# North Alabama Regional Science and Engineering Fair Official Results

1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place, in addition to *ASEF Finalists*, will advance to the Alabama Science & Engineering Fair.

# PROJECTS CANNOT BE CHANGED BETWEEN THE REGIONAL AND STATE FAIR – "After competing in an Affiliated Fair, projects may not be changed or amended. However, additional data may be collected using the same methodology that was previously approved for the affiliated fair."

### 0100 Animal and Plant Sciences

# **Junior Division (grades 6-8)**

**ASEF Finalist** 

Syed Alam - Hampton Cove Middle School - Plastic pollution

3rd Place

Madeline Harper - St. John the Baptist Catholic School (MS) - Anthocyanins to Dye For

2nd Place

Christina Kwarteng, Lunelle Benjamin - Oakwood Adventist Academy (MS) - Ozone Levels

1st Place

Justus Minnon - Libertas Classical Middle School - Paw some Protection: Testing Insulating Materials for Extreme Temperature Safety in Canine Paw P rotection

# Senior Divisions (grades 9-12)

3rd Place

William Schneider - St. John Paul II Catholic High School - Bait Wars

2nd Place

Oliver Pennell - St. John Paul II Catholic High School - Shaping & Operant Conditioning

1st Place

Rowan Seiler - St. John Paul II Catholic High School - Color Coordinated

### 0200 Behavioral & Social Sciences

# **Junior Division (grades 6-8)**

3rd Place

Emilie Silver - Providence Classical School (MS) - AI Private Eye

### 2nd Place

Yan Cepeda Garcia - Academy for Science & Foreign Language
- The Difference In Reaction Time Between Boys and Girls

### 1st Place

Jaynie Woods - Providence Classical School (MS) - Feel the Color Wheel

# Senior Divisions (grades 9-12)

# 3rd Place

Kiana Saldanha - St. John Paul II Catholic High School - Is Memory Reliable With Sound?

### 2nd Place

Sophia Evans - St. John Paul II Catholic High School - Familiar Flavors

### 1st Place

Natalia Goodman - St. John Paul II Catholic High School - Musical Memory

# 0300 Cell, Molecular, Microbiology & Biochemistry

# **Junior Division (grades 6-8)**

### 3rd Place

Karthik Panchavati - Liberty Middle School - GUT WARS : COMPARING PROBIOTICS IN YOGURT VS PROBIOTIC CAPSULES

### 2nd Place

Aaron Shoemaker - Academy for Science & Foreign Language - Which Surfaces Have The Most Bacteria?

### 1st Place

Hannah Turbe - St. John the Baptist Catholic School (MS) - How Does Algae Affect Ammonia Levels In A Fish Tank?

# Senior Divisions (grades 9-12)

### 3rd Place

Evelyn Creehan - St. John Paul II Catholic High School - Microbiome Busters

## 2nd Place

Brianna Wilkinson - St. John Paul II Catholic High School - Beet Infection

# 1st Place

Janaia Vanterpool - Oakwood Adventist Academy (HS)

- The Impact of Popular Skincare Products on Staphylococcus enzyme activity part 2

# 0400 Chemistry

# **Junior Division (grades 6-8)**

# **ASEF Finalist**

Christopher Jackson - Oakwood Adventist Academy (MS)

- Ions In Action: How Activtors Impact The Electrical Conductivity Of Slime

# **ASEF Finalist**

Henry Mitchell - Academy for Science & Foreign Language - The Taste of Flour: How a Cake's Flavor Changes

### 3rd Place

Charlotte Rush - Holy Family School - Keep It Cool

### 2nd Place

Will McCandless - St. John the Baptist Catholic School (MS)
- Does Water Content Affect the Freezing Time of a Liquid?

### 1st Place

Ellis Howard - Libertas Classical Middle School - Electrolyte Challenge

# Senior Divisions (grades 9-12)

### 3rd Place

Isabelle Bao - James Clemens High School - Using Metal Organic Framework (MOF) MIL-101-Fe to Adsorb Cr(VI) From Polluted Water Bodies

### 2nd Place

Anna Diaz - Providence Classical School (HS) - When Life Gives You Lemons

### 1st Place

Urvi Mysore - James Clemens High School - Synthesis and Iron Modification of Zeolitic Imidazol ate Frameworks for the Adsorption of Hexavalent Chromium

# 0500 Engineering

# Junior Division (grades 6-8)

### 3rd Place

Emma Taylor - Holy Family School - Spare-Change Circus

### 2nd Place

Ryan Ranjan - Liberty Middle School - Wind Tunnel working model

# 1st Place

Levi Lambert - Academy for Science & Foreign Language - Filament Strength

# Senior Divisions (grades 9-12)

# 3rd Place

Douglas Murray - St. John Paul II Catholic High School - Wing Load Learning

### 2nd Place

Liam Schuld - St. John Paul II Catholic High School - Critical Angle of Attack

### 1st Place

Eli Evans - St. John Paul II Catholic High School - Spin to Win

# 0600 Energy

# **Junior Division (grades 6-8)**

**3rd Place** 

Aiden Cai - St. John the Baptist Catholic School (MS)
- WHICH PHONE CHARGING BRAND CHARGES THE FASTEST

### 2nd Place

Tatiana Clayborne - Academy for Science & Foreign Language-From Fork to Flame

### 1st Place

Collin Darulla - Providence Classical School (MS)- Can you take the heat?

# 0700 Earth and Environmental Sciences & Environmental Engineering

# **Senior Divisions (grades 9-12)**

3rd Place

Elle Prasthofer - St. John Paul II Catholic High School - H2 Go: Soil Water Retention

### 2nd Place

Viswa Mandadapu - James Clemens High School

- Effect of heat treatment on the luminescence spectrum of Ag3+ doped glass

### 1st Place

Coleman Reeser - St. John Paul II Catholic High School - Water Wars

# 0800 Biomedical Engineering & Biomedical and Health Sciences

# **Junior Division (grades 6-8)**

3rd Place

Daksh Sunil - Liberty Middle School

- From Innovation to Impact: Building an Artificial Pancreas for Diabetes

# 2nd Place

Philip Madsen - Academy for Science & Foreign Language - Bye Blue Light

# 1st Place

Shravan Balaji - Liberty Middle School

- Modeling Epilepsy using The Virtual Brain to Optimize Surgical Interventions

# Senior Divisions (grades 9-12)

3rd Place

Caroline Powell - Providence Classical School (HS) - Hanging by a Suture

### 2nd Place

Molly Wessel - Providence Classical School (HS) - Safe Call?

### 1st Place

Nikita Prabhakar - Bob Jones High School

- A Low Cost Portable Electrography Monitoring System for Rapid Diagnosis of Coagulopathy

# 0900 Physics, Astronomy & Mathematics

# **Junior Division (grades 6-8)**

**ASEF Finalist** 

Peter Diaz - Providence Classical School (MS) - Time to Fly

3rd Place

Cooper Harris - Holy Family School - The Art of Baseball Pitching

2nd Place

Prahaas Avula - Liberty Middle School - Shielding the Future: Exploring Solutions to Protect Sp accorafts from Space Debris

1st Place

Luke Buse - Libertas Classical Middle School-White or Black; Which Absorbs More Heat?

# **Senior Divisions (grades 9-12)**

3rd Place

Madelyn Freelove - St. John Paul II Catholic High School - All Wound Up

2nd Place

Felix Brown - Providence Classical School (HS)

- Development and Characterization of a High Voltage Electromagnetic Launcher

1st Place

Corbin Hawkes - Sparkman High School - The QuEST for Quantum Entanglement

### 1100 Robotic Systems & Communication Technology

# Junior Division (grades 6-8)

3rd Place

Kayden Barbour - Liberty Middle School

- Using Artificial Intelligence to Improve Music Practice

2nd Place

Devansh Goyal - Journey Middle School - Obstacle-Detecting Glasses for Visually Impaired People

1st Place

Melody Kwarteng - Oakwood Adventist Academy (MS)

- Obstacle detecting Smart Glasses for Visually impaired

# Senior Divisions (grades 9-12)

3rd Place

Hudson Schmidt - St. John Paul II Catholic High School - Paws-itive identification

### 2nd Place

Leland Barbour - James Clemens High School - Using State-of-the-Art Artificial Intelligence Detection for Retrieval of Sample Tubes on Mars

### 1st Place

Joshua Box - Providence Classical School (HS) - Watch It!

# 1200 Computational and Bioinformatics Sciences

# Senior Divisions (grades 9-12)

### 3rd Place

Davin Matthew - Oakwood Adventist Academy (HS)
- Analyzing the Role of FLG in Atopic Dermatitis

### 2nd Place

Joshua Johnson - Oakwood Adventist Academy (HS)
- How heart valve defects affects our bodies

### 1st Place

Joshua Henry - Oakwood Adventist Academy (HS)
- Investigating ALK, PHOX2B, and BRCA2 Gene in Relation to Neuroblastoma

# Thermo Fisher Junior Innovators Challenge Nominees

Shravan Balaji — Liberty Middle School Yan Cepeda Garcia — Academy for Science & Foreign Language Collin Darulla — Providence Classical School Justus Minnon — Libertas Classical School Jaynie Woods — Providence Classical School

# Regeneron International Science and Engineering Fair Finalists

Urvi Mysore – James Clemons High School Nikita Prabhakar – Bob Jones High School

Certified by Any Beth Ford on February 28, 2025