TOP 300 MASTERS 2017

About Broadcom MASTERS

Broadcom MASTERS® (Math, Applied Science, Technology and Engineering for Rising Stars), a program of Society for Science & the Public, is the premier middle school science and engineering fair competition.

Society-affiliated science fairs around the country nominate the top 10% of sixth, seventh and eighth grade projects to enter this prestigious competition. After submitting the online application, the top 300 MASTERS are selected. The top 300 MASTERS are honored for their work with a prize package that includes an award ribbon, semifinalist certificate of accomplishment, Broadcom MASTERS backpack, a Broadcom MASTERS decal, a one-year family digital subscription to *Science News* magazine, an Inventor's Notebook, courtesy of The Lemelson Foundation, and a one year subscription to Wolfram Desktop, courtesy of Wolfram Research. In recognition of the role that teachers play in the success of their students, each top 300 MASTERS' designated teacher also will receive a Broadcom MASTERS tote bag and a one year subscription to *Science News* magazine, courtesy of KPMG.

From the top 300 MASTERS group, 30 finalists are selected and will present their research projects and compete in hands-on team STEM challenges to demonstrate their skills in critical thinking, collaboration, communication and creativity at the Broadcom MASTERS finals. Top awards include a grand prize of $25,000, trips to STEM summer camps and more.

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- Samueli Foundation
- Robert Wood Johnson Foundation
- The Lemelson Foundation
- Allergan
- Jeff Glassman, CEO
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- KPMG
- Wolfram Research
- Computer History Museum
- *Science News for Students*
- Affiliated Regional and
  State Science & Engineering Fairs
- Parents, teachers and mentors of the 2,499
  Broadcom MASTERS entrants

2017 Top 300 MASTERS

Students are listed in order by home state, fair, and name of school based on information provided by each student in their entry. Students listed under the state fair may also have qualified through their regional fair. Students conducting team projects were eligible, but each student individually entered and was judged based on the submitted written entry. The grade listed for each student is from Spring 2017. ***Top 300 MASTERS nominated by regional and state fair.**

Alabama

USAL03

Covenant Christian Academy
Ella Poston (8th Grade)*
Owens Cross Roads, Alabama
Chlorantraniliprole Effect on Corn Seedling Emergence

Rainbow Elementary
Ashwin Prabhakar (6th Grade)
Madison, Alabama
Arduino and Thermoplastic Polymer Bas Fluidic DNA Sensor

USAL50

Clark Shaw Magnet School
Hannah Patterson (8th Grade)
Mobile, Alabama
Algebraic Hot Spots

Arizona

USAZ03

Anthem K-8 School
Leo Job (8th Grade)
Florence, Arizona
Focusing a WIFI Signal using a Parabolic Reflector

Crane Middle School
Quinn Nemeth (7th Grade)
Yuma, Arizona
Rogue Wind: A Science Wars Story

Saint Gregory College Preparatory School
Maya Baker (8th Grade)
Tucson, Arizona
The Correlation Between Sabino Canyon Cottonwood Tree Size (Populus fremontii) and Hydraulic Gradient of the Water Table

USAZ50

Accelerated Middle School at Basha High School
Nikita Bharati (8th Grade)
Chandler, Arizona
The Antioxidizing, Antimicrobial, and Anitmutagenic Effects of Tree Bark

BASIS Scottsdale
Arjun Moorthy (8th Grade)
Scottsdale, Arizona
Can Technology Be Used to Modify Behavior and Reduce Rates of Melanoma

Arkansas

USAR03

The New School
Pooja Kalyan (8th Grade)
Fayetteville, Arkansas
The Sleep Solution

USAR05

Forest Heights STEM Academy
Surabhee Eswaran (8th Grade)
Little Rock, Arkansas
Going Bananas with Recycling

LISA Academy-West
Akshay Padala (7th Grade)
Little Rock, Arkansas
Making Combat Vehicles Safer from Blasts: Thermal Conductivity of Metal Foams

California

USCA01

Canyon View Elementary School
Alyssa Tang (6th Grade)
Irvine, California
Testing the Effectiveness of Mycofoam as an Eco-Friendly Packing Material

Fairmont Private School-Historic Anaheim Campus
Jian Park (8th Grade)
Irvine, California
Elliptical Wingtip Extensions: A Novel Way to Improve Airplane Performance

Fairmont Private Schools
Nadia Ansari (7th Grade)
Tustin, California
Passive Xylem Filter for Bacterial Elimination from Wastewater

Kraemer Middle School
Tejal Patel (8th Grade)
Brea, California
Cellular Factors Involved in the Progression of DCIS to Invasive Breast Cancer

Orchard Hills Middle School
LeAnn Tai (6th Grade)
Irvine, California
Natural Alternatives for Preservation Without Refrigeration

Rancho San Joaquin Middle School
Daniel Feng (8th Grade)*
Irvine, California
Are Southern Californian Waters in Danger of Algae Blooms?

Rancho San Joaquin Middle School
Emily Hsi (7th Grade)*
Irvine, California
How to Remove Ink Stains

Rancho San Joaquin Middle School
Pranav Moudgalya (7th Grade)
Irvine, California
Energy of the Future: Using a Microbial Fuel Cell to Harness Bacterial Power Production

Saint Margaret's Episcopal School
Espen Garner (8th Grade)
Laguna Hills, California
Buzz Trap: Designing an Unmanned Aerial Vehicle to Trap Mosquitoes for Scientific Testing

Samuel E. Talbert Middle School
Ian Weiss (7th Grade)
Fountain Valley, California
Our Roads, a Large Thermoelectric Power Generator

The Pegasus School
Spencer Green (7th Grade)
Huntington Beach, California
The Sonification of Accelerometers for the Training of Elite Gymnasts

Vista Verde School
Andrei Mandelshtam (8th Grade)*
Irvine, California
Limiting Behavior of the Iterations of Tangent

USCA02

American Martyrs School
Katie Champion (7th Grade)
Redondo Beach, California
Creating Food Options for Those Allergic to Heavy Metals

Beverly Vista Middle School
Leia Gluckman (7th Grade)
Beverly Hills, California
A Clean Conscience: Formulating an All-Purpose Hair, Dental and Body Cleansing Powder for the Homeless Population

Dana Middle School
Stanley Liu (8th Grade)
Arcadia, California
Development of Advanced Microfluidic Device for CTC Capture from Blood Samples

Incarnation Parish School
Felimon Legaspi (7th Grade)
Glendale, California
To Bridge or Not to Bridge? Truss, Arch, Beam or Suspension? Strength, Structural Efficiency and Seismic Safety of Bridges

Lennox Middle School
Sophya Mirza (8th Grade)
Inglewood, California
Decoding the Artificial Intelligence Behind Tactile and Photocell Navigation

Oak Avenue Intermediate School
Maximillian Bhatti (8th Grade)
Temple City, California
An Evaluation of the Flight Characteristics of Ornithopter-Type Aircraft Systems

Portola Highly Gifted Magnet Middle School
Anson Noland (8th Grade)
Claremont, California
Computational Local Alignment Search of Neurodegenerative Disease-Related Proteins

Sierra Madre Middle School
Holly Carter (6th Grade)
Altadena, California
How do the Sound Properties of a Glass Goblet depend on the Type and Amount of Liquid?

USCA03

Carden School of Fresno
Marrin Nerenberg (8th Grade)*
Fresno, California
Active vs. Passive: Which Sun-Tracking Solar Panel System Is More Efficient?

USCA04

California Connections Academy at Ripon
Yahvin Gali (7th Grade)
Tracy, California
Watts from Waves–Low Impact, Nature Inspired, Hydrokinetic Energy Harvester

Sutter Middle School–Sacramento
Zuriel Erikson Joven (8th Grade)
West Sacramento, California
Improving the EyeWriter for Patients with Locked-in Syndrome

USCA05

Coastal Academy
Raj Pabari (7th Grade)
Carlsbad, California
AquaGuard–A Smart Water Sensor and Electronic Alert System (Internet of Things Device)

Islamic School of San Diego
Yusuf Amanullah (8th Grade)
San Diego, California
A Novel Shower-Usage Monitoring Systen that Promotes Water Conservation

Mesa Verde Middle School
Atulya Mandyam (7th Grade)
San Diego, California
Wheel Running During Adolescense Reduces Weight Gain and Increases Exersize Output During Adulthood

Pacific Beach Middle School
Francisco Catanzaro (8th Grade)
San Diego, California
Detecting Gopher Tunnels Using Ground Penetrating Radar

Saint Rose of Lima School
Lauren Reilly (8th Grade)
Chula Vista, California
On Course: A New Device for Backstroke Efficiency

San Diego Jewish Academy
Jessie Gan (8th Grade)
San Diego, California
Natural Antioxidant and Nano-Antioxidant Effects Against Oxidative Stress

Stella Maris Academy
Peter Eckmann (8th Grade)
San Diego, California
Airfoil Optimization by Applying Evolutionary Algorithms to Computational Fluid Dynamics

The Cambridge School
Emily Shi (8th Grade)
San Diego, California
Microscopic Study of Torrey Pine Needles For Moisture Condensation

The Rhoades School
Aidan Byrnes (7th Grade)
San Marcos, California
Avian Dangers–Developing Devices for the Prevention of Bird Strike

The Rhoades School
Alexandra Orczyk (8th Grade)
Escondido, California
Comparing Changes in Local Sea Star Populations

USCA07

BASIS Independent Silicon Valley
Andrew Chiang (8th Grade)*
Saratoga, California
Manipulation of Ultrasonic Force Field

Challenger School–Almaden
Grace Li (8th Grade)
San Jose, California
An Organic Insulator: The Effect of Green Roof Plant Type on Thermal Reduction

Challenger School–Strawberry Park
Akhilesh Balasingam (8th Grade)
San Jose, California
The Test Tube Reimagined: On the Optimal Design of 3D-Printable Lab-on-a-Chip Devices for Low-Cost Onsite Medical Diagnostics

Challenger School–Strawberry Park
Pujita Tangirala (7th Grade)
Los Gatos, California
A Green, Low-Cost Adsorbent for the Removal of Dye from Aqueous Solutions

Challenger School–Sunnyvale
Samika Swamy (7th Grade)
Cupertino, California
BioFresh Food Smarts: An Eco-friendly, Smart Solution to Reduce Wastage of Climacteric Produce

Challenger School–Sunnyvale
Anirudh Venkatraman (6th Grade)*
Sunnyvale, California
Production of Bioplastics from Vegetable Waste

Cupertino Middle School
Ruchika Dixit (8th Grade)
Sunnyvale, California
How Quorum Sensing and Media Affect Bacterial Bioluminescence

Cupertino Middle School
Anushka Sanyal (8th Grade)
Los Altos, California
Developing a Tool for Studying Alzheimer's: A Bacterial Expression Vector for the M3-M4 Fragment of the nAChR Alpha-7

Granada Islamic School
Ahmad Ismail (7th Grade)
Santa Clara, California
Effect of Structure and Behavior of Antifungal Agents on the Treatment of Candidiasis

Juan Cabrillo Middle School
Jason Co (7th Grade)
Santa Clara, California
The iCane

Juan Cabrillo Middle School
Saurav Gandhi (7th Grade)
Sunnyvale, California
The iCane Traffic System

Stratford Middle School–San Jose
Adarsh Ambati (7th Grade)*
San Jose, California
A Low-Cost, Cloud-based, Contactless Vital Signs Monitor Using Photoplethysmographic Imaging and Infrared Sensing Techniques

Stratford School–Sunnyvale Raynor Middle School
Arti Gnanasekar (6th Grade)
Cupertino, California
Investigating the Effects of Different Chemical Composition of Pesticides on the Survival of Honeybees

Stratford School–Sunnyvale Raynor Middle School
Annika Viswesh (7th Grade)
Palo Alto, California
Oculus Patch Assistant: A Novel Method to Simplify and Improve the Effectiveness of Amblyopia Treatment by Using a Smart Sensor, a Smartphone Application, and Predictive Machine Learning Algorithms

The Harker School
Nidhya Shivakumar (6th Grade)
Cupertino, California
Halophytes: A Potential Solution for the Remediation of Soil in Saline Wastelands

Challenger School - Ardenwood
Aditya Indla (7th Grade)
Union City, California
A Microcontroller and Air Pollution Sensor Based Smart Air Filter Controller

Challenger School–Ardenwood
Tharika Thambidurai (8th Grade)
Fremont, California
Self -Cleaning Photocatalyst To Reduce Global Pollution

School of the Madeleine
Gregory Saldanha (8th Grade)
Berkeley, California
Look, No Hands! Building a Driverless Toy Car

William Hopkins Junior High School
Aryansh Shrivastava (7th Grade)
Fremont, California
A Microcontroller Based, Programmable, Elderly Healthcare Activity Monitoring System with Intelligent Data Analytics for Early Emergency Detection and Alerts

Georgiana Bruce Kirby Preparatory
Michelle Nazareth (8th Grade)
San Jose, California
ASD Alert! A Novel Low Cost Device to Help Predict and Mitigate Oncoming Autistic Episodes

USCA12

Carmel Middle School
Elizabeth Lindholm (7th Grade)
Carmel-by-the-Sea, California
Can I Have Some of That? Group Foraging in Coral Reef Fishes Across Three Caribbean Islands

USCA13

Krystal School of Science, Math, and Technology
Noah Cain (6th Grade)
Apple Valley, California
Kids Still at Risk: Particulate Matter and Flammable Gas Exposed

USCA16

La Entrada Middle School
Kathleen Virsik (7th Grade)
Portola Valley, California
Enhanced Heptyl Butyrate Attractants for Western Yellowjackets (Vespula pensylvanica)

Saint Charles School
Georgia Butler (8th Grade)
San Carlos, California
A Magnetic Surfboard. Will Sharks be Lured or Perturbed?

Tierra Linda Middle School
Alexander McDowell (8th Grade)
San Carlos, California
Neural Espionage: Can Adversarial Neural Networks Learn to Apply Encryption to Images

Woodside Elementary School
Linus Upson (6th Grade)*
Woodside, California
Material Density and Charged Particle Occurrence in a Cloud Chamber

USCA50

Altamont Elementary School
Jacqueline Prawira (7th Grade)*
Mountain House, California
Rice Plasticity: The Effect of Amylose and Amylopectin in the Formation and Tensile Strength of Rice-based Bioplastic

La Colina Junior High School
Mia Chou (8th Grade)
Santa Barbara, California
Radon: The Silent Killer In Your House

La Colina Junior High School
Neve Greenwald (8th Grade)
Santa Barbara, California
Harvesting Atmospheric Water

Los Cerritos Middle School
Samarth Kadaba (8th Grade)
Newbury Park, California
Better Batteries: A Study of Galvanic Cells

Mountain Oaks
Emily Lickiss (6th Grade)
Jackson, California
Dietary Protein, Dog Urine, and It's Effect on Your Lawn

Northcoast Preparatory Academy
Zoe Osborn (7th Grade)
Arcata, California
What Organisms Other Than Ideonella sakaiensis Have the Ability to Digest and Degrade PET?: A Bioinformatics Project

Stratford Middle School–San Jose
Herin Kang (7th Grade)
Los Gatos, California
Energy Efficient Oxygen Generator Using Micro Algae as an Alternative to Window Ventilation

Colorado

USCO10

Challenge Middle School
Matthew Anderson (7th Grade)
Greenwood Village, Colorado
How the Number of Alpha Particles Shielded Changes with Different Types of Shielding

Challenge Middle School
Sarah Bian (8th Grade)
Englewood, Colorado
Barking Up the Wrong Forest

Challenge Middle School
Esha Sury (7th Grade)
Greenwood Village, Colorado
The Simple Approach to a Lifesaving Biosensor

North Arvada Middle School
Tyler Burt (8th Grade)
Golden, Colorado
BPANIC?

STEM School And Academy
Rewa Raizada (7th Grade)
Highlands Ranch, Colorado
Water Conservation Using SMART Technology

USCO50

Homeschool
Marissa Jordan (8th Grade)
Ignacio, Colorado
A Softer Side of Robots: Using Grippers Made from Soft Materials

North Middle School
Kathryn Kummel (8th Grade)*
Colorado Springs, Colorado
Gone With the Wind: An Investigation of the Horseshoe Vortex Behind Tree Islands on Pikes Peak and What it Means for Tree Growth

Summit Middle Charter School
Anuradha Prakash (8th Grade)
Boulder, Colorado
Pee is for Plants

The Classical Academy
Nathaniel Brim (8th Grade)*
Colorado Springs, Colorado
Depuration Kinetics of Activated Carbon With Ion Exchange Resins, Poly Filter Pad, and Freshwater Bivalves in Aqueous Solutions contaminated with Heavy Metals

Connecticut

USCT50

Christian Heritage School
Rachel Brooks (8th Grade)
Trumbull, Connecticut
The Fabrication and Testing of Various Fruit Juice Dye-sensitized Solar Cells with the Addition of Preservatives

Middlebrook Middle School
Anika Bhagavatula (8th Grade)
Wilton, Connecticut
A Novel Method for Oil Spill Cleanup Using Biomass

Saint Timothy Middle School
Grace Flynn (7th Grade)
West Hartford, Connecticut
Green Tea: A Simple Solution for a Banana's Problem?

St. Gregory the Great School
Anna Flaherty (7th Grade)
New Fairfield, Connecticut
Wind Energy I'm a Big "Fan"

Department of Defense

USDD01

Camp Lester Middle School
Logan Gallardo (8th Grade)
FPO, AP
Exploring the Potential of Bacteria Loads on Surface Sand Found on Okinawa Beaches

Camp Lester Middle School
Hope Hawkins (8th Grade)
FPO, AP
Exploring the Potential of Bacteria Loads on Surface Sand Found on Okinawa Beaches

Camp Lester Middle School
Wesley Marty (8th Grade)
FPO, AP
Exploring the Potential of Bacterial Loads on Surface Sand Found on Okinawa Beaches

Florida

USFL05

Gateway Charter Intermediate School
Junwei Tan (7th Grade)
Fort Myers, Florida
Autonomous Search and Rescue

Gulf Middle School
Sierra Edelstein (8th Grade)
Cape Coral, Florida
The Pearl of the Ocean: Do Freshwater Releases from Lake Okeechobee Affect the Filtration Rate of Eastern Oysters (Crassostrea virginica) in Southwest Florida Estuaries?

USFL07

Okaloosa STEMM Academy
Alexa Drab (8th Grade)*
Niceville, Florida
Neonicotinoids' Role In Colony Collapse Disorder: Infliction or Fiction?

USFL08

Abraham Lincoln Middle School
Jad Helmy (8th Grade)*
Gainesville, Florida
Optimizing and Extending Alzimio to Help Dementia, Autism, and Alzheimer's Patients

Howard W. Bishop Middle School
James Cohan (8th Grade)*
Gainesville, Florida
Determining the Optimal Cooking Method and Pan Material for Preserving Nutrients in White Cauliflower

USFL09

American Heritage School
Gauri Kasarla (8th Grade)
Plantation, Florida
Testing the Efficiency of Avastin in Zebrafish Embryos to Design a Control Mechanism for Possible Implications in the Treatment of Hypoxia in Premature Infants

American Heritage School
Sara Kaufman (6th Grade)
Cooper City, Florida
The Effects of Wind Mitigation Devices on Gabled Roofs

USFL10

Darnell Cookman Middle/High School of the Medical Arts
Joel Valan (7th Grade)
Jacksonville, Florida
Preventing Zika: The Effect of the pH of Water on the Growth and Survivabiliy of Mosquito Larvae Culex pipiens

Saint Joseph Catholic School
Mailene Miranda (8th Grade)
Jacksonville, Florida
What Makes Science A-Peel-ing: Tensile Strength of Banana Fibers

USFL14

Cocoa Beach Junior/Senior High School
Alexander LaFortune (8th Grade)*
Satellite Beach, Florida
Contaminated vs. Clean, Year 2: The Effects of Unfiltered and UV-filtered Solar Radiation on the Viability of Gram-positive Micrococcus luteus and Gram-negative E. coli K-12 Bacteria

USFL19

North Bay Haven
Samantha Kammerer (8th Grade)
Lynn Haven, Florida
Can Cryogenically Preserving Seeds Save Florida's Citrus From Extinction?

North Bay Haven
Emelia Clark (8th Grade)
Panama City, Florida
Oyster Propagation

USFL21

Alice B. Landrum Middle School
Natalie Byron (8th Grade)
Ponte Vedra Beach, Florida
Mighty Microgreens: Don't Judge Your Greens by Their Size

Fruit Cove Middle School
Johnathan Schoenborn (7th Grade)
St. Johns, Florida
From Rubbish to Radishes: Does Compost Produce Increased Plant Growth Over Manufactured Fertilizer?

Valley Ridge Academy
Aditya Singh (8th Grade)*
Ponte Vedra Beach, Florida
Developing Distance Based Edge Detection

USFL23

Jackson Heights Middle School
Laboni Santra (8th Grade)
Oviedo, Florida
Tracking Therapeutics in a Leaf Using a Fluorescent Dye

Sanford Middle School
Annika Vaidyanathan (7th Grade)
Oviedo, Florida
Can We Have Some Quiet Please? The Effects of Shape and Profile on Noise!

St. Luke's Lutheran School
Emily Grossenbaugh (8th Grade)
Oviedo, Florida
Print vs. Nature

USFL26

Deerlake Middle School
Brock Womble (8th Grade)
Tallahassee, Florida
Fish Friendly Lakes: Conducting Water Quality Tests to Determine the Impact of the Surrounding Environment of Lentic Water Systems on Nonpoint Source Pollution Levels Year 2

USFL28

West Shore Junior/Senior High School
Nathan Foo (8th Grade)*
West Melbourne, Florida
Deriving a Predator-prey Mathematical Model for Regulating the Growth of Harmful Algae Blooms with Different Species of Zooplankton inside of a Water Ecological System

USFL30

Charles S. Rushe Middle School
Sarah Menard (8th Grade)
Odessa, Florida
How Particle Size of Surface Terrain Affects the Amplitude of Seismic Waves Produced by a Meteor Impact

USFL32

McIntosh Middle School
Gavin Putnal (8th Grade)
Sarasota, Florida
The Best Offense Is A Diaper Defense

USFL34

Tavares Middle School
Luke Burris (8th Grade)
Tavares, Florida
Applying the Quantum Inconcistency Problem: Year 2

USFL50

Abraham Lincoln Middle School
Anjana Balachandar (7th Grade)*
Gainesville, Florida
High-Fives for Wi-Fi

Abraham Lincoln Middle School
Janani Kumaran (7th Grade)*
Gainesville, Florida
Can Snails Act as Biological Control Agents for the Aquatic Invasive Plant, Hydrilla?

American Heritage School
Andrew Simon (8th Grade)
Davie, Florida
Determination of a Correlation Between the Capsaicinoid Concentration of the Fruit of the Genus Capsicum and Organic Growth Conditions

Canterbury School
Maya Chandar (7th Grade)*
Fort Myers, Florida
The Effects of High Frequency Shortwaves and Laser Beams on the Metamorphosis of Melittobia digitata (A Novel Second Year Study)

Creekside Middle School
Scott Tobin (8th Grade)*
Port Orange, Florida
By Using A Solar Powered Tesla Coil Can Water Be Made Potable Through Ozonification

Gifford Middle School
Zachary Hessler (6th Grade)*
Vero Beach, Florida
Save Our Silence: A Digital Approach To Noise Reduction

Julia Landon College Preparatory and Leadership Development School
Jasmine Roncevic (8th Grade)*
Jacksonville, Florida
Biodegradation of Polystyrene by Tenebrio molitor larvae

Okaloosa STEMM Academy
Gabriel Lerner-Sperow (6th Grade)
Valparaiso, Florida
Hydrogen Production Through Ratio Variance of Sodium Carbonate and Calcium Hydroxide

Georgia

USGA03

The Westminster Schools
Yash Kadadi (8th Grade)
Smyrna, Georgia
VARS: Enabling Deep Space Exploration through Variable Active Radiation Shielding

USGA50

Elkins Pointe Middle School
Hansika Behl (8th Grade)
Roswell, Georgia
Basil Tri-Ponics

Elkins Pointe Middle School
Divya Nori (8th Grade)
Roswell, Georgia
Basil Tri-Ponics

General Ray Davis Middle School
Emma MacDonald (8th Grade)
Covington, Georgia
What are the Immediate Effects of Secondhand Smoke: E-Cigarettes vs. Conventional Cigarettes

General Ray Davis Middle School
Sydney Palmer (8th Grade)
Conyers, Georgia
What are the Immediate Effects of Secondhand Smoke on Lung Cells: E-Cigarettes vs. Conventional Cigarettes?

Henderson Middle School
Saitheja Pucha (8th Grade)
Atlanta, Georgia
Pathogenic Bacterial Growth Inhibition by Yogurt Metabolites

Lovinggood Middle School
Stephen Litt (7th Grade)
Marietta, Georgia
Phase 2: Does Epigallocatechin-3-Gallate Inhibit Tumorigenesis In Planaria (Dugesia Tigrina)? A Novel Approach Toward A Cure For Cancer

Hawaii

USHI05

Waiakea Intermediate School
Lela DeVine (8th Grade)
Hilo, Hawaii
The Effects of Turbidity on the Color Spectrum at Different Depths

Waiakea Intermediate School
Kevin Li (8th Grade)
Hilo, Hawaii
Rapid Ohia Death: The Effectiveness of Biofungicide Treatments and Determining its Method of Transmission

USHI50

Hawaii Baptist Academy
Johnson Lin (8th Grade)
Honolulu, Hawaii
Gene Therapy on Lung Cancer Cells

Hilo Intermediate School
Alicia Chun (8th Grade)
Hilo, Hawaii
Investigating Sound Quality with Panflutes Using Different Types of Materials

Waipahu Intermediate School
Royce Daniel Ilaga (8th Grade)
Waipahu, Hawaii
The Effect of "Rice Wash" on the Growth and Fruit-Bearing Ability of Lycopersicon esculentum

Illinois

USIL01
Whitney M. Young High School Academic Center
Patrick Herbig (8th Grade)
Chicago, Illinois
The Sorbo Helmet

USIL05
Northbrook Junior High School
Eleanor Bosacoma (8th Grade)
Northbrook, Illinois
The Correlation Between Cat Gender and Purr Frequency

Indiana

USIN24
Schmucker Middle School
Faisal Syed (6th Grade)
Granger, Indiana
The Correlation Between Feeding Antioxidants and Drosophila melanogaster Longevity

USIN26
Lafayette Christian School
Corin Tuinstra (8th Grade)
West Lafayette, Indiana
Hydrogen Cyanide Production in Sorghum Influences Fall Army Worm Feeding Preference

West Lafayette Junior/Senior High School
Irene Bhunia (7th Grade)
West Lafayette, Indiana
Antibiotic Resistance: Conventional vs. Organic Chickens

Iowa

USIA50
Clay Central- Everly Junior/Senior High School
EmmaKay McClain (8th Grade)
Everly, Iowa
If Butterflies Survive Do Weeds Thrive?

Lewis Central Middle School
Amara Orth (7th Grade)
Glenwood, Iowa
Natural Antimicrobials in the Beehive: Effects of Propolis on Serratia marcescens

West Central Valley Middle School
Samantha Colin (7th Grade)
Stuart, Iowa
Driving Kidney Cell Differentiation

Kansas

USKS50
Thomas More Prep-Marian
Isabel Peine (8th Grade)
Hays, Kansas
Ethanol - Breath of Fresh Air

Kentucky

USKY02
St. Francis of Assisi
Aliana Conway (8th Grade)
Louisville, Kentucky
A Safe Substitute? Bisphenol-S Affects Health and Learning

USKY03
Meyzeek Middle School
Sowmyan Viswanathan (7th Grade)*
Louisville, Kentucky
Thermophysical and Mechanical Atrributes of 3D Printed Parts

USKY50
Meyzeek Middle School
Sarvesh Babu (8th Grade)*
Louisville, Kentucky
Thought-Code: A Novel New Application of EEGs as Biometric Identification Part 1

Saint Agnes School
Jacob Deere (8th Grade)
Villa Hills, Kentucky
How Do Aluminum Birds Stay Up in the Sky?

St. Francis of Assisi
Elizabeth Gallagher (8th Grade)
Louisville, Kentucky
Trash to Treasure: Converting Plastic Bottles to Porous Carbon

St. Francis of Assisi
Grace Hovekamp (8th Grade)
Louisville, Kentucky
Cissus Quadrangularis: A Potentially New Anti-Cancer Compound

Louisiana

USLA01
Westdale Middle School
Colin Herke (8th Grade)*
Baton Rouge, Louisiana
Sizing PCR Amplicons Using YoYo-1 Dye and the ABI 3130xl DNA Sequencer

USLA02
Caddo Parish Middle Magnet School
Joseph Clary (8th Grade)*
Shreveport, Louisiana
Warning: Baby on Board

USLA08
John Curtis Christian
Rachel Pizzolato (7th Grade)
Metairie, Louisiana
Generating Electricity by Harnessing Air that Flows Around a Skyscraper Using Bernoulli's Principle and the Venturi Effect with Special Emphasis on Biomimicry

USLA50

Caddo Parish Middle Magnet School
Ashini Modi (7th Grade)
Shreveport, Louisiana
Big Bang to Big Freeze: Lifting the Veil on Hubble's Constant to Shed New Light on the Fate of our Universe

Caddo Parish Middle Magnet School
Eshika Tandon (6th Grade)
Shreveport, Louisiana
Can Anti-cancer Agents, Turmeric and Simvastatin, Decrease Germination and Protein Content in Seeds?

Glasgow Middle School
Abhirami Jeyaseelan (8th Grade)*
Baton Rouge, Louisiana
The Hidden Dangers of Secondhand Smoke

Kenilworth School of Science and Technology
Monica Deras (8th Grade)
Baton Rouge, Louisiana
Enhanced Photothermal Response of Nanoparticles for Photothermal Cancer Therapy

Lafayette Christian Academy
Gracie Matt (8th Grade)
Carencro, Louisiana
The Pampered House

Little Oak Middle School
Reilly Fastring (6th Grade)
Slidell, Louisiana
Determining the Temperature Coefficient of Resistance of Copper by Using Lenz's Law

Maryland

USMD02

Urbana Middle School
Sanjanaa Viswanathan (6th Grade)
Frederick, Maryland
Ocean Acidification's Effect on Sea Life

Walkersville Middle School
Vineet Ravichandran (8th Grade)
Frederick, Maryland
Clustering: A Technique that Helps us Discover Similarity Among Invisible Viruses to NBA Players and Everything In-between!!!

USMD03

Roberto Clemente MIddle School
Brian Aniya (8th Grade)
Boyds, Maryland
Using Magnetism in the Process of Cleaning Oil Spills

Roberto Clemente MIddle School
Daniel Choi (7th Grade)
Germantown, Maryland
The Effects of Temperature and Seasonings on the Proteolytic Function of Fruit Proteases

Roberto Clemente MIddle School
Sonia Stan (8th Grade)
Gaithersburg, Maryland
The Search for Wasted Energy

Roberto Clemente MIddle School
Sabrina Su (8th Grade)
Boyds, Maryland
Alternative Energy: Microbial Fuel Cells

Takoma Park Middle School
Ozan Kayaalp (8th Grade)
Silver Spring, Maryland
Optimizing Policies in a Two Player Game

Takoma Park Middle School
Lara Ojha (8th Grade)
Rockville, Maryland
Blazar Emissions: Gamma-Optical Tango

Bennett Middle School
Marvin Li (8th Grade)
Salisbury, Maryland
Applying Machine Learning to Satellite Remote Sensing of Optically Complex Coastal Waters

Massachusetts

USMA02

Cyril D. Locke Middle School
Shashank Jarmale (8th Grade)*
Billerica, Massachusetts
Determining the Most Efficient Design of a Microbial Fuel Cell

Masconomet Regional Middle School
Abigail Moisan (8th Grade)*
Boxford, Massachusetts
Genetically Engineered Pollinating Plants: Changes in UV Spectrum

USMA05

Saint Bernadette School
Garima Prabhakar (8th Grade)*
Shrewsbury, Massachusetts
Improving the Stability of an MBI Perovskite Solar Cell Using Poly-TPD as the Hole-Transport Layer

Sarah W. Gibbons Middle School
Adway Wadekar (8th Grade)
Westborough, Massachusetts
The Pursuit of Happiness

USMA50

Charles E. Brown Middle School
Timothy Pinkhassik (8th Grade)
Newton, Massachusetts
Wearable Diagnostic Platform

Cyril D. Locke Middle School
Saketh Mynampati (8th Grade)
Billerica, Massachusetts
Chirality: Twisting Light into a Brighter Future

Cyril D. Locke Middle School
Tej Patel (8th Grade)
Billerica, Massachusetts
Chirality-Twisting Light into a Bright Future

Saint Bernadette School
Amrita Thirumalai (8th Grade)*
Westborough, Massachusetts
Cymatics

Sarah W. Gibbons Middle School
Ishita Goluguri (8th Grade)
Westborough, Massachusetts
The James Webb Space Telescope

Michigan

USMI02

Kosciuszko Middle School
Mira Hughes (7th Grade)
Hamtramck, Michigan
Sugar: Consider a Substitute

Novi Middle School
Aditya Sriram (8th Grade)
Novi, Michigan
Eliminate Atmospheric Emissions of CO_2 from Power Plants

USMI03

Saginaw Arts and Sciences Academy
Shriya Reddy (8th Grade)
Novi, Michigan
DNA Quantification: Effect of Natural Supplements on Lactobacillus acidophilus and Escherichia coli, Human Gut Bacteria

Minnesota

USMN07

Friedell Middle School
Uma Ashrani (8th Grade)
Rochester, Minnesota
Does the Pitch of a Propeller's Blades Affect its Efficiency?

Friedell Middle School
Marissa Ding (8th Grade)
Rochester, Minnesota
Does the Pitch of a Propeller's Blades Affect its Efficiency?

Homeschool
Supriya Roy (7th Grade)
Rochester, Minnesota
Mathematical Modeling of Strategies to Prevent Zika Virus Transmission

USMN10

Calvin Christian School
Julia Brouwer (8th Grade)
Eagan, Minnesota
Leafy Green Astronauts Year Two: How Space Radiation Impacts Seed Germination and Subsequent Plant Growth of Monocot Versus Dicot Seeds

USMN50

Al-Amal School Fridley
Hassan Mehdi (8th Grade)*
Brooklyn Park, Minnesota
Is it O Too Less?

Friedell District Wide Middle School
Radhika Damle (7th Grade)*
Rochester, Minnesota
Don't Toss MyPlate

Hidden Oaks Middle School
Ethan Fontana (8th Grade)*
Savage, Minnesota
Safety Beacon System Enhancing Hazard Detection by Semi-Autonomous Vehicles

Math and Science Academy
Rikhil Seshadri (7th Grade)*
Woodbury, Minnesota
Low Cost Supercapacitors for Energy Storage

Missouri

USMO04

Cure of Ars
Clifford Booker, V (6th Grade)
Leawood, Kansas
The Gutter Flipper

USMO07

Crestview Middle
Arjun Ray (8th Grade)
Wildwood, Missouri
Heat Induced Changes in Anti-oxidants in Fresh vs. Canned Corn

USMO09

Ray and Nancy Hodge Elementary School
Luke Johnson (6th Grade)
Imperial, Missouri
Long Term Egg Storage

Montana

USMT04
Fairfield Junior High
Luke Ostberg (8th Grade)
Fairfield, Montana
Trash to Gas: The Production of Biogas Using Anaerobic Digestion

USMT50
Missoula International School
Julian Bain (8th Grade)
Missoula, Montana
Focus Pocus – Using Auto-Focusing Water-Based Lenses at Different Distances

Nebraska

USNE02
Wayne Junior/Senior High School
Emily Eilers (8th Grade)
Wayne, Nebraska
The Spatial Variation of Macroinvertebrates in a Small Lake

New Jersey

USNJ78
Delbarton School
William Li (8th Grade)
Chester, New Jersey
Not Your Tree-ditional Search Program: A Performance Analysis of Monte-Carlo-Tree-Search Playing Board Games

USNJ79
Assumption Regional Catholic School
Francis Sargente (8th Grade)
Galloway, New Jersey
You Are What You Eat: A Study of Feed Efficiency Rates on Neonate Thamnophi sirtalis

Benjamin Franklin Middle School
Kannammai Pichappan (7th Grade)
Ridgewood, New Jersey
What Common Foods Possess Anti-Microbial Properties?

Burlington Township Middle School
Carolyn Almonte (8th Grade)
Burlington, New Jersey
The Effect of UV Radiation on the Metamorphic Process of Zophobas morio Larvae and the Ability of Bixin to Protect Against Observed UV Induced Damage

New Mexico

USNM01
Bernalillo Middle School
Isabela Ceniceros (8th Grade)*
Placitas, New Mexico
Perfect Produce: Canned, Frozen, or Fresh

Jefferson Middle School
Liam McGee (7th Grade)
Albuquerque, New Mexico
Building and Testing Solar Powered Water Filters

USNM02
Hermosa Middle School
Mckayla Gilbert (8th Grade)
Farmington, New Mexico
Metallic Corn

USNM50
Capshaw Middle School
Faris Wald (8th Grade)
Santa Fe, New Mexico
The Correlation Between Solar Coronal Hole Occurrences and the Formation of Tropical and Extra-Tropical Cyclones

New York

USNY02
Commack Middle School
Michael Jang (7th Grade)
Commack, New York
Organic Electricity Generator

Commack Middle School
David Yang (7th Grade)
Commack, New York
Organic Biofuel Generator

Commack Middle School
Chapin Zerner (8th Grade)
East Northport, New York
Scintillating Solar Sunspot Cycles

Garden City Middle School
Ian Bailey (8th Grade)
Garden City, New York
Biopreservatives Effect on the Shelf Life of Fresh Raspberries

Garden City Middle School
Austin Crouchley (7th Grade)
Garden City, New York
Archimedes Inspired Hydro-Powered Solar PV Azimuth Tracking Mechanism: A Solution to the Energy and Water Crisis

USNY05
Rye Neck Middle School
Peter Nicholas (7th Grade)
Mamaroneck, New York
The Bioremediation of Plastic

USNY09
Allendale Columbia School
Madeleine Cotter (7th Grade)
Rochester, New York
Watching Our Water

USNY50
The Brearley School
Emma Yang (8th Grade)
New York, New York
Timeless: A Mobile App for Alzheimer's Patients Powered by Artificial Intelligence

USNY78
Hunter College High School
Gaang Choi (7th Grade)
Brooklyn, New York
Effects of Nutrition on Silk Production

Hunter College High School
Andrei Iosifescu (7th Grade)
New York, New York
The Impact of Asteroid Composition on their Appearance, Morphology and Motion

Hunter College High School
Jaeah Kim (8th Grade)
Little Neck, New York
Plastic, Unlike Money, Grows on Trees; A Novel Method of Creating Bio Plastic with Cissus Rhombifolia Foliage

Hunter College High School
Jaejeong Kim (8th Grade)
Little Neck, New York
Plastic, Unlike Money, Grows on Trees; A Novel Method of Creating Bio Plastic with Cissus Rhombifolia Foliage

Hunter College High School
Helen Lyons (8th Grade)
New York, New York
Using Flotation Systems to Harness Wave Power Using Electromagnetism

Hunter College High School
Evie Steele (7th Grade)
New York, New York
The Effect of Treatment on a Cell's Calcium Release

North Carolina

USNC50
Metrolina Regional Scholars Academy
Anushka Kulkarni (7th Grade)
Charlotte, North Carolina
Yielding Hydrogen by the Electrolysis of Water Using a Hoffman Apparatus

R. Max Abbott Middle School
Kaitlyn Zuravel (7th Grade)
Fayetteville, North Carolina
GLIDERS: Which Airfoil Shape and Angle of Incidence Will Produce the Longest Glide Time and Distance?

Roland-Grise Middle School
Regan Williams (6th Grade)
Wilmington, North Carolina
Marsh Attacks: Context-dependent Effects of Intraspecific Trait Variation in a Marsh Ecosystem Predator-prey Interaction

Ohio

USOH02
Academy of Saint Adalbert
Ryan Anthony (8th Grade)
Strongsville, Ohio
The Effect of Concentration and the Maillard Reaction on the Optical Rotation of Glucose, Fructose, and Sucrose

Incarnate Word Academy
Ferenc Somogyi (8th Grade)
Parma Heights, Ohio
Building a Heart Pulse Monitor Using IoT and Cloud that Rivals the Capabilities of Traditional Medical Heart Pulse Monitors

Saint Anselm School
Robert Kent (8th Grade)
Chagrin Falls, Ohio
Are Microplastic Contaminants More Abundant in Farm Raised or Wild Clams?

USOH04
Dayton Regional STEM School
Neeti Prasad (8th Grade)
Beavercreek, Ohio
Harvesting Solar Energy and Body Heat Using Thermoelectric Generators

USOH10
Walnut Hills High School
Charlotte Adams (8th Grade)
Cincinnati, Ohio
Reflected Ultraviolet Radiation Exposure in Athletes

Oregon

USOR04
Meadow Park Middle School
Ian Rundle (8th Grade)
Portland, Oregon
Ternary Relay Computer

Meadow Park Middle School
Nishant Sane (8th Grade)
Beaverton, Oregon
Ternary Relay Computer

Stoller Middle School
Vedanth Iyer (8th Grade)
Portland, Oregon
Using Li_2O Based Glass to Create Solid State Electrolytes for Safer use in Li-ion Batteries

Stoller Middle School
Pratik Vangal (7th Grade)*
Portland, Oregon
A Milli-Watt Energy-Harvesting Light Bulb Based on Thermo-Electric Generation

USOR50

ACCESS Academy
Aidan Sheeran-Hahnel (7th Grade)
Portland, Oregon
The Application of the Golden Ratio to Food Proportions and How It Impacts Visual Appeal to Humans

Bend Science Station
Kent Koehler (8th Grade)
Bend, Oregon
Vietnamese Walking Stick Dietary Habits

Carden Cascade Academy
Alan Kappler (6th Grade)
Hillsboro, Oregon
Square-Retaining Numbers

Heritage Middle School
Kady Cluff (6th Grade)
Meridian, Idaho
Dominant "Sweet Spot"

Lake Oswego Junior High School
Ellie Tanimura (8th Grade)
Lake Oswego, Oregon
How the Amount of Cornstarch Affects the Tensile Strength of the Bioplastic it Produces

Stoller Middle School
Mithra Karamchedu (7th Grade)
Portland, Oregon
Remote Sensing the Ablation or Accumulation of a Glacier by Using Fractal Analysis on Glacier Images

Stoller Middle School
Vicky Siah (8th Grade)
Portland, Oregon
Creating an Effective Water Filter with Ocimum Basilicum

Whitford Middle School
Lucas Braun (8th Grade)
Beaverton, Oregon
An Examination of Nucleation through Video Analysis

Yamhill Carlton Intermediate School
Kaden Stehr (6th Grade)
Yamhill, Oregon
Dirty Water

Pennsylvania

USPA01

Harrisburg Academy
Alexander Seman (7th Grade)
Camp Hill, Pennsylvania
Maximizing Collection of Radiant Energy

Saint Joseph School
Adam Warren (8th Grade)
Mechanicsburg, Pennsylvania
Coast Guard

Saint Theresa School
Melanie Uroda (8th Grade)
Camp Hill, Pennsylvania
Lighter Can Be Mightier

USPA03

Charles F. Patton Middle School
Naman Razdan (8th Grade)
West Chester, Pennsylvania
Gene Expression in Healthy and Aphid-Infested Switchgrass, Panicum virgatum

Fred S. Engle Middle School
Joseph D'Ambrosio (8th Grade)
Avondale, Pennsylvania
A New Platform for Faster Social Media

Orefield Middle School
Tanya Mehta (8th Grade)
Orefield, Pennsylvania
Seeking a Cure For Schizophrenia–A Biochemical In-Vitro Study to Identify the Inhibitors for DAAO Activity In Human Brain

Orefield Middle School
Sonia Sandhu (7th Grade)
Orefield, Pennsylvania
Will Citrate Help to Reduce the Formation of New Kidney Stones?

Perkiomen Valley Middle School-East
Lillian Miller (8th Grade)
Collegeville, Pennsylvania
Microfiber Pollution and Microbial Enviroments

Springhouse Middle School
Rahul Inaganti (8th Grade)
Allentown, Pennsylvania
The Effect of Aquatic Liming on Acidified Cultures of Daphnia magna

USPA04

Chartiers Valley Middle School
Bridget Schneider (8th Grade)
Bridgeville, Pennsylvania
Magnetic Eddy Current Lifting Platform

Dorseyville Middle School
Amulya Garimella (8th Grade)
Pittsburgh, Pennsylvania
Pensieve: Analyzing the Genes that Affect Memory

Dorseyville Middle School
Sanjay Seshan (8th Grade)
Pittsburgh, Pennsylvania
Keeping Our Heads Above Water: Early Detection of Stress in Buried Water Pipes

Marshall Middle School
Meghna Behari (8th Grade)
Sewickley, Pennsylvania
Aquabot: An Integrated Modular Platform for Testing and Monitoring Surface Water Quality

Sewickley Academy
Srimayi Mulukutla (7th Grade)
Wexford, Pennsylvania
Antibacterial Effects of Copper Surfaces

Shady Side Academy Middle School
Honora Navid (8th Grade)
Pittsburgh, Pennsylvania
Polling Pollinators: Do Pollinators Prefer Native Plants, Cultivars, or Nativars? A Two-Year Study

Puerto Rico

TEPR10

Southwestern Educational Society
Max Feliciano (8th Grade)
Mayaguez, Puerto Rico
Push Button Combination Safety for Trigger Using Devices

Southwestern Educational Society
Saraswati Sridhar (8th Grade)
Mayaguez, Puerto Rico
Synthesis of Ferric Sulfmyoglobin in vitro: Characterization of Hydrogen Sulfide Activity in Hemeproteins and its Relationship with Sulfhemoglobinemia Progression and Free Radical Inhibition

TEPR12

Episcopal Cathedral School
Giancarlo Villaverde (8th Grade)
San Juan, Puerto Rico
The Link between Sand Characteristics and Leatherback Nesting Behavior in Beaches of Puerto Rico

Rhode Island

USRI50

Sacred Heart School
Sean Jacob Alcordo (8th Grade)
Rumford, Rhode Island
A Klann of Variables

Saint Mary Academy Bay View
Isabella Heffernan (8th Grade)
Warwick, Rhode Island
Going Epi-Pen-less: Can Altering the Microbiome Cure Peanut Allergies?

South Carolina

USSC01

Schofield Middle School
Lia Hancock (8th Grade)
Aiken, South Carolina
Investigating Why Chickens Lay Fewer Eggs in the Winter

Tennessee

USTN04

Homeschool
Nathalie-Sofia Tomov (8th Grade)
Knoxville, Tennessee
On with the Wind: Using Artificial Intelligence to Improve Wind Power

USTN05

Pleasant View School
Naisha Chowdhury (7th Grade)
Memphis, Tennessee
Natural Seal, Better Deal

Texas

USTX01

Bowman Middle School
Pratyush Mallick (8th Grade)
Plano, Texas
The Fibrinogen Factor

Otto Middle School
Keshav Vasanth (7th Grade)
Richardson, Texas
Blinds That See

Renner Middle School
Arnold Venter (8th Grade)*
Dallas, Texas
A Computer for an Eye Makes the Whole World See

Rice Middle School
Yash Garg (8th Grade)*
Plano, Texas
Jail Break: Using Game Theory to Study the Emergence of the Nash Equilibrium and Cooperation in the Iterated Prisoner's Dilemma

Rice Middle School
Nabil Sikora (8th Grade)*
Plano, Texas
Jail Break: Using Game Theory to Study the Emergence of Nash Equilibrium and Cooperation in Iterated Prisoner's Dilemma

USTX02
Radford School
Agustin Valles (8th Grade)
El Paso, Texas
High-Energy Biodiesel

USTX05
Gerald D. Irons, Sr. Junior High School
Steven Drabbant (8th Grade)
Conroe, Texas
How Does the Sun Affect Radio Propagation?

Magnolia Junior High School
Grant Ebel (8th Grade)
Magnolia, Texas
Cold Concussions

McCullough Junior High School
Ammar Siddiqi (8th Grade)
The Woodlands, Texas
The Effects of Fertilizer on Daphnia

USTX11
Basis San Antonio Medical Center
John Piwinski (8th Grade)*
San Antonio, Texas
Android Application and Supercomputational Multithreading for the Chemistry Calculator

Fort Settlement Middle School
Aaditya Arun (6th Grade)
Sugarland, Texas
De-fluoridation of Water with Eco-friendly Filters

Saint Matthew Catholic School
Laura Reilly (7th Grade)
San Antonio, Texas
Effect of Blueberry Extract and UV Light on Regeneration and Wound Healing

Young Women's Leadership Academy
Christiana Garcia (7th Grade)
San Antonio, Texas
Novel Biochar Elastomer Composite Sponge for Low-Cost Water Remediation

USTX13
Canyon Vista Middle School
Satvik Dasari (8th Grade)*
Austin, Texas
HydroAlert – Flood Warning System

Canyon Vista Middle School
Srivaishnavi Marreddy (7th Grade)
Austin, Texas
MedElite – Personal Doctor In Your Pocket

Canyon Vista Middle School
Laya Yalamanchili (7th Grade)*
Austin, Texas
HydroAlert – Flood Warning System

USTX15
Seashore Middle Academy
Nikolai Ortiz (8th Grade)*
Corpus Christi, Texas
Storm Water Pollution? You'll Be Lichen This Solution!

USTX50
Harmony School of Innovation
Ruhani Ahluwalia (8th Grade)*
Arlington, Texas
Trojan Horse Delivers Lapatinib to Cancer Cells While It Limits Damage to Normal Cells

Radford School
Vincent Yang (7th Grade)
El Paso, Texas
Miracle of the Implied Tone

Renner Middle School
Pratyush Mohapatra (8th Grade)*
Plano, Texas
A Camera for an Eye Makes the Whole World See

Salam Academy
Areebah Fatima (8th Grade)
Plano, Texas
Weather Resilient Self Cleaning Solar Array

Utah

USUT04
Churchill Junior High
Anthony Hill (8th Grade)
Holladay, Utah
No Pressure: The Effects of Martian-Like Atmospheric Pressure on Enzyme Catalyzed Reactions in Plants

Early Light Academy
Duncan Burns (6th Grade)
South Jordan, Utah
The Effect of Copper Sulfate Pentahydrate

Jordan Ridge Elementary
Michael Pond (6th Grade)
South Jordan, Utah
Slip Slidin' Away: Optimizing the Coefficient of Static Friction (Î¼) Between Shoes and Ice

Salem Junior High School
Ammon Wallace (8th Grade)
Salem, Utah
Prolonging Milk Shelf Life with Blue Light

USUT05

Midvale Middle School
Slama-Catron (6th Grade)
Sandy, Utah
Rough Air: Bird Scare Device

Midvale Middle School
Eric Snaufer (6th Grade)
Sandy, Utah
Rough Air: Bird Scare Device

Our Lady of Lourdes Catholic School
Mark Monette (8th Grade)
Salt Lake City, Utah
Liar, Liar, Map on Fire

West High School
Christopher Li (8th Grade)
North Salt Lake, Utah
Melanoma Susceptibility Gene Mutations in Individuals with Multiple Melanomas

West High School
Clara Tandar (8th Grade)
Salt Lake City, Utah
The Effects of Vitamin C on Melanoma

USUT07

Mount Ogden Junior High School
Pearl Marden (8th Grade)
Ogden, Utah
FUN GUY SAVES THE PLANET: Using Unicellular Algae to Solve Global Issues

Virginia

USVA09

St. Mary–Glenshaw
Parker Cruz (7th Grade)
Hampton, Virginia
OYS2CLOT: The Novel Hemostatic (Blood-Clotting) Properties of Chitosan Extracted from Chesapeake Bay (Crassostrea virginica) Oyster Shells

USVA11

George H. Moody Middle School
Perisa Ashar (8th Grade)
Glen Allen, Virginia
A Novel, Inexpensive Inhibitor for Bromelain: The Effect of Various Mushrooms as Inhibitors of Bromelain's Proteolytic Activity on Milk Proteins and its Cytotoxic Effects on Prostate Cancer Cells

George H. Moody Middle School
William Pardo (7th Grade)
Glen Allen, Virginia
The Effect of the Combination of Rocks on the Speed and Effectiveness of Water Filtration

George H. Moody Middle School
Ashwin Prabu (8th Grade)
Glen Allen, Virginia
The Effect of Various Amino Acids on the Stem Cell Regeneration in Dugesia dorotocephala

George H. Moody Middle School
Cameron Sharma (7th Grade)
Glen Allen, Virginia
www.FutureFlu.org: A Novel Phylogeny and Antigenicity Based Tool for Designing the Seasonal Flu Vaccine

USVA12

Warrenton Middle School
Nathaniel Ribeiro (7th Grade)
Warrenton, Virginia
A Beacon In the Night: Bleach-Based Emergency Lighting

Washington

USWA01

Carmichael Middle School
Zoe Gotthold (8th Grade)*
Richland, Washington
A Novel Method for the Efficient Determination of Long-Term Emulsion Stability

USWA50

Sunrise Elementary
Hariharan Malmurugan (6th Grade)
Kent, Washington
Winter Jacket as the Power House & Self Powering Shoes to Light up the Path for Mountaineers

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