

# **72<sup>nd</sup> Greater Kansas City Science & Engineering Fair**

## **2023 AWARDS**



## **INTERMEDIATE DIVISION**

### ***INTERMEDIATE ANIMAL SCIENCE***

**SPONSORED BY:** BioNexus KC

**WINNER:**

1<sup>st</sup> Place: Reid Kauzlarich

### ***INTERMEDIATE BEHAVIORAL & SOCIAL SCIENCES***

**SPONSORED BY:** Fort Hays State University

**WINNERS:**

3<sup>rd</sup> Place: Salma Yacoub

2<sup>nd</sup> Place: Mia Sonderman

1<sup>st</sup> Place: Harper Galloway and Millie Stewart

### ***INTERMEDIATE CHEMICAL ENERGY***

**SPONSORED BY:** Catalent

**WINNER:**

1<sup>st</sup> Place: Joseph Giocondo

### ***INTERMEDIATE CHEMISTRY***

**SPONSORED BY:** Catalent

**WINNERS:**

3<sup>rd</sup> Place: Tommy Hoffman and Harrison Buntin

2<sup>nd</sup> Place: Stella Martin and 2<sup>nd</sup> Place: Abraham Girard & Kate Bunck

1<sup>st</sup> Place: Gracelyn Clyde and 1<sup>st</sup> Place: Kate Gose

### ***INTERMEDIATE COMPUTER SYSTEMS, ELECTRONICS & ROBOTICS***

**SPONSORED BY:** Evergy

**WINNER:**

1<sup>st</sup> Place: Violet Mora

### ***INTERMEDIATE EARTH & ENVIRONMENTAL SCIENCES***

**SPONSORED BY:** GKC Council - Navy League of the United States

**WINNERS:**

2<sup>nd</sup> Place: Ava Kopitas

1<sup>st</sup> Place: Alton John

### ***INTERMEDIATE ENERGY & ENVIRONMENTAL ENGINEERING***

**SPONSORED BY:** Terracon

**WINNERS:**

2<sup>nd</sup> Place: Aubri Knipp and Samera Doel

1<sup>st</sup> Place: Corbin Tyson

1<sup>ST</sup> Place: Andrew Ridenour

### ***INTERMEDIATE ENGINEERING MECHANICS***

**SPONSORED BY:** HNTB

**WINNER:**

1<sup>st</sup> Place: Kennedy Faris

### ***INTERMEDIATE MICROBIOLOGY***

**SPONSORED BY:** Eurofins Viacor

**WINNERS:**

2<sup>nd</sup> Place: June Becker and Cade Lowery

1<sup>st</sup> Place: Julia McNamara

### ***INTERMEDIATE MOLECULAR BIO/CHEM & HEALTH SCIENCES***

**SPONSORED BY:** Labconco

**WINNER:**

1<sup>st</sup> Place: Brody Lynn

### ***INTERMEDIATE MATERIALS SCIENCE***

**SPONSORED BY:** Black and Veatch

**WINNERS:**

3<sup>rd</sup> Place: Elizabeth Ritter, Elle Rolofson & Lyla Aldridge

2<sup>nd</sup> Place: Brylee Lawing, Kynley Winn & Lola Casey

1<sup>st</sup> Place: Marleigh Foutes, Ansley Bush & Cora Campo

### ***INTERMEDIATE INVENTIONS***

**SPONSORED BY:** Shook, Hardy, and Bacon

**WINNERS:**

3<sup>rd</sup> Place: Luciana Camis and Olive Abbott

2<sup>nd</sup> Place: Cena George

1<sup>st</sup> Place: Sloane Helm

### ***INTERMEDIATE PHYSICS & ASTRONOMY***

**SPONSORED BY:** Regnier Family Foundation

**WINNERS:**

2<sup>nd</sup> Place: Sawyer Bland

1<sup>st</sup> Place: Caleb Callaway

### ***INTERMEDIATE PLANT SCIENCE***

**SPONSORED BY:** Campbell Family Foundation

**WINNERS:**

2<sup>nd</sup> Place: Zoey Wales

1<sup>st</sup> Place: Elizabeth Olschki

## JUNIOR DIVISION

### ***JUNIOR ANIMAL SCIENCE***

**SPONSORED BY:** BioNexus KC

**WINNERS:**

2<sup>nd</sup> Place: Gerard Hickey

2<sup>nd</sup> Place: Jude Golden

1<sup>st</sup> Place: Grace Groebe

### ***JUNIOR BEHAVIORAL & SOCIAL SCIENCE***

**SPONSORED BY:** Fort Hays State University

**WINNERS:**

3<sup>rd</sup> Place: Lillian Bogart and Maizie French

2<sup>nd</sup> Place: Benjamin Kramer

1<sup>st</sup> Place: Margaret Stocks

### ***JUNIOR CHEMISTRY***

**SPONSORED BY:** Catalent

**WINNERS:**

3<sup>rd</sup> Place: Annabelle Hair

2<sup>nd</sup> Place: Zoe Miller

2<sup>nd</sup> Place: Grace Shields

1<sup>st</sup> Place: Phoebe Grant

1<sup>st</sup> Place: Madeline Male

### ***JUNIOR COMPUTATIONAL SCIENCE, BIOINFORMATICS & MATHEMATICS***

**SPONSORED BY:** GARMIN

**WINNER:**

1<sup>st</sup> Place: Mahi Kohli

### ***JUNIOR COMPUTER SYSTEMS, ELECTRONICS & ROBOTICS***

**SPONSORED BY:** Evergy

**WINNER:**

1<sup>st</sup> Place: Aiden Loretto

### ***JUNIOR EARTH & ENVIRONMENTAL SCIENCES***

**SPONSORED BY:** GKC Council - Navy League of the  
United States

**WINNERS:**

2<sup>nd</sup> Place: Katherine and Mary Harman

1<sup>st</sup> Place: Anya Reddy

### ***JUNIOR ENERGY & ENVIRONMENTAL ENGINEERING***

**SPONSORED BY:** Terracon

**WINNER:**

1<sup>st</sup> Place: Hannah Kerr

### ***JUNIOR ENGINEERING MECHANICS***

**SPONSORED BY:** HNTB

**WINNERS:**

2<sup>nd</sup> Place: Jack Neely

1<sup>st</sup> Place: Luke Rando

### ***JUNIOR MICROBIOLOGY***

**SPONSORED BY:** Eurofins Viacor

**WINNERS:**

3<sup>rd</sup> Place: Luciana Conigilio

2<sup>nd</sup> Place: Noah Freeman

1<sup>st</sup> Place: Sydney Culbertson

### ***JUNIOR MOLECULAR BIOLOGY & HEALTH SCIENCES***

**SPONSORED BY:** Labconco

**WINNER:**

1<sup>st</sup> Place: Diya Kiran Krishnan

### ***JUNIOR MATERIAL SCIENCE***

**SPONSORED BY:** Black and Veatch

**WINNERS:**

3<sup>rd</sup> Place: Kamryn Gordon

2<sup>nd</sup> Place: Daniel Martin

2<sup>nd</sup> Place: Emily Growney

1<sup>st</sup> Place: Edward Houlehan

1<sup>st</sup> Place: Julie Sykes

### ***JUNIOR INVENTIONS***

**SPONSORED BY:** Shook, Hardy, and Bacon

**WINNERS:**

3<sup>rd</sup> Place: Sofia Martinez and Julie Tobar

2<sup>nd</sup> Place: Dhruv Mogenahalli

1<sup>st</sup> Place: Emma Bright

### ***JUNIOR PHYSICS & ASTRONOMY***

**SPONSORED BY:** Regnier Family Foundation

**WINNERS:**

2<sup>nd</sup> Place: Avery Growney

1<sup>st</sup> Place: Gavin Cammack

### ***JUNIOR PLANT SCIENCE***

**SPONSORED BY:** Campbell Family Foundation

**WINNERS:**

2<sup>nd</sup> Place: Sarah Biritz

1<sup>st</sup> Place: Logan Daughtery

## **SENIOR DIVISION**

### ***SENIOR ANIMAL SCIENCE***

**SPONSORED BY:** BioNexus KC

**WINNER:**

1<sup>st</sup> Place: Tayten DeGarmo

### ***SENIOR BEHAVIORAL & SOCIAL SCIENCE***

**SPONSORED BY:** Fort Hays State University

**WINNER:**

1<sup>ST</sup> Place: Ashley Taylor

### ***SENIOR CHEMISTRY***

**SPONSORED BY:** Catalent

**WINNERS:**

2<sup>nd</sup> Place: Nithya Kailad

1<sup>st</sup> Place: William Schulte

### ***SENIOR COMPUTATIONAL SCIENCE, BIOINFORMATICS & MATHEMATICS***

**SPONSORED BY:** GARMIN

**WINNER:**

1<sup>st</sup>: Abigail West

### ***COMPUTER SYSTEMS, ELECTRONICS AND ROBOTICS***

**SPONSORED BY:** Every

**WINNER:**

1<sup>st</sup>: Rahi Dasgupta

### ***SENIOR EARTH & ENVIRONMENTAL SCIENCE***

**SPONSORED BY:** GKC Council - Navy League of the United States

**WINNERS:**

3<sup>rd</sup> Place: Katelin Henry

2<sup>nd</sup> Place: Grayson Klimek

1<sup>st</sup> Place: Elizabeth Barnes

### ***SENIOR ENERGY & ENVIRONMENTAL ENGINEERING***

**SPONSORED BY:** Terracon

**WINNER:**

1<sup>st</sup> Place: Erandi Ramirez Oviedo

### ***SENIOR MICROBIOLOGY***

**SPONSORED BY:** Eurofins Viacor

**WINNERS:**

2<sup>nd</sup> Place: Margaret Howard

1<sup>st</sup> Place: Lara Dunkley

### ***SENIOR MOLECULAR BIO/CHEM & HEALTH SCIENCES***

**SPONSORED BY:** Labconco

**WINNERS:**

2<sup>nd</sup> Place: Caleb Gilmore

1<sup>st</sup> Place: Mia Stamos

**SENIOR MATERIAL SCIENCE**

**SPONSORED BY:** Black and Veatch

**WINNER:**

1<sup>st</sup> Place: Denham McIntosh

**SENIOR PHYSICS & ASTRONOMY**

**SPONSORED BY:** Regnier Family Foundation

**WINNER:**

1<sup>st</sup> Place: Joshua Robison

**SENIOR PLANT SCIENCE**

**SPONSORED BY:** Campbell Family Foundation

**WINNERS:**

2<sup>nd</sup> Place: Bryson Sanders

1<sup>st</sup> Place: Menaka Garapaty

## **2023 Greater Kansas City Science & Engineering Fair Winners**

The **PIONEERS IN SCIENCE** awards are given to the top seven senior division projects, in no particular order. This award recognizes outstanding examples of student research, innovation and design. From these, the TOP 4 GRAND AWARD FINALISTS are selected.

**School:** SMSD Biotechnology Program

**Category:** Earth and Environmental Science

**WINNER:** Elizabeth Barnes

**Title of Project:** Understanding the Regional Effect of Microplastic Contamination Through the Study of Beach Sand

**School:** Olathe North High

**Category:** Molecular Biology

**WINNER:** Menaka Garapaty

**Title of Project:** QR Code Laser Printing Power Optimization and Evaluation of Microbial Presence on the Surface of Apples

**School:** SMSD Biotechnology Program

**Category:** Molecular Biology

**WINNER:** Caleb Gilmore

**Title of Project:** Alzheimer's and Aftins: Understanding the role of Mitochondria in Alzheimer's Disease

**School:** SMSD Biotechnology Program

**Category:** Molecular Biology

**WINNER:** Mia Stamos

**Title of Project:** Characterization of Engineered Chimeric Protein LLHP Repression Through the Induction of DNA Looping

**School:** SMSD Biotechnology Program

**Category:** Computational Science, Bioinformatics and Math

**WINNER:** Abigail West

**Title of Project:** The Use of Topological Scoring and Chemical Cross-linking to Identify Direct Protein Interactions in the Sin3 Complex

**School:** SMSD Biotechnology Program

**Category:** Energy & Environmental Engineering

**WINNER:** Erandi Ramiez Oviedo

**Title of Project:** Rubisco: A New Approach to Carbon Sequestration

**School:** SMSD Biotechnology Program

**Category:** Microbiology

**WINNER:** Laura Dunkley

**Title of Project:** The Efficiency of d-Limonene as a Fungicide

## **GRAND AWARD WINNERS AND ISEF FINALISTS**

The **GRAND AWARDS** are presented to the top **four** senior division projects that meet the stringent requirements for entering the REGENERON International Science and Engineering Fair. Grand Award winners and their sponsoring teacher will receive an all-expense paid trip to compete at the 2023 International Science & Engineering Fair, held this year in Dallas, TX from May 14<sup>th</sup>-19<sup>th</sup>, 2023.

### ***Grand Awards Sponsors:***

Bluescope • Broadcom • DeBruce Foundation • Honeywell NSC • Kiewit • Millipore Sigma

### ***Elizabeth Barnes***

#### **Title of Project:**

Understanding the Regional Effect of Microplastic Contamination Through the Study of Beach Sand

### ***Erandi Ramiez Oviedo***

#### **Title of Project:**

Rubisco: A New Approach to Carbon Sequestration

### ***Mia Stamos***

#### **Title of Project:**

Characterization of Engineered Chimeric Protein LLHP Repression Through the Induction of DNA Looping

### ***Abigail West***

#### **Title of Project:**

The Use of Topological Scoring and Chemical Cross-linking to Identify Direct Protein Interactions in the Sin3 Complex

## SPECIAL AWARDS

Both national and local STEM organizations with a devoted interest in science education provide special awards for projects entered into the Fair. Each organization selects its own award criteria and provides judges to select the winning projects. This year there are 40 organizations providing 112 awards with cash prizes over \$8,500 and a total value of almost \$14,000 – a new record!

A list of Special Awards organizations is provided on the back of your program. We would like to thank all of these organizations for their support and participation in the Fair.

***Organization: Air and Waste Management Association***

**Senior:** Elizabeth Barnes

**Junior:** Hannah Kerr

**Intermediate:** Pinesh Ezhil

**Description of Award:** The best projects in the senior, junior and intermediate division relating to pollution or waste management, energy conservation or renewable energy. Each winner will receive a \$100 cash award and a plaque. Additionally, the science department of each winner's school will receive \$50.

***Organization: American Chemical Society***

**Winner:** William Schulte

**Description of Award:** ACS Recognizes Excellence in Chemistry by honoring and celebrating achievements in advancing the chemical enterprise and making a positive impact on organizations, communities and society. All of this starts with you engaging in science. To celebrate these achievements, we have selected the top 3 projects that support science growth for future impact on the world at large. Each of these winners will receive honors from the ACS, including an award plaque and certificate along with a one-year membership in the ACS.

***Organization: American Institute of Chemical Engineers – Kansas City Section***

**Winner:** William Schulte

**Description of Award:** This organization presents \$100 to the student in the senior or junior division whose project best exemplifies practical application of chemical engineering principles.

***Organization: American Psychological Association***

**Winner:** Chase Morgan

**Description of Award:** A certificate is presented to outstanding research in psychological science under the category of Behavioral and Social Sciences or any category related to psychology.

***Organization: Association For Women Geoscientists***

**Winner:** Delaney Chirpich

**Description of Award:** The association for Women Geoscientists is pleased to provide an Award Certificate to the female student whose project exemplifies high standards of innovation and scientific excellence in the geosciences.

***Organization: Broadcom Coding with Commitment Award***

**Winner:** Mahi Kohli

**Description of Award:** Broadcom Coding With Commitment is intended to encourage greater inclusivity in science fairs by recognizing a participant in 5<sup>th</sup> through 8<sup>th</sup> grade who is not a traditional winner but shows passion and promise – and applies basic coding or computational thinking to solve a problem the student or student team cares about.

***Organization: Burroughs Audubon Society of Greater Kansas City***

**Intermediate:** Riley Jablonski

**Junior:** Grace Groebe

**Senior:** Matthew Hamlin

**Description of Award:** The best project in the intermediate, junior, and senior division in Animal Science and/or Behavioral Science relating to native animal species of North America in ecology, Mendelian genetics, systemics, animal behavior, or linguistics. Each winner will receive \$100 and a plaque and the science department of each school will receive \$100.

**Organization: Citizens' Climate Lobby, Kansas City (Missouri and Kansas) Chapters**

**Senior:** Erandi Ramirez Oviedo and Riley Stephenson

**Junior:** Sandra Phillips and Hannah Kerr

**Intermediate:** Dinesh Ezhil

**Description of Award:** Entries can cover any facet of the Mid-American Regional Council's 2021 Regional Climate Action Plan. Entries will be judged on scientific merit, contribution to overall greenhouse gas reduction, suitability for the Kansas City region, and aesthetic appeal. Projects can address renewable and "non-carbon" energy production, improved electrical transmission, electrification of buildings and transportation, improving efficiency in some aspect of electrical consumption, removing carbon from the atmosphere, or any other CO2 reduction strategy.

**Organization: Community Innovation Award by Society for Science**

**Winner:** Riley Stephenson

**Description of Award:** The Society for Science is proud to offer an award to high school students at 30 science fairs around the world who seek to help mankind through science and engineering. The \$500 Community Innovation award is provided to a high school student who has done a project that will better humanity and improve conditions in the local community.

**Organization: EPA Region 7's Excellence in Environmental Science Award**

**Senior:** Elizabeth Barnes, Eric Lebar, Katelin Henry, and Grayson Klimek.

**Junior:** Anya Reddy, Everett Talley, Henry Lewis, Ava Bartlett, and Dhruv Mogenahalli

**Intermediate:** Kate Gose, Alton John and Rylie Jablonski

**Description of Award:** Certificates will be awarded to 1st, 2nd and 3rd place projects in Environmental Science in each age division, plus a special plaque for an outstanding project.

**Organization: F. Gene Hampton Award of Excellence in the Life Sciences**

**Winner:** Tayten DeGarmo

**Description of Award:** Awarded to a ninth or tenth grade student whose project best exemplifies the use of scientific processes in addressing a biological problem. The student and the sponsoring teacher will each receive an award of \$100.

**Organization: George L. MacCurdy Award**

**Winners:** Aiden Hamilton and Daniel Schulte

**Description of Award:** Awarded to a ninth or tenth grade student whose project best exemplifies the use of scientific processes in addressing a biological problem. The student and the sponsoring teacher will each receive an award of \$100.

**Organization: Greater Kansas City Association of Family and Consumer Sciences**

**Presented by:** Joyce Huff

**Winners:** Diya Kiran Krishnan, Madelyn Lary, Anna Mudd, Ellery Ridenour

**Description of Award:** Four \$50 cash awards are given to students whose projects emphasize and highlight our purposes, which are to educate individuals for family living, improve services and goods used by families, and promote research on the changing needs of individuals and families.

**Organization: Institute of Electrical & Electronic Engineers**

**Winner:** Rahi Dasgupta

**Description of Award:** IEEE is the world's largest professional association advancing innovation and technological excellence for the benefit of humanity. The IEEE KC award is given to one outstanding senior division project making use of the fields of electrical engineering, computer science, or mathematics.

**Organization: Kansas City Archaeological Society**

**Presented by:** Melissa Eaton

**Winner:** Ethan Heinen

**Description:** A \$100 cash award is presented for outstanding research in the area of archaeology, the study of past human life. One award will be given for the best experiment in tool manufacture or use, pottery making, native agricultural practices or additional topics related to archaeology.

**Organization: Kansas City Garden Club**

**Winners:**

**Senior:** Riley Stephenson and Riley Smith

**Junior:** Margaret Stocks, and Katherine and Mary Harman

**Intermediate:** Riley Jablonski. And Benjamin Jones & Viktor Williams.

**Description of Award:** Horticulture, environment and ecology related entries are eligible for this award. \$25 cash prize, a ribbon, and certificate to the top 2 winning entries in each division.

**Organization: KC Zoo Biodiversity Defender Award**

**Senior:** Katelin Henry

**Junior:** Henry Lewis

**Intermediate:** Alton John

**Description of Award:** This award will be awarded to the top three individuals who present a project that makes a positive contribution to an areas biodiversity by changing, enhancing, or monitoring environmental factors.

**Organization: K-State Olathe Urban Scholarship Award for Agriculture/Food Safety and Security**

**Winner:** Margaret Howard

**Description of Award:** This Scholarship Award for \$500 is given to the project that demonstrates a sustainable, safe food production in an urban environment, and may relate to either developing, processing, manufacturing, or marketing safe, wholesome, and attractive food products (divided among team members if joint project).

**Organization: K-State Olathe Scholarship Award for Animal Health/Biosecurity**

**Winner:** Menaka Garapaty  
**Description of Award:** This Scholarship Award for \$500 is awarded to the project that demonstrates in-depth knowledge about animal physiology, diseases and their relevance to human health.

**Organization: Lakeside Nature Center**

**Senior:** Riley Jablonski

**Junior:** Katie Shaw

**Intermediate:** Grayson Klimek

**Description of Award:** Lakeside Nature Center would like to present a special award for the best display showing what 'kids can do' to help the environment. There are three awards - one for each age group -- \$100 to the student and \$50 to the student's school or teacher.

**Organization: Lemelson Early Inventor Prize**

**Winner:** Ava Bartlett

**Description of Award:** The Lemelson Early Inventor Prize is awarded to a student in the intermediate division who develops an invention to solve a critical societal problem and improve the lives of others. The winner receives \$100 and a certificate.

**Organization: Linda Hall Library of Science, Engineering & Technology – Joseph C. Shipman Award**

**Winner:** Erandi Ramirez Oviedo

**Description of Award:** The Shipman Award of \$500 is granted to the senior division student who makes excellent use of scientific literature in the context of a science fair project. \$500 also goes to the sponsoring teacher.

**Organization: Martin N. Schuler Award**

**Winner:** Mia Stamos

**Description of Award:**

The Martin N. Schuler award recognizes Mr. Schuler's outstanding commitment to research professionalism, and his contributions to the community through his long-term involvement with Science Pioneers and the Science Fair as their past president and secretary-treasurer. This cash award of \$250 and a certificate will be presented to a student in the senior division for outstanding achievement in the biological sciences.

**Organization: NASA Earth Systems Science Award**

**Winner:** Avery Erickson

**Description of Award:** The NASA Earth Systems Science Award is given to the student that best demonstrates insight into Earth's interconnected spheres and the project should incorporate studies including different spheres of the Earth system, their interactions and change over time.

**Organization: National Oceanic and Atmospheric Administration**

**Winner:** Elizabeth Barnes

**Description of Award:** A Certificate and invitation to a webinar is presented to one project in the junior or senior division 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."

**Organization: Regeneron Biomedical Science Award Administration**

**Winner:** Luke Chen

**Description of Award:** Society for Science is proud to partner with Regeneron to inspire and celebrate the next generation of biomedical scientific heroes with a \$375 award and certificate of achievement.

**Organization: Ricoh Corporation**

**Winner:** Andrew Ridenour

**Description of Award:** It is our honor to provide Ricoh Sustainable Development Award Certificate, to recognize your student, whose outstanding project addresses social and environmental challenges and a meaningful solution for a more sustainable future.

**Organization: Science City Ad Astra Award**

**Senior:** Avery Erickson

**Junior:** Luke Bolch

**Intermediate:** Caleb Calloway

**Description of Award:** The Science City Ad Astra Award is presented to students with projects relating to physics and astronomy that: showcase a great understanding of the scientific method, use applicable and recent research methods, and strive to use physics and/or astronomy-based sciences to help improve our world for future generations.

**Organization: Science City Maker Award**

**Senior:** Denham McIntosh

**Junior:** Jonah Miller

**Intermediate:** Alexa Jennings-Anand

**Description of Award:** In recognition of your creative project, 1 project from each division will receive a 4-pack of Science City tickets and a custom made Maker Studio award.

**Organization: Science City Showcase Award**

**Senior:** Brieyn Elemore and Payton Reber

**Junior:** Hadley Graham

**Intermediate:** Siobhan Davis

**Description of Award:** The Science City Showcase Award recognizes 3 outstanding projects in each division based on the scientific inquiry, and project display board. Winner will receive a certificate, 4 passes to Science City and Planetarium, and will have their project on display in Science City.

**Organization: LeAnn Smith Science Pioneers Legacy Award**

**Winner:** Bailey Callighan

**Description of Award:** This intermediate special award is for a project that showcases scientific learning, creativity, and curiosity. The Fair began in 1952 to help promote student interest in the sciences, and the Science Pioneers legacy continues as participation in the Fair grows. The winner will receive a 1-year Union Station membership along with a Fair T-shirt and lapel pin.

**Organization: Society for In Vitro Biology**

**Winner:** Margaret Carletti

**Description of Award:** Certificate to the most outstanding 11th grade student exhibiting in the areas of plant or animal in vitro biology or tissue culture.

**Organization: Society of Women Engineers - Kansas City Section**

**Senior:** Margaret Carletti, Ashley Taylor and Mary Shaw

**Junior:** Anna Mudd, Madelyn Lary, Diya Kiran Krishnan, and Ellery Ridenour.

**Description of Award:** Society of Women Engineers is an organization that provides valuable opportunities for women in science and engineering to network, find support and develop their careers. The Kansas City section works to achieve the society's goals by reaching out to girls of all ages and encouraging them to pursue careers in STEM. 2 female senior division projects will be recognized.

**Organization: Stockholm Junior Water Prize**

**Winners:** Alesander Padakis & Matthew Hamlin, Elianna Bargmann & Eliana Clark, and Jax Rosekrans

**Description of Award:** Projects should be aimed at enhancing the quality of life through improvement of water quality, water resource management, or water and wastewater treatment. The projects may explore water issues on a local, regional, national, or global level using a research-oriented approach. Regional winner receives certificate and a free one-year student membership to WEF.

**Organization: The Society of American Military Engineers- The Greater Kansas City Post**

**Winner:** Erandi Ramirez Oviedo, Carleigh Schuster and Mary Shaw

**Description of Award:** The winner of this award will receive a silver medal, a cash prize (\$100 each), and a certificate of achievement in the Senior Division for exemplary projects that reflect innovativeness, practical application, and leadership in each of the Earth & Environmental Science, Energy & Environmental Engineering, and Engineering Mechanics categories.

**Organization: The United States Agency for International Development**

**Winner:** Lara Dunkley

**Description of Award:** The U.S. Agency for International Development (USAID) is pleased to offer one (1) Science Champion Award to recognize an exceptional project at your fair that has the potential to help address a salient international development challenge. In addition to an electronic certificate, the winning individual/team will be invited to join other winners from around the world to participate in a virtual conversation with USAID's Chief Scientist, to be held in summer 2023.

**Organization: The United States Air Force**

**Winners:** Luke Rando, Gavin Cammack, Grady Hutchison & Andy Phung

**Description of Award:** The Air Force will give four equal awards in 2023. Each student prize will include a sling pack, Power Bank, USB Flash Memory Drive, USB Car Charger, and Official AF Certificate.

**Organization: The United States Metric Association**

**Winner:** Alyssa Haynes

**Description of Award:** The U.S. Metric Association provides a certificate to be presented to the best senior level student whose project involves significant amount of quantitative measurement and which best uses the SI metric system for those measurements.

**Organization: The Office of Naval Research (United States Navy & Marine Corps Science Award)**

**Winners:** Joshua Robison, Rahi Dasgupta, Margaret Howard

**Description of Award:** Certificates, a medallion and \$50 gift certificate to 3 senior projects in any category of science.

**Organization: Western Chapter of the Missouri Society of Professional Engineers**

**Winners:** Jack Neely and Kennedy Faris

**Description of Award:** The Western Chapter of the Missouri Society of Professional Engineers presents its awards to individual projects that exhibit the application of outstanding engineering creativity, design and analysis. Our organization is committed to promoting the ethical practice of engineering to serve the public welfare. Through these awards, we desire to encourage and support students who will make up the next generation of professional engineers.

**Organization: Wildwood Outdoor Education Center**

**Winner:** Alton John

**Description of Award:** This award goes to the best Bio-Inspired Design Project in the Intermediate or Junior Divisions and the winner will receive 1 free week of summer camp.

**Organization: Yale Science & Engineering Association, Inc.**

**Winner:** Oliver Zhang

**Description of Award:** The Yale Science & Engineering Association, Inc. provides an award to the most outstanding 11th grade project exhibiting in the areas of Science, Technology, Engineering and Mathematics.

## **GRAND CHAMPION SPECIAL AWARD**

### ***MRIGlobal Excellence in Science Award***

Awarded to what is judged to be the very best of the blue-ribbon winners from the Senior Division, MRIGlobal's Excellence in Science Award recognizes excellence in pursuit of objective, scientific truth and progress. In this winner and their work, we see many of the qualities exemplified that MRIGlobal prides itself on.

#### **Winner:**

***Mia Stamos*** from the Shawnee Mission School District's Center for Academic Achievements for her work on "Characterization of Engineered Chimeric Protein LLHP Repression Through the Induction of DNA Looping."

**CONGRATULATIONS TO ALL OF THIS YEAR'S WINNERS!!!  
WE HOPE TO SEE YOU BACK NEXT YEAR!**