

ANNOUNCEMENT OF AWARDS

The 77th Georgia Science & Engineering Fair took place April 3-5, 2025 in Athens, Georgia. The award winners listed in this document were selected by the GSEF Judging Team and representatives of sponsoring organizations. Congratulations to these winners, and to each and every exhibitor who advanced to GSEF from a Regional Fair. You have done excellent work and should be very proud!

Special thanks goes to the GSEF Judging Team and Award Sponsors. GSEF would not be possible without you.

SPECIAL AWARDS are listed on pages 2-13. GRAND AWARDS are listed on pages 14-23. HONORS RIBBONS are listed on pages 24-42.

GSEF is a program of the Office of Academic Special Programs at the University of Georgia Center for Continuing Education & Hotel, a unit of the Office of Public Service & Outreach.

GSEF is an official affiliate of the Regeneron International Science & Engineering Fair.





SPECIAL AWARDS

American Institute of Aeronautics & Astronautics

With nearly 30,000 individual members from 91 countries, and 95 corporate members, AIAA is the world's largest technical society dedicated to the global aerospace profession. Created in 1963 by the merger of the two great aerospace societies of the day, the American Rocket Society (founded in 1930 as the American Interplanetary Society), and the Institute of the Aerospace Sciences (established in 1933 as the Institute of the Aeronautical Sciences), AIAA carries forth a proud tradition of more than 80 years of aerospace leadership.

FIRST PLACE JUNIOR DIVISION AWARD WINNER:

Andrew Beauchamp Optimizing Wind Energy

SECOND PLACE JUNIOR DIVISION AWARD WINNER:

Maxwell Chesnut-Anne What Quantity of Water in Soda Bottle Rocket Gives Max. Altitude

FIRST PLACE SENIOR DIVISION AWARD WINNER:

Stephen Griggs Sundancer: Long Endurance Solar Powered UAV for Disaster Relief

SECOND PLACE SENIOR DIVISION AWARD WINNER:

Raaga Sundar FDM 3D-Printed vs. Traditional AA6061 for Martian Rovers

THIRD PLACE SENIOR DIVISION AWARD WINNERS:

Ethan Hoellrich & Carpenter Ray

Anti Ice Paint: Safer & Cheaper Methods to Combat Ice on Planes

Richards Middle School - MUSCOGEE COUNTY Columbus Regional Fair

Wadsworth Magnet School - DEKALB COUNTY DeKalb County Regional Fair

> Midtown High School - FULTON COUNTY Atlanta Regional Fair

McIntosh High School - FAYETTE COUNTY Griffin RESA Regional Fair

Whitewater High School - FAYETTE COUNTY Griffin RESA Regional Fair

American Psychological Association Award

The American Psychological Association is the largest scientific and professional organization representing psychology in the U.S. APA's mission is to advance the creation, communication and application of psychological knowledge to benefit society and improve lives.

JUNIOR DIVISION AWARD WINNER:

Mary Evenal Thompson Out of Sight, Out of Mind

SENIOR DIVISION AWARD WINNERS:

Jaelena Arroyo & Trint Conrod Academic Perception Thomas County Middle School - THOMAS COUNTY ABAC Regional Fair

> Impact Academy - HENRY COUNTY Henry County Regional Fair

Association for Women Geoscientists Award

The Association for Women Geoscientists is an international organization devoted to enhancing the quality and level of participation of women in geosciences and to introduce girls and young women to geoscience careers. AWG's diverse interests and expertise cover the entire spectrum of geoscience disciplines and career paths, providing unexcelled networking and mentoring opportunities.

AWARD WINNER:

Joy Sanders Value Added Product from Cellulose in Peanut Shell Agro Waste Warner Robins High School - HOUSTON COUNTY Houston Regional Fair

Atlanta Geological Society Nils Thompson Memorial Award for K-12 Geoscience Research

The Atlanta Geological Society (AGS) is a professional society established in 1991 with individuals and corporate members interested in geosciences. AGS provides access to information and educational opportunities that are essential to the professional growth of earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry. The Nils Thompson Memorial Fund is in recognition of Nils Thompson, our beloved President, who passed away February 9, 2022 after being afflicted by Creutzfeldt-Jakob Disease (CJD), a degenerative brain disorder that leads to dementia and, ultimately, death. Nil was a committed advocate for stimulating interest in our science in everyone and encouraging young students to pursue their scientific interests. In Nil's memory, we are using a portion of this fund to encourage young researchers to explore the many areas of the geological sciences from environmental hydrogeology to processes affecting worlds beyond our own.

JUNIOR DIVISION AWARD WINNER:

Ryan Nix What's in YOUR Water?

SENIOR DIVISION AWARD WINNER:

Sarah Wang Spatial Disparities in Toxic Particulate Matter Across Transport Richards Middle School - MUSCOGEE COUNTY Columbus Regional Fair

The Westminster Schools - FULTON COUNTY Atlanta Regional Fair

Boehringer Ingelheim Animal Health Biotechnology Award

Boehringer Ingelheim Animal Health manufactures some of the most well-respected and widely used vaccines, parasite-control products and therapeutics for pets, horses and livestock. Boehringer Ingelheim Animal Health believes that people and animals are connected in deep and complex ways, and it believes that nurturing an interest in STEM will help enhance the well-being of both.

FIRST PLACE JUNIOR DIVISION AWARD WINNER:

Ellis Robertson Urine the Race Thomas County Middle School - THOMAS COUNTY ABAC Regional Fair

SECOND PLACE JUNIOR DIVISION AWARD WINNER:

Tallulah Pair How to Best Supplement Diets to Prevent Osteoporosis Tybee Island Maritime Academy - CHATHAM COUNTY Savannah State University Regional Fair

FIRST PLACE SENIOR DIVISION AWARD WINNER:

 Moatapari Agbere
 Chattahoochee County High School - CHATTAHOOCHEE COUNTY

 Natural Antimicrobials for E. coli Control and HUS Prevention
 Columbus Regional Fair

SECOND PLACE SENIOR DIVISION AWARD WINNER:

Ari FosterRockdale Magnet School for Science & Technology - ROCKDALE COUNTYEffect of Onion Bulb, Pregnenolone, and Hirudin on FibroblastsRockdale County Regional Fair

Department of Defense STEM Leadership Prize

The DoD STEM Leadership Prize is awarded to a 6th, 7th, or 8th grade student who demonstrates problem solving skills and determination to overcome challenges throughout their research project, and exemplifies leadership qualitied through excellent communication skills and creative thinking.

AWARD WINNERS:

Sesharaman Krishnan

Pradarshan: An Omnidirectional Display

Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Georgia Aquarium Conservation Award

Georgia Aquarium is a nonprofit committed to inspiring awareness and preservation of our oceans and aquatic animals worldwide. By educating guests and sparking the interest of school groups, Georgia Aquarium inspires conservation. The Sponsored Education Admission (SEA) program sponsors Aquarium admission from Title I schools and nonprofits in Georgia. Aquarium staff have also built partnerships with local schools that allow students to collaborate with Georgia Aquarium staff using project-based learning. These partnerships include Lovett School students getting hands-on experience with animal behavior training, and Ray Davis Middle School students receiving science fair mentoring. Georgia Aquarium also has an internship program for students 18 years or older which provides pre-professional, experiential learning opportunities for individuals working towards our mission. Sponsoring school groups, collaborating with students' projects and providing internships allows Georgia Aquarium to dedicate time to spreading knowledge of the ocean and aquatic world to the up and coming generation.

JUNIOR DIVISION AWARD WINNER:

Patrick Xia Sugarcane in 3D Printing

SENIOR DIVISION AWARD WINNER:

Riley Sipe Making a Low-Cost Carbon Catcher for Developing Communities

HONORABLE MENTIONS:

Shelby Kendrick Aspergillus terreus for Biodegradation of Pre-Treated Plastics

Jeffrey Lim Algae-Based Rooftop Wastewater & Carbon Removal System Taylor Road Middle School - FULTON COUNTY Fulton County Regional Fair

North Atlanta High School - FULTON COUNTY Atlanta Regional Fair

Paulding County High School - PAULDING COUNTY Cobb/Paulding Regional Fair

Lakeside High School DeKalb - DEKALB COUNTY DeKalb County Regional Fair

Georgia BioGENEius Challenge Award

Sponsored by Georgia Life Sciences, the Georgia BioGENEius Challenge is a competition for high school students who are doing outstanding research in biotechnology. Founded in 1989, Georgia Life Sciences is a non-profit, membership-based organization that promotes the interests and growth of the life sciences industry. The winner of this award will be invited to attend the Georgia Life Sciences Summit in August and may also receive the opportunity to attend the International BioGENEius Challenge.

AWARD WINNER:

Bhavya Alapati SpectroStroke

RUNNER-UP:

Shelby Kendrick

Aspergillus terreus for Biodegradation of Pre-Treated Plastics

FCS Innovation Academy - FULTON COUNTY Fulton County Regional Fair

Paulding County High School - PAULDING COUNTY Cobb/Paulding Regional Fair

Georgia Engineering Foundation Award of Excellence for Impact on Better Living

GEF dates back to February 1971, when the presidents of fifteen Georgia engineering societies met to discuss forming a non-profit, tax-exempt organization to improve engineering education and the image of the engineer in Georgia. GEF was chartered as a 501(c)(3)charity in July of 1971. GEF is made up of nine professional engineering societies and four associate member organizations.

AWARD WINNER:

Rahul Gokhale

Optimizing Energy Use in Medical Spaces with Building Materials

Milton High School - FULTON COUNTY Fulton County Regional Fair

Georgia Intellectual Property Alliance Young Inventor's Award, sponsored	l by
Founders Legal	

The winner of the GIPA Young Inventor's Award will receive free legal assistance toward obtaining a patent for their research. This award is facilitated by the Georgia Intellectual Property Alliance as part of an initiative to increase awareness and educational resources about IP for all of our talented young inventors and researchers across the state. The award is sponsored by Founders Legal, a corporate and intellectual property law firm based in Atlanta, Georgia.

AWARD WINNER:

Jooyoung Kim High Gender Determination Using Acoustic Methods in Layer Strains

<u>IST ALTERNATE:</u>

Ethan Hoellrich & Carpenter Ray Anti Ice Paint: Safer & Cheaper Methods to Combat Ice on Planes

2ND ALTERNATE:

Mrinal Kulkarni

Novel Graphene-Ink Sensors for Monitoring Sleepwalking Patients

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

Whitewater High School - FAYETTE COUNTY Griffin RESA Regional Fair

West Forsyth High School - FORSYTH COUNTY Northwest Georgia Regional Fair

Georgia Science Teachers Association Award for Creative Problem Solving

GSTA is committed to supporting excellence in science teaching for the students of Georgia. GSTA works to CONNECT, INFORM, SUPPORT, and ADVOCATE for science teachers across the state. They also seek to PARTNER with like-minded formal and informal science education organizations to further GSTA's mission and goals.

JUNIOR DIVISION AWARD WINNER:

Sahil Singh Sound, Vibrations, EMF, and Electrostatic Energy Generation Fulton Science Academy - FULTON COUNTY Fulton County Regional Fair

SENIOR DIVISION AWARD WINNER:

Nina Zhang Automated Vehicle Recognition System for Efficient School Pickups Fulton Science Academy - FULTON COUNTY Fulton County Regional Fair

Fulton Science Academy - FULTON COUNTY

Fulton County Regional Fair

Georgia Society of Professional Engineers Best Use of Engineering Skills Award

The Georgia Society of Professional Engineers is the state society of engineering professionals from all disciplines that promote the ethical and competent practice of engineering, advocates licensure, and enhances the image and well-being of its members.

AWARD WINNER:

Nina Zhang

Automated Vehicle Recognition System for Efficient School Pickups

IEEE Atlanta Section Awards

IEEE is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. IEEE and its members inspire a global community through its highly cited publications, conferences, technology standards, and professional and educational activities.

ELECTRICAL & MECHANICAL ENGINEERING, JUNIOR DIVISION AWARD WINNER:

Sesharaman Krishnan

Pradarshan: An Omnidirectional Display

Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

ELECTRICAL & MECHANICAL ENGINEERING, SENIOR DIVISION AWARD WINNER:

Stephen Griggs Sundancer: Long Endurance Solar Powered UAV for Disaster Relief Midtown High School - FULTON COUNTY Atlanta Regional Fair MATERIALS & BIOENGINEERING, JUNIOR DIVISION AWARD WINNER:

Malcolm Guise Testing the Elastic Sag Modulus of Real & Artificial Spider Webs

MATERIALS & BIOENGINEERING, SENIOR DIVISION AWARD WINNER:

Anushka Sable

A Platform to Study Microplastic Pollution-Induced Pathologies

Inspiring Excellence Award

Inspiring Excellence Inc. is a non-profit organization established in 1999 to encourage elementary and high school science fair participants and their teachers to continue their efforts in science. Inspiring Excellence, Inc gives monetary awards that recognize exceptional enthusiasm, effort, and scientific curiosity. Inspiring Excellence was founded by a science fair winner.

STUDENT AWARD WINNERS:

Moatapari Agbere Chattahoochee County High School - CHATTAHOOCHEE COUNTY Natural Antimicrobials for E. coli Control and HUS Prevention Columbus Regional Fair

Brielle Childs A. R. Johnson Health Science & Engineering Magnet School - RICHMOND COUNTY Blooming Bright for Flower Longevity Georgia College Regional Fair

Ryan McCord How Can You Grow Plants in the Absence of a Seed?

Tallulah Pair How to Best Supplement Diets to Prevent Osteoporosis

Amy Smith The Mouse Maze Part 2.0

Jonah Toon Reducing Carbohydrate Intake Improves Blood Sugar Control

Alicia Wright Rockdale Magnet School for Science & Technology - ROCKDALE COUNTY Bioink: Future of Temporary Medical Markings & Health Monitoring Rockdale County Regional Fair

Buruk Ykeallo The Carbon Cycle: Who Drives It? Rehoboth Road Middle School - SPALDING COUNTY Griffin RESA Regional Fair

TEACHER AWARD WINNER:

Sureka Taylor

The Champion Theme Middle School - DEKALB COUNTY

Lemelson Early Inventor Prize

The Lemelson Early Inventor Prize is awarded to a 6th, 7th, or 8th grade project that applies empathy, STEM knowledge, and entrepreneurial thinking in addressing a critical problem that impacts their life or the lives of their family or community.

AWARD WINNER:

Jooyoung Kim

High Gender Determination Using Acoustic Methods in Layer Strains

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

Chamblee High School - DEKALB COUNTY DeKalb County Regional Fair

The Champion Theme Middle School - DEKALB COUNTY DeKalb County Regional Fair

Tybee Island Maritime Academy - CHATHAM COUNTY Savannah State University Regional Fair

Johnson County High School - JOHNSON COUNTY Georgia College Regional Fair

> Clarke Middle School - CLARKE COUNTY Northeast Georgia Regional Fair

Atlanta Regional Fair

David T. Howard Middle School - FULTON COUNTY

The Linda Voss Excellence in Plant Science Award

This award is sponsored by the Dong Family in honor of Linda Voss. Though Linda was neither wealthy nor famous, she was a devoted mother and grandmother who cherished her family. She took immense pride in her granddaughters, both dedicated science fair participants, and spent countless hours listening, encouraging, and supporting them as they developed their projects, conducted experiments, and competed in various fairs. By sponsoring awards in her name, the Dong family strives to continue her legacy of encouragement and support, inspiring future generations of students to explore and excel in science.

JUNIOR DIVISION AWARD WINNER:

Harris Palmer Jammin Plants Thomas County Middle School - THOMAS COUNTY ABAC Regional Fair

SENIOR DIVISION AWARD WINNER:

Natalia KurzGwinnett School of Mathematics, Science & Technology - GWINNETT COUNTYEarthworms and Phosphorus: A Controlled Greenhouse ExperimentGwinnett County Regional Fair

Mercer University School of Medicine Award

The mission of the Mercer University School of Medicine focuses on training physicians to meet the healthcare needs of rural and underserved areas of Georgia. The School encourages young scientists in these areas to set high educational goals and challenge themselves to become tomorrow's healthcare providers and leaders in our state. The Mercer University School of Medicine Scholarship Award goes to outstanding projects in life sciences research that may lead to new discoveries in the diagnosis and treatment of disease or in understanding the causal factors of population health risks.

JUNIOR DIVISION AWARD WINNER:

Garrett Torres How Green Tea Processing Methods Affect Antimicrobial Potential Oconee County Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

SENIOR DIVISION AWARD WINNER:

Moatapari AgbereChattahoochee County High School - CHATTAHOOCHEE COUNTYNatural Antimicrobials for E. coli Control and HUS PreventionColumbus Regional Fair

NASA Earth System Science Award

The purpose of NASA's Earth science program is to develop a scientific understanding of Earth's system and how it responds to changes that occur as a result of natural and human-made causes. NASA is involved in numerous research and educational efforts, working to find answers to questions related to these complex interactions. Through a variety of Earth system satellite missions, NASA is striving to provide researchers and scientists with the data they need to find these answers.

JUNIOR DIVISION AWARD WINNER:

Buruk Ykeallo The Carbon Cycle: Who Drives It? Rehoboth Road Middle School - SPALDING COUNTY Griffin RESA Regional Fair

SENIOR DIVISION AWARD WINNER:

Caleb Menghisteab

Investigating the Impact of Amine-Functionalization on MOF-303

Paul Duke STEM High School - GWINNETT COUNTY Gwinnett County Regional Fair

National Youth Science Camp Award

Hosted in Monongahela National Forest in West Virginia since 1963, the National Youth Science Camp is an elite residential STEAM program designed to honor and challenge some of the nation's rising leaders and provide them with opportunities to engage with STEAM professionals and participate in exciting outdoor activities.

AWARD WINNERS:

Samantha Dalby, Woodland High School Stockbridge Kristen Lee, Chattahoochee High School

ALTERNATES:

Aarya Gupta, Alpharetta High School **Keefer Lin**, Chattahoochee High School

Naval Science Award

The Naval Science Awards Program is a U.S. Navy and Marine Corps program that encourages our nation's students to develop and retain an interest in science and engineering. NSAP recognizes the accomplishments of eligible students at regional and state science and engineering fairs and the International Science and Engineering Fair (ISEF) in producing and presenting quality science and engineering projects. The Office of Naval Research (ONR) sponsors NSAP for the U.S. Navy and Marine Corps. ONR coordinates, executes, and promotes science and technology programs of the Naval services through universities, government laboratories, and nonprofit and for-profit organizations. Fostering an academic interest in Naval-relevant science and engineering from high school through post-doctoral levels is of great importance to ONR.

JUNIOR DIVISION AWARD WINNERS	JUNIOR	DIVISION	AWARD	WINNERS:
-------------------------------	--------	----------	-------	----------

Joshua Buchanan How Extra Weather Information Affects Decision Making

Maxwell Chesnut-Anne What Quantity of Water in Soda Bottle Rocket Gives Max. Altitude

Robert Hall Novel Biodegradable Bioplastic Derived from Invasive P. lobata

Dhanvi Mepani Red Is the New Green

Cora Snyder

Butterflies Lift Off!

Rockdale County Regional Fair Wadsworth Magnet School - DEKALB COUNTY

General Ray Davis Middle School - ROCKDALE COUNTY

Glenn C. Jones Middle School - GWINNETT COUNTY

DeKalb County Regional Fair

Cobb/Paulding Regional Fair

Cobb/Paulding Regional Fair

Wheeler High School - COBB COUNTY

Gwinnett County Regional Fair

Dove Creek Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

Oak Hill Middle School - BALDWIN COUNTY Georgia College Regional Fair

Paulding County High School - PAULDING COUNTY

SENIOR DIVISION AWARD WINNERS:

Samantha CaswellGwinnett School of Mathematics, Science & Technology - GWINNETT COUNTYBioQubits: Advancing Quantum Physics at the Biological FrontierGwinnett County Regional Fair

Shelby Kendrick Aspergillus terreus for Biodegradation of Pre-Treated Plastics

Matthew Mui Development of Dual MDM2/Tubulin-Targeted Treatment for AML

Mehek SahaGwinnett School of Mathematics, Science & Technology - GWINNETT COUNTYGeometric Optimization of Differential Ray-Tracing ModelsGwinnett County Regional Fair

Ella Sipe Connection Between Modern Military and Increased Incidence of ALS North Atlanta High School - FULTON COUNTY Atlanta Regional Fair

NOAA - Taking the Pulse of the Planet Award

The National Oceanic & Atmospheric Administration (NOAA) is the U.S. government agency with a mission of science, service, and stewardship. Its mission touches the lives of every American, protecting life and property and conserving and protecting natural resources.

JUNIOR DIVISION AWARD WINNER:

Nevee Mishra Cooling the Thermal Hotspots: Variability in Heat Exposure

SENIOR DIVISION AWARD WINNER:

Neal Mishra Socioeconomic and Demographic Disparities in Urban Heat Exposure

Malcom Bridge Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

North Oconee High School - OCONEE COUNTY Northeast Georgia Regional Fair

Northeast Georgia Section American Chemical Society Award for Achievement in Chemistry

The American Chemical Society is a non-profit organization founded in 1876 and chartered by the U.S. Congress. ACS is committed to improving all lives through the transforming power of chemistry. Their mission is to advance scientific knowledge, empower a global community, and champion scientific integrity.

JUNIOR DIVISION AWARD WINNER:

Stella Nguyen Stained to Sparkle North Gwinnett Middle School - GWINNETT COUNTY Gwinnett County Regional Fair

SENIOR DIVISION AWARD WINNER:

Shiv Garg Utilizing Quantum and Classical Computing for Drug Discovery FCS Innovation Academy - FULTON COUNTY Fulton County Regional Fair

Psi Alpha International Honor Society for High School Psychology Award

Founded in 2018, Psi Alpha is an honor society for high school students, inviting students who plan to major or minor in psychology, as well as students who simply have an interest in psychology. Psi Alpha's mission is to enhance high school students' understanding and knowledge of the science of psychology, how psychology benefits society, and career opportunities available in psychology.

AWARD WINNER:

Jaelena Arroyo & Trint Conrod

Academic Perception

Impact Academy - HENRY COUNTY Henry County Regional Fair

Regeneron Biomedical Science Award

This award goes to an exceptional student scientist who not only demonstrates an impressive command of biomedical science and research but also embodies Regeneron's core values and behaviors: Lead with science, Take on big ideas, Make it happen, Be great together, and Do what's right.

AWARD WINNER:

McKenzie BroughtonRockdale Magnet School for Science & Technology - ROCKDALE COUNTYWay of Nature: Using Medicinal Herbs to Treat Alzheimer's DiseaseRockdale County Regional Fair

Ricoh Sustainable Development Award

Ricoh is a global technology company specializing in office imaging equipment, production print solutions, document management systems and IT services. Ricoh has a long-standing environmental mission and commitment to sustainability, bringing corporate, social and environmental responsibilities into balance.

JUNIOR DIVISION AWARD WINNERS:

Shreya Balamurugan, Jahnavi Jawahar & Samhita NarayananRiver Trail Middle School - FULTON COUNTYUnseen Intruders: Shedding Light on an Invisible ThreatFulton County Regional Fair

SENIOR DIVISION AWARD WINNER:

Dani DonaldRockdale Magnet School for Science & Technology - ROCKDALE COUNTYAgar Packing Material: Just as Good as Styrofoam?Rockdale County Regional Fair

Society for In Vitro Biology Award

The Society for In Vitro Biology (SIVB) was founded in 1946 as the Tissue Culture Association to foster exchange of knowledge of in vitro biology of cells, tissues and organs from both plan and animals (including humans). The focus is on biological research, development, and applications of significance to science and society.

AWARD WINNERS:

Eugene Kang

Anticancer Activity and Tumor Modulation of Uvularia perfoliata

Sean Lee

Sniper-dCas9: Directed Evolution for the Optimization of dCas9

Harrison High School - COBB COUNTY Cobb/Paulding Regional Fair

Lambert High School - FORSYTH COUNTY Northwest Georgia Regional Fair

Stockholm Junior Water Prize Regional Nomination

Started in 1997, the Stockholm Junior Water Prize is considered the most prestigious award for water-related science, both nationally and internationally. The prize strives to encourage enthusiasm in today's youth regarding water issues, build an international community of young scientists bonded together for the water environment, raise public awareness about the future of water resources, and develop and ensure future leadership in the water quality community by attracting the best and brightest young people into the water sector field. This nomination invites students to apply to the state-level competition.

NOMINEES:

Anabella Bluhm Making Ocean Oil Spill Cleanup Attractive

Shelby Kendrick Aspergillus terreus for Biodegradation of Pre-Treated Plastics

Luke Loudon The Effects of Pollutants on Pond Water Quality

Seowon (Steven) Park Measuring the Impact of Conyers BioLab Explosion Using D. magna

Johns Creek High School - FULTON COUNTY Fulton County Regional Fair

Oconee County High School - OCONEE COUNTY

Paulding County High School - PAULDING COUNTY

Dunwoody High School - DEKALB COUNTY

Northeast Georgia Regional Fair

Cobb/Paulding Regional Fair

DeKalb County Regional Fair

Tiffany Ramos E. coli as a Microbiological Indicator of Water Quality Elite Scholars Academy Jonesboro - CLAYTON COUNTY Clayton County Regional Fair

Thermo Fisher Scientific Junior Innovators Challenge Nomination

Formerly the Broadcom MASTERS competition, the Thermo Fisher Scientific Junior Innovators Challenge is sponsored by the Society for Science and is the nation's premier science fair competition for 6th, 7th and 8th grade students. The following students have been nominated to enter the Thermo Fisher Scientific Junior Innovators Challenge competition. Thermo Fisher Scientific JIC finalists will be awarded an expense-paid trip to Washington, DC in October to compete for more than \$100,000 in prizes. Students who already received nominations from their Regional Fair were not re-nominated.

NOMINEES:

Arjun Ananda Cytognosis

Saranya Bandaru, Sanika Khairnar & Siruni Pulijala SegraBin: Revolutionizing Waste Management

Pranav Banerjee & Vidith Shastrula How Can We Create Building Designs that Can Resist Earthquakes?

Ella Bryant & Avila Harter May the Best Moisturizer Win Lakeside Middle School Cumming - FORSYTH COUNTY Northwest Georgia Regional Fair

> Riverwatch Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

> > Daniell Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Chamblee Middle School - DEKALB COUNTY DeKalb County Regional Fair

Award continues on following page →

Thermo Fisher Scientific JIC Nominees, continued from previous page

Joshua Buchanan How Extra Weather Information Affects Decision Making

Peyton Chapman Beautiful Bones: Best Household Chemical for Whitening Bones

Hudson Gillentine The Alchemy of Elasticity: Turning Stretch into Power

Kavya Jogiraju, Avery Lohman & Kelly Lu Under Fire

Jooyoung Kim High Gender Determination Using Acoustic Methods in Layer Strains

Sesharaman Krishnan Pradarshan: An Omnidirectional Display

Siddhant Mahapatra Identifying Differentially Expressed Genes in Alzheimer's

Saanvi Maremanda, Anoushka Nair & Shambhavi Shankar Biodegradable vs Polythene: Which One Will Save Our Planet?

Dhanvi Mepani Red Is the New Green

Tallulah PairHow to Best Supplement Diets to Prevent Osteoporosis

Jonah Toon Reducing Carbohydrate Intake Improves Blood Sugar Control

Andrew Wang Enhancing Bioplastics: Impact of Natural Additives on Flexibility

Patrick Xia Sugarcane in 3D Printing

Buruk Ykeallo The Carbon Cycle: Who Drives It? General Ray Davis Middle School - ROCKDALE COUNTY Rockdale County Regional Fair

William James Middle School - BULLOCH COUNTY Savannah State University Regional Fair

E. T. Booth Middle School - CHEROKEE COUNTY Northwest Georgia Regional Fair

Riverwatch Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Piney Grove Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

Dove Creek Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

Tybee Island Maritime Academy - CHATHAM COUNTY Savannah State University Regional Fair

> Clarke Middle School - CLARKE COUNTY Northeast Georgia Regional Fair

Chamblee Middle School - DEKALB COUNTY DeKalb County Regional Fair

Taylor Road Middle School - FULTON COUNTY Fulton County Regional Fair

Rehoboth Road Middle School - SPALDING COUNTY Griffin RESA Regional Fair

UGA Charter Scholarship Award

The University of Georgia Charter Scholarship is a \$2,000 renewable scholarship awarded to 225-275 new students demonstrating outstanding achievement in academics and other criteria contained in the Philosophy Statement of Admissions, including an understanding of and respect for intellectual, social, and cultural differences, and a commitment to citizenship through public service, school activities, community involvement, leadership, and family. To qualify for this scholarship, students submitted an application packet documenting their academic standing, as well as a personal essay.

SCHOLARSHIP RECEIPIENTS:

Eun Jae Lee Harshitha Rajaprabhu Peachtree Ridge High School - GWINNETT COUNTY Northview High School - FULTON COUNTY

UGA College of Pharmacy Award

The UGA College of Pharmacy is a distinguished institution known for its excellence in pharmacy education, research, and community service. They are at the forefront of pharmaceutical research, with faculty and students engaged in groundbreaking studies that contribute to advancements in healthcare and medicine.

AWARD WINNERS:

Abby Lee, Pragya Modgil & Claire Park Identification & Validation of Novel Atherosclerosis Biomarkers Johns Creek High School - FULTON COUNTY Fulton County Regional Fair

Ramin SarkarGwinnett School of Mathematics, Science & Technology - GWINNETT COUNTYDual Potential of Anti-Hypertensive IAA for AD and Tau ModulationGwinnett County Regional Fair

UGA Mathematics Department Award

The University of Georgia Department of Mathematics offers four degrees: Bachelor of Science (B.S.), Master of Arts (M.A.), Master of Applied Mathematical Sciences (M.A.M.S.), and Doctor of Philosophy (Ph.D.), as well as a Double Dawgs 5-year program which combines the B.S. and M.A. in Mathematics.

JUNIOR DIVISION AWARD WINNER:

Peyton Chapman Beautiful Bones: Best Household Chemical for Whitening Bones

SENIOR DIVISION AWARD WINNER:

Anthony Ahn & Aditya Zaveri

Traffic Optimization Through Graph Theory

William James Middle School - BULLOCH COUNTY Savannah State University Regional Fair

> Dunwoody High School - DEKALB COUNTY DeKalb County Regional Fair

UGA Microbiology Department Award

Founded in 1952 in the Franklin College of Arts and Sciences at the University of Georgia, the Department of Microbiology has enjoyed sustained growth and has developed an international reputation in prokaryotic biology. The department has approximately 40 faculty affiliates who lead vigorous and innovative research programs in a wide variety of areas of microbiology.

JUNIOR DIVISION AWARD WINNER:

Shawn Rouse 5 Second Rule

SENIOR DIVISION AWARD WINNER:

Tiffany Ramos

E. coli as a Microbiological Indicator of Water Quality

THRIVE Christian Academy - DEKALB COUNTY DeKalb County Regional Fair

Elite Scholars Academy Jonesboro - CLAYTON COUNTY Clayton County Regional Fair

UGA Physics & Astronomy Department Award

The University of Georgia Department of Physics and Astronomy offers undergraduate degrees in Astrophysics and Physics. It also offers comprehensive graduate degrees at both the Masters and Doctorate levels. Recipients of this award will be receiving a full set of the New Millennium Edition of The Feynman Lectures on Physics.

JUNIOR DIVISION AWARD WINNER:

Jooyoung Kim High Gender Determination Using Acoustic Methods in Layer Strains

SENIOR DIVISION AWARD WINNERS:

Nicole Ouyang & Hiya Patel

Quantum AI for TESS: Detecting Exoplanet Candidates w/ ExoScope-Q

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

Chattahoochee High School - FULTON COUNTY 2 Fulton County Regional Fair

U.S. Air Force Achievement Award

The Air Force Research Laboratory is a global technical enterprise, boasting some of the best and brightest leaders in the world. We are Revolutionary, Relevant, and Responsive to the Warfighter. We defend America by unleashing the unconquerable power of scientific and technical innovation. Our mission is leading the discovery, development, and integration of affordable warfighting technologies for our air, space, and cyberspace force.

AWARD WINNERS:

Stephen Griggs

Sundancer: Long Endurance Solar Powered UAV for Disaster Relief

Adarsh Hemrajani, Aakash Joshi & Kristen Lee

Rose Petal Microstructures in Improving Solar Power Efficiency

U.S. Metric Association Award

The US Metric Association (USMA), Inc., is a national non-profit organization that was founded in 1916. USMA advocates completing the US conversion to the International System of Units, known by the symbol SI (ess-eye) and also called the metric system. The process of changing measurement units to the metric system is called metric transition or metrication.

JUNIOR DIVISION AWARD WINNER:

Garrett Torres How Green Tea Processing Methods Affect Antimicrobial Potential

SENIOR DIVISION AWARD WINNERS:

Yesha Mistry & Remiya Stephens Centrifugal Cycle: The Best Solution for Nanoplastic Separation

Wesleyan College Math & Science Award

As the first college in the world chartered to grant degrees to women, Wesleyan College is committed to creating a diverse and inclusive women's education.

AWARD WINNERS:

Dani DonaldRockdale Magnet School for Science & Technology - ROCKDALE COUNTYAgar Packing Material: Just as Good as Styrofoam?Rockdale County Regional Fair

Hannah Liles

Synthesis of Silver Nanoparticles for Detection of Heavy Metals

Sarah Wang

Spatial Disparities in Toxic Particulate Matter Across Transport

The Westminster Schools - FULTON COUNTY Atlanta Regional Fair

Rutland High School - BIBB COUNTY

Georgia College Regional Fair

Yale Science & Engineering Association Award

YSEA connects alumni with students, the University, and each other to strengthen the Yale science and engineering community. It comprises alumni working together to strengthen Yale's education of leaders for a world increasingly dominated by science and technology.

AWARD WINNERS:

Samantha Dalby

Wheeled to Quadruped Transforming Robot

Woodland High School Stockbridge - HENRY COUNTY Henry County Regional Fair

Oconee County Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

> Rutland High School - BIBB COUNTY Georgia College Regional Fair

Atlanta Regional Fair Chattahoochee High School - FULTON COUNTY

Midtown High School - FULTON COUNTY

Fulton County Regional Fair

GSEF PIN DESIGN CONTEST WINNER

Each year, GSEF participants look forward to receiving a commemorative, collectible pin that represents STEM and the state of Georgia. Students who advance to the Regeneron International Science & Engineering Fair exchange a set of pins with fellow ISEF exhibitors from all over the world at the official ISEF Pin Exchange Ceremony. The design is also featured on the cover of the GSEF printed program.

> CONTEST WINNER: Grace Zeleke Walton High School COBB COUNTY



GRAND AWARDS - JUNIOR DIVISION

Junior Division Student Choice Awards

GROSSEST PROJECT: Ellis Robertson Urine the Race

<u>"I NEVER WOULD HAVE THOUGHT OF THAT":</u> Sesharaman Krishnan Pradarshan: An Omnidirectional Display

BEST OVERALL: Saylor Mactier How Do Mental Health Disorders Affect You? Thomas County Middle School - THOMAS COUNTY ABAC Regional Fair

> Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Waycross Middle School - WARE COUNTY South Georgia State College Regional Fair

Junior Division Best in Category

ANIMAL SCIENCE: Jooyoung Kim High Gender Determination Using Acoustic Methods in Layer Strains

BEHAVIORAL & SOCIAL SCIENCE: Joshua Buchanan How Extra Weather Information Affects Decision Making

BIOCHEMISTRY: Spencer Fortson Retention of Moisture in Low-Porosity Afro-Centric Hair

BIOMEDICAL & HEALTH SCIENCE: **Tallulah Pair** How to Best Supplement Diets to Prevent Osteoporosis

BIOMEDICAL ENGINEERING: Arjun Ananda

Cytognosis

<u>CELLULAR & MOLECULAR BIOLOGY:</u> Grayson White How Does Omega 3 Chicken Feed Supplement Affect Daily Egg Product

<u>CHEMISTRY:</u> **Stella Nguyen** Stained to Sparkle

<u>COMPUTATIONAL BIOLOGY & BIOINFORMATICS:</u> **Siddhant Mahapatra** Identifying Differentially Expressed Genes in Alzheimer's

EARTH & ENVIRONMENTAL SCIENCE: Andrew Wang Enhancing Bioplastics: Impact of Natural Additives on Flexibility River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

General Ray Davis Middle School - ROCKDALE COUNTY Rockdale County Regional Fair

General Ray Davis Middle School - ROCKDALE COUNTY Rockdale County Regional Fair

Tybee Island Maritime Academy - CHATHAM COUNTY Savannah State University Regional Fair

Lakeside Middle School Cumming - FORSYTH COUNTY Northwest Georgia Regional Fair

> Central Middle School - CARROLL COUNTY West Georgia Regional Fair

North Gwinnett Middle School - GWINNETT COUNTY Gwinnett County Regional Fair

> Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Chamblee Middle School - DEKALB COUNTY DeKalb County Regional Fair

EMBEDDED SYSTEMS:

Veer Shah Keep Going - The Future of Electric Vehicles

ENERGY: SUSTAINABLE MATERIALS & DESIGN:

Sahil Singh Sound, Vibrations, EMF, and Electrostatic Energy Generation

ENGINEERING MECHANICS: Sesharaman Krishnan Pradarshan: An Omnidirectional Display

ENVIRONMENTAL ENGINEERING: Saranya Bandaru, Sanika Khairnar & Siruni Pulijala SegraBin: Revolutionizing Waste Management

MATERIALS SCIENCE: Hudson Gillentine The Alchemy of Elasticity: Turning Stretch into Power

MATHEMATICS: Molly Grace Carney Man vs. Machine

<u>MICROBIOLOGY:</u> Garrett Torres How Green Tea Processing Methods Affect Antimicrobial Potential

<u>PHYSICS & ASTRONOMY:</u> **Helen Zhou** The Effect of Solute Identity and Concentration on Refraction

PLANT SCIENCE: Arman Shpuza A Solution to Air Pollution

<u>ROBOTICS & INTELLIGENT MACHINES:</u> **Olivia Molesworth** No Longer Lost in the Middle: How LLMs Assess Large Datasets

<u>SYSTEMS SOFTWARE:</u> **Maya Davis, Sloan Ghai & Anushka Venkatdas** ImmunoIntel: AI's Costimulatory Domain Matchmaker Hull Middle School - GWINNETT COUNTY Gwinnett County Regional Fair

Fulton Science Academy - FULTON COUNTY Fulton County Regional Fair

Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

Riverwatch Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

E. T. Booth Middle School - CHEROKEE COUNTY Northwest Georgia Regional Fair

MacIntyre Park Middle School - THOMAS COUNTY ABAC Regional Fair

Oconee County Middle School - OCONEE COUNTY Northeast Georgia Regional Fair

Taylor Road Middle School - FULTON COUNTY Fulton County Regional Fair

The Westminster Schools - FULTON COUNTY Atlanta Regional Fair

Piney Grove Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

Riverwatch Middle School - FORSYTH COUNTY Northwest Georgia Regional Fair

Junior Division Outstanding 6th, 7th, 8th Grade Projects

OUTSTANDING 6TH GRADE PROJECT: Hudson Gillentine The Alchemy of Elasticity: Turning Stretch into Power

OUTSTANDING 7TH GRADE PROJECT:

Siddhant Mahapatra Identifying Differentially Expressed Genes in Alzheimer's

OUTSTANDING 8TH GRADE PROJECT:

Jooyoung Kim High Gender Determination Using Acoustic Methods in Layer Strains

E. T. Booth Middle School - CHEROKEE COUNTY Northwest Georgia Regional Fair

> Dodgen Middle School - COBB COUNTY Cobb/Paulding Regional Fair

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair

Georgia Science & Engineering Fair Junior Pinnacle Award

Jooyoung Kim

High Gender Determination Using Acoustic Methods in Layer Strains

River Trail Middle School - FULTON COUNTY Fulton County Regional Fair



GRAND AWARDS - SENIOR DIVISION

Senior Division Best in Category

ANIMAL SCIENCE: Vikram Bora Springtail Inspired Mechanisms for Advancing Bio-Hybrid Robotics

BEHAVIORAL & SOCIAL SCIENCE: Jaelena Arroyo & Trint Conrod Academic Perception Johns Creek High School - FULTON COUNTY Fulton County Regional Fair

> Impact Academy - HENRY COUNTY Henry County Regional Fair

 BIOCHEMISTRY:
 Gwinnett School of Mathematics, Science & Technology - GWINNETT COUNTY

 Dual Potential of Anti-Hypertensive IAA for AD and Tau Modulation
 Gwinnett County Regional Fair

BIOMEDICAL & HEALTH SCIENCE:

Christopher Nguyen Bioremediation to Reduce Effects of PAH on Fetal & Neuro Systems

BIOMEDICAL ENGINEERING:

Aadi Vaidya TremorTech: A Stabilizing Glove for Parkinson's Disease Tremors

CELLULAR & MOLECULAR BIOLOGY:

Andrew Guo Gwin Investigating Variable rRNA Modifications in Ribosome Biogenesis

CHEMISTRY:

Pragathi Kasani-Akula Nanoarchitectures for the Identification of Exosomes of TNBC

COMPUTATIONAL BIOLOGY & BIOINFORMATICS:

Arpit Ramani QMD Biclonal Antibodies to Prevent Ferroptosis in Alzheimer's

EARTH & ENVIRONMENTAL SCIENCE:

Sarah Wang Spatial Disparities in Toxic Particulate Matter Across Transport

EMBEDDED SYSTEMS:

Om Guin & Pranav Sambhu ShooterScan: Real-Time Detection for Stopping School Intruders

ENERGY: SUSTAINABLE MATERIALS & DESIGN:

Adarsh Hemrajani, Aakash Joshi & Kristen Lee Rose Petal Microstructures in Improving Solar Power Efficiency

ENGINEERING MECHANICS:

Stephen Griggs Sundancer: Long Endurance Solar Powered UAV for Disaster Relief FCS Innovation Academy - FULTON COUNTY Fulton County Regional Fair

McIntosh High School - FAYETTE COUNTY Griffin RESA Regional Fair

Gwinnett School of Mathematics, Science & Technology nesis Gwinnett County Regional Fair

> South Forsyth High School - FORSYTH COUNTY Northwest Georgia Regional Fair

> > Wheeler High School - COBB COUNTY Cobb/Paulding Regional Fair

The Westminster Schools - FULTON COUNTY Atlanta Regional Fair

Fulton Science Academy - FULTON COUNTY Fulton County Regional Fair

Chattahoochee High School - FULTON COUNTY Fulton County Regional Fair

> Midtown High School - FULTON COUNTY Atlanta Regional Fair

<u>ENVIRONMENTAL ENGINEERING:</u> Joy Sanders Value Added Product from Cellulose in Peanut Shell Agro Waste	Warner Robins High School - HOUSTON COUNTY Houston Regional Fair
MATERIALS SCIENCE: Abhijeet Ghosh Gold Nanoparticles in Medicine: A Study of Anti-Cancer Properties	Walton High School - COBB COUNTY Cobb/Paulding Regional Fair
<u>MICROBIOLOGY:</u> Eun Jae Lee Silent Signals: Boronic Acids Quench E. coli Quorum Sensing	Peachtree Ridge High School - GWINNETT COUNTY Gwinnett County Regional Fair
PHYSICS & ASTRONOMY:Mehek SahaGwinnett School of MathemGeometric Optimization of Differential Ray-Tracing Models	atics, Science & Technology - GWINNETT COUNTY Gwinnett County Regional Fair
<u>PLANT SCIENCE:</u> Taylor Fegley & Nathon Sanft Killer Plants: The Allelopathic Properties of Catnip	Mountain View High School - GWINNETT COUNTY Gwinnett County Regional Fair
<u>ROBOTICS & INTELLIGENT MACHINES:</u> Zachary Orwin Virtual Vision: Enhancing Navigation and Perception for the Blind	Seckinger High School - GWINNETT COUNTY Gwinnett County Regional Fair
SYSTEMS SOFTWARE: Samiel Azmaien & Austin Johnson Gwinnett School of Mathem Optimizing V100 GPU Architecture and Markov Predictive Caching	atics, Science & Technology - GWINNETT COUNTY Gwinnett County Regional Fair
TRANSLATIONAL MEDICAL SCIENCE: Aarav Kothari, Diya Raj & Palak Verma A Multimodal Framework for Non-Invasive Celiac Disease Diagnosis	Denmark High School - FORSYTH COUNTY

A Multimodal Framework for Non-Invasive Celiac Disease Diagnosis

Northwest Georgia Regional Fair

Regional Fair Regeneron ISEF Finalists

Regional Fairs across the state that are directly affiliated with the Regeneron International Science & Engineering Fair may select winners to advance to the ISEF competition. These students were awarded this honor at their Regional Fair prior to advancing to GSEF. Congratulations!

ATLANTA REGIONAL FINALISTS:

Rowan Gillian The Optimal OECT for Future Liquid Biopsies for Cancer

Rhyland O'Neill Red Blood Cell Derived-Extracellular Vesicles for Therapeutic App

Riley Sipe Making a Low-Cost Carbon Catcher for Developing Communities

CLAYTON COUNTY REGIONAL FINALISTS:

Vy Le Optimization of Soil Microbes for Microplastic Biodegradation

James Mays & Ka'Lil Remer Cost-Effective Sound Transducers for Cardiological Applications

COBB/PAULDING REGIONAL FINALISTS:

Arpit Ramani QMD Biclonal Antibodies to Prevent Ferroptosis in Alzheimer's

DEKALB COUNTY REGIONAL FINALIST:

Akosua Baah We're Dyeing to Know!

Anushka Sable A Platform to Study Microplastic Pollution-Induced Pathologies

GEORGIA COLLEGE REGIONAL FINALISTS:

Hannah Liles Synthesis of Silver Nanoparticles for Detection of Heavy Metals

Emma Tillery Investigating the Effects of Gravitational Force on Cress Seed

GRIFFIN RESA REGIONAL FINALISTS:

Ludovic Lythgoe A Multimodal Deep Ensemble Network for ASD Diagnosis & Subtyping

Lara Otico Speuro: Kudzu-Based Supramolecular Polymers for Neuroregeneration

Aadi Vaidya TremorTech: A Stabilizing Glove for Parkinson's Disease Tremors The Westminster Schools - FULTON COUNTY Atlanta Regional Fair

Drew Charter School - FULTON COUNTY Atlanta Regional Fair

North Atlanta High School - FULTON COUNTY Atlanta Regional Fair

Morrow High School - CLAYTON COUNTY Clayton County Regional Fair

Stilwell School of the Arts - CLAYTON COUNTY Clayton County Regional Fair

> Wheeler High School - COBB COUNTY Cobb/Paulding Regional Fair

Tucker High School - DEKALB COUNTY DeKalb County Regional Fair

Chamblee High School - DEKALB COUNTY DeKalb County Regional Fair

> Rutland High School - BIBB COUNTY Georgia College Regional Fair

Central High School Macon - BIBB COUNTY Georgia College Regional Fair

Whitewater High School - FAYETTE COUNTY Griffin RESA Regional Fair

McIntosh High School - FAYETTE COUNTY Griffin RESA Regional Fair

McIntosh High School - FAYETTE COUNTY Griffin RESA Regional Fair



<u>GWINNETT COUNTY REGIONAL FINALISTS:</u> Aditya Arora EV Charge - A Novel Approach to EV Charging Inf	Peachtree Ridge High School - GWINNETT COUNTY rastructure Gwinnett County Regional Fair	
Samiel Azmaien & Austin Johnson Gwinnett School of Mathematics, Science & Technology - GWIN Optimizing V100 GPU Architecture and Markov Predictive Caching Gwinnett Coun		
Kristen Bright Gwinnett S	chool of Mathematics, Science & Technology - GWINNETT COUNTY	
Phage and Peptide Solutions for Biofilm Growth in	Space Gwinnett County Regional Fair	
BanAnh Doan Gwinnett S	chool of Mathematics, Science & Technology - GWINNETT COUNTY	
Optimization of Net & Whipple Shield-Based Space	e Debris Removal Gwinnett County Regional Fair	
Joyce Lee	Peachtree Ridge High School - GWINNETT COUNTY	
N-3-Hydroxyphenyl Alkanamide for Seizure Manag	gement Gwinnett County Regional Fair	
Eun Jae Lee	m Sensing Peachtree Ridge High School - GWINNETT COUNTY	
Silent Signals: Boronic Acids Quench E. coli Quoru	Gwinnett County Regional Fair	
HENRY COUNTY REGIONAL FINALISTS: Samantha Dalby Wheeled to Quadruped Transforming Robot	Woodland High School Stockbridge - HENRY COUNTY Henry County Regional Fair	
Jonathan Dorminy	Sola Fide Home School - HENRY COUNTY	
Faster Terahertz Gap Modulation for Higher Data	Rates Henry County Regional Fair	
Monica Ngo & Hannah Tran	Woodland High School Stockbridge - HENRY COUNTY	
Thermoelectric Generator's Effect on Photovoltaic	System's Output Henry County Regional Fair	
HOUSTON REGIONAL FINALISTS: Joy Sanders Value Added Product from Cellulose in Peanut She	Warner Robins High School - HOUSTON COUNTY Il Agro Waste Houston Regional Fair	

ROCKDALE COUNTY REGIONAL FINALISTS:

Sydney HammettRockdale Magnet School for Science & Technology - ROCKDALE COUNTYRedefining Synthetic Hair: A Sustainable Banana Fiber SolutionRockdale County Regional Fair

Gavin ReeceRockdale Magnet School for Science & Technology - ROCKDALE COUNTYUsing Magnets to Replace Traditional Static Automotive SuspensionRockdale County Regional Fair

Alex RojasRockdale Magnet School for Science & Technology - ROCKDALE COUNTYUsing Electroencephalography to Control Transhumeral ProsthesesRockdale County Regional Fair



GEORGIA SCIENCE & ENGINEERING FAIR SENIOR DIVISION TOP TEN GRAND AWARD RECIPIENTS

listed alphabetically



Samiel Azmaien & Austin Johnson

Optimizing V100 GPU Architecture and Markov Predictive Caching Gwinnett School of Mathematics, Science & Technology - GWINNETT COUNTY Gwinnett County Regional Fair

Stephen Griggs

Sundancer: Long Endurance Solar Powered UAV for Disaster Relief Midtown High School - FULTON COUNTY Atlanta Regional Fair

Om Guin & Pranav Sambhu

ShooterScan: Real-Time Detection for Stopping School Intruders Fulton Science Academy - FULTON COUNTY Fulton County Regional Fair

Pragathi Kasani-Akula

Nanoarchitectures for the Identification of Exosomes of TNBC South Forsyth High School - FORSYTH COUNTY Northwest Georgia Regional Fair

Aarav Kothari, Diya Raj & Palak Verma

A Multimodal Framework for Non-Invasive Celiac Disease Diagnosis Denmark High School - FORSYTH COUNTY Northwest Georgia Regional Fair

Eun Jae Lee

Silent Signals: Boronic Acids Quench E. coli Quorum Sensing Peachtree Ridge High School - GWINNETT COUNTY Gwinnett County Regional Fair

Ayan Patel

Therasyn: A Novel Synergistic Drug Therapy for COPD Walton High School - COBB COUNTY Cobb/Paulding Regional Fair

Harshitha Rajaprabhu

The Genetics Behind Systemic Lupus Erythematosus Northview High School - FULTON COUNTY Fulton County Regional Fair

Arpit Ramani

QMD Biclonal Antibodies to Prevent Ferroptosis in Alzheimer's Wheeler High School - COBB COUNTY Cobb/Paulding Regional Fair



GEORGIA SCIENCE & ENGINEERING FAIR REGENERON ISEF AWARD





Stephen Griggs

Sundancer: Long Endurance Solar Powered UAV for Disaster Relief Midtown High School - FULTON COUNTY Atlanta Regional Fair

Pragathi Kasani-Akula

Nanoarchitectures for the Identification of Exosomes of TNBC South Forsyth High School - FORSYTH COUNTY Northwest Georgia Regional Fair

Ayan Patel

Therasyn: A Novel Synergistic Drug Therapy for COPD Walton High School - COBB COUNTY Cobb/Paulding Regional Fair

Harshitha Rajaprabhu

The Genetics Behind Systemic Lupus Erythematosus Northview High School - FULTON COUNTY Fulton County Regional Fair

Georgia Science & Engineering Fair Pinnacle Award

Pragathi Kasani-Akula

Nanoarchitectures for the Identification of Exosomes of TNBC South Forsyth High School - FORSYTH COUNTY Northwest Georgia Regional Fair



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

FIRST HONORS

Arjun Ananda Saranya Bandaru Pranav Banerjee Ella Bryant Joshua Buchanan Peyton Chapman Hudson Gillentine Avila Harter Kavya Jogiraju Sanika Khairnar Jooyoung Kim Sesharaman Krishnan Avery Lohman Kelly Lu Siddhant Mahapatra Saanvi Maremanda Dhanvi Mepani Archan Morajkar Anoushka Nair Stella Nguyen Tallulah Pair Siruni Pulijala Eshaan Shah Veer Shah Shambhavi Shankar Vidith Shastrula Arman Shpuza Jonah Toon Andrew Wang Patrick Xia Buruk Ykeallo

Lakeside Middle School Cumming **Riverwatch Middle School** Daniell Middle School Chamblee Middle School General Ray Davis Middle School William James Middle School E. T. Booth Middle School Chamblee Middle School **Riverwatch Middle School Riverwatch Middle School River Trail Middle School** Dodgen Middle School **Riverwatch Middle School** Riverwatch Middle School Dodgen Middle School Piney Grove Middle School Dove Creek Middle School Hull Middle School Piney Grove Middle School North Gwinnett Middle School Tybee Island Maritime Academy **Riverwatch Middle School** Hull Middle School Hull Middle School Piney Grove Middle School Daniell Middle School The Westminster Schools Clarke Middle School Chamblee Middle School Taylor Road Middle School Rehoboth Road Middle School

FORSYTH COUNTY FORSYTH COUNTY COBB COUNTY DEKALB COUNTY **ROCKDALE COUNTY** BULLOCH COUNTY CHEROKEE COUNTY DEKALB COUNTY FORSYTH COUNTY FORSYTH COUNTY FULTON COUNTY COBB COUNTY FORSYTH COUNTY FORSYTH COUNTY COBB COUNTY FORSYTH COUNTY OCONEE COUNTY **GWINNETT COUNTY** FORSYTH COUNTY **GWINNETT COUNTY** CHATHAM COUNTY FORSYTH COUNTY GWINNETT COUNTY **GWINNETT COUNTY** FORSYTH COUNTY COBB COUNTY FULTON (ATLA REGIONAL) **CLARKE COUNTY** DEKALB COUNTY FULTON COUNTY SPALDING COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

SECOND HONORS

Daniel Adebayo **Ursuline Arnold** Shreya Balamurugan Piper Card Jade Coleman Maya Davis Savi Garq Sloan Ghai Aemalie Griffin Malcolm Guise Robert Hall Adyn Honore' Jahnavi Jawahar Rylee Kelly Mahdy Masoud Nevee Mishra Olivia Molesworth Samhita Narayanan **Rishabh Pandya** Ashaan Patel Mia Perla Raelynn Robinson Shawn Rouse Jessie Salas Estrada Sarah Small Emma Striedinger Mary Evenal Thompson Garrett Torres Anushka Venkatdas Jacey Wu Helen Zhou

Chapel Hill Middle Douglasville David T. Howard Middle School River Trail Middle School Hilsman Middle School Central Middle School Riverwatch Middle School River Trail Middle School Riverwatch Middle School Mossy Creek Middle School David T. Howard Middle School Glenn C. Jones Middle School David T. Howard Middle School River Trail Middle School Crisp County Middle School Wadsworth Magnet School Malcom Bridge Middle School Piney Grove Middle School River Trail Middle School E. T. Booth Middle School The Westminster Schools Chamblee Middle School **Richards Middle School** THRIVE Christian Academy Hilsman Middle School St. Thomas More Catholic School David T. Howard Middle School Thomas County Middle School Oconee County Middle School **Riverwatch Middle School** The Westminster Schools Taylor Road Middle School

DOUGLAS COUNTY FULTON (ATLA REGIONAL) FULTON COUNTY CLARKE COUNTY CARROLL COUNTY FORSYTH COUNTY FULTON COUNTY FORSYTH COUNTY HOUSTON COUNTY FULTON (ATLA REGIONAL) **GWINNETT COUNTY** FULTON (ATLA REGIONAL) FULTON COUNTY CRISP COUNTY DEKALB COUNTY OCONEE COUNTY FORSYTH COUNTY FULTON COUNTY CHEROKEE COUNTY FULTON (ATLA REGIONAL) DEKALB COUNTY MUSCOGEE COUNTY DEKALB COUNTY **CLARKE COUNTY** DEKALB COUNTY FULTON (ATLA REGIONAL) THOMAS COUNTY OCONEE COUNTY FORSYTH COUNTY FULTON (ATLA REGIONAL) FULTON COUNTY

IONOF

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

THIRD HONORS

Juann Abraham Aarushi Amin Aarushi Arora Satwik Bodhireddy Alex Call Sahil Chitta Saurya Chunduri **Ruby Darnell** Olivia Ficarra Omar Ghareeb Ezra Irwin Charlotte Killebrew Mason Malec Ian McCracken Zyion Miles Ryan Nix Harper O'Neill Annabelle Paquette Veera Puri Aisha Saxena Aatmiva Shah Anoushka Shinde Sahil Singh Rvan Sok Saahil Trivedi Lucas Trust Aanetra Vaidya M.K. Vaughn Brantley Vogt Leona Wierwille Vishruth Yelisetti

Taylor Road Middle School Hull Middle School Hull Middle School DeSana Middle School Clarke Middle School Piney Grove Middle School Piney Grove Middle School Dove Creek Middle School Henderson Middle School Jackson Clarke Middle School Clarke Middle School Pine Hill Middle School Clarke Middle School Clarke Middle School M D Roberts Middle School **Richards Middle School** River Trail Middle School St. James Catholic School Oak Hill Middle School The Irish Gifted Academy The Irish Gifted Academy **River Trail Middle School** Fulton Science Academy Hull Middle School Taylor Road Middle School Social Circle Middle School Piney Grove Middle School Woodward Academy Drew Charter School Chamblee Middle School DeSana Middle School

FULTON COUNTY **GWINNETT COUNTY GWINNETT COUNTY** FORSYTH COUNTY **CLARKE COUNTY** FORSYTH COUNTY FORSYTH COUNTY OCONEE COUNTY BUTTS COUNTY CLARKE COUNTY CLARKE COUNTY **RICHMOND COUNTY CLARKE COUNTY CLARKE COUNTY** CLAYTON COUNTY MUSCOGEE COUNTY FULTON COUNTY CHATHAM COUNTY **BALDWIN COUNTY** LAURENS COUNTY LAURENS COUNTY FULTON COUNTY FULTON COUNTY **GWINNETT COUNTY** FULTON COUNTY WALTON COUNTY FORSYTH COUNTY FULTON COUNTY FULTON (ATLA REGIONAL) DEKALB COUNTY FORSYTH COUNTY

IONOF

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

FOURTH HONORS

Janelle Adzotor Cameron Bell Bryce Bosworth Woodson Bowe Charlotte Brown Daniel Bruijn Nicolas Chong Prieto Spencer Fortson India Grainger Abby Green Auden Ing Olivia Inman Daphne Kolan Ryan McCord Dennon McMillan Layla Mitchell Harrison Mobley Samantha Nelson Sadie Paul Domenick Luca Peronti Amogh Ramesh Lillian Shaw Cora Snyder Luke Suprise Carson Ta Paul Vu

Factory Shoals Middle School Woodland Middle School Stockbridge Sutton Middle School **Rising Starr Middle School** Aaron Cohn Middle School Rising Starr Middle School Taylor Road Middle School General Ray Davis Middle School Austin Road Middle School Hilsman Middle School Woodland Middle School Stockbridge Fairplay Middle School Chamblee Middle School The Champion Theme Middle School Bonaire Middle School Brooks County Middle School St. James Catholic School Austin Road Middle School Five Forks Middle School Booth Middle School Booth Middle School Hilsman Middle School Oak Hill Middle School **Richards Middle School** Summerour Middle School Booth Middle School

DOUGLAS COUNTY HENRY COUNTY FULTON (ATLA REGIONAL) FAYETTE COUNTY MUSCOGEE COUNTY FAYETTE COUNTY FULTON COUNTY **ROCKDALE COUNTY** HENRY COUNTY CLARKE COUNTY HENRY COUNTY DOUGLAS COUNTY DEKALB COUNTY DEKALB COUNTY HOUSTON COUNTY **BROOKS COUNTY** CHATHAM COUNTY HENRY COUNTY GWINNETT COUNTY FAYETTE COUNTY FAYETTE COUNTY CLARKE COUNTY **BALDWIN COUNTY** MUSCOGEE COUNTY **GWINNETT COUNTY** FAYETTE COUNTY



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR

Sara Abonza Annie Achiampong Angelica Agbaere Amar'e Altice Gabriella Amissah Tai'Lynn Askew Johana Bacon **Baylie Ballard** Wyatt Ballard Nandi Bancroft Caiden Bass Andrew Beauchamp Jhakeirra Bell Laurie Bjorkland-Glazman Eliana Blanchard Israel Blanchard Daniel Brown Owen Bryant-Molyneaux Emma Burrell **Treshawn Burris** Conner Bussey Molly Grace Carney Taige Castillo Lyric Caudell Dheephaasakti Chandrasekaran Annabel Chastain Lakshmi Chawda Qing Lan Chen Qing Lu Chen Maxwell Chesnut-Anne Zack Christie Lyrik Clayton Charlie Cole Addi Colick Anna Collins

Atkinson County Middle School Union Grove Middle School Austin Road Middle School Twin Rivers Middle School East Columbus Magnet Academy Rex Mill Middle School Waycross Middle School Scholars Academy Scholars Academy Lanier Middle School Nahunta Elementary School **Richards Middle School** Waycross Middle School Clarke Middle School Five Forks Middle School Five Forks Middle School Clarke Middle School Drew Charter School Oak Hill Middle School Fort Middle School Austin Road Middle School MacIntyre Park Middle School McDonough Middle School Clarke Middle School Fairplay Middle School Atkinson County Middle School Lanier Middle School The STEM Academy at Bartlett The STEM Academy at Bartlett Wadsworth Magnet School Thomas County Middle School Clinch County Middle School Elite Scholars Academy Jonesboro Bonaire Middle School William James Middle School

ATKINSON COUNTY HENRY COUNTY HENRY COUNTY GWINNETT COUNTY MUSCOGEE COUNTY CLAYTON COUNTY WARE COUNTY THOMAS COUNTY THOMAS COUNTY GWINNETT COUNTY **BRANTLEY COUNTY** MUSCOGEE COUNTY WARE COUNTY CLARKE COUNTY **GWINNETT COUNTY GWINNETT COUNTY** CLARKE COUNTY FULTON (ATLA REGIONAL) **BALDWIN COUNTY** MUSCOGEE COUNTY HENRY COUNTY THOMAS COUNTY HENRY COUNTY **CLARKE COUNTY** DOUGLAS COUNTY ATKINSON COUNTY **GWINNETT COUNTY** CHATHAM COUNTY CHATHAM COUNTY DEKALB COUNTY THOMAS COUNTY CLINCH COUNTY CLAYTON COUNTY HOUSTON COUNTY BULLOCH COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Iris Cooper Estella Craft Josephine Crim Emily Cuenca London Culver Brayleigh Denham Dante Dennis Arsh Doddamani Nathan Douglas Victoria Duncan Mason Eberhardt Caleb Eddy Andrew Edwards Maggie Cate Ferguson Ana-Maria Filimon Khloe Franklin Noah Franklin Davis Fussell Kennedy Gates Akeem Gibson Usman Gill Arely Gonzalez Noah Grage Allen Graves Stacey Green Damon Gresham Maybree Gruno Ezra Haag Wyatt Hamilton Mackenzie Hampton Kylie Harbin Bella Harden Cullen Harrell Josie Harris Mya Harris

Rex Mill Middle School Rothschild Leadership Academy Clarke Middle School General Ray Davis Middle School The Irish Gifted Academy Crisp County Middle School Waycross Middle School Glenn C. Jones Middle School Atkinson County Middle School Aaron Cohn Middle School Georgia College Early College Bonaire Middle School Rothschild Leadership Academy Bonaire Middle School Oak Hill Middle School Atkinson County Middle School Oak Hill Middle School Atkinson County Middle School Clarke Middle School Waycross Middle School Memorial Middle School North Clayton Middle School Brooks County Middle School Austin Road Middle School Mason Creek Middle School Central Middle School Brooks County Middle School Clarke Middle School Tybee Island Maritime Academy Georgia College Early College Bonaire Middle School Scholars Academy Thomas County Middle School Nahunta Elementary School North Clayton Middle School

CLAYTON COUNTY MUSCOGEE COUNTY **CLARKE COUNTY** ROCKDALE COUNTY LAURENS COUNTY **CRISP COUNTY** WARE COUNTY **GWINNETT COUNTY** ATKINSON COUNTY MUSCOGEE COUNTY **BALDWIN COUNTY** HOUSTON COUNTY MUSCOGEE COUNTY HOUSTON COUNTY **BALDWIN COUNTY** ATKINSON COUNTY **BALDWIN COUNTY** ATKINSON COUNTY **CLARKE COUNTY** WARE COUNTY ROCKDALE COUNTY CLAYTON COUNTY **BROOKS COUNTY** HENRY COUNTY DOUGLAS COUNTY CARROLL COUNTY **BROOKS COUNTY CLARKE COUNTY** CHATHAM COUNTY **BALDWIN COUNTY** HOUSTON COUNTY THOMAS COUNTY THOMAS COUNTY **BRANTLEY COUNTY** CLAYTON COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Kent Harvey Robert Heald Anniston Herron Sadie Hess Alainah Hicks **Kinsley Hockensmith** A'Maya Hunter Reece Huston Aireyin Jackson Carynn Jefferson **Isabel Jenkins** Autumn Johnson Matthew Johnson Nia Kelly Amari Kemp Melanie Kennington Ryan Kirk Patrick Kitchens Kayla Kokoth Ojas Kulkarni Loxley Lamar Josiah LaRue Daviana Lattimore Andrew Lauer Kyndall Lemon Lilly Lewis Anaya Lindsey Minuli Liyanarchchi Zion Logbo Jamie Love Madeline MacDonald Saylor Mactier Waleed Marouf Ethan Martin Harley Mash

The Irish Gifted Academy Clarke Middle School Thomson Middle School Perry Middle School Tybee Island Maritime Academy Crisp County Middle School Rothschild Leadership Academy Miller Fine Arts Middle School Feagin Mill Middle School Veterans Memorial Middle School Thomas County Middle School Austin Road Middle School Austin Road Middle School Chestnut Log Middle School Bennett's Mill Middle School Perry Middle School Mossy Creek Middle School The Champion Theme Middle School Henderson Middle School Clarke Middle School Wesley International Academy Clarke Middle School North Clayton Middle School Mossy Creek Middle School The Champion Theme Middle School Miller Fine Arts Middle School The Irish Gifted Academy Bay Creek Middle School Chamblee Middle School William James Middle School Smitha Middle School Waycross Middle School Feagin Mill Middle School Chamblee Middle School Thomas County Middle School

LAURENS COUNTY **CLARKE COUNTY** HOUSTON COUNTY HOUSTON COUNTY CHATHAM COUNTY CRISP COUNTY MUSCOGEE COUNTY **BIBB COUNTY** HOUSTON COUNTY MUSCOGEE COUNTY THOMAS COUNTY HENRY COUNTY HENRY COUNTY DOUGLAS COUNTY **FAYETTE COUNTY** HOUSTON COUNTY HOUSTON COUNTY DEKALB COUNTY DEKALB COUNTY **CLARKE COUNTY** FULTON (ATLA REGIONAL) **CLARKE COUNTY** CLAYTON COUNTY HOUSTON COUNTY DEKALB COUNTY **BIBB COUNTY** LAURENS COUNTY **GWINNETT COUNTY** DEKALB COUNTY **BULLOCH COUNTY** COBB COUNTY WARE COUNTY HOUSTON COUNTY DEKALB COUNTY THOMAS COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Monique Mayes Ryleigh Mayo Bella McCullough William McCullough Emmy McNeal Chloe Medbery **Braylee Meeks** Zoya Meghani Mei-Lan Moey Ariana Morcus Tread Morgan Mckennajames Morris Addison Mosley Kate Murphey Taylor Murphy Arhaan Musani Meghna Nataraj Bradlee Nelms Olivia Newby Rhys Newcomer Addison Padgett Harris Palmer Emma Paparo **Taylor Parker** Aarushi Patel Khuong Phan Melody Phan Hasini Reddy Pingali Marlee Pool Zeniya Powell Isaiah Quinn Braxton Railey Nethra Ramalingam Maya Ramirez Jaiden Rather

M D Roberts Middle School Central Middle School Bonaire Middle School **Rising Starr Middle School** Feagin Mill Middle School General Ray Davis Middle School Georgia College Early College Lanier Middle School Bay Creek Middle School St. Francis Xavier Catholic School **Clinch County Middle School** Bonaire Middle School Oak Hill Middle School Perry Middle School Valor Christian Academy North Gwinnett Middle School Riverwatch Middle School Bonaire Middle School Wadsworth Magnet School Clarke Middle School The STEM Academy at Bartlett Thomas County Middle School **Rising Starr Middle School** Huntington Middle School Feagin Mill Middle School Bay Creek Middle School Union Grove Middle School DeSana Middle School The Irish Gifted Academy Crawford Long Middle School Clinch County Middle School Clinch County Middle School Henderson Middle School Henderson Middle School Twin Rivers Middle School

CLAYTON COUNTY CARROLL COUNTY HOUSTON COUNTY FAYETTE COUNTY HOUSTON COUNTY ROCKDALE COUNTY **BALDWIN COUNTY GWINNETT COUNTY GWINNETT COUNTY GLYNN COUNTY** CLINCH COUNTY HOUSTON COUNTY **BALDWIN COUNTY** HOUSTON COUNTY FULTON COUNTY **GWINNETT COUNTY** FORSYTH COUNTY HOUSTON COUNTY DEKALB COUNTY **CLARKE COUNTY** CHATHAM COUNTY THOMAS COUNTY FAYETTE COUNTY HOUSTON COUNTY HOUSTON COUNTY **GWINNETT COUNTY** HENRY COUNTY FORSYTH COUNTY LAURENS COUNTY FULTON (ATLA REGIONAL) CLINCH COUNTY CLINCH COUNTY DEKALB COUNTY DEKALB COUNTY **GWINNETT COUNTY**

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Randall Reams Ellis Robertson Aida Rojas Emma Romanelli Eli Ross Kayleigh Rozier Maxwell Ruehl Jack Rumfelt Zoe Saavedra Ari Sanderson Rebecca Savage William Schmelzer Brock Schonberg Brenden Scott Colin Senger Addison Sewell Andrew Sexton Lexie Simpson Shay Simpson Makayla Skipper MaKenzie Skipper Maya Slover Melanie Souvenir Maxon Spivey Jackson Steedley Jordyn Stokes Jackson Sweat Amelia Tanner Daniela Tarancon Colmenares Maxime Tchamna Monthe Rachel Terry Caleb Thomas Luke Thomas Read Thomas Liberty Thomaston

B.E.S.T. Academy Thomas County Middle School St. Francis Xavier Catholic School Chamblee Middle School Georgia College Early College Dublin Middle School **Richards Middle School** Clarke Middle School Smitha Middle School Martin Luther King, Jr. Middle School Chamblee Middle School Carrollton Middle School Chamblee Middle School Bonaire Middle School Tybee Island Maritime Academy Carrollton Middle School **Rising Starr Middle School** Atkinson County Middle School Austin Road Middle School Crisp County Middle School Crisp County Middle School Nahunta Elementary School East Columbus Magnet Academy Atkinson County Middle School **Clinch County Middle School** Sandtown Middle School Georgia College Early College Oak Hill Middle School Memorial Middle School Georgia College Early College Georgia College Early College Chapel Hill Middle Douglasville Aaron Cohn Middle School Nahunta Elementary School Carrollton Middle School

FULTON (ATLA REGIONAL) THOMAS COUNTY **GLYNN COUNTY** DEKALB COUNTY **BALDWIN COUNTY** LAURENS COUNTY MUSCOGEE COUNTY CLARKE COUNTY COBB COUNTY FULTON (ATLA REGIONAL) DEKALB COUNTY CARROLL COUNTY DEKALB COUNTY HOUSTON COUNTY CHATHAM COUNTY CARROLL COUNTY FAYETTE COUNTY ATKINSON COUNTY HENRY COUNTY CRISP COUNTY CRISP COUNTY **BRANTLEY COUNTY** MUSCOGEE COUNTY ATKINSON COUNTY CLINCH COUNTY FULTON COUNTY **BALDWIN COUNTY BALDWIN COUNTY** ROCKDALE COUNTY **BALDWIN COUNTY BALDWIN COUNTY** DOUGLAS COUNTY MUSCOGEE COUNTY **BRANTLEY COUNTY** CARROLL COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Daniel Thompson James Threat Steven Tillery Karmyn Timmons Ian Tolbert **Tinsley Tolbert** Elliot Tran Liem Tran Haseeb Ulhag Eduards Valeskalns Solomon Wade Desley Walker Hunter Walker Kacey Washington Aubrey Watson Max Weaver Jadyn Wentworth Grayson White Selena White Luke Wilgenbusch Hattie Williams Jayden Williams Tanmayee Yaddala

Thomas County Middle School Waycross Middle School Miller Fine Arts Middle School The Irish Gifted Academy Westside Atlanta Charter School Carrollton Middle School Martin Luther King, Jr. Middle School Twin Rivers Middle School General Ray Davis Middle School The Irish Gifted Academy Bay Creek Middle School The Irish Gifted Academy Warner Robins Middle School Memorial Middle School Thomson Middle School Carrollton Middle School Thomas County Middle School Central Middle School Warner Robins Middle School Mason Creek Middle School St. Francis Xavier Catholic School Georgia College Early College DeSana Middle School

THOMAS COUNTY WARE COUNTY **BIBB COUNTY** LAURENS COUNTY FULTON (ATLA REGIONAL) CARROLL COUNTY FULTON (ATLA REGIONAL) **GWINNETT COUNTY** ROCKDALE COUNTY LAURENS COUNTY **GWINNETT COUNTY** LAURENS COUNTY HOUSTON COUNTY **ROCKDALE COUNTY** HOUSTON COUNTY CARROLL COUNTY THOMAS COUNTY CARROLL COUNTY HOUSTON COUNTY DOUGLAS COUNTY **GLYNN COUNTY BALDWIN COUNTY** FORSYTH COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

FIRST HONORS

Anthony Ahn Aarushi Ammavajjala Samiel Azmaien Vikram Bora Taylor Fegley Samanyu Ganesh Abhijeet Ghosh Stephen Griggs Om Guin Jenny Ha Landon Hobbs Austin Johnson Pragathi Kasani-Akula Uddip Kashyap Aarav Kothari Pranesh Sathish Kumar Eun Jae Lee Dhruv Mehta Caleb Menghisteab Christopher Nguyen Zachary Orwin Avan Patel Joseph Pittman Diya Raj Harshitha Rajaprabhu Arpit Ramani Anushka Sable Pranav Sambhu Nathon Sanft Trenton Smith Dylan Storey Aadi Vaidya Palak Verma Sarah Wang

Aditya Zaveri

Dunwoody High School South Forsyth High School Gwinnett School of Mathematics, Science & Technology Johns Creek High School Mountain View High School The Westminster Schools Walton High School Midtown High School Fulton Science Academy Gwinnett School of Mathematics, Science & Technology Paulding County High School Gwinnett School of Mathematics, Science & Technology South Forsyth High School FCS Innovation Academy **Denmark High School** Alliance Academy for Innovation Peachtree Ridge High School Gwinnett School of Mathematics, Science & Technology Paul Duke STEM High School FCS Innovation Academy Seckinger High School Walton High School Paulding County High School **Denmark High School** Northview High School Wheeler High School Chamblee High School Fulton Science Academy Mountain View High School Rockdale Magnet School for Science & Technology Paulding County High School McIntosh High School Denmark High School The Westminster Schools Dunwoody High School

DEKALB COUNTY FORSYTH COUNTY **GWINNETT COUNTY** FULTON COUNTY GWINNETT COUNTY FULTON (ATLA REGIONAL) COBB COUNTY FULTON (ATLA REGIONAL) FULTON COUNTY **GWINNETT COUNTY** PAULDING COUNTY **GWINNETT COUNTY** FORSYTH COUNTY FULTON COUNTY FORSYTH COUNTY FORSYTH COUNTY **GWINNETT COUNTY GWINNETT COUNTY** GWINNETT COUNTY FULTON COUNTY **GWINNETT COUNTY** COBB COUNTY PAULDING COUNTY FORSYTH COUNTY FULTON COUNTY COBB COUNTY DEKALB COUNTY FULTON COUNTY **GWINNETT COUNTY** ROCKDALE COUNTY PAULDING COUNTY FAYETTE COUNTY FORSYTH COUNTY FULTON (ATLA REGIONAL) DEKALB COUNTY



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

SECOND HONORS

Lilah Anderson Aditya Arora Jaelena Arroyo Reva Badkundri McKenzie Broughton Trint Conrod Avery Dinh Manashyu Gadia Shiv Garg Colin Hacker Alex Han Aliyah Hayes Seonwoo Im Abby Lee Claire Lee Jaehyeon (Rachel) Lee Jieya Leng Asher Levine Pragya Modgil Rhyland O'Neill Lara Otico Nicole Ouyang Malhaar Panse Claire Park Charvi Patel Hiya Patel Anika Pathak Mehek Saha Eric Shu Aditya Singh **Riley Sipe** Ishanth Talanki **Oluwatimileyin Thomas** Nina Zhang

Harrison High School Peachtree Ridge High School Impact Academy Lambert High School Rockdale Magnet School for Science & Technology Impact Academy Harrison High School FCS Innovation Academy FCS Innovation Academy McIntosh High School Peachtree Ridge High School Whitewater High School Lambert High School Johns Creek High School Lambert High School Walton High School Brookwood High School McIntosh High School Johns Creek High School Drew Charter School McIntosh High School Chattahoochee High School Alliance Academy for Innovation Johns Creek High School Gwinnett School of Mathematics, Science & Technology Chattahoochee High School Gwinnett School of Mathematics, Science & Technology Gwinnett School of Mathematics, Science & Technology Peachtree Ridge High School Alliance Academy for Innovation North Atlanta High School Alliance Academy for Innovation McIntosh High School Fulton Science Academy

COBB COUNTY **GWINNETT COUNTY** HENRY COUNTY FORSYTH COUNTY **ROCKDALE COUNTY** HENRY COUNTY COBB COUNTY FULTON COUNTY FULTON COUNTY FAYETTE COUNTY **GWINNETT COUNTY** FAYETTE COUNTY FORSYTH COUNTY FULTON COUNTY FORSYTH COUNTY COBB COUNTY **GWINNETT COUNTY** FAYETTE COUNTY FULTON COUNTY FULTON (ATLA REGIONAL) FAYETTE COUNTY FULTON COUNTY FORSYTH COUNTY FULTON COUNTY **GWINNETT COUNTY** FULTON COUNTY **GWINNETT COUNTY GWINNETT COUNTY** GWINNETT COUNTY FORSYTH COUNTY FULTON (ATLA REGIONAL) FORSYTH COUNTY FAYETTE COUNTY FULTON COUNTY



IONO

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

THIRD HONORS

Moatapari Agbere Bhavya Alapati Alexandra Bowe Kristen Bright Brennan Coiro Samantha Dalby Nathaniel Ehret Brookes Grimwood Moss Andrew Guo Phoebe Hansen Alethea He Adarsh Hemrajani **Gabrielle Huggins** Andrew Hutchison Aakash Joshi Yerri Kang Avani Karthik Kristen Lee Jun Hao Lin Keefer Lin Sophie Lin Anagha Macheri Fanta Maiga Deeya Mepani Yesha Mistry Elliot Oh Seowon (Steven) Park Bochen Shen Shivali Singh **Remiya Stephens** Daniel Ta Dennis Ta Sahasra Tatavarti Sarah Verma Vishal Vijay Gavin Weida

Chattahoochee County High School FCS Innovation Academy Starr's Mill High School Gwinnett School of Mathematics, Science & Technology McIntosh High School Woodland High School Stockbridge Newton College & Career Academy Impact Academy Gwinnett School of Mathematics, Science & Technology Statesboro High School North Oconee High School Chattahoochee High School Starr's Mill High School Davidson Fine Arts Magnet School Chattahoochee High School North Oconee High School Lambert High School Chattahoochee High School Jenkins High School Chattahoochee High School Chattahoochee High School North Oconee High School Gwinnett School of Mathematics, Science & Technology North Oconee High School **Rutland High School** McIntosh High School Johns Creek High School North Oconee High School Gwinnett School of Mathematics, Science & Technology **Rutland High School** Peachtree Ridge High School Peachtree Ridge High School Lambert High School Lambert High School Peachtree Ridge High School McIntosh High School

CHATTAHOOCHEE COUNTY FULTON COUNTY **FAYETTE COUNTY GWINNETT COUNTY** FAYETTE COUNTY HENRY COUNTY NEWTON COUNTY HENRY COUNTY **GWINNETT COUNTY** BULLOCH COUNTY OCONEE COUNTY FULTON COUNTY **FAYETTE COUNTY RICHMOND COUNTY** FULTON COUNTY OCONEE COUNTY FORSYTH COUNTY FULTON COUNTY CHATHAM COUNTY FULTON COUNTY FULTON COUNTY OCONEE COUNTY **GWINNETT COUNTY** OCONEE COUNTY **BIBB COUNTY** FAYETTE COUNTY FULTON COUNTY OCONEE COUNTY **GWINNETT COUNTY BIBB COUNTY GWINNETT COUNTY GWINNETT COUNTY** FORSYTH COUNTY FORSYTH COUNTY **GWINNETT COUNTY** FAYETTE COUNTY



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

FOURTH HONORS

Akosua Baah Anabella Bluhm Payton Bush Samantha Caswell Aditya Dutta Samarth Gautam Sampann Gautam Sydney Hammett Ethan Hoellrich Corina Huang Eugene Kang Mrinal Kulkarni Aiden Lee Sean Lee Hannah Liles Miles McNeese Iman Merchant Neal Mishra Dalena Nguyen Axum Nickerson Carpenter Ray Joy Sanders **Corin Staples** Veeral Thokchom Nash Vogeltanz William Wickstrum Kaylin Wu Sophia Yang Hansika Yerramsetti

Tucker High School Oconee County High School Westover High School Gwinnett School of Mathematics, Science & Technology Northview High School Northview High School Northview High School Rockdale Magnet School for Science & Technology Whitewater High School Statesboro High School Harrison High School West Forsyth High School Savannah Arts Academy Lambert High School Rutland High School Atlanta Classical Academy The Westminster Schools North Oconee High School Rockdale Magnet School for Science & Technology Drew Charter School Whitewater High School Warner Robins High School McIntosh High School Kennesaw Mountain High School Atlanta Classical Academy Atlanta Classical Academy **Douglas County High School** Douglas County High School The Westminster Schools

DEKALB COUNTY OCONEE COUNTY DOUGHERTY COUNTY **GWINNETT COUNTY** FULTON COUNTY FULTON COUNTY FULTON COUNTY ROCKDALE COUNTY FAYETTE COUNTY BULLOCH COUNTY COBB COUNTY FORSYTH COUNTY CHATHAM COUNTY FORSYTH COUNTY **BIBB COUNTY** FULTON (ATLA REGIONAL) FULTON (ATLA REGIONAL) OCONEE COUNTY ROCKDALE COUNTY FULTON (ATLA REGIONAL) FAYETTE COUNTY HOUSTON COUNTY FAYETTE COUNTY COBB COUNTY FULTON (ATLA REGIONAL) FULTON (ATLA REGIONAL) DOUGLAS COUNTY DOUGLAS COUNTY FULTON (ATLA REGIONAL)



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR

Caitlin Alexander Sri Sai Ashritha Aluru Amaya Anand **Evan Angeles** Clarissa Asare-Bediako Kwaku Asiedu Chloe Au Darion Ayoola Brody Baker Oluwafemi Balogun Dwij Bapat Hannah Beharry Allison Benton Tanvi Bhandurge Rahina Biyogmam Hailey Blackmon Airiyohna Bolton Maya Botelho Magic Boyd Christopher Broaddus Jr. Savannah Brooks Chloe Brown David Buchanan Alexander Burgin Hailee Burnette Julie Cardenas Karson Carter Saige Chandler Yahminisakti Chandrasekaran **Brielle Childs** Kaitlin Coakley Hannah Coley Kaleb Colon Kyleigh Conley Eli Connell Kira Culp

Rockdale Magnet School for Science & Technology **Dunwoody High School Dutchtown High School** Newton College & Career Academy **Douglas County High School** Elite Scholars Academy Jonesboro Paul Duke STEM High School Elite Scholars Academy Jonesboro Seckinger High School Lithia Springs High School Wheeler High School Rockdale Magnet School for Science & Technology Woodland High School Stockbridge Walton High School Georgia College Early College THRIVE Christian Academy **Baldwin High School** Paul Duke STEM High School Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology Lithia Springs High School Woodland High School Stockbridge Rockdale Magnet School for Science & Technology **Columbus High School** Effingham College & Career Academy Lithia Springs High School Union Grove High School Rockdale Magnet School for Science & Technology Alexander High School A. R. Johnson Health Science & Engineering Magnet School Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology Thomas County Central High School Elite Scholars Academy Jonesboro Thomas County Central High School Paulding County High School

ROCKDALE COUNTY DEKALB COUNTY HENRY COUNTY NEWTON COUNTY DOUGLAS COUNTY CLAYTON COUNTY **GWINNETT COUNTY** CLAYTON COUNTY **GWINNETT COUNTY** DOUGLAS COUNTY COBB COUNTY ROCKDALE COUNTY HENRY COUNTY COBB COUNTY **BALDWIN COUNTY** DEKALB COUNTY **BALDWIN COUNTY** GWINNETT COUNTY **ROCKDALE COUNTY ROCKDALE COUNTY** DOUGLAS COUNTY HENRY COUNTY **ROCKDALE COUNTY** MUSCOGEE COUNTY **EFFINGHAM COUNTY** DOUGLAS COUNTY HENRY COUNTY **ROCKDALE COUNTY** DOUGLAS COUNTY **RICHMOND COUNTY ROCKDALE COUNTY** ROCKDALE COUNTY THOMAS COUNTY CLAYTON COUNTY THOMAS COUNTY PAULDING COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Aarav Dave Rowan Davidson Michael Davis **Taylor Davis** Jasmine Delgado Aissata Diallo Charlotte Dickerson Michelle Diep Toan Do BanAnh Doan Dani Donald Jonathan Dorminy Nathaniel Driver Paul Duval Adeleine Ebert Anointed Enahoro Jaylen Fannin Elise Ferguson Charlie Fifield Mitchell Flater Ari Foster Marshall Frost Karsyn Gilbreath Rowan Gillian Rahul Gokhale Deverell Goldson Aarya Gupta Braylee Hall Abigail Henderson Andrea Hoang Yayra Hodasi Nina Howard Bryson Huynh Isaiah Igwilo Ely Isidoro Isabelle Jean-louis

Lowndes High School Statesboro High School Rockdale Magnet School for Science & Technology Thomas County Central High School Paul Duke STEM High School **Dublin High School** Davidson Fine Arts Magnet School Gwinnett School of Mathematics, Science & Technology Rockdale Magnet School for Science & Technology Gwinnett School of Mathematics, Science & Technology Rockdale Magnet School for Science & Technology Sola Fide Home School Paulding County High School Eagle's Landing Christian Academy Paul Duke STEM High School **Douglas County High School** Newton College & Career Academy Woodland High School Stockbridge Union Grove High School Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology Davidson Fine Arts Magnet School Woodstock High School The Westminster Schools Milton High School Woodville-Tompkins High School Alpharetta High School Thomas County Central High School Jonesboro High School **Dunwoody High School** Woodstock High School Wheeler High School Union Grove High School Newton College & Career Academy Statesboro High School Rockdale Magnet School for Science & Technology

LOWNDES COUNTY BULLOCH COUNTY ROCKDALE COUNTY THOMAS COUNTY **GWINNETT COUNTY** LAURENS COUNTY **RICHMOND COUNTY** GWINNETT COUNTY ROCKDALE COUNTY GWINNETT COUNTY **ROCKDALE COUNTY** HENRY COUNTY PAULDING COUNTY HENRY COUNTY **GWINNETT COUNTY** DOUGLAS COUNTY NEWTON COUNTY HENRY COUNTY HENRY COUNTY **ROCKDALE COUNTY** ROCKDALE COUNTY RICHMOND COUNTY CHEROKEE COUNTY FULTON (ATLA REGIONAL) **FULTON COUNTY** CHATHAM COUNTY FULTON COUNTY THOMAS COUNTY CLAYTON COUNTY DEKALB COUNTY CHEROKEE COUNTY COBB COUNTY HENRY COUNTY NEWTON COUNTY BULLOCH COUNTY ROCKDALE COUNTY

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Catherine Ji Mava Johnson Habiba Kabir Sricha Kamal Shelby Kendrick Rishita Kunam Shriya Kunam Natalia Kurz Olivia Land Rebecca Larkin Kelis Lawrence Vy Le Ariel Lee Joyce Lee Zoe Lee Judy Li Jeffrey Lim Allen Liu Ivy Liu Nani London Ralph Long IV Luke Loudon Adriana Lowery Ludovic Lythgoe David Martin Saniya Martin James Mays Raymond McKrow Vedant Mehta Niya Middlebrooks Mihaat Mohammed Caroline Moon Mariah Moran Matthew Mui Kinsey Mundie Kaitlyn Nelson

Northview High School Georgia College Early College **Chamblee High School** Paul Duke STEM High School Paulding County High School **Denmark High School Denmark High School** Gwinnett School of Mathematics, Science & Technology Rockdale Magnet School for Science & Technology **Tucker High School Dublin High School** Morrow High School Davidson Fine Arts Magnet School Peachtree Ridge High School Gwinnett School of Mathematics, Science & Technology Westover High School Lakeside High School DeKalb Northview High School Gwinnett School of Mathematics, Science & Technology **Tucker High School** Benjamin E. Mays High School **Dunwoody High School** Woodland High School Stockbridge Whitewater High School Whitewater High School Arabia Mountain High School Stilwell School of the Arts Locust Grove High School Lambert High School Arabia Mountain High School **Dutchtown High School** Davidson Fine Arts Magnet School Redan High School Wheeler High School Baldwin High School Baldwin High School

FULTON COUNTY **BALDWIN COUNTY** DEKALB COUNTY **GWINNETT COUNTY** PAULDING COUNTY FORSYTH COUNTY FORSYTH COUNTY GWINNETT COUNTY ROCKDALE COUNTY DEKALB COUNTY LAURENS COUNTY CLAYTON COUNTY **RICHMOND COUNTY GWINNETT COUNTY GWINNETT COUNTY** DOUGHERTY COUNTY DEKALB COUNTY FULTON COUNTY **GWINNETT COUNTY** DEKALB COUNTY FULTON (ATLA REGIONAL) DEKALB COUNTY HENRY COUNTY FAYETTE COUNTY **FAYETTE COUNTY** DEKALB COUNTY CLAYTON COUNTY HENRY COUNTY FORSYTH COUNTY DEKALB COUNTY HENRY COUNTY RICHMOND COUNTY DEKALB COUNTY COBB COUNTY **BALDWIN COUNTY BALDWIN COUNTY**

Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Monica Ngo Andrew Nguyen Bryan Nguyen Jacob Nguyen Siri Oduaran Otito Okafor Oreoluwa Owoyemi Adrian Panaro Brianna Paredes Kendall Parker Hana Pasco Celia Perry Abigail Pitchford Kaavya Prabhakar Alexia Pruiett Lisie Pulido Maya Puri Mackenzie Putnam Arya Radhakrishnan Damaris Ramos **Tiffany Ramos** Victor Rath-Say Gavin Reece Ka'Lil Remer Caitlyn Rivera Alex Rojas Husna Roshan Taylor Ross Kenadi Sales Marcus Salom-Maceira Leonardo Santorelli Siddartha Sarakadam Ramin Sarkar Candon Scott Colton Scott Roshan Selvaraj

Woodland High School Stockbridge Rainey McCullers School of the Arts Union Grove High School Brookwood High School Spalding High School South Gwinnett High School South Gwinnett High School Union Grove High School Paul Duke STEM High School Rockdale Magnet School for Science & Technology Jonesboro High School Thomas County Central High School Newton College & Career Academy Rockdale Magnet School for Science & Technology **Richmond County Technical Career Magnet School** Harrison High School **Baldwin High School** Rainey McCullers School of the Arts Milton High School Rockdale Magnet School for Science & Technology Elite Scholars Academy Jonesboro Statesboro High School Rockdale Magnet School for Science & Technology Stilwell School of the Arts Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology **Dunwoody High School** Georgia College Early College Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology **Dunwoody High School** Jenkins High School Gwinnett School of Mathematics, Science & Technology Johnson County High School Johnson County High School North Oconee High School

HENRY COUNTY MUSCOGEE COUNTY HENRY COUNTY **GWINNETT COUNTY** SPALDING COUNTY **GWINNETT COUNTY GWINNETT COUNTY** HENRY COUNTY **GWINNETT COUNTY** ROCKDALE COUNTY CLAYTON COUNTY THOMAS COUNTY NEWTON COUNTY ROCKDALE COUNTY **RICHMOND COUNTY** COBB COUNTY **BALDWIN COUNTY** MUSCOGEE COUNTY FULTON COUNTY **ROCKDALE COUNTY** CLAYTON COUNTY BULLOCH COUNTY **ROCKDALE COUNTY** CLAYTON COUNTY **ROCKDALE COUNTY** ROCKDALE COUNTY DEKALB COUNTY **BALDWIN COUNTY** ROCKDALE COUNTY ROCKDALE COUNTY DEKALB COUNTY CHATHAM COUNTY **GWINNETT COUNTY** JOHNSON COUNTY JOHNSON COUNTY OCONEE COUNTY



Honors ribbons indicate a student's relative position in the overall fair. They do not take into consideration either project category or student's grade, although Junior and Senior divisions are calculated separately. First Honors go to projects with total scores ranking approximately at or above the 90th percentile based on overall scores, regardless of category. Second Honors go to the 80th to 90th percentiles. Third Honors go to the 70th to 80th percentiles. Fourth Honors go to the 60th to 70th percentiles.

All students, regardless of awards, are commended on their excellent research and advancing this far in the competition. All exhibitors are awarded a ribbon and certificate honoring their hard work and participation in the statewide Georgia Science & Engineering Fair.

STATE COMPETITOR, CONT'D

Tashfeen Shafi Samira Shanks Sofiia Shvets Rehan Simpson Ella Sipe Amy Smith Kayla Smith Ethan Son Sirish Subash Raaga Sundar Jehosheba Sylvestre Vedha Tamilinian Emma Tillery Hannah Tran Dayveyshee Trivedi **Emanuel Varian** Harmoni Walker Easton Watts Carter Weiss Kaylyn Wigington Jonah Willard **Cordarius Williams** Machaiya Wilson Naomi Wood Alicia Wright Anant Yoganathan Nelaya Young Sophia Zakirova Karishma Zechariah Shelby Zeigler Annie Zhang Christina Zheng

Rockdale Magnet School for Science & Technology Arabia Mountain High School Union Grove High School Atlanta International School North Atlanta High School Johnson County High School Rockdale Magnet School for Science & Technology Gwinnett School of Mathematics, Science & Technology Gwinnett School of Mathematics, Science & Technology McIntosh High School Rockdale Magnet School for Science & Technology Northview High School Central High School Macon Woodland High School Stockbridge Gwinnett School of Mathematics, Science & Technology Union Grove High School **Dublin High School** Impact Academy Thomas County Central High School Locust Grove High School **Dunwoody High School** Drew Charter School Rockdale Magnet School for Science & Technology Lithia Springs High School Rockdale Magnet School for Science & Technology **Tucker High School** Rockdale Magnet School for Science & Technology Rockdale Magnet School for Science & Technology Davidson Fine Arts Magnet School Effingham College & Career Academy Davidson Fine Arts Magnet School Statesboro High School

ROCKDALE COUNTY DEKALB COUNTY HENRY COUNTY FULTON COUNTY FULTON (ATLA REGIONAL) JOHNSON COUNTY ROCKDALE COUNTY GWINNETT COUNTY **GWINNETT COUNTY** FAYETTE COUNTY **ROCKDALE COUNTY** FULTON COUNTY **BIBB COUNTY** HENRY COUNTY **GWINNETT COUNTY** HENRY COUNTY LAURENS COUNTY HENRY COUNTY THOMAS COUNTY HENRY COUNTY DEKALB COUNTY FULTON (ATLA REGIONAL) **ROCKDALE COUNTY** DOUGLAS COUNTY **ROCKDALE COUNTY** DEKALB COUNTY ROCKDALE COUNTY **ROCKDALE COUNTY RICHMOND COUNTY** EFFINGHAM COUNTY **RICHMOND COUNTY** BULLOCH COUNTY