildlife Present.	Sophia	Ng
Ochoa William, Using The Most Common Food Waste In America To Produce biogas	William	Ochoa
Ohlschlager Lily, <i>Hydrilla verticillata</i> in the Chickahominy River- Are All Invaders Really Bad?	Lily	Ohlschlager
Oluwaji Olawande Filtering Efficiency of <i>Daphnia magna</i> in Response to Low and High <i>Anabaena</i> Concentrations	Olawande	Oluwaji
Parashar Anika The Effect of Different Substrates on the Efficiency of a Waste-Based Microbial Fuel Cell	Anika	Parashar

Submission Name	First Name	Last Name
Emily Paul Creating a Close Chamber System to Measure Carbon Dioxide Efflux From Far North Environments	Emily	Paul
Phillips Charlotte, Investigating Degradation of Polyhydroxyalkanoate Straws in Saltwater Environments with Varying Temperatures, and in Presence of Turbo marmoratus and Lysmata wurdemanni	Charlotte	Phillips
Ranjan Meilin A Pollution Distribution Confusion: Socioeconomics of Microplastics Contamination in Virginia Beach, VA Waterways	Meilin	Ranjan
Ransone Bevan Prevalence of Macroparasites Polydora websteri and Zaops ostreus Within Crassostrea virginica in Varying Environmental Conditions.	Christopher	Ransone
Saidou Sakeena A Call to Action! Changes in Glycine max Photosynthesis Rates According to UV-B Intensities	Sakeena	Saidou
Saravanan Barathi-The Effect of Hydrocolloid Edible Coatings on Ripening of Bananas	Barathi	Saravanan
Schrader Jack The Effect of Land Gradients on Erosion Risk	Jack	Schrader
Shrestha Arnav, The Effect of Algae Species Simulated Growth on Carbon Dioxide Reduction Efficiency	Arnav	Shrestha
Siminiceanu Eva The Effect of Decreased Environmental pH on the Rate of Clam Filtration	Eva	Siminiceanu
Weston Smith The Influence of UV-A & Infrared Exposure on The Reproductive Capabilities of The Cyanobacteria of Southwest Virginia	Weston	Smith
Isabelle Hoover, Zainab Soofi, Lauren Kim Discovering the effect of anthropogenic vibrations on the behaviors and development of Artemia salina	Zainab	Soofi
South Caroline Effect of Digestive Enzymes on Cellulose Microplastics	Caroline	South
Sridhar Sriya Enzymatic Engineering for Enhanced Plastic Degradation in a Novel Plasmid System	Sriya	Sridhar
Sundarrajan Pranav The Effect of Citric Acid on Heavy Metal Rhizofiltration Efficiency	Pranav	Sundarrajan
Alexandria Swenson Mean Frequencies of Microplastics in Commercially Processed Equine Feeds	Alexandria	Swenson
Samantha Winter The Effect of Rain on Stream pH	Samantha	Winter
Anshika Yadav The Effect of Polluted Water Runoff on Daphnia magna	Anshika	Yadav
Mary Ann Zyglocke Impact of Different Levels of Sunlight on Dissolved Oxygen Produced by Elodea canadensis	Mary	Zyglocke

MTM - Mathematics: Theoretical and Modeling

Submission Name	First Name	Last Name
Bandla Shriya Using Modeling Techniques to Predict the Likelihood of Heart Disease	Shriya	Bandla
Guo Angelina A Highly Accurate Detection of Glaucoma with Neural Networks - A Case Study for Early Detection	Angelina	Guo
Kumar Devesh An Ensemble Approach for Improving Model-Based Reinforcement Learning in Robotic Control	Devesh	Kumar
Canon Robins Sports Analytics: Using Multiple Regression to Predict the Outcomes of NBA Games	Canon	Robins
Tadinada Abhinav AI-Powered Renewable Energy Forecasting	Abhinav	Tadinada

MDH - Medicine and Health

Submission Name	First Name	Last Name
Abuan Jullian The Effect of Artificial Axillary Hair Length on Transepidermal Water Loss on Agar	Jullian	Abuan
Effects of Sanitization and Desk Setup on Bacteria Concentration	Nisah	Allauddin
Ambati Vidya Recasting an anti-psychotic as a prevention for multiple arthritides: Discovery of a novel receptor and mechanism of action	Vidya	Ambati
Baccouche Aisha, Bilal Maryam, Lahbabi Soukayna The Effect of Phytotherapies on Hyperglycemic Induced C. elegans	Aisha	Baccouche
Blair Aliyah The Effect of the COVID-19 pandemic on OCD related cleaning habits	Aliyah	Blair
Chandran Ria The Effect of Pharmacodynamic Constituents on KRAS Protein of Metastatic Pancreatic Cancer	Ria	Chandran
Chang Taylor The Effects of Daily Stretching	Taylor	Chang
Dalton Laura The Correlation Between Surface Temperature and Heart Disease Incidents within Ethnic Groups	Laura	Dalton
Datta Tvisha, Datta Mahika Optimizing Melatonin-Based Interventions through Aromatherapy with Herbal Supplements for Circadian Rhythm Regulation and Thalamus Functions	Tvisha	Datta
Ganti Tanvi The Effect of Organophosphate Insecticides on the Growth of Heat-Stressed Planaria	Tanvi	Ganti
Garrison Meg The Effect of Artistic Movements on the Symptoms of Parkinson's Disease	Meg	Garrison
Haider Reyhan-A Comprehensive Multiomics Approach Reveals a Novel Panel of Markers in APOE4	Reyhan	Haider
Hewitt Ashley Studying the Similarities of Lucidity in Alzheimer's Disease and Lucid Dreaming with Galantamine	Ashley	Hewitt
Hiner Reilly The Multigenerational Effects of Propylparaben Exposure on Drosophila melanogaster Reproduction	Reilly	Hiner
Hughes Holden The Effect of Fibromyalgia Syndrome on Anxiety and Depression In Women	Holden	Hughes
Huizar Evan Impact of SCP2 Deficiency on Hepatic Metabolic Profiling in a Murine Model of MAFLD	Evan	Huizar

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Hunter Kaitlyn Comparing Manual Therapy and Dry Needling on the Rehabilitation of Sports Related Achilles Injuries	Kaitlyn	Hunter
Iyer Samyukta Assessing Inflammatory Similarities: Mice vs. Human Renal Failure Models	Samyukta	Iyer
Diya Johar The Effect of Antibacterial Hand Soap on the Amount of "Bacteria" removed	Diya	Johar
Kumar Priya The Effect of different concentrations of liquid ashwagandha (Withania somnifera) on the heart rate of the Daphnia magna	Priya	Kumar
Lach-Hab Nadia The Effect of the Concentration of Polyethylene Glycol on the Zone of Inhibition of Lactobacillus acidophillus	Nadia	Lach-Hab
Laneve Jake The Effect of Sports on a Human's Cardiovascular Health	Jake	Laneve
Layne Ashley The Effects of a Specific Rest Interval on Different Levels of Physical Exertion, and How the Interval Affects Bat Speed	Ashley	Layne
Lee Minhyung The Causes of Spontaneous Firing of Cardiac Muscle and Effects of Ion Concentration	Minhyung	Lee
Li Jerry The Evaluation of Anti-cancer Activity of Over-the-Counter Medication	Jerry	Li
Lucas Jordan Comparing Different Breathing Techniques in Their Effectiveness of Lowering Elevated Heart Rate	Jordan	Lucas
McKenney Samantha The Effect of Pacifier Usage on Speech Development	Samantha	McKenney
Milam Berkley The Effects of Energy Drink Components on the Heart Rate of Drosophila melanogaster	Berkley	Milam
Mishra Aarya ,The Effect of Artificial Sweeteners on Insulin Sensitivity	Aarya	Mishra
Patel Anchal The Effect of Applying Neosporin vs. Turmeric to Bisected Planaria on the Number of Fully Regenerated Planaria, Over Time	Anchal	Patel
Shah Kaavya-The Prevalence of Thyroid Disease in Ultrasound Screenings Across Various Regions in the United States	Kaavya	Shah
Sureshkumar Ashna The Effect of Bronchial Resistance on the Forced Expiratory Volume (FEV1)	Ashna	Sureshkumar
Szabo Erik The Effect of the Food Coloring Tartrazine (FD&C Yellow #5) Added to a Fruit Fly Media Fed to the	Erik	Szabo

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Drosophila (Fruit Fly) on Response to Light		
BSEPV2: Designing A Novel Protein with enhanced ATP Binding Capabilities Utilizing AI-Assisted Predictions of Molecular Evolution for Effective Treatment of Progressive Familial Intrahepatic Cholestasis (PFIC)	Khartik	Uppalapati
Zasler Maytal Figure Skating Training and Balance: A Quantitative and Comparative Analysis	Maytal	Zasler

MCB - Microbiology and Cell Biology

Submission Name	First Name	Last Name
Beaumont Nicola, 'The Use of Chlorella as a Coagulant/Flocculant to Remove Polyethylene Microplastics from Wastewater	Nicola	Beaumont
Bell Megan The Effect of Temperature on Dye Dispersion in Agar Plates	Megan	Bell
Carter Anna Application of CRISPR Gene Editing in a Classroom Setting	Anna	Carter
Fontana Ava Gray, The Effects of Different Brands of Sunscreen on <i>Lytechinus variegatus</i> Fertilization	Ava Gray	Fontana
Goff Ruby, Cytotoxic Effect of Varying Doses of Allura Red AC, Brilliant Blue FCF, and Sunset Yellow FCF on <i>Allium Cepa</i> L.	Ruby	Goff
Guo Henry The Effect of Divalent Ions on the Viability of <i>E. coli</i>	Henry	Guo
Hanke Helen - The Effect of Different Types of Oral Care Rinses on the Growth of <i>Staphylococcus epidermidis</i>	Helen	Hanke
Hassen Nadia, The Effects of Natural Ingredients Found Commonly in Natural Toothpaste on the Growth of <i>Corynebacterium</i>	Nadia	Hassen
Hengst Sadie The Effect of Different Natural Antibacterial Agents on <i>Escherichia coli</i>	Sadie	Hengst
Team: Iliassov Sofiya, Ferdinando Heaven, The Effects of Sine versus Sawtooth Ultrasonic Sound Waveform Administration on Necrosis in <i>Escherichia coli</i> K-12 and <i>Lactuca sativa</i> var. capitata	Sofiya	Iliassov
Jain Saanvi, The Effect of Antibacterial Properties of Natural Substances on K12 <i>Escherichia coli</i>	Saanvi	Jain
Joh Lydia The Effect of Concentration of Sugar in a Sugar-Water Solution in a Liquid Medium on the Resultant Optical Density, After Inoculating the Medium with <i>E. coli</i>	Lydia	Joh
Kaur Bhoomika Investigating the Therapeutic Potential of Natural Products on Advanced Glycation End Product (AGE) Formation and Function in MyC-CaP Prostate Cancer Cells	Bhoomika	Kaur
Krzyzanowski Emma Bacteria's Antibiotic Resistance to Tetracycline	Emma	Krzyzanowski
Kumar Deepanshi Mitigating the Spread of <i>Cryptococcus Neoformans</i> Infections: The Effect of Green Tea Consumption on <i>Paramecium Aurelia</i> Feeding Rate	Deepanshi	Kumar
Labert Reagan, Niknezhad Iana Development of Novel RNA Therapeutics for Female Infertility	Reagan	Labert
Levorson Madeline Discovery of Medically Important Lytic Bacteriophage in the Environment	Madeline	Levorson
Madison Kaitlin The Effect of Conjugation Time on Area of Bacteria Growth	Kaitlin	Madison

Submission Name	First Name	Last Name
Miller Christopher A Comparison of Copper, Copper Alloys, and Stainless Steel in Bacterial Contact Killing Ability	Christopher	Miller
Neidert Julia The Effect of Amount of Time Exposed to Light on the Light Output of Bioluminescent Photosynthetic Dinoflagellates	Julia	Neidert
Nguyen Ngo Tan An-The Effect of Obstacles on Slime Mold Navigation Abilities	Ngo Tan An	Nguyen
Beckett Normington The Effect of Different Topical Anti-Acne Treatments on the Zones of Inhibition of Staphylococcus epidermidis	Beckett	Normington
Rao Samvrit In-vitro aided computational approach to identify preclinical drug targets to treat Glioblastoma Multiforme (GBM)	Samvrit	Rao
Dylan Borek, Josh Rizer, Izidor Yatsevich, Effects of Ocean Acidification and UV Radiation on Spirulina Major	Josh	Rizer
Roark Carsyn The Effect of Water and Temperature on the Growth of Bacteria in Powdered Infant Formula	Carsyn	Roark
Rojas-Duran, Kaylee The Effect of the Soaking Solution on the Mass of the Egg	Kaylee	Rojas-Duran
Thomas Ben The Effect on the Growth of Escherichia coli Through the Presence of Streptomyces griseus	Ben	Thomas
Tivare Kriesh Novel Approach for Modulating the Antibiotic Response and Growth Behaviors of Bacteria Using Oscillating Compound Magnetic Fields	Kriesh	Tivare
Waterworth Ann Effects of Different Brands of Sunscreen on Escherichia coli	Ann	Waterworth
Yang Emily Type I γ Phosphatidylinositol Phosphate 5-Kinase Regulates Hippo Signaling Pathway	Emily	Yang
Zhang Alice-The Deficiency of Acid Ceramidase Promotes Intracellular Nanovesicle Biogenesis Contributing to Aortic Stiffness	Alice	Zhang

PHY - Physics and Astronomy

Submission Name	First Name	Last Name
Corazzini Kate The Effect of Different Types of Soccer Ball Casings on Force of Impact	Kate	Corazzini
Covington Alexis Effectiveness of the Radial Velocity Method Based on Changing Velocity Utilizing the Doppler Effect	Alexis	Covington
Ekiert Allison The Effect of Various Types of Goggle Straps on the Elasticity of the Straps	Allison	Ekiert
Ellenberger Carson The Effect of Counterweight and Arm Length on the Height and Distance a Trebuchet Projectile Travels	Carson	Ellenberger
Jakoubek Sid Investigating the Factors Which Allow for the Stability of Planetary Orbits in Binary Star Systems Using Numerical Simulations Based on Initial Planetary Positions	Sid	Jakoubek
Laub, Allyson A Comparison in the Quality of Cane and Synthetic Oboe Reeds	Ally	Laub
Leighton Declan The Effect of Voltage and Nozzle Size on the Force Generated by Radial Magnetohydrodynamic Drive	Declan	Leighton
Mukhtar Kareem The Effect Of Different Tennis Balls on Contact	Kareem	Mukhtar
Blaze Narron The Correlation between Globular Clusters and Millisecond Pulsars	Samuel	Narron
Schmutz Ella The Effect of Lead, Polyethylene, and Water on Blocking Cobalt-60 Gamma Radiation	Ella	Schmutz
Spitzak Kaya The Effect of the Day On the Intensity of Transients	Kaya	Spitzak
Styles Samantha The Effect of Painting Various Types of Surfaces with the Same Acrylic Paint on the Degree of Fading Over Time, Measured by RGB Difference Over Time	Samantha	Styles
Tomiak Elijah Change of the Coefficient of Friction on a Tennis Court Before, During, and After being Washed Off with Water	Elijah	Tomiak
Winters Lauren The Effect of Using a Colored Pencil on Various Types of Art Media on the Brightness or Dullness of Color Exhibited	Lauren	Winters
Zakriya Amna The Effect of Solar Energetic Particle Events on the Earth's Geomagnetic Field	Amna	Zakriya
Zhang Minghui, Lupariello Maxim, To Louis Electro-Stopping Power	Minghui	Zhang

PSY - Psychology

Submission Name	First Name	Last Name
Aboagye Nyomi The Effect of Fear on Heart Rate	Nyomi	Aboagye
Adamczyk Katie The Correlation Between Houseplants and Motivation	Katie	Adamczyk
Burgess Lizzy The Correlation Between Anxiety and Friendship Quality	Lizzy	Burgess
Cantrell Josiah, The Effect of Academic Performance on Symptoms of Generalized Anxiety Disorder	Josiah	Cantrell
Debnath Tanusiya The Effect of Psychotherapy on Opioid Addiction	Tanusiya	Debnath
Emanuel Emily The Relationship Between Musical Theatre Involvement and Self-esteem in Highschoolers	Emily	Emanuel
Glover Sydney The Relationship Between Biological Sex and Short-term memory	Sydney	Glover
Heideman Annalyse The Effect of Social and Extracurricular Activities on Students need for Academic Dishonesty	Annalyse	Heideman
Hines Emily The Effect of Hair Color on Human Perception	Emily	Hines
Jones Taylor The Effect of Social Influence on Adolescent Decision Making	Taylor	Jones
Kintz, Arwen The Effect of Positive Versus Negative Portrayals of Sharks on People's Dispositions Towards Them.	Arwen	Kintz
Lloyd Evangeline The Relationships Between Religious Affiliations and Perceptions of Multiple Forms of Intelligence	Evangeline	Lloyd
Long Isabella The Effect of Studying and Working in the Legal Field on Emotional Well-Being	Isabella	Long
Lucas Addison The Impact of an Athlete's Performance in Competition On Their Perception of How They Will Perform in Future Competition	Addison	Lucas
Mattox Conner The effects of the COVID-19 pandemic on early childhood social development	Conner	Mattox
May Charles Relationship Between Participation in Extracurricular Activities and Stress Levels	Charles	May
Morris Molly The Correlation Between Color Cues and Human Perception of Flavor	Molly	Morris
Patton Natalie The Impact of Motivational Theories on Perceived Persuasion	Natalie	Patton

Submission Name	First Name	Last Name
Perdue Sophie Comfort Level Discussing Medical Topics Based on Parental Education Level	Sophie	Perdue
Prasanna Kabilan, MasterMind: A Novel Multi-Output Model Approach for Detecting Mental Illnesses through Natural Language Processing	Kabilan	Prasanna
Rai Bisan, Online "Group" Effect on Addiction Recovery	Bisan	Rai
Smith Scarlett, The correlation between maternal cosmetic use and their teenage child's confidence.	Scarlett	Smith
Stone Emma The Correlation Between Personality Type and Academic Achievement	Emma	Stone
Wait Mitchel Cognitive Memory as it Relates to Sound	Mitchel	Wait
Warner Riley The Effect of Social Media on Eating Disorder Prevalence in College Students	Riley	Warner
Woody Lainey The Effect of Music on Testing Anxiety	Lainey	Woody
Yuan Annie Emotional Perception of Vaping Affects Vascular Health of Electronic Cigarette Users	Annie	Yuan

SAI - Statistical Analysis and Inferences

Submission Name	First Name	Last Name
Brame Lily An Analysis of Gender Equality and National Success: Are You Happy, Healthy, and Wealthy?	Lily	Brame
Burks Jenna Predicting Familial Relationships Using Fingerprints	Jenna	Burks
Chen Ryan The Effect of Different Brands of Competitive Swimwear on the Amount of Water Absorbed	Ryan	Chen
Hardin Isaac The Effect of Fine Arts Involvement on Academic Performance	Isaac	Hardin
Herrick Jonathan Relationship Between Economic Inflation and Stock Performance	Jonathan	Herrick
The Impact Comparison of Artificial Intelligence on Different Occupations in the Labor Market	Isabella	Liu
Morishetty Sriyutha, An Empirical Analysis of the Existence of Greenwashing in the Wider US Market: A Test on the Efficacy of ESG Scores	Nalini	Morishetty
Quinones-Partain Griffin Correlation Between a Country's GDP and Secondary Aluminum Production	Griffin	Quinones-Partain
Sittason Parker Comparing the Frequency of Knee Injuries in American Football on Artificial Turf Vs Natural Grass	Parker	Sittason
Somala Abhijit, Predictive Wildfire Modeling in California: Leveraging Machine Learning for Effective Resource Allocation and Prevention Strategies	Abhijit	Somala
Walker Tripp How Has 1930's Redlining Affected the Current Equity of Walkability in American Cities?	Tripp	Walker
Wang Lishu The Economic Impact of California's Recent Out-Migration on its Neighboring States	Lishu	Wang

ZOO - Zoology

Submission Name	First Name	Last Name
Appleton Peter The Effect of Various Household Chemicals, When Used as a Deterrent, on Food-Gathering Speed in Pogonomyrmex occidentalis	Peter	Appleton
Atturu Ishaan - The Effect of Solvents on Oil Removal from a Feather	Ishaan	Atturu
Badhrayan Aditya The Effect of Intermittent Metabolic Switching on a-synuclei aggregation in Parkinson's Disease via Drosophila Melanogaster.	Aditya	Badhrayan
Beeravalli Neha The Effect of Tempo Speed Vibrations on Daphnia Magna Heart Rate	Neha	Beeravalli
Branch Lily The Effect of Melatonin on Regeneration of Dugesia dorotocephala	Lily	Branch
Chatterjee Rimil The Effect of Various Amounts of an Ascorbic Acid Solution on the Difference in Length of Dugesia dorotocephala	Rimil	Chatterjee
Croxford Bryce The Effect of Food Dyes on Planarian Growth	Bryce	Croxford
Easter Ethan Determining the Effects of Four Natural Items on Oranges to Repel Drosophila melanogaster	Ethan	Easter
Edassery Kristine The Effect of Household Beauty Products on Daphnia magna	Kristine	Edassery
Harpole Ailin, Assessing Reproductive Substrate Availability and Timing for Chrysaora chesapeakei	Ailin	Harpole
Ayan Jethava The Effect of Indian Medicinal Spices on Planarian Regeneration	Ayan	Jethava
Kamujula Anika The Effect of Phenolic Acids on the Regeneration of Dugesia dorotocephala Cells	Anika	Kamujula
Lateef Rania, Rhythms and Blues: Examining Potential Health Hazards of Blue Light-induced Circadian Disruption in Drosophila melanogaster	Rania	Lateef
Lee James The Effect of Over-the-counter Drugs on Earthworm Locomotion	James	Lee
Mohammed Ayaan The Effect of Electricity on the Regeneration of Planaria	Ayaan	Mohammed
Molligoda Heshan, The Effect of Antibacterial Ointments on Planarian Regeneration	Heshan	Molligoda
Morton Grace The Effect of Feeding Plastic Polystyrene to Mealworms Compared to Baby Carrots on Survival Rate Over Time	Grace	Morton
Phillips Kailin The Effects of Age on Milk Fat Percentage in Holstein Cows	Kailin	Phillips
Poovathukaran Noah The Effect of Adaptogenic Herbs on Planaria Regeneration	Noah	Poovathukaran

Submission Name	First Name	Last Name
Saleha Manha, Kim Aerin, Johnson Alyssa The Physiological Effects of Cumin as a Homeopathic Remedy for Drosophila Melanogaster	Manha	Saleha
Smith Brett A Phylogenetic Analysis of the Origin of Neuronal Structures in Basal Holozoa	Brett	Smith
Thompson Nicholas Rationality of Ants	Nicholas	Thompson
Vijay Dhruv The Effect of Different Temperatures with Vitamin A on Planaria Regeneration	Dhruv	Vijay