GEARSEF 2022 Awards Ceremony Winners List (Senior Division)

SPECIAL AWARD RECOGNITIONS

American Psychological Association Award

Sponsored by: American Psychological Association

This award recognizes the top project in the category of Behavior & Social Sciences. The winner will receive a certificate of recognition.

The winner is: Rachel Allen – Elmore County High School

Auburn University's 100 Women Strong Achievement Award

Sponsored by: 100 Women Strong

This achievement award recognizes females that exemplify excellence through research 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.

The winners are:

1st place – Sydney Tait – Holtville High School

2nd place – Sara Paige Baggett – Stanhope Elmore High School

3rd place – Shemaiya Peak – Stanhope Elmore High School

Auburn University Biological Sciences Award for Creative Application of Biological Principles, sponsored by the AU Biological Sciences Dept.

This award recognizes the project that best demonstrated a creative application of biological principles. The winner will receive a certificate and \$100 cash award.

The winner is: Brennan Rey – Central High School

AU Biological Sciences Award for Outstanding Poster in Cellular, Molecular, or Microbiology

Sponsored by: The Auburn University Department of Biological Science

This award recognizes an outstanding poster in any category, which has a cellular, molecular, or microbiology emphasis. The winner will receive a certificate and a \$100 cash award.

The winner is: Shivani Babu – Auburn High School

AU Department of Chemistry and Biochemistry Award

Sponsored by: AU Department of Chemistry and Biochemistry

This award recognizes high achievement in scientific research in the field of chemistry or biochemistry. The winner will receive a certificate and a \$100 cash award.

The winner is: Dylan LaPorte – Wetumpka High School

AU Department of Geosciences Award

Sponsored by: AU Department of Geosciences

This award recognizes high achievement in the categories of geoscience, geology, and geography. The winner will receive a certificate and a \$100 cash award.

The winner is: Gracen Corbitt – Central High School

AU Physics Award for Ingenuity and Inventiveness

Sponsored by: AU Department of Physics

Physical principles underlie all of science. This award is given in recognition of an individual who demonstrated 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: Luke Sipper – Wetumpka High School

AU Samuel Ginn College of Engineering Award

Sponsored by: Samuel Ginn College of Engineering Award, Office of the Dean This award will be given for a project in any category that demonstrates an innovative application of math or science to a challenge of our society. The winner will receive a certificate and a \$100 cash award.

The winner is: Naeim Mahjouri – Auburn High School

AU Society of Women in Sciences and Mathematics Achievement Award

Sponsored by: The Society of Women in Sciences and Mathematics – Auburn University
This award recognizes high achievement in scientific research by a female. It will be awarded to
the top-scoring female in the senior division. Winners of this award will receive a certificate and
a \$100 cash award

The winner is: <u>Lillian Vilardi – Wetumpka High School</u>

AU Spirit of Excellence

Sponsored by: The Auburn University COSAM Office of Inclusion, Diversity and Equity
This award recognizes any student for any category considered an underrepresented minority in
STEM (African Americans, American Indians including Native Alaskans, Hispanics and Native
Pacific Islanders), or persons with disabilities. The winner will receive a certificate and a \$100
cash award.

The winner is: Shemaiya Peak – Stanhope Elmore High School

Biophysical Society Award

Sponsored by: The Biophysical Society

This award will be given to the student whose project shows great promise for innovation in a biophysics related field. The winner will receive a certificate and a \$100 cash award.

The winner is: Chloe Naguin – Stanhope Elmore High School

Community Innovation Award

Sponsored by: The Society for Science

This award will be given to the student who seeks to help mankind through science and engineering. The winner will receive a \$500 cash award and a certificate.

The winner is: Shemaiya Peak – Stanhope Elmore High School

Future Scientist Award

Sponsored by: AU College of Sciences and Mathematics, Dean's Office

The award will be given to a student, in any category, who demonstrated a complete, thorough, and current understanding of a scientific topic during their interview. As such, this student shows great promise as a future researcher. The winner will receive a certificate and a \$100 cash award.

The winner is: <u>Julian Vilardi – Wetumpka High School</u>

Innovation of Robotic Systems Award

Sponsored by: Southeastern Center of Robotics Education

This award will recognize a project from any category that demonstrates the greatest promise for innovation in the use of robotic systems. The winner will receive a certificate and a \$100 cash award.

The winner is: Naeim Mahjouri – Auburn High School

International Development Science Champion Award

Sponsored by: US 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. The winner will receive a certificate and a social media packet.

The winner is: <u>Lillian Vilardi – Wetumpka High School</u>

Most Outstanding Exhibit in Materials Science Award

Sponsored by: ASM Materials Education Foundation

This award will be given to the top project with a materials science theme. The winner will receive a certificate and a medallion to follow.

The winner is: Julian Vilardi – Wetumpka High School

Mu Alpha Theta Award

This award is presented for the project that best demonstrated challenging, original, thorough, and creative investigation of a problem using mathematics. The winner will receive a certificate of recognition.

The winner is: <u>Logan Bracknell & Nathan Currier – Wetumpka High School</u>

NASA Earth System Science Award

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 of achievement.

The winner is: Sara Paige Baggett – Stanhope Elmore High School

National Geographic: That's Geography!

Sponsored by: Office of Naval Research

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. The winner will receive a certificate and \$100.00 cash award.

The winner is: <u>Brennan Rey – Central High School</u>

Naval Science Award

Sponsored by: Office of Naval Research

This award recognizes two students who demonstrated excellence in science research or engineering design. The winners will receive a certificate of achievement, a medallion, and a \$50 gift card to follow.

The winners are:

- 1. Chloe Naquin Stanhope Elmore High School
- 2. Dylan LaPorte Wetumpka High School

Regeneron Biomedical Science Award

Sponsored by: The Society for Science

This award recognizes 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". The winner will receive a certificate and a \$500 cash award.

The winner is: Shivani Babu – Auburn High School

Ricoh Sustainable Development Award

This award recognizes the project that best reflects the principles of sustainability --balancing economic development with environmental responsibility. The winner will receive a certificate of recognition.

The winner is: Naeim Mahjouri – Auburn High School

Science Technology, Engineering & Math (STEM) Award

Sponsored by: The United States Air Force

This award recognizes three projects from any category that demonstrated outstanding science or engineering. The winners will receive a certificate of achievement.

The winner is: Naeim Mahjouri – Auburn High School

Society of Hispanic Professional Engineers Young Innovator Award

Sponsored by: Auburn University Chapter of SHPE

In an effort to encourage a lifelong enthusiasm for the sciences in traditionally underrepresented demographics, this award recognizes research excellence presented by a minority student from any category. The winner will receive a certificate and a \$75 cash award.

The winner is: Will Bao – Auburn High School

Stockholm Junior Water Prize (certificate and chance to enter on-line competition)

Sponsored by: Water Environment Federation and Xylem Inc

This award is considered the most prestigious award for water related sciences, 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.

The Stockholm Water Foundation recognizes up to three projects that best address water related issues. The winner(s) of this award are invited to enter a statewide on-line competition hosted by the Stockholm Water Foundation.

The winner is: Shemaiya Peak – Stanhope Elmore High School

Talent in Mathematics and Statistics Award Sponsored by: AU Department of Mathematics and Statistics

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

The winner is: Luke Sipper – Wetumpka High School

Yale Science and Engineering Association Award

Sponsored by: Yale Science and 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: Ryan Smith & Keegan Dorrill – Central High School

Now we will shift gears and announce the placement winners of each category. A judging panel of over 40 scientists and engineers determined which projects scored highest today in each category. In addition, the judges determined which projects should advance from GEARSEF to the Alabama Science and Engineering Fair (ASEF) in April by only awarding category medals to those projects meriting advancement to the state fair. Students receiving a category medal will automatically qualify to advance to the Alabama State Science Fair held virtually April 4-8, 2022. In addition, the 1st place winner of each category will receive a \$100 cash prize. Students, if I call your name please come forward to receive your award.

CATEGORY AWARDS

Category 100: Animal, Plant, Computational & Bioinformatics Sciences

1st – Leo Shen – Auburn High School

2nd – Rhett Pinkston – Wetumpka High School

3rd – Brennan Rey – Central High School

Category 200: Behavioral & Social Sciences

1st – Sydney Tait – Holtville High

2nd – Adrianna Orsi – Wetumpka High School

3rd - Rachel Allen - Elmore County High School

Category 300: Cellular, Molecular, Microbiology & Biochemistry

1st – Shivani Babu – Auburn High School

Category 400: Chemistry

1st – <u>Dylan LaPorte – Wetumpka High School</u>

2nd – <u>Julian Vilardi – Wetumpka High School</u>

3rd - Drinda Coachman - Dothan High School

Category 500: Engineering Mechanics

1st - Ryan Smith & Keegan Dorrill - Central High School

2nd - Nicholas Sasser - Central High School

3rd – <u>Judson Wood – Wetumpka High School</u>

Category 600: Energy: Sustainable Materials & Design

1st – Naeim Mahjouri – Auburn High School

Category 700: Earth and Environmental Sciences

1st – Shemaiya Peak – Stanhope Elmore High School

Category 800: Medicine, Health & Translational Medical Sciences

1st - Jacob Norrell & Timothy Hughes - Wetumpka High School

2nd – Margaret Yeilding – Central High School

Category 900: Physics, Astronomy, Mathematics & Materials Science

1st – <u>Luke Skipper – Wetumpka High School</u>

Category 1100: Robotic Systems & Communication Technology

No projects scored high enough to award a category placement award

Category 1200: Bio-Engineering

1st – Lillian Vilardi – Wetumpka High

2nd – Chloe Naguin – Stanhope Elemore High School

3rd – Benjamin Tzao – Auburn High School

GEARSEF will also advance our top three Best of Fair winners directly to the Regeneron International Science and Engineering Fair 2022. This year's event will be held in Atlanta, GA May 7-13, 2023. Auburn University will cover all expenses for three students to attend ISEF as representatives of GEARSEF at Auburn University. This year's Best of Fair winners are:

Shivani Babu – Auburn High School

Naeim Mahjouri – Auburn High School

Leo Shen – Auburn High School

Congratulations to all our participants and winners today!

I have a few notes for winners:

1.) CASH AWARDS - Today's winners have received a variety of awards – some sponsored internally by Auburn University Departments and Organizations as well as others sponsored by other outside organizations. These awards may have a specific requirement for follow up action. Directions and any additional forms, paperwork or instructions are included in your award packet. Please pay close attention to all stated deadlines. Failure to follow directions could result in forfeiture of your cash award.

- 2.) ASEF If you are advancing to the state science fair, we will automatically advance your Scienteer project paperwork and the Virtual Display Board you uploaded. We have included instructions with your award about the advancement process. However, All ASEF participants must complete the following steps by March 18, 2022 in order to compete:
 - a. Log in to Scienteer to confirm your intent to participate
 - b. Re-select your project category
 - c. Check to be sure your Virtual Display Board is a single slide in the correct dimensions in order to ensure it displays correctly in the Virtual Exhibit Hall. These dimensions are: 3456 x 2592. Students may make small changes to their display board and/or project to make improvements.
 - d. Pay your \$10 ASEF project registration fee.
- 3.) **ISEF -** If you are advancing to ISEF:
 - a. You will need to complete the online questionnaire ASAP.
 - b. Pay close attention to the information we have provided you about ISEF registration deadlines and details from Dr. Virginia Vilardi who coordinates all travel arrangements and event details.