

## **Greater East Alabama Regional Science and Engineering Fair - Special Awards Script - All Divisions**

### **NOAA-J-S03 National Oceanic and Atmospheric Administration Award**

**Special Award Description :** The NOAA award will go to one individual whose research emphasizes NOAA's mission of Science, Service, and Stewardship. This award will be given to the student whose project offers the greatest insight into earth's interconnected systems.

Award Name :J-S03 National Oceanic and Atmospheric Administration Award  
Award Sponsor :NOAA  
Student Name :Brooke Baker, Emmalyn Sutton  
Placement :  
Award Prize :Certificate  
Project Number :JR-0700-0031-T  
Project Name :Fantastic Ferros: Removing Microplastics From Water with Ferrofluids

### **Department of Biology and Environmental Science-JR01 - Creative Application of Biological Principles**

**Special Award Description :** This achievement award recognizes students that exemplify excellence in the creative application of biological principles through research in biology related categories.

Award Name :JR01 - Creative Application of Biological Principles  
Award Sponsor :Department of Biology and Environmental Science  
Student Name :Avanita Deepak  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-0100-0127  
Project Name :Do Big Changes in Temperature Affect Plant Growth and Nitrogen Fixation Ability in Legumes?

### **College of Sciences-JR02 - Department of Chemistry Award**

**Special Award Description :** This award is designed to recognize the top chemistry/biochemistry project.

Award Name :JR02 - Department of Chemistry Award  
Award Sponsor :College of Sciences  
Student Name :Lilian Hurley, Anne Mustin  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-0400-0101-T  
Project Name :Save Our Strawberries

### **College of Sciences-JR03 - Engineering Excellence Award**

**Special Award Description :** This award recognizes a project, in any category, that demonstrates an innovative application of math or science to a societal challenge. Preference will be given to projects in the 500 category.

Award Name :JR03 - Engineering Excellence Award  
Award Sponsor :College of Sciences  
Student Name :Morgan Williams  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-0500-0135  
Project Name :Sir Scraps A Lot

### **Department of Biology and Environmental Science-JR04 - Environmental Science and GIS Award**

**Special Award Description :** This award recognizes high achievement in the area of geoscience, geology, and geography.

Award Name :JR04 - Environmental Science and GIS Award  
Award Sponsor :Department of Biology and Environmental Science  
Student Name :Dasia Daniels, Antwaun Williams  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-0700-0039-T  
Project Name :where we gas up matterz

### **College of Sciences-JR06 - Talent in Mathematics and Statistics Award**

**Special Award Description :** This award recognizes a project, from any category, that demonstrates a strong mathematical and statistical analysis.

Award Name :JR06 - Talent in Mathematics and Statistics Award  
Award Sponsor :College of Sciences  
Student Name :Taylor Barron, Jenna Mitchell  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-0200-0033-T  
Project Name :Unexpected Stop

### **College of Sciences-JR08 - Innovation of Robotic Systems Award**

**Special Award Description :** This award will recognize a project from any category that demonstrates the greatest promise for innovation in the use of robotic systems.

Award Name :JR08 - Innovation of Robotic Systems Award  
Award Sponsor :College of Sciences  
Student Name :Noah Freeman, Webster Griggs  
Placement :  
Award Prize :Certificate, \$50  
Project Number :JR-1100-0032-T  
Project Name :The Baseboard Roomba

### **Department of Computer Science-JR09 - Engineering and Computer Science for Humanity Award**

**Special Award Description :** This award will recognize a project that uses computer science and engineering technology to address challenges to enhance the quality of life for individuals or populations.

Award Name :JR09 - Engineering and Computer Science for Humanity Award  
Award Sponsor :Department of Computer Science  
Student Name :Adriel Amoroto, Forrest Bell  
Placement :  
Award Prize :Certificate, \$100  
Project Number :JR-0500-0113-T  
Project Name :Reach out and Grab It

## **Department of Psychology-AUM-JR11-Emerging Psychological Scientist Award**

**Special Award Description :** In recognition of excellence in behavioral and social science research.

Award Name :JR11-Emerging Psychological Scientist Award

Award Sponsor :Department of Psychology-AUM

Student Name :Taylor Barron, Jenna Mitchell

Placement :

Award Prize :Certificate, \$100

Project Number :JR-0200-0033-T

Project Name :Unexpected Stop

## **College of Sciences-JR21 - Judge's Choice Award**

**Special Award Description :** The award highlights projects that judges determine deserve to advance to state but may not have placed 1st, 2nd or 3rd in their category.

Award Name :JR21 - Judge's Choice Award

Award Sponsor :College of Sciences

Student Name :Gabriel Ashford

Placement :

Award Prize :Certificates

Project Number :JR-0700-0052

Project Name :Water Out of Thin Air?

Award Name :JR21 - Judge's Choice Award

Award Sponsor :College of Sciences

Student Name :Thomas Grimes

Placement :

Award Prize :Certificates

Project Number :JR-0500-0074

Project Name :The Science of Propulsion

Award Name :JR21 - Judge's Choice Award

Award Sponsor :College of Sciences

Student Name :Adriel Amoroto, Forrest Bell

Placement :

Award Prize :Certificates

Project Number :JR-0500-0113-T

Project Name :Reach out and Grab It

Award Name :JR21 - Judge's Choice Award

Award Sponsor :College of Sciences

Student Name :Amare Harris

Placement :  
Award Prize :Certificates  
Project Number :JR-0200-0041  
Project Name :Mind Tricks: Exploring The Brain's Behavior

Award Name :JR21 - Judge's Choice Award  
Award Sponsor :College of Sciences  
Student Name :Nakshi Patel, Erin Williams  
Placement :  
Award Prize :Certificates  
Project Number :JR-0400-0134-T  
Project Name :Electrolyte Challenge

Award Name :JR21 - Judge's Choice Award  
Award Sponsor :College of Sciences  
Student Name :Scarlett Kim, Grace Lee  
Placement :  
Award Prize :Certificates  
Project Number :JR-0100-0075-T  
Project Name :Can plants survive without open air?

Award Name :JR21 - Judge's Choice Award  
Award Sponsor :College of Sciences  
Student Name :Byron Heersink  
Placement :  
Award Prize :Certificates  
Project Number :JR-0400-0085  
Project Name :Which Paper towel is the most Absorbent

Award Name :JR21 - Judge's Choice Award  
Award Sponsor :College of Sciences  
Student Name :Samiyah Dixon, Ivy Fortner, Payton Johnson  
Placement :  
Award Prize :Certificates  
Project Number :JR-0800-0120-T  
Project Name :The Baby's Diaper is Leaking

### **Thermo Fisher Scientific-JR22 - Junior Innovators Challenge (JIC)**

**Special Award Description :** Thermo Fisher Scientific Junior Innovators Challenge is intended to encourage, reward, and celebrate the mastery of science, technology, engineering and math among a fair's 6th, 7th, and 8th grade participants.

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Skylar Smith  
Placement :  
Award Prize :Certificate  
Project Number :JR-0400-0086  
Project Name :Too Hot to Handle: Do Spicy Chips Break Down The Stomach's Defense

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Avanita Deepak  
Placement :  
Award Prize :Certificate  
Project Number :JR-0100-0127  
Project Name :Do Big Changes in Temperature Affect Plant Growth and Nitrogen Fixation Ability in Legumes?

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific

Student Name :Alani Cole, Blakely Sheppard, Lennon Strickland  
Placement :  
Award Prize :Certificate  
Project Number :JR-0800-0034-T  
Project Name :Prints Charming: A Tale of Family Ridges

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Brooke Baker, Emmalyn Sutton  
Placement :  
Award Prize :Certificate  
Project Number :JR-0700-0031-T  
Project Name :Fantastic Ferros: Removing Microplastics From Water with Ferrofluids

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Logan Rogers  
Placement :  
Award Prize :Certificate  
Project Number :JR-0600-0057  
Project Name :Feathered Fuel

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Quinn Nelson  
Placement :  
Award Prize :Certificate  
Project Number :JR-0500-0084  
Project Name :Gerbil Litter Sieve

Award Name :JR22 - Junior Innovators Challenge (JIC)  
Award Sponsor :Thermo Fisher Scientific  
Student Name :Taylor Barron, Jenna Mitchell  
Placement :  
Award Prize :Certificate  
Project Number :JR-0200-0033-T  
Project Name :Unexpected Stop

## **US Airforce-**

### **JR24 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)**

**Special Award Description :** This certificate will be given to a student who shows excellence in science or engineering.

Award Name :JR24 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)  
Award Sponsor :US Airforce  
Student Name :Javon James, Mitchell Strickland  
Placement :  
Award Prize :Certificate  
Project Number :JR-0900-0059-T  
Project Name :Winging it

### **The Lemelson Foundation-JR26 - Lemelson Early Inventor Prize**

**Special Award Description :** This award will recognize a young inventor creating a promising solution to real-world problems.

Award Name :JR26 - Lemelson Early Inventor Prize

Award Sponsor :The Lemelson Foundation

Student Name :Logan Rogers

Placement :

Award Prize :Certificate, \$100

Project Number :JR-0600-0057

Project Name :Feathered Fuel

### **Society for Science-JR28 - Citadel Securities Innovation Prize**

**Special Award Description :**

Award Name :JR28 - Citadel Securities Innovation Prize

Award Sponsor :Society for Science

Student Name :Shafia Khan, Zoey Kissic

Placement :

Award Prize :Certificate, \$100

Project Number :JR-1100-0051-T

Project Name :Microplastic in Different Water Bottle Brands

### **US Metric Association-S04 Best use of the International System of Units**

**Special Award Description :** A research project that expresses measurements in the SI is an ideal candidate for this award. All reported measurements, including calculations, data, graphs, and conclusions should be expressed exclusively and accurately using the SI.

Award Name :S04 Best use of the International System of Units

Award Sponsor :US Metric Association

Student Name :Jessica Shu

Placement :

Award Prize :Certificate

Project Number :SR-0500-0004

Project Name :ThermalPvpils: A Passive Power-Saving Artificial-Intelligence Driven Shell that Makes your Building Cooler in Summer and Warmer in Winter

### **Department of Biology and Environmental Science-SR01 - Creative Application of Biological Principles**

**Special Award Description :** This award recognizes a senior division project in a biological field.

Award Name :SR01 - Creative Application of Biological Principles

Award Sponsor :Department of Biology and Environmental Science

Student Name :Jatin Banna, Yujin Bong

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0300-0029-T

Project Name :Investigating the Novel Oncogenic Potential of Colibactin-Producing Escherichia coli in Breast Tumorigenesis

### **College of Sciences-SR02 - Department of Chemistry Award**

**Special Award Description :** This award is designed to recognize the top chemistry/biochemistry project.

Award Name :SR02 - Department of Chemistry Award

Award Sponsor :College of Sciences

Student Name :Kaylee Oh

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0400-0003

Project Name :The Influence of KOH-Activated Lignin-Derived Carbon on Methyl Orange

### **College of Sciences-SR03 - Engineering Award**

**Special Award Description :** This award recognizes a project, in any category, that demonstrates an innovative application of math or science to a societal challenge. Preference will be given to projects in the 500 category.

Award Name :SR03 - Engineering Award

Award Sponsor :College of Sciences

Student Name :Nathan Dinh, James Mracek

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0500-0013-T

Project Name :How Accurate is a DIY Colorimeter?

### **Department of Biology and Environmental Science-SR04 - Environmental Science and GIS Award**

**Special Award Description :** This award recognizes high achievement in the area of geoscience, geology, and geography.

Award Name :SR04 - Environmental Science and GIS Award

Award Sponsor :Department of Biology and Environmental Science

Student Name :Maddie Lee

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0700-0053

Project Name :Terrestrial Impacts of Agriculture Runoff on Soil Rhizosphere Acidity and Microbial Diversity

### **College of Sciences-SR05 - Physics Award for Ingenuity and Inventiveness**

**Special Award Description :** This award recognizes someone who demonstrates an understanding of the laws of physics and how to use them to interpret and understand the world around us.

Award Name :SR05 - Physics Award for Ingenuity and Inventiveness

Award Sponsor :College of Sciences

Student Name :Andrew Zhang

Placement :

Award Prize :Certificate \$100

Project Number :SR-0600-0017

Project Name :Facile Microwave Nanomanufacturing of Novel Graphene Based Catalyst for High Performance, Low-Cost Hydrogen Evolution Reaction

### **College of Sciences-SR06 - Talent in Mathematics and Statistics Award**

**Special Award Description :** This award recognizes a project, from any category, that demonstrates a strong mathematical and statistical analysis.

Award Name :SR06 - Talent in Mathematics and Statistics Award

Award Sponsor :College of Sciences

Student Name :Mason Hilburgh

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0900-0063

Project Name :Blast Off The Torpedo (Bats)!!!

### **College of Sciences-SR08 - Innovation of Robotic Systems Award**

**Special Award Description :** This award will recognize a project from any category that demonstrates the greatest promise for innovation in the use of robotic systems.

Award Name :SR08 - Innovation of Robotic Systems Award

Award Sponsor :College of Sciences

Student Name :Sungbin Park

Placement :

Award Prize :Certificate, \$100

Project Number :SR-1100-0016

Project Name :The Effect of Prompt Engineering on Accuracy and Consistency in Financial News Sentiment Classification Using Large Language Models

### **Department of Computer Science-SR09 - Engineering and Computer Science for Humanity**

**Special Award Description :** This award will recognize a project that uses computer science and engineering technology to address challenges to enhance the quality of life for individuals or populations.

Award Name :SR09 - Engineering and Computer Science for Humanity

Award Sponsor :Department of Computer Science

Student Name :Arnav Aggarwal

Placement :

Award Prize :Certificate, \$200

Project Number :SR-1200-0024

Project Name :AI/ML-driven systems-level analysis identifies CEACAM1 as a neuroinflammatory metabolic signaling vulnerability in Parkinson's disease

### **College of Sciences-SR10 - Future Scientist Award**

**Special Award Description :** This award will be given to a student, in any category, who demonstrates a complete, thorough and current understanding of a scientific topic during their interview. As such, this student shows great promise as a future scientific researcher.

Award Name :SR10 - Future Scientist Award

Award Sponsor :College of Sciences

Student Name :Andrew Zhang

Placement :

Award Prize :Certificate, \$100

Project Number :SR-0600-0017

Project Name :Facile Microwave Nanomanufacturing of Novel Graphene Based Catalyst for High Performance, Low-Cost Hydrogen Evolution Reaction

### **Department of Psychology - AUM-SR11 Emerging Psychological Scientist Award**

**Special Award Description :** In recognition of excellence in behavioral and social science research.

Award Name :SR11 Emerging Psychological Scientist Award

Award Sponsor :Department of Psychology - AUM

Student Name :Aeesha Mulani

Placement :

Award Prize :Certificate, \$200

Project Number :SR-0200-0094

Project Name :Effect of Saffron and Curcumin on Age-Based Behavioral Patterns in *Drosophila melanogaster*

### **American Psychological Association-SR22 - American Psychological Association Award**

**Special Award Description :** This award recognizes outstanding research in psychological science under the category of behavioral and social sciences.

Award Name :SR22 - American Psychological Association Award

Award Sponsor :American Psychological Association

Student Name :Parker Thompson

Placement :

Award Prize :Certificate

Project Number :SR-0200-0005

Project Name :Perceived Access vs. Actual Access: Mental Health Resource Utilization Among College Students

### **NASA-SR23 - NASA Earth System Science Award**

**Special Award Description :** This award will be given to the student whose project focuses on issues of oceans, land, wildlife, human history & cultures, and human ingenuity or brings geographic concepts and skills to life in new, non-traditional ways.

Award Name :SR23 - NASA Earth System Science Award

Award Sponsor :NASA

Student Name :Niyam Patel

Placement :

Award Prize :Certificate

Project Number :SR-0300-0025

Project Name :Genetic Effects of Colonialism in South Asia

### **RICOH-SR24 - Ricoh Sustainable Development Award**

**Special Award Description :** This award recognizes the project that best reflects the principles of sustainability -- balancing economic development with environmental responsibility.

Award Name :SR24 - Ricoh Sustainable Development Award

Award Sponsor :RICOH

Student Name :Kaylee Oh  
Placement :  
Award Prize :Certificate  
Project Number :SR-0400-0003  
Project Name :The Influence of KOH-Activated Lignin-Derived Carbon on Methyl Orange

## **US Airforce-**

### **SR25 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)**

**Special Award Description :** This certificate will be given to a student who shows excellence in science or engineering.

Award Name :SR25 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)  
Award Sponsor :US Airforce  
Student Name :Ezra Hall, Armaan Sagar  
Placement :  
Award Prize :Certificate  
Project Number :SR-0500-0116-T  
Project Name :Responsive Aero

Award Name :SR25 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)  
Award Sponsor :US Airforce  
Student Name :Nathan Dinh, James Mracek  
Placement :  
Award Prize :Certificate  
Project Number :SR-0500-0013-T  
Project Name :How Accurate is a DIY Colorimeter?

Award Name :SR25 - Science, Technology, Engineering and Math (STEM) Achievement Award (U.S. Air Force)  
Award Sponsor :US Airforce  
Student Name :Alexis Saffold  
Placement :  
Award Prize :Certificate  
Project Number :SR-0800-0020  
Project Name :Using Arduino Pressure Sensors And SJ Accelerometer To Determine The Least Painful Backpack Strap Length

## **Office of Naval Research-SR26-Naval Science Award**

**Special Award Description :** INDIVIDUAL projects only.

Award Name :SR26-Naval Science Award  
Award Sponsor :Office of Naval Research  
Student Name :Jiwoo Park  
Placement :  
Award Prize :\$50 gift card, certificate, and medal  
Project Number :SR-0200-0097  
Project Name :Adversarial Skyline Analysis of NATO Defense Spending: A Multi-Objective Game-Theoretic Framework for Burden-Sharing Under Information Warfare

Award Name :SR26-Naval Science Award  
Award Sponsor :Office of Naval Research  
Student Name :Mira Menon  
Placement :  
Award Prize :\$50 gift card, certificate, and medal  
Project Number :SR-0800-0023  
Project Name :Identifying Seizure Onset Zones Using Time-Frequency and Entropy-Based EEG Biomarkers

## **Yale Science and Engineering Association-SR27 - Yale Science and Engineering Association Award**

**Special Award Description :** This award will be given to the most outstanding 11th grade project in the areas of computer science, engineering, physics, or chemistry. In extraordinary cases, it may be awarded to 10th or 12th grade.

Award Name :SR27 - Yale Science and Engineering Association Award  
Award Sponsor :Yale Science and Engineering Association  
Student Name :Arnav Aggarwal  
Placement :  
Award Prize :Certificate  
Project Number :SR-1200-0024  
Project Name :AI/ML-driven systems-level analysis identifies CEACAM1 as a neuroinflammatory metabolic signaling vulnerability in Parkinson's disease

### **Water Environment Federation-SR28 - Stockholm Junior Water Prize - Regional Water Prize Award**

**Special Award Description :** Excellent water-science project conducted by 1 or 2 students, one student must be

Award Name :SR28 - Stockholm Junior Water Prize - Regional Water Prize Award  
Award Sponsor :Water Environment Federation  
Student Name :Jaxon Hutto, Jeremiah Ray  
Placement :  
Award Prize :Certificate  
Project Number :SR-0700-0014-T  
Project Name :Simulating Narcotic Introduction in a Micro-Ecosystem: Effects of Diphenhydramine on Crickets and Worms

### **Society for Science-SR28.5 -Citadel Securities Innovation Prize**

**Special Award Description :** A young scientist who is using innovation and expert data analysis to address and solve real-world problems.

Award Name :SR28.5 -Citadel Securities Innovation Prize  
Award Sponsor :Society for Science  
Student Name :Jessica Shu  
Placement :  
Award Prize :Certificate, \$100  
Project Number :SR-0500-0004  
Project Name :ThermalPvpils: A Passive Power-Saving Artificial-Intelligence Driven Shell that Makes your Building Cooler in Summer and Warmer in Winter

### **Society for In Vitro Biology-SR29- Society for In Vitro Biology Award**

**Special Award Description :** Most outstanding 11th grade student exhibiting in the area of plant or animal in vitro biology or tissue culture.

Award Name :SR29- Society for In Vitro Biology Award  
Award Sponsor :Society for In Vitro Biology  
Student Name :Amelie Hixson  
Placement :  
Award Prize :certificate  
Project Number :SR-0300-0010  
Project Name :PRMT5 Inhibition Induces Metabolic Reprogramming and Disrupts Blood-Brain Barrier Gene Expression in Human Brain Endothelial Cells

### **Society for Science-SR30 - Regeneron Biomedical Science Award**

**Special Award Description :** This award will provide an award and certificate 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 known as "The Regeneron Way" which are reflected in the award selection criteria.

Award Name :SR30 - Regeneron Biomedical Science Award  
Award Sponsor :Society for Science  
Student Name :Mira Menon

Placement :

Award Prize :Certificate, \$375

Project Number :SR-0800-0023

Project Name :Identifying Seizure Onset Zones Using Time–Frequency and Entropy-Based EEG Biomarkers

## **Regeneron ISEF-SR31 - ISEF Best of Fair**

### **Special Award Description :**

Award Name :SR31 - ISEF Best of Fair

Award Sponsor :Regeneron ISEF

Student Name :Arnav Aggarwal

Placement :

Award Prize :Recipient(s) will receive a trophy and travel to Arizona for the ISEF competition.

Project Number :SR-1200-0024

Project Name :AI/ML-driven systems-

level analysis identifies CEACAM1 as a neuroinflammatory metabolic signaling vulnerability in Parkinson's disease

Award Name :SR31 - ISEF Best of Fair

Award Sponsor :Regeneron ISEF

Student Name :Alexis Saffold

Placement :

Award Prize :Recipient(s) will receive a trophy and travel to Arizona for the ISEF competition.

Project Number :SR-0800-0020

Project Name :Using Arduino Pressure Sensors And SJ Accelerometer To Determine The Least Painful Backpack Strap Length

Award Name :SR31 - ISEF Best of Fair

Award Sponsor :Regeneron ISEF

Student Name :Mira Menon

Placement :

Award Prize :Recipient(s) will receive a trophy and travel to Arizona for the ISEF competition.

Project Number :SR-0800-0023

Project Name :Identifying Seizure Onset Zones Using Time–Frequency and Entropy-Based EEG Biomarkers