

Alachua

First Place

Junior

Aradhya Kasala	Howard Bishop Middle School	EAEV
J0630	Development of a Low-Cost Bio Coagulant Based Water Purification System; and Validation of Water Quality via a Novel Real-Time IoT Monitoring	

Senior

Samantha Bruner	Oak Hall School	CMBI
S0430	Modeling SRP-54-Associated Rare Diseases in the Nematode Model <i>C. elegans</i>	

Fourth Place

Senior

Shiven Sharma	Eastside High School	BMED
S0331	PCSK9 Inhibition Attenuates Abdominal Aortic Aneurysm Growth via Enhanced Macrophage Efferocytosis	

Honorable Mention

Senior

Pranav Kaushal Mannam	Eastside High School	ENMS
S0742	The Use of Dual Venturi Strips in a Positive Feedback Orientation to Improve Downforce Production in Modern Ground Effect Race Cars	

Recognition

Senior

Yifan Song	Frazer School	IMRS
S0939	Machine Learning Detection of REM Sleep Behavior Disorder Using Low-Cost Sensors	

Third Place

Junior

Finnegan Edward Alread	Micanopy Academy	MICR
J1112	Ancient Solutions for Modern Hygiene: Skincare Using Traditional Ethnobotanical Methods	

Aung Bhone Pyae	Fort Clarke Middle School	PHYS
J1224	Celestial Geometry: A Mathematical Approach to Modeling Patterns and Periodic Variations in Lunar Orbital Distance	

Senior

David Lewei Rong	Frazer School	MACO
S1022	Can Kudzu Take Over? A Climate-Driven Model of Invasive Growth	

8 awards for Alachua Region

Big Springs

Division Grand Award Winner And First Place

Senior

Briana Stephens	Bellevue High School	IMRS
S0935	Revolutionizing Tympanoplasty: A Personalized Surgical Process Using Three-Dimensional High-Resolution Scanning and Modeling, Bio Printed Tympanic Graphs, and an Automated Autonomous Robotic Surgical Procedure with Reinforcement Learning	

Fourth Place

Junior

Arya Raj Borade	The Cornerstone School	BMED
J0314	Can you Balance an Electromagnetic Field with Neodymium Magnets?	
Abigail Marie Lightle	The Cornerstone School	BMED
J0315	Measles in Motion: A Digital Epidemic Simulation	
Yousef Jawad	The Cornerstone School	EAEV
J0625	Does Global Warming Affect Coral Growth?	
Kanisha Sandip Patel	Howard Middle School	EAEV
J0626	Hidden Plastics Beneath the Springs	
Raelyn Westbrook	Saint John Lutheran School	PLNT
J1320	Let It Grow!	

Senior

Megha Sandrapaty	Forest High School	MACO
S1019	The Peak Problem: Achieving Steady-State in Extended-Release Stimulants via Algorithmic Design of Variably Coated Beads	

Honorable Mention

Junior

Dhruva Toom	The Cornerstone School	BEHA
J0211	Testing Large Language Models for Human-Like Responses	
Emily Lane Schlinsky	The Cornerstone School	CHEM
J0520	Banana Preservation: Which Method Best Slows Ripening of a Whole Banana?	
Katjalina Glatter-Gotz	The Cornerstone School	PHYS
J1219	Micrometeorite-sized Steps to Success	

Senior

Nicholas Andrew DePasquale	Vanguard High School	IMRS
S0934	Hostile Radar System Detection Approximation of an Electromagnetic Field Using Gaussian Process Regression and High-Intensity Source Avoidance Using a Hough Transform	

Recognition

Junior

Navya Gaurav Mahatma	Howard Middle School	CHEM
J0519	Rooted in Nature or Cooked in a Lab: The Ultimate Haircare Showdown	
Jaiden Chetty	Howard Middle School	PHYS
J1218	The Great Insulation Showdown	
Emma Jenkins	Saint John Lutheran School	PLNT
J1318	Lettuce Grow	
Krithin Krishna Ventrapragada	The Cornerstone School	PLNT
J1319	Do Plants Remember Past Water Stress (Drought)?	

Senior

Cynthia Weng	West Port High School	BEHA
S0215	Development of Anxiety During Anesthesia	
Abhi Shital Patel	Vanguard High School	ENMS
S0735	Solarpanel Simulation: A Closer look at Solar Panel Efficiency for NASA's International Space Station's Energy Systems and the Effects Lunar Conditions Had on the Ability to Perform Tasks	
Alok Henry Rajcoomar	Vanguard High School	ENMS
S0735	Solarpanel Simulation: A Closer look at Solar Panel Efficiency for NASA's International Space Station's Energy Systems and the Effects Lunar Conditions Had on the Ability to Perform Tasks	
Rishit Shah	Vanguard High School	ENMS
S0735	Solarpanel Simulation: A Closer look at Solar Panel Efficiency for NASA's International Space Station's Energy Systems and the Effects Lunar Conditions Had on the Ability to Perform Tasks	
Ronan Roberts	Saint John Lutheran School	IMRS
S0933	The uUse of AI Powered Aerial Searching to Identify Gopher Tortoise Burrows in Order to Aid in Conservation Efforts	

Second Place

Junior

Peyton Garrett Atchison	Howard Middle School	BEHA
J0210	Breaking the Cycle: Evaluating Driver Privilege Reinstatement as a Cost-Effective Recidivism Intervention	
Elias Benjamin Javelona	Howard Middle School	EAEV
J0624	Hydrogel Beads for Removal of Acetaminophen from Water Supplies	

Senior

Gabrielle Victoria Javelona	Vanguard High School	MICR
S1120	EcoEnamel: Targeted Inhibition of gtfb and Idh Gene Expression in <i>Streptococcus mutans</i> via an Anhydrous Gelatin-Pectin Film Delivery System	

Third Place

Junior

Vallari Vaibhav Bhuskute	Howard Middle School	EAEV
J0623	Useful to Humans-Harmful to Marine Life: A Study on How Pollutants Affect the Growth and Health of Marine Plants	

Senior

Delaney Clair Peterson	Belleview High School	EAEV
S0635	Revolutionizing Artificial Reefs: Recycled Foamed Glass Aggregates as a Sustainable Solution for Oyster Habitats (Year 3)	

25 awards for Big Springs Region

Brevard: Intracoastal

First Place

Junior

Shruthi Ganesh	Edgewood Jr/Sr High School	CHEM
J0515	Novel Method of Cost-Effective Waterborne Pathogen Detection: Rapid Curcumin-Based Fluorometric Whole-Cell Sensing of <i>Escherichia coli</i>	

Fourth Place

Senior

Julia A Cohen-Pinsky	Satellite High School	CMBI
S0417	Engineering Bifidobacterium infantis–Melittin–Nanoparticle Biohybrids for Targeted Deep Tumor Penetration, Enhanced Payload Localization, and Potent Spheroid Disruption in a 3D Cancer Model	
Alexander L Ferland	Edgewood Jr/Sr High School	CHEM
S0515	Improving Sustainability by Understanding How Protective Oils Affect Galvanic Corrosion in Launchpad Environments	

Honorable Mention

Junior

Cameron T Gilbert	Herbert H. Hoover Middle School	ANIM
J0105	Comparative Repellent Efficacy of Botanical and Nanoformulated <i>Allium sativum</i> Extracts on <i>Tenebrio molitor</i>	

Senior

Zander C Colangelo	Satellite High School	PHYS
S1214	Spectral Analysis of Rocket Emissions	
Christopher J Shepherd	Satellite High School	PLNT
S1315	Utilizing PCR and Induced Transformation to Reinsert Amplified Genes of Plant-Symbiotic <i>Bacillus subtilis</i> for Improved Growth, Antimicrobial Activity, and Abiotic Stress Resistance in <i>Arabidopsis thaliana</i>	

Recognition

Junior

Augusta R Peranich	Herbert H. Hoover Middle School	BEHA
J0206	Clicking into Deception: The Role of Age in Malicious Hyperlinks	
Anne M Eidson	DeLaura Middle School	EAEV
J0613	How Do Commonly Used Fertilizers Affect the Growth of Mangrove Propagules?	
James Diaz Johnson	Herbert H. Hoover Middle School	MICR
J1104	Medicinal Efficacy of <i>Hamelia patens</i> : A Comparative Evaluation of Antimicrobial Activity Against <i>Escherichia coli</i> K-12 and <i>Saccharomyces cerevisiae</i>	
Ian A Hymer	Herbert H. Hoover Middle School	PHYS
J1209	Limit the Luminosity: Decreasing the Visibility of Light Pollution Using a Visual Didymium Filter	

Second Place

Senior

Aiden R Wright	Satellite High School	BMED
S0318	Development of Cell-Derived Exosome Delivery Systems for CRISPR/Cas13a-Mediated Modulation and Superoxide Dismutase 3-Driven Reduction of Oxidative Stress and Inflammation in ESR1 Breast Cancer Adenocarcinoma Year: III	
Twisha Bhattacharyya	Edgewood Jr/Sr High School	MACO
S1011	Designing a High-affinity Peptide binder to the Brd4 ET Domain to Outcompete MLV TP utilizing ProteinMPNN and AF-CBA with Additional Molecular Dynamics Verification	

Amy Qiao	Edgewood Jr/Sr High School	MICR
S1114	Developing Chitosan-Based Polymeric Nanoparticles Informed by Differential Gene Expression Analysis for the Enhanced Repair of Mesenchymal Stem Cells and Modulation of Oxidative Stress in Burn Wound Environments	
David Raguindin	Edgewood Jr/Sr High School	MICR
S1114	Developing Chitosan-Based Polymeric Nanoparticles Informed by Differential Gene Expression Analysis for the Enhanced Repair of Mesenchymal Stem Cells and Modulation of Oxidative Stress in Burn Wound Environments	

Third Place Junior

Ashley Thankachan	Edgewood Jr/Sr High School	CMBI
J0404	Healing or Harming: The Impact of Chamomile, Clove, and Turmeric on <i>Candida albicans</i>	
Axel R Bourgoin	DeLaura Middle School	ENMS
J0712	Building and Testing Toroidal Propellers Using a Thrust Stand	
Alexander J Howell	Edgewood Jr/Sr High School	IMRS
J0909	Lunar Base Camp Development and Operations Year 2	

Senior

Giovanni R Ramsaran	Satellite High School	EAEV
S0617	Optimizing Stormwater Treatment: Integrating Bacteriophage Mixtures into Baffle Boxes for Enhanced Pollutant Degradation	
Thor S Kopenkoskey	Satellite High School	ENMS
S0724	Active Rocket Control System (ARC-S) Reducing Barrier of Entry and Market Costs for Aerial Vehicle Research	

19 awards for Brevard: Intracoastal Region

Brevard: Mainland

Division Grand Award Winner And First Place

Senior

Aswath Rajesh	Viera High School	ENEV
S0827	Accelerating Discovery of Sustainable Crosslinked Biopolymers: A Hybrid Supervised and Unsupervised Machine Learning Pipeline for Property Prediction and Performance Mapping for Application-Specific Design	

First Place

Senior

Kaedin S Delaney	Melbourne High School,	ENMS
S0747	Optimizing Rowing Performance with Modification of Shell Weight, Stability, and Properties by Determining Modifications of Best Fit.	
Sophie A Schuh	Viera High School	ENMS
S0748	Revolutionizing Marine Mammal Survival Through Multi-Spectrum Imaging, AI-Powered Detection and Innovative Disentanglement Strategies	

Fourth Place

Junior

Marissa A Mitsakos	Space Coast Jr/Sr High School	EAEV
J0635	Eco-Friendly Bioremediation Techniques For Absorption of Excess Phosphate Nutrients In The Indian River Lagoon, towards Preventing Harmful Algal Blooms: A Comparative Analysis	
Elena B Malofsky	Madison Middle School	ENEV
J0828	Water Monitoring Buoy	

Senior

Enzo B Carter	Melbourne High School,	PHYS
S1233	An Analysis of Fiber-Optic Induced Decoherence in Long Distance Quantum Communication Channels	

Honorable Mention

Senior

Ella M Morrissey	Melbourne High School,	BEHA
S0224	Teenagers with ADHDs Reactions to Simulated Stressful Car Situations	
Maxwell W Cope	Space Coast Jr/Sr High School	CHEM
S0527	Development of a Bio-Based Polyelectrolyte Multilayer Organic Pollutant Adsorptive Gyroid PLA Scaffold with TiO2 Photocatalysis Targeting Carcinogenic Emerging Contaminants of Concern	

Recognition

Senior

Archit V Kulkarni	Melbourne High School,	BMED
S0338	Designing a Cost-Effective Machine Learning Framework to Differentiate Renal Calculi from Ultrasound Artifacts Using Synthetically Generated Ultrasound Datasets: Year 2	
Riya Reddy	Viera High School	CMBI
S0435	Effect of Hydrogen Peroxide on Curli Fiber Production in <i>Escherichia coli</i> as a Novel Approach for Modeling Oxidative Stress-Induced Protein Aggregation in Alzheimer's Disease	
Darsh V Kulkarni	Melbourne High School,	IMRS
S0946	Self-Evolving GAN with a Self Evolving Neural Network System for Autonomous Cyberattack Detection and Response	
Madalyn K Nice	Eau Gallie High School	MICR
S1129	Influence of Oceanic Thermal Stress on Algal Bloom Formation and Intensity	

Third Place

Junior

Annabelle D Wiegmann	Space Coast Jr/Sr High School	CHEM
J0530	Effects of Contaminants on Luminol Glow	

Jace Lauer	Home school,	MACO
J1018	Analyzing Mathematical Patterns in Resistor Networks	

Senior

Evan N Mellor	Melbourne High School,	EAEV
S0634	Cellulose Nanofibril-Based Adsorbents for the Removal of Copper Ions and Methylene Blue from Aqueous Solutions	

15 awards for Brevard: Mainland Region

Brevard: South

First Place

Senior

Ehab I El-Ahmad	West Shore Junior/Senior High School	BMED
S0334	Effects of 100LL Aviation Fuel on Inflammatory Cytokine Release from Human Lung and Skin Epithelial Cells.	

Fourth Place

Junior

Amelia Boyle	West Shore Junior/Senior High School	CHEM
J0524	The Effect of Different Baking Powder Concentrations on the Rise of Cookies	
Lucia A Bender	Ascension Catholic School	IMRS
J0919	Handthingz: The Prosthetic Project	
Mary G Wyrick	Ascension Catholic School	IMRS
J0919	Handthingz: The Prosthetic Project	
Julia R Zimmer	Ascension Catholic School	IMRS
J0919	Handthingz: The Prosthetic Project	

Senior

Shriya R Varada	West Shore Junior/Senior High School	MICR
S1127	Machine Learning–Driven Design and Experimental Validation of Peptide-Based Mixed- Metal Organic Frameworks (MOFs) for Predictive Membrane Disruption in Targeted Immunotherapeutic Applications	

Honorable Mention

Junior

Andrew D Kerschensteiner	Central Middle School	MICR
J1114	Evaluating the Bactericidal Effects of UV Filtration and Lysozyme on Gram-Positive and Gram-Negative Bacteria	

Senior

Aryan Ashta	West Shore Junior/Senior High School	IMRS
S0943	Using Expert Vectors to Mitigate Catastrophic Forgetting in SEAL	

Recognition

Junior

Angelina Tosi	West Shore Junior/Senior High School	BEHA
J0213	The Effects of Prolonged Screen Time on Vision Quality	
Emma Toro	West Shore Junior/Senior High School	EAEV
J0633	The Effects of Nitrate and Phosphate Concentration on Seagrass Density in the Indian River Lagoon	

Senior

Lola Leao de Camargo Le Guillou	West Shore Junior/Senior High School	BEHA
S0220	School Discipline Disparities as Predicators of Future Incarceration	
Cydnee E Miranda	West Shore Junior/Senior High School	EAEV
S0631	The Effect of UV Pretreatment of Oxo-Biodegradable Plastic on its Biodegradation by Fungi	
Sophia S Fetouh	West Shore Junior/Senior High School	MACO
S1024	Utilizing Mathematical Models to Understand Biomarkers of Tumor Volume Changes with Pembrolizumab Efficacy in Advanced Anal Squamous Cell Carcinoma	
Rose-Sirivatr K Boonsanguan	West Shore Junior/Senior High School	PHYS
S1230	AI-Assisted Solar Tracking Model to Optimize Efficiency	

Second Place

Junior

Kylee M Langham	Ascension Catholic School	MACO
J1016	Uncovering Latent Prints with Natural vs Traditional Black Powder	
Emma G. Tecson	Ascension Catholic School	MACO
J1016	Uncovering Latent Prints with Natural vs Traditional Black Powder	

Senior

Faizan Ahmed	West Shore Junior/Senior High School	CMBI
S0433	Computational Hematology - Prototype-Guided Leukemia Detection: A Prototype-Based Few-Shot Learning and Ensemble Uncertainty Framework for Robust Automated AML Blast Detection and Quantification	

Third Place

Junior

Lily A Forsman	Holy Name of Jesus Catholic School	PHYS
J1226	The Drag Dilemma: The Impact of Shape and Texture on the Drag Force of Rocket Nose Cones	

Senior

William J Estevez	West Shore Junior/Senior High School	ANIM
S0122	Detection and Quarantine of Varroa Mites in Honeybee Colonies	
Gabriella Weiner	Holy Trinity Episcopal Academy	ENMS
S0743	Utilizing Shape Memory Alloys with Antagonistic Muscle Pairs to Improve Prosthetic Responsiveness	
Eshan Vipuil	West Shore Junior/Senior High School	MACO
S1023	A Multi-Modal Deep Learning Pipeline Integrating Physics-Informed Neural Networks and 3D Image Processing for Accurate Rupture Prediction and Data-Driven Surgical Planning of Cerebral Aneurysms: Year 3	

21 awards for Brevard: South Region

Broward

Division Grand Award Winner And First Place

Junior

Maximilian Wakefield J0911	Pine Crest School Novel Dementia Screening and Monitoring Tool Using Passive Speech Recordings	IMRS
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First Place

Junior

Bailey Frank J1107	Pine Crest School Designing an eDNA Sampler to Provide Health Surveillance through Detection and Identification of Pathogens in Rural Communities	MICR
Daniel Jitari J1212	Indian Ridge Middle School Dual-Channel Experimental Study of Elastocaloric Cooling in Nitinol Wire	PHYS

Fourth Place

Junior

Colton Poppe J0108	American Heritage School Healing Waves: Enhancing Cardiac Regeneration Using Electromagnetic and Ultrasound Therapies in <i>Danio rerio</i>	ANIM
Michael Adam Albertini J0717	Lux Vera Classical Journey with the Sun: The Solar-Electric Vehicle	ENMS
Maxwell Cohen J0815	American Heritage School The Effects of Different Sources of Anthocyanin Dyes on the Output of a Dye-Sensitized Solar Cell	ENEV

Senior

Colette Petit S0116	Pine Crest School Effects of Ash Exposure on Oxidative Stress Response and Behavior of <i>Caenorhabditis elegans</i>	ANIM
Mia Sturgill S0323	American Heritage School Studying the Neuroprotective Efficacy of GLP-1 Receptor Agonist Semaglutide on ALS in Model Organism <i>C. elegans</i>	BMED
Vid Yash S0423	American Heritage School Modulating Cytokine Profiles in Aged Immune Cells as a Novel Approach to Inflammaging	CMBI
Shihan Zhang S0817	American Heritage School A Hybrid Wind-Solar-Rain Triboelectric Nanogenerator for All-Weather Energy Harvesting	ENEV
Aditya Kumar S0929	Pine Crest School Joint Delay-Tolerant Networking and Multi-View Fusion System for Post-Disaster Drone Swarm Search and Rescue	IMRS
Sophia Krauss Almonacid S1117	American Heritage School Increasing the Efficacy of Platinum-Taxane Combination Chemotherapy through <i>E. faecium</i> Probiotics in Ras85D <i>Drosophila melanogaster</i> for Epithelial Ovarian Cancer	MICR

Honorable Mention

Junior

Hasnain Hakeem J0716	Salah Tawfik Elementary and Middle School Motion-Tracking Robotic Hand Controlled by Flex Sensors	ENMS
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Recognition

Junior

Liv Gordon	Pine Crest School	EAEV
J0619	The Effects of Ocean Acidification on Calcium Carbonate Structures in Marine Organisms and the Mitigating Potential of Seaweed	

Senior

Anugraha Tiju Pereppadan	Cypress Bay High School	ANIM
S0115	Can Using <i>Eisenia fetida</i> (Red Wiggler Earthworms) Model Accelerated Wound Healing and Regeneration with Natural Materials?	
Mahatthi Premkumar	Cypress Bay High School	ANIM
S0115	Can Using <i>Eisenia fetida</i> (Red Wiggler Earthworms) Model Accelerated Wound Healing and Regeneration with Natural Materials?	
Aliyah Dania	American Heritage School	BEHA
S0211	The Effects of a Combined Modality Therapy on the Treatment of Neurological Deficits Due to the Development of Bronchial Asthma Using <i>Drosophila melanogaster</i> as a Model Organism	
Stella Shin	American Heritage School	EAEV
S0622	Enzymatic Microplastic Degradation in Textiles	
Kiera Makayla Carroll	Saint Thomas Aquinas High School	MICR
S1119	Investigation of Treatment Efficacy in Malassezia Associated Fungal Acne	

Second Place

Junior

Allyson Scaramucci	American Heritage School	BMED
J0309	The Effect of Different Vitamins on the Reduction of Overstimulation in <i>Drosophila melanogaster</i>	
Scarlett Asselta	American Heritage School	BMED
J0310	A Biodegradable DNA-Triggered Capsule and Wearable Patch for Early Sepsis Detection	
Kai Elrom	American Heritage School	ENMS
J0718	Comparing the Electrical Output of Hydrokinetic Turbines and Piezoelectric Ceramic Discs in Flowing Water Conditions with a Fouling-Resistant Coating	

Third Place

Junior

Nora Nair	American Heritage School	ANIM
J0107	The Developmental Effects of Early Carbon Dioxide Exposure on Danio rerio Morphology and Physiological Recovery	
Bianca Garfi	Pine Crest School	ANIM
J0109	Enhancing Planarian Regeneration with Chitosan: A Model for Human Tissue Regeneration	
Suhaana Desai	Pine Crest School	BEHA
J0207	The Impact of Generative AI Assistance on Adolescent Student Writing: A Study of Working Memory, Understanding and Retention, and Task Performance	
Aarush Doshi	American Heritage School	ENMS
J0715	Optimizing the Electric Output of a Piezoelectric Generator by Changing Base Layer Hardness and Configuration	
Beatriz M Assano	American Heritage School	PLNT
J1313	Comparing the Efficiency of Different Natural Sources and Their Effects on Alzheimer's Disease	
Samantha Cook	Pine Crest School	PLNT
J1314	Fungal-Mediated Improvement of Arabidopsis thaliana Growth Under Microplastic Pollution Stress	

Senior

Ian Chen	American Heritage School	BMED
S0322	Early-Life Metformin Exposure as a Preventative Strategy Against High-Sugar Diet-Induced Lipid Dysregulation	

Koray Sam Abramson	Pine Crest School	IMRS
S0927	High Precision Markerless 3D Gait Analysis Using Customizable Volumetric and Reprojection-Based Deep Learning	
Vedaant Agarwal	Pine Crest School	IMRS
S0928	A Multimodal Deep Learning Framework for a Novel Clinical Decision Support System in Retinal Disease Diagnosis and Management	
James Nattayod Ayoung	Saint Thomas Aquinas High School	MICR
S1118	Improved Wound Healthcare with Antimicrobial Essential Oil Bandages	
Daniela Rodriguez Debach	Saint Thomas Aquinas High School	MICR
S1118	Improved Wound Healthcare with Antimicrobial Essential Oil Bandages	
Kobi Weitzman	Pine Crest School	PHYS
S1217	Vetting TESS Exoplanet Candidates and Refining Their Transit Predictions	

34 awards for Broward Region

Capital

Fourth Place

Senior

Shaoxuan Ma	Lawton Chiles High School	BMED
S0329	Human Stem Cell Derived Extracellular Vesicles for the Treatment of Neurodegenerative Disease	
Tim Qin	James S. Rickards High School	ENMS
S0739	Novel Approaches in the Layout and Shape of Prandtl Plane/box Wing Aircraft	

Honorable Mention

Junior

Lucy Souva	Trinity Catholic School	BMED
J0317	Stop the Spread	
Lucas G. Friedman	Deerlake Middle School	CHEM
J0522	How Does Color Affect Vitamin C Content?	

Senior

Lorelei G Patronis	Florida State University School	PLNT
S1322	Characterization of Plant Growth Responses to Alfalfa-Amended Martian Regolith Stimulant	

Recognition

Junior

Peyton Flynn	Trinity Catholic School	ENEV
J0821	The World of Microfluidics	

Senior

Keya Patel	Maclay School	CMBI
S0428	Which PARP Inhibitors are Most Effective on Diffuse Intrinsic Pontine Glioma (DIPG) Cells?	
Rakesh Raj	James S. Rickards High School	IMRS
S0938	The Rubble Robot: AI-Augmented Robot Snake for Terrain Classification, Hotspot Detection, and Autonomous Navigation	
Nayana Sneha Vemireddy	James S. Rickards High School	IMRS
S0938	The Rubble Robot: AI-Augmented Robot Snake for Terrain Classification, Hotspot Detection, and Autonomous Navigation	

Second Place

Senior

Yichen Ou	Lawton Chiles High School	BEHA
S0218	How Cognitive Abilities Affect Contingent Reasoning in Adverse Selection	

10 awards for Capital Region

Citrus

First Place

Junior

Francine Ann Ulep Enriquez	Lecanto Middle School	MACO
J1014	Forensic Science: What Does Blood Spatter Tell Us In A Crime Scene Investigation?	

Fourth Place

Junior

Arhana Nerella	Lecanto Middle School	BMED
J0320	Gaitkeeper: Fall Forecasting Using IMU sensors	

Senior

Amya Ky-Mani Francois	Crystal River High School	BMED
S0333	A Novel Innovation: Design and Develop Cost-effective, High-efficiency Bioavailability Enhancers for Cancer Therapeutics	

Honorable Mention

Junior

Myles Brennan-Kocher Leazott	Saint John Paul II Catholic School	PHYS
J1225	Ruff Weather: A Soundproofing Solution for Dogs During Thunderstorms	

Recognition

Junior

Bridget Murphy	Saint John Paul II Catholic School	MACO
J1015	Pitch Perfect	

Senior

Sarah Elizabeth Duncan	Crystal River High School	BMED
S0332	Neutralizing Neurotoxicity: Smart PEGylated Liposome Nanocarriers with Michael Acceptor Chemistry for Targeted 4-HNE Capture in Parkinson's Disease	

6 awards for Citrus Region

Clay Rotary

Honorable Mention

Senior

Brenna Finnegan S0511	Ridgeview High School Conversion of Lignocellulosic Waste to Electrical Energy: The Effect of Cathode Material on Performance in a <i>Pseudomonas putida</i> Mediated Microbial Fuel Cell	CHEM
Elamae Evangelista S0715	Clay High School The SmartCane: A Smart Obstacle-Detecting Cane	ENMS
Joshua Chun S0913	Ridgeview High School A Novel Study in the Utilization of Artificial Intelligence, Machine Learning, and Convolutional Neural Networks in the Identification of Differing Recyclable Materials	IMRS

Recognition

Junior

Joshua Gonzalez J0905	Lake Asbury Junior High School Training a Computer to Recognize the World	IMRS
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Senior

Gavin Deen S0749	Clay High School Exploring Exhaust Size and its Relations to the Noise and Output of a Valveless Pulse Jet Engine	ENMS
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5 awards for Clay Rotary Region

Collier

First Place

Senior

Saanvi Chakraborty	Mason Classical Academy	IMRS
S0917	FetalyzeAI: An Uncertainty-Aware Hybrid Intelligence Framework for Reliable Fetal Health Classification Using Cardiotocography	

Fourth Place

Senior

Darius Zafar	Community School, Naples	IMRS
S0918	Risk-Constrained Derivation of Operational Constraints for Urban Air Mobility Using Stochastic Simulation	

Honorable Mention

Senior

Eva Galvez	Community School, Naples	BEHA
S0207	Determining the Influence of Detergents on Maternal-Infant Attachment Response, and Pheromone-Related Social Interactions, Using <i>Reticulitermes hesperus</i> as a Model Organism	
Joshua Scarle	Palmetto Ridge High School	ENMS
S0716	Parameter Optimization in Selective Laser Melting for Desired Properties Across Diverse Part Geometries and Materials	
Alex Ewy	Aubrey Rogers High School	MACO
S1007	The Trading Secret: Unmasking the Impact of Timestamp-Aligned News Sentiment Filters on Intraday Trade Performance and Risk through 11 Highly Liquid Stocks Under the S&P 500.	

Recognition

Senior

Nikolai Pratasenia	Mason Classical Academy	ENMS
S0717	Optimizing Solar Cell P-N Junction By Biomimicking Mantis Shrimp Guanine Eye Structure	

Third Place

Senior

Ariana Sharma	Community School, Naples	BMED
S0313	Identifying Key Genes/Pathways that Show A Connection between Coronary Heart Disease and Generalized Anxiety Disorder Using Bioinformatics	
Sarah Dabees	Aubrey Rogers High School	CHEM
S0512	Improving Sustainability Through Biotechnologies: Electrochemical Analysis of <i>Rhizobium tropici</i> Biopolymer for Fuel Cell Applications	
Harold Hoffmann	Community School, Naples	PLNT
S1311	Presymptomatic Detection of Bacterial Spot and Anthracnose via Machine Learning Integrating Ethylene, Ultrasonic, and Electrophysiological Signals	

9 awards for Collier Region

Dr. Nelson Ying Expo - Orange

Division Grand Award Winner And First Place

Senior

Mahie Patil	Orlando Science High School	BEHA
S0216	AI Companion for Attentional Fatigue: Detection of Facial Features to Anticipate Attentional Fatigue Coupled with Sonic Stimuli to Mitigate Inattention	

First Place

Senior

Clara Martins De Bellis Silva	Horizon High School	PHYS
S1222	Year II: Quantifying Behavioral Entropy as a Mechanistic Indicator of Neural State under Sleep Deprivation in <i>Drosophila melanogaster</i>	

Fourth Place

Junior

Ibnat Jahin Intiha	Leaders Preparatory School	BEHA
J0212	Stress Is Coming - Your Way!- Who Will Handle It the Best?	
Tasmiyah Noor	Leaders Preparatory School	CMBI
J0409	Evaluating Non-Animal Enzymes as Alternatives to Porcine Pancreatin	
Diya Dhanraj Chavada	Orlando Science Middle School	CHEM
J0521	Does Higher SPF Sunscreen Really Work?	
Reyansh Sane	Orlando Science Middle School	MACO
J1013	Year II: Identifying Radon-Induced Kidney Cancer Incidence through Hybrid In-Silico Modelling	
Vinay Landrum	Orlando Science Schools - East Campus	PHYS
J1221	Which Car Shape Is the Most Aerodynamic?	

Senior

Marie Garcia	Lake Highland Preparatory School	BMED
S0327	Extracellular Vesicles from the Saliva of Periodontal Patients Modulates Macrophage Function	
Aanvi Mathur	Orlando Science High School	MACO
S1017	Pathway-Level Multi-Omics Integration for Early-Stage Discrimination of Lung Adenocarcinoma and Squamous Cell Carcinoma Using Machine Learning	
Zach Chang	Lake Highland Preparatory School	PHYS
S1221	Geometric Optimization of Radiation-Hard Silicon PIN Diodes for Proton Therapy Beam Monitoring	

Honorable Mention

Senior

Max Wang	Trinity Preparatory School	MICR
S1122	Prebiotic Potential of Polysaccharides from East Asian Foods: Effects of Gut Bacterial Fermentation	

Recognition

Junior

Muhammed Muadinov	Leaders Preparatory School	ANIM
J0112	Using Daphnia to Monitor Water Toxicity	
Habibullah Abrar Amiry	Leaders Preparatory School	MICR
J1110	Comparing the Antibacterial Effects of Different Types of Honey	

Senior

Hammad Elahi	Lake Highland Preparatory School	CMBI
S0425	Profiling Isoform Expression and Morphological Responses to Natural Killer Cells within the Prostate Tumor Microenvironment	
Jia Nicole Sood	Trinity Preparatory School	CHEM
S0521	Investigating Phthalates in Unconventional Menstrual Products	

Second Place

Junior

Talia Abdelmonem Kardash	Leaders Preparatory School	EAEV
J0627	Breaking Down PET: The Effect of Different pH Levels on Lipase B's Plastic Depolymerization Activity	

Senior

Aakash Manaswi	Lake Highland Preparatory School	ANIM
S0119	Integrating Multi-Convolutional Neural Network Histological Analysis and Field Trials to Evaluate Carbon Dioxide and Pesticide Impacts on Honeybee Health and Colony Performance	
Aditi Swain	Orlando Science High School	EAEV
S0626	Developing a Novel Sustainable Bio-Adsorbent Derived from Agricultural Biomass and Iron-Functionalized Biochar for the Removal of Algal Toxin from Water	
Aarit Dixit	Orlando Science High School	ENMS
S0737	Year 2: Development of R.A.M.P.A.T. (Rapid, Affordable, Modular, Printed Aerial Tiltrotor) for Emergency Response	
Sheyna Patel	Orlando Science High School	ENEV
S0820	Advancing Carbon Capture Utilization to Electricity Using Novel Janus Amine Cryogels via Nanoconfined-Ion Separation	
Smera Rathee	Orlando Science High School	PLNT
S1321	Phytosense: A Novel System for Optimizing Phytochemical Biosynthesis in <i>Ocimum sanctum</i> through Controlled Abiotic Stress Environments	

Third Place

Junior

Abhinav Sathish	Orlando Science Schools - East Campus	BMED
J0316	An Analysis of EMF Levels in Household Appliances	
Siddharth Surya Challa	Orlando Science Middle School	IMRS
J0916	Smart Smoke Detection System	
Shriya Nirav Sheth	Orlando Science Middle School	PLNT
J1321	The Study of Homemade Fertilizer Improving the Stand Count and Plant Height of Radishes	

Senior

Malak Yehia Salem	Leaders Preparatory School	CMBI
S0426	Year II : A Breakthrough for Developing Countries in Novel Cost-Effective Organ-on-chip Technology	

25 awards for Dr. Nelson Ying Expo - Orange Region

East Panhandle

Division Grand Award Winner And First Place

Junior

Brantley Lane J0725	Okaloosa STEMM Academy	ENMS
Evaluating the Tensile Strength of Polylactic Acid Enhanced with Reinforcing Agents		

First Place

Junior

Benjamin Nusimow J0319	Ruckel Middle School	BMED
Spot the Spot: Creating a More Efficient Skin Cancer Logistic Regression Model by Using Geometric Representations		

Fourth Place

Junior

Moira Reyenga J0824	Okaloosa STEMM Academy	ENEV
BIOROCK; A New Take on Saving the Coral Reefs Through Electrolysis of Seawater		

Senior

Elisabeth Wallace S0429	Magnet Innovation Center	CMBI
Hybrid vs. Alkali: Finding a More Sustainable Method to Produce Chitosan-Based Superabsorbent Polymers from <i>Agaricus bisporus</i> Fungi		

Honorable Mention

Junior

Ryan Gregg J0823	Okaloosa STEMM Academy	ENEV
Hydrogels for Humanity: Advancing Farming Techniques		

Recognition

Junior

Anna Belk J0318	Okaloosa STEMM Academy	BMED
Blood Spatter Analysis		
Calvin Fortner J0724	Okaloosa STEMM Academy	ENMS
Calvin's Automatic Watering System (C.A.W.S.)		
Arianna Lopez J0918	Northwest Florida Ballet Academie	IMRS
Line Following Face-Off		
Nolan Kirk J1323	Okaloosa STEMM Academy	PLNT
The Natural Fertilizer Battle Royale		

Senior

Natasha Duffley S0822	Magnet Innovation Center	ENEV
Modeling the Electrochemical Control of Polyhydroxyalkanoate Biosynthesis: Effects of Oxidation-Reduction Potential Setpoints on Interactions between Phages and Bacteria, as well as Biomass Accumulation, in a Two-Dimensional Computational Framework		
Ian Allen S1225	Niceville High School	PHYS
SPARCSS: Simulation of Plasmonic Attributes Related to Composition, Size, and Shape		

Third Place

Junior

Aimi Frasca J0822	Northwest Florida Ballet Academie	ENEV
Stronger than You Imagine		

12 awards for East Panhandle Region

Heartland

Fourth Place

Senior

Brady J Williamson S1307	Okeechobee High School Optimizing the Use of Individual Protective Covers and Therapeutical Materials to Effectively Protect Young Citrus Trees Against HLB- A Five Year Study	PLNT
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Honorable Mention

Junior

Eli H Dewey J0707	Lake Placid Middle School Crushing It	ENMS
Jillian K Keen J1305	Hardee Junior High School Does Compost Increase <i>Citrus sinensis</i> (citrus tree) Vigor and Reduce <i>Xanthomonas citri</i> (canker) Lesion Severity?	PLNT

Senior

Alexander Rojas-Salazar S0610	Hardee Senior High School How Does Bahia, St. Augustine, and Bermuda Grass Affect Slope stability under Simulated Rain?	EAEV
Jaclyn S Brown S0909	Hardee Senior High School Spot the Fake? Stop the Threat!	IMRS

Recognition

Senior

Cooper L Nolte S0508	Okeechobee Virtual School The Efficiency of Different Types of Electrodes in Alkaline Electrolysis, a Third Year Study	CHEM
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Third Place

Senior

Anika Bhandare S0407	Sebring High School Spatial Analysis of Epithelial-to-Mesenchymal Transition and <i>Fusobacterium nucleatum</i> Associations in Colorectal Cancer Year 3	CMBI
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7 awards for Heartland Region

Hillsborough

Fourth Place

Junior

Sophia Cameron J0529	Dorothy York Innovation Academy Udderly Sustainable: Bioplastic Made from Milk	CHEM
Kaitlyn Post J0529	Dorothy York Innovation Academy Udderly Sustainable: Bioplastic Made from Milk	CHEM

Senior

Kohana P Basu S0633	George S. Middleton High School Computationally Designing Proteins that Bind to Heavy Metals	EAEV
Sahil Patel S0746	George Steinbrenner High School Validation of a Smartphone-Based Laser Speckle Contrast Imaging System for Assessing Cutaneous Microvascular Perfusion	ENMS
Nayana Jayakumar S1232	Hillsborough High School Using Artificial Neural Networks to Predict Future Orbital States Across Three Different Types of Orbits: LEO, MEO, and GEO	PHYS

Honorable Mention

Junior

Gideon Flink J0726	Adum K-8 AquaVolt	ENMS
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Senior

Shivin R Anand S0826	George S. Middleton High School Autonomous Hydroponic Plant Growth System with Computer Vision-Based Growth Analysis for Long-Term Space Travel	ENEV
Shreyashi Bodaka S1026	Strawberry Crest High School CoMPHI: A Composite Deep Learning Model Combating Antibiotic Resistance	MACO
Casey A Ayres S1128	Newsome High School Growing Green in Zero-G: The Impact of Simulated Microgravity on <i>Chlorella vulgaris</i> Cultures	MICR
Mya O Sullivan S1128	Newsome High School Growing Green in Zero-G: The Impact of Simulated Microgravity on <i>Chlorella vulgaris</i> Cultures	MICR

Recognition

Junior

Akshitha Mandula J1227	Farnell Middle School The Signal Vanishers:Who's Killing My Wi-Fi	PHYS
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Second Place

Junior

Jiya U Patel J0634	Williams Middle Magnet School AI in the Sky: Drone Mapping for Sustainable Locust Defense	EAEV
Hridaan Waswani J0921	Benito Middle School Smart A.I. Trash Can	IMRS

Senior

Chinmay V Gujar S0223	George S. Middleton High School NeuroLens+: A Six-Task, AI-Based Ocular-Motor Biomarker Framework for Quantifying Neurological Deviation and Condition-Associated Pattern Similarity	BEHA
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Daniel Park	C. Leon King High School	CMBI
S0434	Psalmacross: A Novel Tarantula Venom-Derived Peptide Drug Candidate for ASIC Inhibition via In Silico Design	
Siddharth Mohan	George S. Middleton High School	ENMS
S0745	Enhancing Respiratory Treatment Accessibility Through A Compact, Dual-Mode Nebulizer System	
Yashika Garg	George S. Middleton High School	IMRS
S0944	NeuroPath: Machine Learning for Early Detection of Cognitive Decline and Neurodegenerative Disease Risk	
Sarayu R Karedla	George S. Middleton High School	IMRS
S0944	NeuroPath: Machine Learning for Early Detection of Cognitive Decline and Neurodegenerative Disease Risk	
Navita Mishra	George S. Middleton High School	IMRS
S0944	NeuroPath: Machine Learning for Early Detection of Cognitive Decline and Neurodegenerative Disease Risk	
Youssef Alhamzawi	American Youth Academy	MACO
S1027	Integrative Multi-Omics and Pan-Cancer Protein-Protein Interaction Network Analysis to Identify Novel, Understudied Drivers of Tumor Progression Across Cancer Types	

Third Place

Senior

Bryan Velazquez	Robinson High School	ANIM
S0123	What is the Effect of Varying Salinities on the Filter Feeding Activity of the Eastern Oyster (<i>Crossostrea virginica</i>), Measured through Nitrate Levels, Turbidity and Valve Gape?	
Tanishka Aglave	Strawberry Crest High School	PLNT
S1326	A Next-Generation Weed Management Platform: Engineering of a Modular Weed Management System Integrating a Multi-Mode Bioherbicide Formulation and Precision Spraying Tool to Reduce Agricultural Chemical Inputs	

22 awards for Hillsborough Region

Indian River

Fourth Place

Senior

Gianna L D'Elia S1106	Vero Beach High School Antibacterial Potential of Lactic Acid Bacteria Isolated from Vegetables: Bacteriocin Gene Screening and Inhibitory Activity Analysis	MICR
Hunter M Swenson S1305	Vero Beach High School The Effect of Rhizosphere Bacterial Inoculation Timing on <i>Celosia argentea</i> (Lagos Spinach) Nutritional Quality as a Novel and Accessible Approach to Agricultural Drought	PLNT

Honorable Mention

Junior

Luca V D'Elia J0103	Osceola Magnet School K-8 Lizard Cafe	ANIM
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Senior

Elaina R Turner S0203	Vero Beach High School Nostalgia and Adolescent Decision-making	BEHA
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Second Place

Junior

Kieran T Mosblech J0102	Storm Grove Middle School Digging Down? Pillbug Response to Temperature Variations	ANIM
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5 awards for Indian River Region

Lake

Honorable Mention

Junior

Sophia J Antepara	Imagine South Lake Charter School	EAEV
J0612	Ultrasonic Splash: A New Way to Clean Water	

Brandon Christopher Gaines	Windy Hill Middle School	IMRS
J0907	MediREMINDER	

Senior

Kai Larry McConnell	Homeschool- Lake	IMRS
S0921	Animatronic Octopus Tentacle	

Recognition

Junior

Penelope Rose Gifaldi	Modern Schoolhouse	ENEV
J0808	Solar Powered Irrigation System	

Third Place

Junior

Juan Guio Acevedo	East Ridge Middle School	ENEV
J0807	Wire to Fire : A Bright Therm Alert with Buzzing Heat Detection	

Andrea Sanchez Alvarez	East Ridge Middle School	ENEV
J0807	Wire to Fire : A Bright Therm Alert with Buzzing Heat Detection	

6 awards for Lake Region

Manatee STEM Competition

Fourth Place

Junior

Emerson Christy J0703	Barbara A. Harvey K-8 Seawalls to the Rescue! Which Seawall Works the Best?	ENMS
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Senior

Manal Chatri S0802	Southeast High School Electrochemical Testing of Sodium Dodecylbenzene Sulfonate using Biochar and Graphene-Modified Screen-Printed Electrodes as a Model Compound for Per- and Polyfluoroalkyl Detection	ENEV
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Recognition

Junior

Ella Fuschetto J0505	R. Dan Nolan Middle School Wave of Power: How Salinity Affects Electricity Production	CHEM
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Senior

Selma Onus S0306	Lakewood Ranch High School How Does Nanoplastic Size Influence Apoe3-mediated Transcytosis Across the Blood-Brain Barrier?	BMED
Gabriela Calomeni S0505	Southeast High School Green Catalysts in the Decomposition of Hydrogen Peroxide (H ₂ O ₂)	CHEM
Eshun Burge S0905	Southeast High School Fairness and Predictive Performance of Pediatric Type 2 Diabetes Machine Learning Algorithms	IMRS

6 awards for Manatee STEM Competition Region

Martin

Fourth Place

Junior

Zoey Kappler J0602	Ferro Sweep	Hidden Oaks Middle School	EAEV
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Senior

Aahan Asthana S1304	Native Plant Competition Suppresses Chlorella Vulgaris Growth	South Fork High School	PLNT
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Recognition

Junior

Liliana Reppeto J0503	Easy Peasy Lemon Squeezy Citrus "Volcanoes"	Hidden Oaks Middle School	CHEM
Stella Dzikowski J0802	From Sheen to Clean: Using Natural Materials to Extract Oil from Water	Hidden Oaks Middle School	ENEV

Second Place

Senior

Nina Goyal S1303	Year 5: Developing a Novel RNAi Based Biopesticide Optimized via Bioenhancers to Target the miRNA Bantam in <i>Spodoptera trugiperda</i> for Environmentally-Friendly, Cost-Effective, Improved Pest Management	Martin County High School	PLNT
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5 awards for Martin Region

Monroe

Honorable Mention

Senior

Taylor Pennington Thomason	Key West High School	ANIM
S0103	Survival Over Synthesis: Shifts in Chitin-to-Calcium Carbonate Ratios in South Florida Shrimp Following Synthetic Polymer Exposure	

Recognition

Junior

Braelyn Rachel Dixon	Key Largo School	EAEV
J0603	The Bullying Sapodilla	
Aiden Carrick McElheny	Ocean Studies Charter School	ENMS
J0702	Wingtip Vortices	

3 awards for Monroe Region

Northeast Florida

Division Grand Award Winner And First Place

Senior

Alan M Alwakeel	Stanton College Preparatory School	CMBI
S0415	The Virtual Cell 2.0: Expanding Precision and Personalized Cancer Therapy through AI-Powered Simulation	

First Place

Senior

Leona Shaeffer	Samuel W. Wolfson Senior High School	EAEV
S0615	Field Based Biopolymer-Enhanced Dune Stabilization Performance Assessment	

Fourth Place

Junior

Isabella L Guthrie	Julia Landon College Preparatory Middle School	EAEV
J0611	Filtration with Mollusks	
Aaron Liu	Sacred Heart Catholic School	ENMS
J0709	Tesla Coil Electromagnetic Principles	

Senior

Christopher Trinidad	Bishop Kenny High School	BEHA
S0208	EEG-Based Emotion Recognition and Conversational AI VR Assistant for Personalized Assistance	
Deshaun H Hadley	River City Science Academy	CMBI
S0416	Enhanced PINK1-Kinase Activity Increases Physiological p-S129-a-Synuclein Levels & Neuronal Firing in Human iPSC-Derived Neurons	
Liza Kalitynska	Samuel W. Wolfson Senior High School	CHEM
S0514	Ocean Acidification and Marine Carbon Dioxide Removal: Impacts on Marine Life	
Jaden U Omale	Duval Charter School at Baymeadows	ENMS
S0721	Redefining Winglet Geometry: A Partial Spiroid Approach For Supercritical Airfoil Wing Enhancement	
Lynn Ibrahim	The Bolles School	ENEV
S0810	Evaluating Microplastic Aggregation to the Microalga <i>Chlorella vulgaris</i>	
Ashley Wang	Stanton College Preparatory School	PHYS
S1212	Optimization of Type-II Superconducting Coherence through Dynamic Stimulation	

Honorable Mention

Junior

Madhiniya Ragupathi	Julia Landon College Preparatory Middle School	BEHA
J0205	Reexamining Psychology	

Senior

Lilly J McCoy	Episcopal School of Jacksonville	ANIM
S0111	The Effects of Natural and Chemical Treatments on <i>Gallus gallus domesticus</i> Embryonic Development	
James A Rinaman	Episcopal School of Jacksonville	EAEV
S0614	Evaluating Recirculating Upweller Systems as an Effective Method for Oyster Ecosystem Restoration	
Penelope D Phillips	Episcopal School of Jacksonville	ENEV
S0809	Developing a Colorimetric Patch and Toxicity Index for Detecting Components in Secondhand Smoke	
Jane E Haley	Episcopal School of Jacksonville	MICR
S1111	Analyzing the Adaptation of <i>Acidithiobacillus ferrooxidans</i> to High Temperatures	

Evelyn Carroll	Episcopal School of Jacksonville	PLNT
S1314	Optimizing Phytoene Synthase Content in Kale with the Use of Blue Light	

Recognition
Senior

Blaire E Massey	Episcopal School of Jacksonville	PLNT
S1313	Comparing Calcium Levels and Growth of Romaine Lettuce with Different Fertilizers and Red Worms	

Second Place
Junior

Anne R Zacharia	Julia Landon College Preparatory Middle School	PHYS
J1208	Thermal Zones: Optimizing Cooling Efficiency	

Senior

Prapti Paladagula	Stanton College Preparatory School	ENMS
S0720	Development of Thermostable Lipid Nanoparticle Formulations for the Accessibility of mRNA Vaccines	

Marco A Chua	Stanton College Preparatory School	ENEV
S0807	Physics-Based Wave Barrier Design for Storm Surge Protection	

Rohan Varghese	Stanton College Preparatory School	IMRS
S0919	NeuroLens - A Multimodal Deep Learning Framework for Early Detection of Infectious Disease	

Third Place
Junior

Yuvan Bodapati	Julia Landon College Preparatory Middle School	CHEM
J0512	Magnetic Murmurs in Mineral Waters	

Shan W Vance	Julia Landon College Preparatory Middle School	MACO
J1003	How Accurately Can an AI Model Detect Urban Blight Using Street-View Images	

Senior

Ishika Doma	Stanton College Preparatory School	BEHA
S0209	Utilizing Physiological Devices and Predictive AI Modeling to Optimize Breathing-Based Meditation	

Sathvik C Patibandla	Stanton College Preparatory School	BMED
S0315	Enhancing Drug Internalization in PDAC Cells Using Tumor Treating Fields	

Mithra Vasanthan	Stanton College Preparatory School	ENEV
S0808	Optimizing Biofoams for Multi-Phase Pollutant Capture/Remediation in Fresh and Marine Environments	

Sarina S Tangyingyong	Episcopal School of Jacksonville	MICR
S1112	Effect of Taurine on Hydrogen Sulfide Production in Gut Microbiome Bacteria	

27 awards for Northeast Florida Region

Osceola

Honorable Mention

Senior

Hajar Kaciri	Neocity Academy	BMED
S0326	Beyond the Face: A Novel Assessment of Adaptive Multisensory Identity Encoding to Quantify Cross-Modal Stabilization of Recognition in Simulated Prosopagnosia	

Recognition

Senior

Diego Morales Carao	Gateway High School	ENMS
S0733	Pressure to Power: Investigating the Efficiency of Piezoelectric Tiles Under Vehicular Stress	

Samuel Peralta Morales	Gateway High School	ENMS
S0733	Pressure to Power: Investigating the Efficiency of Piezoelectric Tiles Under Vehicular Stress	

3 awards for Osceola Region

Palm Beach

First Place

Junior

Mariia Kuznetcova	Pine Crest School	ANIM
J0101	Artificial Intelligence-Based Gait Analysis for Detecting Feline Osteoarthritis	

Senior

Lenny Jean Hanisko	Florida Atlantic University High School	ANIM
S0102	Morphological Analysis of Gastric Nematodes in Pygmy and Dwarf Sperm Whales (<i>Kogia breviceps</i> and <i>Kogia sima</i>) Using Stereoscopy and Scanning Electron Microscopy	
Devesh Kumaresh	American Heritage School of Boca/Delray	BMED
S0301	The Design and Evaluation of Novel Mesoporous Silica Nanoparticles for Colon Cancer Therapy	

Fourth Place

Junior

Sebastian Chen Hua Natanek	The Weiss School	CHEM
J0501	Comparative Study of the Hydrogen Gas Efficiency between Glucose and Acidic, Solutions.	
Luca Elliot Rogers	Jupiter Middle School	CHEM
J0502	The Ability of Plant-Derived Antioxidants to Inhibit Reactive Oxygen Species (R.O.S.) in a pH Neutral Solution	
Ryker Nolan Scott	The Weiss School	ENEV
J0801	Co-Composting Brown Sargassum (<i>natans</i> , <i>S. Fluitans</i>) and Horse Manure as a Sustainable Waste Management Strategy	
Salahiddin Sultanov	Jupiter Middle School of Technology	IMRS
J0902	Performance of Existing and Previous Nuclear Defenses	

Senior

Maxine Yang	American Heritage School of Boca/Delray	ANIM
S0101	Observing Memory Formation in Carpenter Ants to Develop an Efficient Method of Early Detection of Alzheimer's Disease	
Zoe Franklin	American Heritage School of Boca/Delray	BEHA
S0225	The Epigenetic Effects of dop1R1 and Induced Behaviors Transgenerationally in <i>Drosophila Melanogaster</i> Models	
Gabriel Hosein Mikati	American Heritage School of Boca/Delray	CHEM
S0503	Chemical Design and Evaluation of Biodegradable Polymer-Based Superhydrophobic Coatings for Water Repellency and Oil-Water Separation Applications	
Ishaan Gupta	American Heritage School of Boca/Delray	ENMS
S0701	Developing and Testing a Novel Lateral Flow Immunoassay for Early Detection of Chronic Pain	
Anisah Aden	Alexander W. Dreyfoos School of the Arts	IMRS
S0902	Metabolic Modeling and Simulation of the Human Eye	
Nidhi Begur	Florida Atlantic University High School	MACO
S1002	From Signals to Sidewalks: A Computational Framework for Modeling Human Mobility from Passive WiFi Probes	
Johnny Carlos Rodriguez	American Heritage School of Boca/Delray	MICR
S1102	Fighting Bacterial Antibiotic Resistance: An Experimental & Computational Approach to Inhibiting CspA Proteins	
Tiffany Sophia Dunn	Spanish River Community High School	PLNT
S1301	Identifying Development for Root Hair Patterning in <i>Arabidopsis thaliana</i>	

Honorable Mention

Junior

Kayleigh Sortie	The Weiss School	EAEV
J0601	The Efficiency of Source Control: Investigating Total Volatile Organic Compounds (TVOC) and Formaldehyde (HCHO) Off-Gassing from Dyed Furniture and its Correlative Impact on Indoor Air Quality	
Benjamin William Tribuiani	American Heritage School of Boca/Delray	PLNT
J1301	The Effect of Nitrogen on Plant Health	

Senior

Yuvan Shandalingam	Spanish River Community High School	EAEV
S0602	Solar Powered Electro-Purification of Saline Groundwater Using Low Cost Clay Electrodes	

Recognition

Senior

Lilia Andrea Shalaurov	American Heritage School of Boca/Delray	BMED
S0302	Selective Induction of Apoptosis in Colon Cancer Cells by Pore-Forming Drug Amphotericin B. and K ⁺ Channel Inhibitor Stichodactyla Toxin by the Efflux of Intracellular Potassium Ions Compared to Healthy Colon Cells	
Aysel Elshenawy	Florida Atlantic University High School	ENEV
S0801	Dual-Function Thermoelectric Platform for Waste Heat Recovery and Thermal Pollution Mitigation in Marine Cooling Systems	
Bhav Jain	American Heritage School of Boca/Delray	MACO
S1001	IDENTITYCLOAK: Invisible Protection Against AI Deepfakes Using Semantic Attention Targeting and a Novel Form of Targeted Noising	
Tristan Obser	American Heritage School of Boca/Delray	MICR
S1101	Inhibiting Quorum Sensing and Colibactin Self-protection in <i>Escherichia coli</i> as a Novel Method to Prevent and Combat Colorectal Cancer	
Sophia Lena Yohe	Palm Beach Central High School	PLNT
S1302	The Effectiveness of Mycorrhizae to Improve the Water Efficiency of <i>U. paniculata</i>	

Second Place

Junior

David Diaz-Padua	Pine Crest School	BEHA
J0201	Effects of Probiotic Supplementation on Neural-Driven Behaviors in Planaria	
Rhea Mahesh	Pine Crest School	CMBI
J0401	Investigating the Efficacy of Dietary Interventions with Cellulose Fiber and Ascorbic Acid Supplementation to Mitigate Microplastic-Induced Heart Rate Variability and Oxidative Stress in <i>Daphnia magna</i>	
Rihaan Meher	Pine Crest School	IMRS
J0901	Saving Money, Saving Lives; Using Deep Neural Networks for the Early Prediction of Natural Disasters	
Krish Gupta	A.D. Henderson University School	MACO
J1001	Artificial Intelligence Driven Neuroimaging Framework for the Early Detection Of Alzheimer's Disease	
Dilan Saverimuttu	Pine Crest School	MICR
J1101	Combating Antibiotic Resistance: Evaluating the Antimicrobial Efficacy of Tomato Juice and Shikonin in Combination with Standard Antibiotics	

Senior

Nicholas Raphael Stan	Alexander W. Dreyfoos School of the Arts	CHEM
S0504	Enhancing the Oncotoxic Effects of Mitochondrial-targeting D-(KLAKLAK) ₂ Peptide by Improving Cell Membrane Permeability via Chemical Conjugation with Imidazopyridinium (IP ⁺)	
Taroon Muthuswamy	American Heritage School of Boca/Delray	EAEV
S0601	The Effect of Metal Oxide Infused Biochar on the Absorption of Heavy Metal Pollutants from Simulated Soil Environments	

Adia Agarwal	Alexander W. Dreyfoos School of the Arts	ENMS
S0704	Year 3: Identifying Cost-Effective Advanced Catalysts Using an AI-Enabled Digital Twin of a PEM Hydrogen Electrolyzer	
Tanzeela Tasneem	Florida Atlantic University High School	PHYS
S1201	Design and Fabrication of a Liquid Crystal Diffractive Sail Prototype for 2D Beam Steering and Enhanced Diffraction Efficiency (Year 3)	

Third Place

Junior

Belle Bostick Wengler	The Benjamin School	BMED
J0301	Breast Cancer Factors: Unraveling the Connections - Year 3	
Max Hall	Pine Crest School	ENMS
J0701	Enhancing Driver Decision-Making at Yellow Lights Using GPS Data	
Stella Ann Persek	Jupiter Middle School	PHYS
J1201	Load Resistance and Tip Mass Effects in Piezoelectric Energy Harvesting	

Senior

Rishi Iyer	Alexander W. Dreyfoos School of the Arts	BEHA
S0202	Analyzing Head Behavior Using Wearable Inertial Measurement Unit (IMU) Sensors to Explore Links to Neurological Conditions	
Aishwarya Deshpande	American Heritage School of Boca/Delray	CHEM
S0501	High Throughput Synthesis of Protein-Mimetic Poly (acrylamides) for Decoding Blood-Brain Barrier Permeability	
Mili Mohanty	The Benjamin School	CHEM
S0502	AI-Driven Molecular Design and Docking Validation of Ferroptosis Inhibitors for Parkinson's Disease	
Francesca Ramona Rodriguez	Palm Beach Central High School	EAEV
S0603	Dual-Function Biochar-Alginate Beads for Heavy Metal Removal and as Slow-Release Fertilizer	
Colin Christopher Quinn	Suncoast High School	ENMS
S0703	OPUS-1: An Ultracompact Satellite-Based Galactic Cosmic Ray Sensor	
Daniel James Goldberg	Alexander W. Dreyfoos School of the Arts	IMRS
S0901	AI-Assisted Design of Targeted Genetic Mutations	
Katherine Olenn	Home School	PHYS
S1202	Utilizing Pulsars as Local Gravitational Wave Detectors in Globular Clusters	

42 awards for Palm Beach Region

Pasco

Division Grand Award Winner And First Place

Junior

Arshiya Ghosh	Starkey Ranch K-8	CMBI
J0407	NeuroVeda: Discovering Neuroprotective Resilience Against Oxidative Damage by Evaluating Nature-Derived Stress-Resistant Antioxidant Mechanisms in Neural Systems	

Senior

Anvi Nemade	Wiregrass Ranch High School	CHEM
S0516	Addressing Junction Temperature Instabilities in Optoelectronic Semiconductors: A Novel Adaptive Die-Bonding Process to Optimize Thermal Diffusion	
James Jedrzejczyk	Wiregrass Ranch High School	MICR
S1116	Enhancing the Validity of Proxy-Based Non-Endemic Viral Monitoring through GIS-AHP-Assisted Ecological Niche Modeling	

First Place

Junior

Aarti Varma	Thomas E. Weightman Middle School	EAEV
J0617	Operation Neutralization: Investigating How the Conditions of Ascorbic Acid Dilution Affect Seawater's Parameters so a Chemical and Biochemical Analysis Can Be Done to Aid Desalination Efficiency	

Senior

Kundana Chowdary Kommini	Wiregrass Ranch High School	IMRS
S0925	Shadow: A Cross-Domain, Mathematically Validated, Meta-Cognitive Reasoning infrastructure for AI Models	

Fourth Place

Junior

Saanvi Amrutur	Starkey Ranch K-8	ENMS
J0713	The Flood Alarm	
Oakley Berger	Dayspring Academy Middle School	PHYS
J1210	Does a Solar Panel that Follows the Sun's Movements throughout the Sky Have a Higher Energy Output than a Stationary Solar Panel that Has Each End Facing the Start and End of the Sun's Journey throughout the Sky?	
Harper Pasquale	Dr. John Long Middle School	PHYS
J1211	Using AI to Simulate a Temperature Adaptive Elastic Suit and Intracranial Pressure Mitigator Helmet to Improve Health of Astronauts and Reverse the Affect of Zero Gravity on the Human Body	

Senior

Carson West	Wiregrass Ranch High School	ENEV
S0816	Addressing Deficiencies in Wastewater Treatment: Engineering an Innovative Dielectrophoretic Apparatus Capable of Real-time Emerging Pollutant Remediation	
Sanab Sahu	Land O'Lakes Senior High School	MACO
S1014	An Advanced Pipeline for Predictive Bioinformatics of Active HERV-K in Cancer Patients in an Ensemble Using Elastic Net and Gradient Boosted Trees	
Gabriella Ginesin	Wiregrass Ranch High School	PLNT
S1317	Reassessing Inefficient Taxane Extraction Methods: A Novel Approach to Optimize Paclitaxel Production	

Honorable Mention

Junior

Avi Amin	Dr. John Long Middle School	CMBI
J0406	How Do Phytochemical Antioxidants Effect Anthocyanin Pigment under UV-B Radiation?	
Aria Bagdanov	Charles S. Rushe Middle School	ENEV
J0813	The Fresher Fountain 3.0 - Rejuvenating Freshwater Lakes and Ponds through Aeration, Filtration, and Circulation	
Krishaan Sharma	Dr. John Long Middle School	MACO
J1005	How Does the Level of Simulated Dopamine Depletion Affect Beta-band Power in a Parkinson Basal Ganglia Model?	

Senior

Akshat Vasdev	Land O'Lakes Senior High School	ENMS
S0727	The ASL Bridge: A Smart Glove For Real-Time Translation	
Pradyun Palthur	Wesley Chapel High School	PHYS
S1216	Hydrogen vs Xenon in Ion Propulsion	

Recognition

Junior

Tanvi Barve	Dr. John Long Middle School	BMED
J0306	How Does the Nanoparticle Shape Affect the Mean Penetration Distance (mm) through a Simulated Porous Tumor Model?	
Sophia Ustymenko	Dr. John Long Middle School	MACO
J1006	Using Machine Learning to Detect Breast Cancer	

Senior

Violet Ciaccio	Wiregrass Ranch High School	EAEV
S0619	Developing an Alginate-Biopolymer to Reduce the Adverse Effects of Chemical Degradation on Aquatic Ecosystems	

Second Place

Junior

Krishna Pujara	Kirkland Ranch K-8	PLNT
J1312	BioSense AI: An Intelligent Soil-Moisture Prediction System for Next-Generation Plant Health Optimization	

Senior

Priya Anand	Wiregrass Ranch High School	BMED
S0320	Optimizing the BDNF Isoform Ratio Measurement by Implementing a Computational SEC Framework for Accurate Protein Quantification	

Third Place

Junior

Sreedhanvi Karnati	Dr. John Long Middle School	EAEV
J0616	GreenGo : An Innovative Approach to Sustainable Biopackaging by Developing and Testing Strength, Usability, and Disintegration of Biodegradable Bioplastic Compared to Petroleum-based Polypropylene Plastic to Reduce Plastic Pollution.	

Senior

Sydney Kim	Wiregrass Ranch High School	ANIM
S0114	Overcoming eDNA-Based Multispecies Occupancy Model Unreliability through a Latent False Positive Classification to Enhance Freshwater Biodiversity Monitoring	
Gavin Sawall	Wiregrass Ranch High School	ENMS
S0726	Developing an Innovative Biocompatible Piezoelectric Energy Harvester to Overcome the Longevity Limitations of Deep Biomedical Implants: Year Two	

24 awards for Pasco Region

Pinellas

Fourth Place

Senior

Anabella Camero De Abreu	Countryside High School	EAEV
S0621	Biodegradable Capsules Solving Toxicity in Saltwater Systems	
Clementine Villegas	Countryside High School	EAEV
S0621	Biodegradable Capsules Solving Toxicity in Saltwater Systems	

Honorable Mention

Senior

Srinika Bekkem	Palm Harbor University High School	BMED
S0321	Non-Invasive Brain Powered Communication Device	
Tapfuma Mayida	Palm Harbor University High School	BMED
S0321	Non-Invasive Brain Powered Communication Device	

Recognition

Senior

Kaylee Mashburn	Seminole High School, Pinellas	EAEV
S0620	The Natural Art Resin Discovery	
Heidi Connor	Countryside High School	PLNT
S1318	Biodegradable Hydrogels: A Measure of Effective Water Conservation in Agricultural Applications Year 2	

6 awards for Pinellas Region

Polk

Division Grand Award Winner And First Place

Senior

Adrian Hernandez Vega	Homeschool.	MACO
S1005	Generalizing Taylor Series through Hypergeometric and Recursive Differentiation	

Honorable Mention

Junior

Brianna Hoang	Ridgeview Global Studies Academy	EAEV
J0609	Air-Resistable Science	

Senior

Aadit Kumar	IB at Bartow High School	PHYS
S1207	How Can a Material's Refractive Index Influence the Polarization Induced Phase Difference In Single Mode Fibers (SMF), and How Its Application Can Be Used To Reduce Polarization Modal Dispersion (PMD)	

Third Place

Senior

Aksh Sachin Ladegaonkar	IB at Bartow High School	CMBI
S0408	Lyso-PCTP: A Reengineered Lipid Biosensor for Early PDAC Diagnosis and Monitoring	

Johan Bijiyos	IB at Bartow High School	IMRS
S0910	Evaluating Quantum Game Theory as a Modeling Approach for Alectinib-Fibroblast Non-Small Cell Lung Cancer Evolutionary Dynamics	

Dhiaan Dhaduk	IB at Bartow High School	IMRS
S0912	AeroCog: A Multi Agent Orchestration with Large Language Models that Enables UAVs to Interpret Natural-Language Instructions and Autonomously Decompose Tasks into Context-Sensitive Action Sequences	

Shlok Patel	IB at Bartow High School	IMRS
S0912	AeroCog: A Multi Agent Orchestration with Large Language Models that Enables UAVs to Interpret Natural-Language Instructions and Autonomously Decompose Tasks into Context-Sensitive Action Sequences	

7 awards for Polk Region

Sarasota

First Place

Senior

Aadi Bhensdadia S0738	Pine View High School NovaCardia: A Novel, Optimized Total Artificial Heart for Destination Therapy	ENMS
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Fourth Place

Senior

Amaury Castillo-Acevedo S0217	Sarasota High School Creating an AI-Driven Emotion Recognition and Intermediary Mental Health Support System	BEHA
Sarah Gutierrez S0427	Sarasota High School Effect of Antioxidant Activity on Viability of Cells Treated with SV-LAOs and its Application in Biofilm Inhibition	CMBI
Michael Stahl S0427	Sarasota High School Effect of Antioxidant Activity on Viability of Cells Treated with SV-LAOs and its Application in Biofilm Inhibition	CMBI
Jeremy Hu S0522	Sarasota High School The Enhanced Permeability of PEGylated Antibodies into Artificial Respiratory Mucus Tested with a Novel Affordable In Vitro Mucus Permeability Test	CHEM
Samuel Schwartz S0627	Sarasota High School The Effect of Pasture Raised Chickens on the Regrowth Rates of Bermuda Grass with Rotational Grazed Cattle	EAEV
Rohan Dash S1020	Pine View High School A Transformer-Based Approach to Controllable, Multi-Objective Neural Architecture Search	MACO

Honorable Mention

Senior

Tripp Isaacson S0821	Sarasota High School The Use of Florida's Invasive Tung Tree as a Biolubricant for Rotary Engines	ENEV
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Recognition

Senior

Claire Toale S0120	Sarasota High School The Effect of Varying Iron Availability on <i>Daphnia magna</i> Responses Related to Oxygen Transport and Survival	ANIM
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Second Place

Senior

Yatharth Kakkad S0328	Pine View High School Identification of a Novel TBX2-Dependent Mechanism Linking Pericyte Dynamics to Abnormal Vasculature in Lung Adenocarcinoma	BMED
Brenin Linander S0937	Sarasota High School EvoDetect: Developing a Meta-Evolutionary Network for Pan-Cancer, TP53 Mutation Status Detection in Histopathology.	IMRS

Third Place

Senior

Jack Greenwell S1123	Sarasota High School Investigating the Synergistic Inhibitory Effects of <i>Escherichia coli</i> bacteriophage T4 and Sulfamethoxazole-Trimethoprim on <i>Escherichia coli</i> K-12 Bacteria?	MICR
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12 awards for Sarasota Region

Seminole

Division Grand Award Winner And First Place

Senior

Moitri Santra	Oviedo High School	PLNT
S1320	Development of an Industrially Viable Oxytetracycline Nano-Carrier and Microneedle-Based Detection System (OXYCHECK2) for Citrus and Stone Fruit Disease Management: Year 4	

First Place

Junior

Maanya Chauhan	Sanford Middle School	PLNT
J1327	Nature Caretaker: Using AI to Help with Early Plant Disease Detection and Identification	

Fourth Place

Junior

Yuthika Mahajan	Sanford Middle School	IMRS
J0912	AI Hall Monitor: Can a Convolutional Neural Network system Recognize Hazards at School?	
Jamie Jiang	Jackson Heights Middle School	MICR
J1109	Developing Chitinase to Break Down Fungal Structures	
Rivaan Teegavarapu	Sanford Middle School	PHYS
J1214	Computational Experimentation and Data Analysis of Supersonic Aircraft Advancements to Evaluate High-Mach Aerodynamics, Sonic Boom Reduction, and Efficiency Optimization through Multivariable Performance Modeling Across Generations.	
Yuvika Samanta	Jackson Heights Middle School	PLNT
J1316	Antibacterial Activity of Less-Studied Plant Extracts and Their Concentration Dependent Effects	

Senior

Adhip Maitra	Oviedo High School	CHEM
S0519	The Use of Substrate Enhanced Raman Spectroscopy (SERS) to Noninvasively Detect Thyroxine Levels in Blood and Tissue from Micro Vessels To Determine Thyroid Function	
Allison Alfert	Oviedo High School	EAEV
S0623	Revealing an Invader: Using Environmental DNA to Detect the Invasive African Jewelfish (<i>Hemichromis letourneuxi</i>) in Florida Waterways	
Yug Umasudhan	Seminole High School	ENEV
S0818	Modular Sensor Integrated AI Anomaly Detection Robotic ROV for Submerged Environmental Analysis	
Pranoy Roy	Paul J. Hagerty High School	IMRS
S0930	A Low-Cost Multi-Sensor Rover for Soil Health Monitoring and Optimization	
Aiden Xu	Winter Springs High School	IMRS
S0931	Detecting and Classifying Fully Hidden Objects in High-Noise Images Using Deep Learning-based Vision Models, Boosting Accuracy with New pLIA and SFI Methods	

Honorable Mention

Junior

Samhith Sunkaranam	Sanford Middle School	IMRS
J0913	AI Measures Litter: How does background clutter affect the AI's litter count on a fixed path before and after a cleanup?	

Senior

John Behanan	Oviedo High School	CHEM
S0518	Influence of Water Salinity and Light Intensity on Total Phenolic Content and Antioxidant Activity in Basil (<i>Ocimum basilicum L.</i>) Leaves	

Recognition

Senior

Shreya Suresh	Seminole High School	PHYS
S1219	The Future of Transportation: Enhancing the Cost-effectiveness and Safety of MagLev Systems	

Second Place

Junior

Yifan (Evelyn) Xia	Sanford Middle School	CHEM
J0517	Hollow Gold-Nickel Nanoparticles: A Cheaper and More Powerful Alternative to Conventional Solid Gold Nanoparticles	
Anika Banerjee	Jackson Heights Middle School	ENMS
J0719	Hooked on Strength: Which Crochet Stitch Holds up Best?	
Thanishka Senthilkumar	Jackson Heights Middle School	ENEV
J0819	Eco-Friendly Froth Flotation: Cleaning Microplastics with Natural Surfactants	

Senior

Deepak Marpu	Oviedo High School	ANIM
S0117	A Small Device for a Small Creature: Developing a Simple Device to Efficiently & Effectively Collect Red Imported Fire Ant (RIFA) Venom for Extraction	
Angela Calvo-Chumbimuni	Oviedo High School	CMBI
S0424	Simultaneous Electrochemical Detection of Serotonin and MicroRNAs in Biological Samples to Enhance Mental Disorder Diagnosis: Year 2	
Sanjit Prakash	Seminole High School	PHYS
S1218	Adaptive Measurement Locality: Accelerating Quantum Simulation by Minimizing Measurement Overhead in VQE	

Third Place

Junior

Guha Krishna	Jackson Heights Middle School	BEHA
J0208	Digital Impulse - Behavioral Analysis of Cyber Hygiene in the Age of AI Surveillance	
Myaraa Gupta	Sanford Middle School	BMED
J0311	Don't Shake Under Pressure: A Study of Hand Stability	
Anika Jain	Sanford Middle School	BMED
J0311	Don't Shake Under Pressure: A Study of Hand Stability	
Dhruv Nunna	Sanford Middle School	EAEV
J0620	Predicting Hurricane Formation Using Machine Learning: A Data-Driven Model Trained on NOAA Historical Storm Records	
Naboshree Santra	Jackson Heights Middle School	ENEV
J0818	Combating Drought through Environmentally-Friendly Materials Engineering - Year 1	
Ishaan Adhikari	Sanford Middle School	MACO
J1008	How Can Mathematical Modeling Be Used to Reduce Emergency Response Times?	

Senior

Nishchay Gupta	Seminole High School	BMED
S0324	SENTINEL (Simultaneous Electrochemical Neurotransmitter and Toxic-metal Interaction Evaluation Lab-platform) A Novel Dual Carbon Microelectrode Biosensor Enabling Real-Time Detection of Serotonin and Cadmium to Analyze Parkinson's and Alzheimer's Disease	

Kathir Vasanth	Seminole High School	BMED
S0324	SENTINEL (Simultaneous Electrochemical Neurotransmitter and Toxic-metal Interaction Evaluation Lab-platform) A Novel Dual Carbon Microelectrode Biosensor Enabling Real-Time Detection of Serotonin and Cadmium to Analyze Parkinson's and Alzheimer's Disease	
Ankan Das	Oviedo High School	ENMS
S0731	A Fully Autonomous Tensegrity-based Compliant Mobile Robot using Shape Memory Alloy Actuators for Rapid Assembly and Deployment in Planetary Explorations, Search- and-Rescue and Surveillance Missions	
Sofie An	Oviedo High School	MACO
S1015	Cointegration-Driven Pairs Trading as an Empirical Test for Efficient Market Hypothesis	

30 awards for Seminole Region

South Florida

Fourth Place

Junior

Tanishqa Unwalla J0405	George Washington Carver Middle School Effect of pH on Activity of Catalase Enzyme	CMBI
Thai Durham J0811	MAST Academy Mighty Mulch	ENEV

Senior

Daniel Li S0618	Ransom Everglades School Neural Network Reconstruction of Tropical Cyclone Wind Fields for Data Assimilation	EAEV
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Honorable Mention

Junior

Katarina Schuerer J0305	George Washington Carver Middle School Teaching AI Chemistry from Names	BMED
Eduardo Gonzalez J0615	Paul W. Bell Middle School Evaluating the Effectiveness of Leaf Density as a Natural Filtration Method of Microplastics	EAEV
Abigail Gilbert J0812	iPrep Academy North An AI-Powered Device for Detecting Citrus Weevils and Deploying Cinnamon as a Natural Repellent	ENEV
Salet Fuentes J1311	Redland Middle School The Effect of Pruning on the Growth of Newly Transplanted <i>Podocarpus macrophyllus</i>	PLNT
Charlie Garcia J1311	Redland Middle School The Effect of Pruning on the Growth of Newly Transplanted <i>Podocarpus macrophyllus</i>	PLNT
Dayra Lopez J1311	Redland Middle School The Effect of Pruning on the Growth of Newly Transplanted <i>Podocarpus macrophyllus</i>	PLNT

Senior

Elena Beck S0113	Coral Reef Senior High School Maxent Modeling and Climatic Determinants of Invasive Herpetofauna Spread in Florida	ANIM
Ruoshui Lu S0319	Miami Palmetto Senior High School GAMEX: AML Subtype Classification with Generative AI and Multiple Instance Learning	BMED
Raiya Cohen S1012	iPrep Academy North Biophysical Computational Modeling of Neuronal Network Activity in Control and SHANK2-Linked Autism Brain Organoids	MACO

Recognition

Senior

Melissa Xiaowen Moy S0419	MAST Academy Development and Use of Artificial Membranes to Mimic B-cell Selection and Investigate HGAL	CMBI
Felipe Marques S0814	iPrep Academy North Non-Visual Snake Detection: AI Recognition of Python Infrared Profiles	ENEV
Lucas Muniz-Suarez S0814	iPrep Academy North Non-Visual Snake Detection: AI Recognition of Python Infrared Profiles	ENEV
Jack O'Malley S0814	iPrep Academy North Non-Visual Snake Detection: AI Recognition of Python Infrared Profiles	ENEV

Ruby Cohen	iPrep Academy North	MACO
S1013	Computational Analysis of α -Synuclein Protein Misfolding in Parkinson's Disease and Lewy Body Dementia Using AlphaFold-Predicted Structures and RMSD-Based Metrics	

Second Place

Junior

Elizabeth Afkhami Searcy	Southwood Middle School	ANIM
J0106	Some Like it Hot: Miami's Urban Heat Island Aids the Spread of its Most Prolific Non-Native Lizards	
Luca Durham	MAST Academy	ENEV
J0810	Concrete Reinvented	

Third Place

Senior

Alejandra Perry	Miami Coral Park Senior High School	CMBI
S0420	Modeling Neurodegenerative Pathways: Behavioral Impact of Gamma-Aminobutyric Acid (GABA) on Amyloid-Beta-Expressing <i>C. Elegans</i>	

20 awards for South Florida Region

St. Johns

Division Grand Award Winner And First Place

Junior

Maahi Ailawadhi	Alice B. Landrum Middle School	BEHA
J0203	Brainwaves and Heartbeats: Decoding Mental Effort	

Fourth Place

Senior

Dhaani Ailawadhi	Ponte Vedra High School	ENMS
S0713	PRESSURE: Preventative Response Electronic System for Skin Ulcer Risk Evaluation	

Sophie Duan	Allen D. Nease High School	PHYS
S1208	Discovery of Transiting Exoplanet Candidates Orbiting White Dwarfs Using Automated Transient Analysis of ZTF Light Curves	

Honorable Mention

Senior

Nat Bagnall	Ponte Vedra High School	CMBI
S0409	Mechanisms and Synergistic Effects of GIPC1 and Pan-Kras Inhibitor Combination Therapy for Pancreatic Ductal Adenocarcinoma	

Anya Dorairaj	Ponte Vedra High School	CMBI
S0410	Uncovering Novel VEGF-B Regulated Molecular Mechanisms in Myocardial Infarction	

Vailoces Miller	Ponte Vedra High School	CMBI
S0411	Targeted Dual-Drug Loaded Polymer Nanocarrier Approach to Overcome Platinum Resistance in BRCA 1 and BRCA 2 Mutated Ovarian Cancer	

Recognition

Senior

John Chau	Ponte Vedra High School	ANIM
S0108	Transgenerational Effects of Caffeine on <i>C elegans</i> on Gene Expression and Longevity	

Minh Nguyen	Ponte Vedra High School	ANIM
S0108	Transgenerational Effects of Caffeine on <i>C elegans</i> on Gene Expression and Longevity	

Second Place

Senior

Gurhans Dhillon	Creekside High School	IMRS
S0911	Quantum-Inspired Machine Learning Classification of Cognitive States Using Public EEG Data	

Sachith Hulikere	Creekside High School	IMRS
S0911	Quantum-Inspired Machine Learning Classification of Cognitive States Using Public EEG Data	

Sanvi Tummala	Creekside High School	IMRS
S0911	Quantum-Inspired Machine Learning Classification of Cognitive States Using Public EEG Data	

Third Place

Junior

Nicolas Jimenez-Otalora	Pine Island Academy	IMRS
J0904	SLEEVi - Spatial and Light Enhanced Environmental Vibration Interface	

12 awards for St. Johns Region

St. Lucie

Recognition Senior

William Li	Lincoln Park Academy	ENMS
S0722	Manipulating Water Droplets with Magnetic Nanoparticles: The Science of Ferro-Marbles	

1 awards for St. Lucie Region

Sumter

First Place

Senior

Kara Lynn Loudon	Wildwood Middle High School	EAEV
S0613	Establishing a Possible Plant Healer that Will self-heal Biodegradable Polymer Corresponding with Longer Lasting Eco-friendly Food Packaging	

Fourth Place

Junior

Landry Dale Watson	South Sumter Middle School	PLNT
J1308	How Does Soil Compaction Affect Plant Growth?	

Senior

Jordan Geovani Miranda Juarez	Wildwood Middle High School	ANIM
S0110	Optimizing Anaerobic Digestion by Utilizing a Fiber Type Composition to Improve Methane Production and Viability? Year 2	
Roberto Carlos Carmona-rivero	The Villages Charter High School	ENMS
S0719	Pen Pal: A Novel AI-Enabled Multimodal Smartpen for Parkinson's Disease Tremor Detection, Kinematic Tracking, Automatic Handwriting Transcription, and Training Protocol Implementation	
Jonah Terry	The Villages Charter High School	ENMS
S0719	Pen Pal: A Novel AI-Enabled Multimodal Smartpen for Parkinson's Disease Tremor Detection, Kinematic Tracking, Automatic Handwriting Transcription, and Training Protocol Implementation	

Honorable Mention

Junior

Tinsley Bisignano	Wildwood Middle High School	CHEM
J0511	Textiles Dyes vs Natural Solutions	
Raelyn Janelle Lipham	Wildwood Middle High School	CHEM
J0511	Textiles Dyes vs Natural Solutions	

Senior

Sophia Marie Stephens	Wildwood Middle High School	BMED
S0314	Strengthening Maternal Health Screening through Proteinuria Test	
Lily Belle Kosa	Wildwood Middle High School	ENMS
S0718	Designing Tubercle-Enhanced Wing Edges to Reduce Air Turbulence Sensitivity	
Jaycee Woody	Wildwood Middle High School	ENMS
S0718	Designing Tubercle-Enhanced Wing Edges to Reduce Air Turbulence Sensitivity	
Brady Wayne Kline	The Villages Charter High School	PHYS
S1211	Analyzing the Impact of Various 3D Printed Infill Patterns on the Tensile Strength of a 3D Print Relative to its Weight and Orientation	

Recognition

Junior

Cheryl Janice Wise	Wildwood Middle High School	CMBI
J0402	Plant vs Animal Enzymes: Evaluating Papain as an Eco-Friendly Alternative to Rennet in Protien	
Josey Pauline Strickland	South Sumter Middle School	IMRS
J0906	Can Artificial Intelligence Accurately Identify Plants from Aerial Images?	

Second Place

Senior

Abigail Denise Lacayo	Wildwood Middle High School	CHEM
S0513	Development of Pancreatic Enzyme Replacement Therapy (PERT): A Natural Enteric Delivery System to Protect Digestive Enzymes in Gastric Fluid to Preserve Acitivity in the Duodenum	
Kylie Shannon Skaggs	Wildwood Middle High School	EAEV
S0612	A Comparative Analysis of Coral Bleaching Predictive Models and Construction of a Multivariable Reef Bleaching Stress Score Utilizing Oceanic Conditions from Global Coral Reef Systems	

**Third Place
Senior**

Gerardo Juan Pablo Cardoso	Wildwood Middle High School	PHYS
S1210	Biomimetic Rotor Optimization for Passive Autorotation: Development of an Innovative Rotor Configuration for High-Precision, Controlled Descents during Aerial Delivery and Airdrop Operations	

16 awards for Sumter Region

Suwannee Valley

Fourth Place Junior

Tucker Ayers J1115	Fort White High School Does Pretreatment of Polylactic Acid Thermoplastic Improve its Degradation Rate by <i>Bacillus subtilis</i> ?	MICR
William Porter J1115	Fort White High School Does Pretreatment of Polylactic Acid Thermoplastic Improve its Degradation Rate by <i>Bacillus subtilis</i> ?	MICR
Elena Chesnut J1326	Fort White High School What Ratio of Aminoplast Resin to Potting Mix Results in Optimal Lettuce Transplant Production?	PLNT

3 awards for Suwannee Valley Region

Thomas Alva Edison

Second Place

Junior

Alyssa Liu J0516	Cypress Lake Middle School Green Hydrogen-Using Plasma to Analyze Seawater Electrolysis	CHEM
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Third Place

Junior

Bella Dacanay J0614	Charlotte Preparatory School Assesing the Influence of Sediment Characteristics on Seagrass Distribution in the Charlotte Harbor	EAEV
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Senior

Mason Huffman S0210	Cape Coral High School Strengthening Middle School Mathematics through an AMC 8 Workshop: A Study of Student Learning Gains	BEHA
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Kurukulasuriya Nishini Fernando S1316	Dunbar High School Investigating the Apoptotic Mechanisms Activated in Glioblastoma Cells by Pre-Screened Cytotoxic Plants: Innovations for Novel Drug Discovery	PLNT
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4 awards for Thomas Alva Edison Region

Tomoka

First Place

Junior

Evan Aldridge	Burns Science and Technology Charter School	ENEV
J0806	Evaluating the Effectiveness of Banana Peels as a Bioplastic Alternative	

Fourth Place

Senior

Evie White	Spruce Creek High School	IMRS
S0907	Breeding for the Future: A Software Simulation Approach to Crossbreeding Corals for Reef Resilience	

Honorable Mention

Junior

Mia Manolidis	Creekside Middle School	IMRS
J0903	Sink or Spin? A Deep Dive into how ROV Propeller Angles Impact Speed and Control	

Second Place

Junior

Dante Cáceres	iBuild Academy	PLNT
J1304	Forest Shield A Fire Resistance Study of 4 Natural Materials.	

Third Place

Junior

Kaysha Patel	David C. Hinson Middle School	CHEM
J0506	Wax on, Waste Gone: Using Saturated Hydrocarbon Wax Coating to Extend the Shelf Life of a Biodegradable Hydrogel with Embedded Starch Particles as Sustainable Food Packaging Solution	

Jayu Hilley	Silver Sands Middle School	CHEM
J0507	Beyond Faraday: Analyzing Mass Loss and Gain in Copper Electroplating - A Comparison of Real-World Data and Theoretical Predictions	

Senior

Salsabeel Eldeeb	Spruce Creek High School	ENEV
S0804	Year 2: Integrating Photocatalytic Degradation into Electrostatic Capture for Tire Wear Microplastic Mitigation and Predictive Analysis through Machine Learning	

Lilly Downs	Deltona High School	ENEV
S0805	The Future of Seaweed: Can Seaweed Cellulose Fibers Work as Green Composites for Structural and Packaging Materials?	

Reagan Dispennette	Spruce Creek High School	PHYS
S1206	Thermal and Morphological Analysis of Lunar Lava Flows Using Machine Learning and Stefan-Boltzmann Modeling	

9 awards for Tomoka Region

West Panhandle

Fourth Place

Junior

Aaron Fridge	Brown Barge Middle School	MACO
J1011	The Trouble with Traffic: Can Smart Lights Reduce Your Commute?	

Recognition

Junior

Mia Hendrickson	Holley Navarre Middle School	ANIM
J0111	Sea Creatures vs Stimulants - How Do Different Stimulants Affect the Heart Rate of <i>Daphnia magna</i> ?	
Jacqueline Miller	Holley Navarre Middle School	BMED
J0312	Noise, Notes, or Nothing? What Should You Listen to While Studying to Get the Most Accuracy?	
Lucas Crisia	Holley Navarre Middle School	CMBI
J0408	Udderly Strong: Comparing the Strength of Milk Plastics	
Benjamin Minot	Holley Navarre Middle School	ENMS
J0720	A Thousand Miles from Nowhere: Making Wind Turbines Even More Accessible than Ever Before	

5 awards for West Panhandle Region