

Congratulations to the 2020 Fair Award Winners!

Category Awards

Behavioral and Social Sciences

4th Place

Jayanshi Pathak - The study of the effects of hypoglycemia on different ages and genders

3rd Place

Julia Werner - The Effect of Reading Literary Fiction on Theory of Mind in Children Versus Adults

2nd Place

Kassidy Haynes - Group Membership and Voice Recognition

1st Place

Sonia Nagpal - The Effect Of Optical Illusions on Working Memory

Biochemistry

4th Place

Khushi Pola - The effect of persulfates on the prevalence of bacteria on removable retainers

3rd Place

Sushruth Muthuluru - An analysis of Polysialic Acid and its Contributions to Epithelial Non-small Cell Lung Cancer and the NK cell and Killer T-cell Response

2nd Place

Ikshitha Tippa - The Effect of Phospholipid Concentration on the Rate of Water Evaporation in Tears

1st Place

Rohin Dutt - A Comparative Analysis of Genes on the Dosage of Warfarin

Biomedical and Health Sciences

4th Place

Spandana Pavuluri - The Effect of TiO₂ Under Light Exposure on Birth Control Pills in Drug-Polluted Water

3rd Place

Shaun Liu - Effect of Age-Related Inflammation on Different Subtypes of Ischemic Strokes

2nd Place

Ibrahim Jouja - The correlation of retinal reflectivity with ages and diabetic retinopathy

1st Place

Emma Huang - Nrf2 Pathway is Critical to Prevent Right Heart Failure by Sulforaphane in a Pulmonary Arterial Hypertension Mouse Model

Biomedical Engineering

4th Place

Arthi Sundar - Designing a smart Chromium supplement dispensary for Type 2 Diabetics

3rd Place

Adam Lapinski - A biomechanical device to reduce ambulatory injuries from peripheral Neuropathy

2nd Place

Shreyas Kar - Early Stage Detection of Parkinson's Disease: Engineering Machine Learning Algorithms using Logistic Regression, an Artificial Neural Network and a Support Vector Machine

1st Place

Varun Chandrashekhar - Automatic Portable Phoropter and Autofocus Glasses using Integrated Variable Focal Length Liquid Lens

Cellular and Molecular Biology

4th Place

Gitanjali Jaikumar - Circadian Metabolism in Macrophages

3rd Place

Mihir Barve - Effects of chronic alcohol consumption on gut-liver-brain axis: development of neuroinflammation and injury

2nd Place

Luke Mo - How Does Ambient Particulate Matter Induce Lung Cancer? miR-21 is Involved in Malignant Transformation of Human Bronchial Epithelial Cells by Particulate Matter Exposure

1st Place

Vasa Vemuri - The Effect of a Combination Therapy of Annona muricata leaf extract and Cisplatin on Pancreatic Cancer cells

Chemistry

3rd Place

Christopher Brown - The Effect of Sodium Fluorosilicate Concentration on the Absorption of Lead in Water

2nd Place

Gia Mendiratta - Selenium Speciation

1st Place

Shreeya Julakanti - Electrospun Nanofibers for Air Filtration

Computational Biology and Bioinformatics

3rd Place

Arjun Kumar - Techniques to correlate multi-variate biological cellular data to patient outcomes

2nd Place

Dhiraj Kanneganti - The Use of MRIs to successfully diagnose Autism

1st Place

Sarvesh Babu, Pranav Kanmadikar - Development of a Holistic Real-Time Computer-Aided Neurodiagnostic Model

Earth and Environmental Science

4th Place

Brian Schwartz - What is the Effect of Ladder Fuel Treatments on the Burn Area of Forest Fires in a Semi-Arid High Elevation Climate?

3rd Place

Phoebe Boylan - The Effects of Noise Barriers on Near-Road Air Quality

2nd Place

Gokul Achaththekoot - The Effect of Brand and Exposure of Disinfectant Wipes on the Growth of Mealworms

1st Place

Arsonlove Abney - Testing the Effect of Salt Alternatives on Conductivity Using Soil Columns

Embedded Systems**4th Place**

Camella Korner - Effect of Humidity on Aircraft Takeoff Performance

3rd Place

Sai Siddharth Jeyaprakash Reddy - Real-Time Temperature Monitoring System for Cold Chain Logistics using IoT and Arduino

2nd Place

Mayukha Bhamidipati - Preventing Ultraviolet Radiation Through Windows Using an IoT Sensor

1st Place

Nimish Mathur, Demos Negash - Assessing the Structural Strength of Concrete Members Using a Low-Cost, Non-Invasive Monitoring System

Energy: Sustainable Materials and Design**4th Place**

Mehek Gupta - The Effect of Modified Titanium Dioxide Electrodes on Photo-Catalytic Activity

3rd Place

Sahil Krishnani - A New Approach at Maximizing the Efficiency of Current Flow of An Energy Storage Device

2nd Place

Shirlin Kingston - Electrospinning Organosolv Lignin into Nanofibers:

1st Place

Viyathma Hapuarachchi - The Optimal Annealing Temperatures to Create Carbon Nanoshells from Metal Precursor Treatments for the Use of Electrodes in Supercapacitors

Engineering Mechanics 4th Place

Rachael Kennedy - The effect of Bridge Column Materials on Bridge Scouring

3rd Place

Sean Korner - The Effect of Paddle Design on Drag

2nd Place

Cameron Watson and Ashrith Garimella - The effects of electro adhesion on surveillance systems

1st Place

Murari Srinivasan - Construction of a 6-Axis Accelerometer Based Wave Analysis Buoy With Wave Function Prediction

Environmental Engineering**3rd Place**

Rishi Vinukonda - Solar Water Heating

2nd Place

Elise Avery - The Effect of Recycled Plastic on the Insulation of Bricks

1st Place

Aditi Talegaonkar - Energy Efficient Blinds: Using Arduino to Create a Temperature-Controlled Feedback Loop That Dictates the Movement of Infrared Blocking Blinds

Materials Science 4th Place

Shriya Kutumbaka - The Effect of Different Types of Materials on Protection from UV Rays

3rd Place

Swetha Senthilnathan - Finding the best foam for sound absorption

2nd Place

Elizabeth Gallagher - Exploring the Environmental Impacts of Converting Plastics to Porous Carbon

1st Place

Sowmyan Viswanathan - Battery Electrolytes from waste Polyethylene terephthalic acid

Mathematics

1st Place

Shubh Gupta - A Reconceptualization of the Multiple Traveling Salesman Problem: Engineering an Approximate Algorithm for Cost

Microbiology 4th Place

Sarah Kwasny - The Effect on Antidepressants on Bacteria in the Gut Microbiome

3rd Place

Shikha Surupa - The Effect of Various Spices on E. coli Growth

2nd Place

Anne Liang - Grape Polyphenols Inhibit Dental Bacteria and Pro-Inflammatory Signaling

1st Place

Elaina Render - Exploring Probiotic Food Products as a Reservoir for Antimicrobial Resistance

Physics and Astronomy

1st Place

James Gonzalez - Growth and Analysis of Nano Clusters: Self-Organized Pattern Formation

Plant Sciences

2nd Place

Jash Pola - The Effect of Electromagnetic Radiation on Vigna Radiata

1st Place

Warren Van Nort - The Effect of a Nitrate-Potassium Citrate Fertilizer on Plant Growth Measures

Robotics and Intelligent Machines

2nd Place

Rohan Ghiya - predicting different types of diabetes using machine learning

1st Place

Santhosh Chendil - Risk VS Reward Mechanics when Q-Learning Learns to Play the Game Snake

Systems Software

2nd Place

Anna Morgan - Engineering an Application to Assess Vulnerability to Heat Mortality Shridha

Rajeswar - Analysis of Water Quality With the Help of Machine Learning

1st Place

Elshaddai Melaku - Developing an Artificial Feedforward Neural Network of Supervised Machine Learning for the Assessment and Classification of Prediabetes and Type 2 Diabetes Mellitus for the American Population

Translational Medical Science

3rd Place

Sreevatsa Vemuri - Glycovariants of Avaren-Fc, a Novel Immunotherapeutic Drug, and their Effects on ADCC Activity

2nd Place

Aysha Khan - The Effect of Quercetin, a Plant Polyphenol, on Bladder Cancer

1st Place

Robi Bolli - Therapeutic potency of physioxia cultured cardiac mesenchymal cells for myocardial repair in mice with a 30-dayold myocardial infarction

Special Awards

Regeneron ISEF Finalists:

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