

# 2023 ASEF Awards (Junior Division)

# **Lemelson Early Inventor Prize**

Sponsored by: The Lemelson Foundation

This award will recognize a young inventor creating a promising solution to real-world problems. The winner will receive a certificate and an award verification letter redeemable for a \$100 cash award.

The winner is: Minlu Wang-He and Ayoung Jeong – East Samford School

#### **Naval Science Award**

Sponsored by: The Office of Naval Research

This award recognizes up to 4 students who show excellence in science or engineering. Winners will receive a certificate and a medallion.

The winners are:

1st place: Maryam Rasheed - Islamic Academy of Alabama

2<sup>nd</sup> place: Leland Barbour - Liberty Middle School

3rd place: Zubayr Rasheed - Islamic Academy of Alabama

### NOAA Award - "Taking the Pulse of the Planet Award"

Sponsored by: NOAA

This award will go to one individual selected from among all the general award categories whose research emphasizes NOAA's mission of Science, Service, and Stewardship: "To understand and predict changes in climate, weather, oceans, and coasts, To share that knowledge and information with others, and To conserve and manage coastal and marine ecosystems and resources." Awardee will receive a certificate and a letter.

The winner is: Minlu Wang-He and Ayoung Jeong - East Samford School

# **Broadcom Coding with Commitment Award**

Sponsored by: Broadcom Foundation

This award will go to a student whose project emphasizes how STEM knowledge and technology come together to create solutions that protect, preserve, save, improve, or promote quality of life or nature. Awardee will receive a \$250 gift certificate and a Raspberry Pi Pico Kit.

The winner is: Nikita Prabhakar - Discovery Middle School

# Science, Technology, Engineering & Math (STEM) Achievement Award (U.S. Air Force)

Sponsored by: US Airforce

This certificate will be given to a student who shows excellence in science or engineering.

The winners are:

1st place: Abhi Parupalli - Phillips Preparatory School

2<sup>nd</sup> place: Greyson Marker - Houston Academy

# 100 Women Strong Achievement Award

Sponsored by: 100 Women Strong at Auburn University

This achievement award recognizes females that exemplify research excellence in any category. Winners will receive the following -1st place \$100 cash prize and a certificate, 2nd place \$75 cash prize and a certificate, 3rd place \$50 cash prize and a certificate.

1st place – Kira LeFevre - Wetumpka Middle School

2<sup>nd</sup> place - Nikita Prabhakar - Discovery Middle School

3rd place - Mei-Ling Rollman - Clark-Shaw Magnet School

## Biological Sciences Award for Outstanding Poster in Animal and Plant Sciences

Sponsored by: Department of Biological Sciences at Auburn University

This award recognizes an outstanding poster in the Animal, Plant, Computational and Bioinformatics Sciences category by a middle school student. The awardee will receive a certificate and a \$100 cash award.

The winner is: Mei-Ling Rollman - Clark-Shaw Magnet School

### **Biological Sciences Award for Outstanding Poster in Medicine and Health Sciences**

Sponsored by: Department of Biological Sciences at Auburn University

This award recognizes an outstanding poster in the Medicine, Health & Translational Medical Sciences category by a middle school student. The awardee will receive a certificate and a \$100 cash award.

The winner is: Nikita Prabhakar - Discovery Middle School

# **Chemistry and Biochemistry Award**

Sponsored by: Department of Chemistry/Biochemistry at Auburn University

This award is designed to recognize the top chemistry/biochemistry project. The awardee will receive a certificate and \$100 cash award.

The winner is: Mahtahseen Fatima - Clark-Shaw Magnet School

#### **Geosciences Award**

Sponsored by: Department of Geosciences at Auburn University

This award recognizes high achievement in the area of geoscience, geology, and geography. 2

The winners will be presented with a certificate and \$100 cash award.

The winner is: Ethan Swardson - Holy Spirit Catholic School

## **Innovation of Robotic Systems**

Sponsored by: Southeastern Center of Robotics Education (SCORE) at Auburn University

This award recognizes a project that shows great promise in the use of robotic systems. The winner will receive a certificate and a \$100 cash award.

The winner is: Zubayr Rasheed - Islamic Academy of Alabama

## **Physics Award for Ingenuity and Inventiveness**

Sponsored by: Department of Physics at Auburn University

This award recognizes a student who demonstrates an understanding of the laws of physics and how to use them to interpret and understand the world around us. The winner will receive a certificate and a \$100 cash award.

The winner is: Joshua Minnon - Libertas Classical

# Society of Hispanic Professional Engineers Young Innovator Award

Sponsored by: Society of Hispanic Professional Engineers

This award recognizes research excellence presented by a minority student in an effort to encourage a lifelong enthusiasm for the sciences in traditionally underrepresented demographics. Awardee will receive a certificate and \$50 cash award.

The winner is: Andres Gonzalez-Espana - Clark-Shaw Magnet School

#### Science Enthusiast Award

Sponsored by: Alabama Science and Engineering Fair at Auburn University

This award recognizes a student whose enthusiasm for their research project was clearly evident during their interviews with judges. Awardee will receive a certificate and \$100 cash prize.

The winner is: June Haynie - Highlands Elementary School

### **Most Creative Use of Resources**

Sponsored by: Alabama Science and Engineering Fair at Auburn University

The Fair judges recognize that all students do not have access to the same level of resources when conducting their research. This award celebrates a student who impressed the judges with their ability to find creative solutions for conducting their research with minimal resources available. The winner will receive a certificate and \$100 cash award.

The winner is: Abby Skinner - Houston Academy

### **Garage Science Award**

Sponsored by: Alabama Science and Engineering Fair at Auburn University

Many scientific discoveries or engineering marvels have happened outside of a laboratory. This award celebrates a student who created an outstanding project within their home or garage. The winner will receive a certificate and \$100 cash award.

The winner is: Daksh Sunil - Heritage Elementary School

## Society of Women in Sciences and Mathematics Achievement Award

Sponsored by: Society of Women in Sciences and Mathematics at Auburn University

This award recognizes high achievement in scientific research by a female. The winner of this award will receive a certificate and a \$100 cash award.

The winner is: Rosie Zhang - Northridge Middle School

# **Spirit of Excellence Award**

Sponsored by: College of Sciences & Mathematics Office of Inclusion, Diversity and Equity

This award recognizes excellence in science research by a student who is an

underrepresented minority in STEM, or a person with a disability. The winner will receive a

The winner is: Brianna Wilkinson - Holy Family School

#### **Talent in Mathematics and Statistics Award**

certificate and \$100 cash award.

Sponsored by: Department of Mathematics and Statistics at Auburn University

This award recognizes a project, from any category, that demonstrates a strong mathematical and statistical analysis. The winner will receive a certificate and a \$100 cash award.

The winner is: Jayden Yoon - Northridge Middle School

### **Future Rocket Scientist Award**

Sponsored by: Aerospace Engineering Department at Auburn University

This award recognizes high achievement in research related to Aerospace Engineering. The winner will receive a certificate and a \$50 cash award.

The winner is: Landyn Randell - Clark-Shaw Magnet School

# **Biosystems Engineering Award**

Sponsored by: Biosystems Engineering Department at Auburn University

This acheivement award recognizes an individual that demonstrates an innovative approach to application of math and/or engineering to biological systems. The winner will recieve a certificate and a \$75 cash award.

The winner is: Brianna Wilkinson - Holy Family School

# **Chemical Engineering Award**

Sponsored by: Chemical Engineering Department at Auburn University

This award recognizes high achievement in scientific research in fields related to Chemical

Engineering or Applied Chemistry. The winner will receive a certificate and a \$100 cash award.

The winner is: Mahtahseen Fatima - Clark-Shaw Magnet School

#### **VCOM Award**

Sponsored by: Edward Via College of Osteopathic Medicine

This award recognizes a project that shows great promise in the fields of Medicine, Health, and Translational Medical Science. The winner will receive a certificate and a \$100 cash award.

The winner is: AnnaMarie Conway - Sanford Middle School

# **Innovation in Science Research Award**

Sponsored by: Associate Dean for Research, College of Sciences & Mathematics

This award recognizes an innovative topic or innovative approaches in research methodologies for a science project. The winner will receive a certificate and \$100 cash prize.

The winner is: Ritesh Babu - Drake Middle School

# **Electrical & Computer Engineering Award**

Sponsored by: Department of Electrical & Computer Engineering at Auburn University

This award is presented to an outstanding project in the Robotic Systems and

Communication Technology category. The winner will receive a certificate and \$100 cash award.

The winner is: Leland Barbour - Liberty Middle School

#### **Future Scientist or Mathematician Award**

Sponsored by: Dean of the College of Sciences & Mathematics at Auburn University

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. The award winner will receive a certificate and a \$100 cash award.

The winner is: Ritesh Babu - Drake Middle School

#### **Outstanding Engineering Award**

Sponsored by: Dean of the Samuel Ginn College of Engineering at Auburn University

This award recognizes a project, in any category, that demonstrates an innovative application of math or science to a societal challenge. The award winner will receive a certificate for their efforts and a \$100 cash award.

The winner is: Max Norris - Clark-Shaw Magnet School

### **Innovative Practices in Agriculture Award**

Sponsored by: Dean of Agriculture at Auburn University

This cash prize of \$100, sponsored by the Auburn University College of Agriculture, recognizes innovative research related to soil management, crop production, or water resources.

The winner is: Minlu Wang-He and Ayoung Jeong - East Samford School

### **Creative Design Award**

Sponsored by: Dean of Architecture, Design & Construction at Auburn University

The Auburn University College of Architecture, Design and Construction recognizes the important intersection of creativity and innovation in science and engineering research. This \$100 cash award is presented to a student who demonstrated a high level of creativity in project topic or methodology.

The winner is: Max Norris - Clark-Shaw Magnet School

# **Economic Impact Award**

Sponsored by: Dean of Raymond J. Harbert College of Business at Auburn University

This award goes to the project that best demonstrates high potential for economic impact locally or globally. This award comes with a \$100 cash prize.

The winner is: Darryl Croom - Bush Hills STEAM Academy

# **Environmental Impact Award**

Sponsored by: Dean of Forestry, Wildlife and Environment at Auburn University

This award celebrates a project that addresses the complex environmental challenges that humans face. This award comes with a \$100 cash prize.

The winner is: Adam Wright - Hampton Cove Middle School

#### **Innovation in Human Sciences Award**

Sponsored by: Dean of Human Sciences at Auburn University

The Auburn University College of Human Sciences is honored to reccognize a student whose research could improve human health and well-being through better nutrition and healthier families. This award comes with a \$100 cash prize

The winner is: Kira LeFevre - Wetumpka Middle School

#### Global Citizen Award

Sponsored by: Dean of Liberal Arts at Auburn University

The Auburn University College of Liberal Arts is honored to recognize students who seek to help mankind through science and engineering. This \$100 cash prize is awarded to a student whose project will better humanity and improve the lives of people in their community and beyond.

The winner is: Joseph Hathaway - Dothan Preparatory Academy

#### **Health Innovations Award**

Sponsored by: Dean of Nursing at Auburn University

The Auburn University College of Nursing is honored to recognize a student whose research

could improve human health through better disease diagnostics and/or treatments. This award comes with a \$100 cash prize.

The winner is: Nikita Prabhakar - Discovery Middle School

#### **Medical Interventions Award**

Sponsored by: Dean of Pharmacy at Auburn University

The Auburn University Harrison College of Pharmacy is providing a \$100 cash prize for a student whose project aims to improve human health and longevity by translating novel discoveries in the biomedical sciences into effective activities and tools for clinical and public health use.

The winner is: Rosie Zhang - Northridge Middle School

### Health and Wellness of Animals Award

Sponsored by: Dean of Veterinary Medicine at Auburn University

The Auburn University College of Veterinary Medicine is providing a \$100 cash prize in recognition of one research project that shows the most promise for improving the health and well-being of agricultural or human companion animals.

The winner is: Mei-Ling Rollman - Clark-Shaw Magnet School

# **CATEGORY AWARDS**

 $1^{st}$  place receives \$100 cash prize, certificate and medal  $2^{nd}$  place receives \$50 cash prize, certificate and medal  $3^{rd}$  place receives medal

# Category 100: Animal, Plant, Computational & Bioinformatics Sciences

 $1^{\mathrm{st}}$  place: Mei-Ling Rollman - Clark-Shaw Magnet School

2<sup>nd</sup> place: Brianna Wilkinson - Holy Family School

 $3^{\rm rd}$  place: Annabelle Johnson - Phenix City Intermediate School

# Category 200: Behavioral & Social Science

1<sup>st</sup> place: Kira LeFevre - Wetumpka Middle School 2<sup>nd</sup> place: Makenna Burdick - Libertas Classical

3<sup>rd</sup> place: Teagan Phillips - Duran North Junior High School

# Category 300: Cell, Molecular, Microbiology & Biochemistry

1<sup>st</sup> place: Diya Issa - Islamic Academy of Alabama 2<sup>nd</sup> place: Sania Kazmi - Auburn Jr. High School 3<sup>rd</sup> place: Shravan Balaji - Liberty Middle School

### Category 400: Chemistry

1st place: Ritesh Babu - Drake Middle School

2<sup>nd</sup> place: Amelia Gollapalli - Muscle Shoals Middle School

3rd place: Henry Bearden and Maddie Lee - Tuscaloosa Magnet Schools - Middle

# Category 500: Engineering Mechanics: Statics and Dynamics

1st place: Maryam Rasheed - Islamic Academy of Alabama

2<sup>nd</sup> place: Abby Skinner - Houston Academy

3rd place: Carlos-Iolo Coma - Holy Spirit Catholic School

## Category 600: Material Sciences & Energy: Sustainable Materials and Design

1st place: Ava Walker - Muscle Shoals Middle School

2<sup>nd</sup> place: Rachel Shu, Max Morgan, Alex Zhu

3rd place: June Haynie - Highlands Elementary School

# Category 700: Earth and Environmental Sciences & Environmental Engineering

1st place: Minlu Wang-He and Ayoung Jeong - East Samford School

2<sup>nd</sup> place: Max Norris - Clark-Shaw Magnet School 3<sup>rd</sup> place: Jessica Shu - Auburn Jr. High School

### **Category 800: Medicine, Health & Translational Medical Science**

1st place: Rosie Zhang – Northridge Middle School

2<sup>nd</sup> place: Nikita Prabhakar - Discovery Middle School 3<sup>rd</sup> place: Mays Mango - Islamic Academy of Alabama

## Category 900: Physics, Astronomy & Mathematics

1st place: Landyn Randell- Clark-Shaw Magnet School
 2nd place: Jayden Yoon – Northridge Middle School
 3rd place: Greyson Marker - Houston Academy

### **Category 1100: Robotic Systems & Communication Technology**

1st place: Leland Barbour - Liberty Middle School

2<sup>nd</sup> place: Zubayr Rasheed - Islamic Academy of Alabama

3<sup>rd</sup> place: Aeesha Mulani - Tuscaloosa Magnet Schools - Middle

### **Category 1200: Bio-Medical Engineering**

1st place: AnnaMarie Conway - Sanford Middle School

# Thermo Fisher Scientific Junior Inventors Challenge (JIC)

Sponsored by: Thermo Fisher Scientific

The Thermo Fisher Scientific Junior Inventors Challenge (JIC) is the premier science fair competition for 6th, 7th and 8th grade students. The top 10% of Junior Division students competing here at ASEF have the honor of continuing their science fair journey by applying to compete in the Thermo Fisher Scientific Inventors Challenge (formerly known as Broadcom MASTERS). From all entrants, the Top 300 Junior Innovators will be selected and will receive a prize of \$125. From the Top 300, thirty finalists will be selected and compet

for more than \$100,000 in prizes, including a top prize of \$25,000 and scholarships for STEM summer camps. Additionally, each of the finalists' schools receives \$1,000.

The winners are:

Minlu Wang-He and Ayoung Jeong - East Samford School

Ritesh Babu - Drake Middle School

Rosie Zhang - Northridge Middle School

Nikita Prabhakar - Discovery Middle School

Mays Mango - Islamic Academy of Alabama

Maryam Rasheed - Islamic Academy of Alabama

Mei-Ling Rollman - Clark-Shaw Magnet School

Kira LeFevre - Wetumpka Middle School

Brianna Wilkinson - Holy Family School

Amelia Gollapalli - Muscle Shoals Middle School

Abby Skinner - Houston Academy

Congratulations to all participants and winners at ASEF 2023!