2023 Awards List (Senior Division)

SPECIAL AWARD RECOGNITIONS

International Development Science Champion Award
Sponsored by: U.S. Agency for International Development (USAID)

This award will be given to the student(s) whose project is an outstanding demonstration of solving an important global development challenge in areas such as agriculture and food security, democracy and governance, economic growth, education, environment and global change, gender equality, global health, science, technology and innovation, water and sanitation or working in crises and conflict. Awardee receives a certificate, social media kit, and an opportunity to meet with USAID's Chief Scientist.

The winner is: Jacob Norrell - Wetumpka High School

NASA Earth System Science Award
Sponsored by: NASA

This award will be given to the student whose project offers the greatest insight into earth's interconnected systems. The winner will receive a certificate.

The winner is: Aanchal Behara - Alabama School of Fine Arts

National Geographic Society, That's Geography! - Cultivating Empathy for the Earth Award
Sponsored by: National Geographic

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. Awardee will receive $100 cash prize.

The winner is: Aanchal Behara - Alabama School of Fine Arts

Naval Science Award
Sponsored by: The Office of Naval Research

This award recognizes up to 2 individual projects that show excellence in science or engineering. Winners will receive a certificate, a medallion and an award verification letter redeemable for a $75 cash award.

The winner is: Makaila Jennings - Key Destiny Academy: 9-12

Regeneron Biomedical Science Award
Sponsored by: Society for Science

This award will provide a $375 cash prize and certificate to an exceptional student scientist who not only demonstrates an impressive command of biomedical science and resarch but also embodies Regeneron's core values and behaviors known as "The Regeneron Way" which are reflected in the award selection criteria.

The winner is: Madhushalini Balaji - James Clemens High School

Ricoh Sustainable Development Award

Sponsored by: RICOH
> This award recognizes the project that best reflects the principles of sustainability -- balancing economic development with environmental responsibility. The awardee will receive a certificate.

The winner is: Lindsey Levy and Raymond Hou - Loveless Academic Magnet Program (LAMP)

Science, Technology, Engineering & Math (STEM) Achievement Award (U.S. Air Force)
Sponsored by: US Airforce
> This award recognizes a student who shows excellence in science or engineering. The awardee receives a certificate and a prize pack.

The winner is: Raymond Hou and Lindsey Levy - Loveless Academic Magnet Program (LAMP)

U.S. Stockholm Junior Water Prize
Sponsored by: U.S. Stokholm Junior Water Prize
> This award 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. Awardee will receive a certificate and an opportunity to participate in a separate competition.

The winners are:
> 1st place: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge
>   High School
> 2nd place: Isabella Wise – Locust Fork High School
> 3rd place: Jacee Wisdom and Katherine Fenn - Holtville High School

Yale Science and Engineering Association Award
Sponsored by: Yale Science & Engineering Association
> 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. The winner will receive a certificate and a medallion to follow.

The winner is: Mingpu Wu – Indian Springs School

Biophysical Society Award
Sponsored by: The Biophysical Society
> This award is a celebration of the cross-disciplinary nature of science and will be given to the top project with a biophysical science theme. The winner will receive a certificate and a $100 cash award.

The winner is: Sumin Park - Loveless Academic Magnet Program (LAMP)

Southern Research Future STEMinist Award
Sponsored by: Southern Research Institute
> This award celebrates the brilliance of female minds in STEM and aims to encourage and inspire the next generation of female scientists, engineers, mathematicians, and technologists. It recognizes the crucial role that women play in these fields and acknowledges the importance of diversity in driving innovation and progress. Awardee will receive a certificate and $100 cash prize.

The winner is: Rhea Rastogi - Loveless Academic Magnet Program (LAMP)

Southern Research Diversity in Science Award
Sponsored by: Southern Research Institute
> This award celebrates and acknowledges the outstanding achievements of minority students in science fair projects and recognizes the highest-scoring minority student project. The award aims to promote diversity in STEM fields, encouraging students from all backgrounds to pursue careers in these fields. Awardee will receive a certificate and $100 cash prize.

The winner is: Jocelyn Peterson - Alabama School of Fine Arts

HudsonAlpha Creative Computation Award
Sponsored by: HudsonAlpha Institute
> This award celebrates a project that illustrates a student's knowledge of computational tools in science research. The awardee will receive a certificate and $200 cash prize.

The winner is: Madhushalini Balaji - James Clemens High School

100 Women Strong Achievement Award
Sponsored by: 100 Women Strong at Auburn University
> This achievement award recognizes females that exemplify excellence through research in any category. Winners will receive the following -1st place $150 cash prize and a certificate, 2nd place $75 cash prize and a certificate, 3rd place $50 cash prize and a certificate.

The winners are:
> 1st place: Joscelyn Peterson - Alabama School of Fine Arts
> 2nd place: Ava Williams - St. John Paul II Catholic High School
> 3rd place: Lillian Vilardi – Wetumpka High School

Biological Sciences Award for Creative Application of Biological Principles
Sponsored by: Department of Biological Sciences at Auburn University
> This award celebrates the creative process used in scientific discovery. The winner of this award demonstrated creative application of biological principles and will receive a certificate and $100 cash award.

The winner is: Sumin Park - Loveless Academic Magnet Program (LAMP)

Biological Sciences Award for Outstanding Poster in Cellular, Molecular, or Microbiology
Sponsored by: Department of Biological Sciences at Auburn University
> This award recognizes an outstanding poster in any category, which has a Cellular, Molecular, or Microbiology emphasis. The awardee will receive a certificate and a $100 cash award.

The winner is: Rhea Rastogi - Loveless Academic Magnet Program (LAMP)

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 $200 cash award.

The winner is: Urvi Mysore - James Clemens High School

Geosciences Award

Sponsored by: Department of Geosciences at Auburn University

This award recognizes high achievement in the area of geoscience, geology, and geography. The winner will receive a certificate and $200 cash award.

The winner is: Jaycee Wisdom and Katherine Fenn - Holtville High 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 $200 cash award.

The winner is: Daniel Zhao - Alabama School of Fine Arts

Physics Award for Ingenuity and Inventiveness

Sponsored by: Department of Physics at Auburn University

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. The winner will receive a certificate and $200 cash award.

The winner is: Makaila Jennings - Key Destiny Academy: 9-12

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

The winner is: Maria Lopez - Holy Family Cristo Rey Catholic High 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. The winner will receive a certificate and $100 cash prize.

The winner is: Sumin Park - Loveless Academic Magnet Program (LAMP)

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: Eli Liebbe - Homeschool (McGuire HS)

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: Isabella Wise – Locust Fork High 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 $200 cash award.

The winner is: Rachel Allen - Elmore County High 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 certificate and $200 cash award.

The winner is: Nisirr McMiller - Central High School

Talent in Mathematics and Statistics 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 $200 cash award.

The winner is: Steven Tran - Alabama School of Fine Arts

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 $100 cash award.

The winner is: Makaila Jennings - Key Destiny Academy: 9-12

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: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge High School

Chemical Engineering Award
Sponsored by: Chemical Engineering Department at Auburn University
>This award recognizes high acheivement 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: Maria Lopez - Holy Family Cristo Rey Catholic High School

Environmental Science Award for Water Science
Sponsored by: Department of Crop, Soil and Environmental Sciences at Auburn University
>This award recognizes high achievement in scientific research in fields related to water science. Winners will receive the following -1st place $100 cash prize and a certificate, 2nd place $50 cash prize and a certificate, 3rd place $25 cash prize and a certificate.

The winners are:

        1st place: Aanchal Behara - Alabama School of Fine Arts
        2nd place: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge
            High School
        3rd place: Christopher Valeri – Auburn High School

Soil Science Award

Sponsored by: Department of Crop, Soil and Environmental Sciences at Auburn University

This award recognizes high achievement in scientific research in fields related to soil science. Winners will receive the following -1st place $100 cash prize and a certificate, 2nd place $50 cash prize and a certificate, 3rd place $25 cash prize and a certificate.

The winners are:

        1st place: Jacob Norell - Wetumpka High School
        2nd place: Destiny Carpenter - Geneva County High School
        3rd place: Brennan Rey – Central High School

Agronomy Award

Sponsored by: Department of Crop, Soil and Environmental Sciences at Auburn University

This award recognizes high achievement in scientific research in fields related to soil management and crop production. Winners will receive the following -1st place $100 cash prize and a certificate, 2nd place $50 cash prize and a certificate, 3rd place $25 cash prize and a certificate.

The winners are:

        1st place: Kevin Yan - Auburn High School
        2nd place: Jakub Hel - Hoover High School
        3rd place: Isabella Wise - Locust Fork High 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: Arsalan Ahmad - Alabama School of Fine Arts

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 $200 cash prize.

The winner is: Madhushalini Balaji - James Clemens High 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: Sebastian Grieves - Alabama School of Math and Science (ASMS)

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 $200 cash award.

The winner is: Makaila Jennings - Key Destiny Academy: 9-12

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 $200 cash award.

The winner is: Naeim Mohjouri – Auburn High School

Innovative Practices in Agriculture Award
Sponsored by: Dean of Agriculture at Auburn University
> This cash prize of $200, sponsored by the Auburn University College of Agriculture, recognizes innovative research related to soil management, crop production, or water resources.

The winner is: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge High 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 creativiy and innovation in science and engineering research. This $200 cash award is presented to a student who demonstrated a high level of creativity in project topic or methodology.

The winner is: Makalia Jennings - Key Destiny Academy: 9-12

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 $200 cash prize.

The winner is: Lillian Vilardi - Wetumpka High School

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 $200 cash prize.

The winner is: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge High 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 $200 cash prize.

The winner is: Sahana Donti - Alabama School of Fine Arts

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 $200 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: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge High School

Health Innovations Award
Sponsored by: Dean of Nursing at Auburn University
>The Auburn University College of Nursing is honored to reccognize a student whose research could improve human health through better disease diagnostics and/or treatments. This award comes with a $200 cash prize.

The winner is: Mingpu Wu - Indian Springs School

Medical Interventions Award
Sponsored by: Dean of Pharmacy at Auburn University
>The Auburn University Harrison College of Pharmacy is providing a $200 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: Leo Koppel and James McDaniel – Hewitt-Trussville High 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 $200 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: Isabella Wise - Locust Fork High School

CATEGORY AWARDS

1st place receives $150 cash prize, certificate and medal
2nd place receives $100 cash prize, certificate and medal
3rd place receives medal

Category 100: Animal, Plant, Computational & Bioinformatics Sciences
>1st place: Sumin Park - Loveless Academic Magnet Program (LAMP)
>2nd place: Madhushalini Balaji - James Clemens High School
>3rd place: Arsalan Ahmad - Alabama School of Fine Arts

Category 200: Behavioral & Social Science
>1st place: Sahana Donti - Alabama School of Fine Arts
>2nd place: Rachel Allen - Elmore County High School

3rd place: Joscelyn Peterson - Alabama School of Fine Arts

Category 300: Cell, Molecular, Microbiology & Biochemistry
        1st place: Rhea Rastogi - Loveless Academic Magnet Program (LAMP)
        2nd place: Sophia Guo and David Wang - Alabama School of Fine Arts
        3rd place: Ashtyn Roberts - Wetumpka High School

Category 400: Chemistry
        1st place: Jakub Hel - Hoover High School
        2nd place: Nisirr McMiller - Central High School
        3rd place: Brennan Parks - Central High School

Category 500: Engineering Mechanics: Statics and Dynamics
        1st place: Will Bao - Auburn High School
        2nd place: Russell Starcher - Hewitt-Trussville High School
        3rd place: Max Herring and William Phillips - Hewitt-Trussville High School

Category 600: Material Sciences & Energy: Sustainable Materials and Design
        1st place: Naeim Mahjouri – Auburn High School
        2nd place: Raymond Hou and Lindsay Levy - Loveless Academic Magnet Program (LAMP)
        3rd place: Christopher Valeri - Auburn High School

Category 700: Earth and Environmental Sciences & Environmental Engineering
        1st place: Mustafa Gurbuz and Adonay Mahatsente-Tewelde - Northridge High School
        2nd place: Aanchal Behara - Alabama School of Fine Arts
        3rd place: Parker Thomson - Wetumpka High School

Category 800: Medicine, Health & Translational Medical Science
        1st place: Ashu Anand and Martin Vizzina - Alabama School of Fine Arts
        2nd place: John Belew - Wetumpka High School
        3rd place: Monish Bommu - Alabama School of Fine Arts

Category 900: Physics, Astronomy & Mathematics
        1st place: Makaila Jennings - Key Destiny Academy: 9-12
        2nd place: Steven Tran - Alabama School of Fine Arts
        3rd place: Aurora Liang - Loveless Academic Magnet Program (LAMP)

Category 1100: Robotic Systems & Communication Technology
        1st place: AnnaBekah Cress - Libertas Classical Community
        2nd place: Kevin Yan - Auburn High School
        3rd place: Daniel Zhao - Alabama School of Fine Arts

Category 1200: Bio-Medical Engineering

1st place: Mingpu Wu - Indian Springs School
2nd place: Leo Koppel and James McDaniel - Hewitt-Trussville High School

Southern Research Moving Science Award
Sponsored by: Southern Research Institute

This award is the highest honor presented to the most exceptional project in the science fair. The award recognizes the project that demonstrates outstanding scientific inquiry, creativity, and innovation. The project is judged based on the quality of research, scientific methodology, clarity of presentation, and overall impact. The winner of this award is deemed to have made significant contributions to the field of science through their project. This award inspires and encourages students to pursue their passion for science, fostering creativity and innovation in future generations. The recipient of this award is recognized as a leading scientist of tomorrow with limitless potential for advancing the frontiers of scientific discovery. The winner will receive a certificate and cash prize of $500.

The winner is: Rhea Rastogi - Loveless Academic Magnet Program (LAMP)

Provost Award Honoring the ISEF Finalists at ASEF
Sponsored by: Office of the Provost at Auburn University

The Auburn University Office of the Provost is proud to support the 4 ISEF Finalists from the Alabama Science and Engineering Fair. Each Finalist will receive a $200 cash prize, a certificate of accomplishment, and a trophy recognizing their significant accomplishments thus far in the 2023 Regeneron Science and Engineering Fair season.

The ISEF Finalists at the Alabama Science and Engineering Fair

Rhea Rastogi - Loveless Academic Magnet Program (LAMP)
Investigating transgenerational phenotypes and altered behavior in C. elegans mutants with inappropriately inherited histone methylation

Madhushalini Balaji - James Clemens High School
Development of a Simulated Platform that Replicates the Visual System Using Large Scale Neural Modeling and Performs Deep Brain Stimulation Using The Virtual Brain to Produce Synthetic Sight for the Visually Impaired

Joscelyn Peterson - Alabama School of Fine Arts
The Effects of Environmental Disparities on the Environmental Awareness of High School Students in the Greater Birmingham Area

Kevin Yan - Auburn High School
Utilizing Convolutional Neural Networks, Deep Learning, and Computer Vision in a Novel Approach to Banana Disease Management

Congratulations to all ASEF Participants!