



2021 Senior Awards

Overview

- Introduction
- Special Awards
- Scholarships
- Grand Awards



Thank You

- Students
- Parents
- Educators
- Judges & Monitors
- Virtual Fair Team



FRSEF Board of Directors

- **John F. Wambaugh, US Navy Dept. Of Defense**
CEO & Junior Division Director
- **Mike Mosher**
President & Operation Services
- **David C. Hill, Hill Funeral Home, Retired**
Treasurer & Printing
- **Jordan Krell**
International Fair Coordinator & Fair Director
- **Kathy Dutton, Homeschool Connections**
Marketing, Outreach, SRC
- **Dr. Qazi Azher, Hurley Medical Center**
Medical Community Liaison / SRC
- **Doris Hill, General Motors**
Grant / Scholarship Chairperson, Head of Judging
- **Jill Campbell, Imlay City Community Schools**
Lapeer County School Liaison
- **Gary Peterson, Lakeville Community Schools, Retired**
Elementary Director
- **John Munsell, General Motors**
Judging Coordinator
- **Jacqueline Ekladyous**
Secretary
- **Daniel Aistrop**
IT Coordinator
- **Michaela Mosher**
- **Josh Engle**
Judging Coordinator
- **David Dutton**
Marketing



Scientific Review Committee

- Dr. Qazi Azher
- Dr. Andrew Wagner
- Dr. Martha Short
- Brian Weatherdon P.A.
- Kathy Dutton
- Jordan Krell

Approval Form (18)
A completed form is required by each Student/Teacher/Parent/Teacher.

1. To be Completed by Student and Parent

Student Approval:

- I understand the rules and regulations of the proposed research project.
- I have read and understand the rules and regulations of the proposed research project.
- I have read and understand the following ethics statement:

Parent Approval:

I have read and understand the rules and regulations of the proposed research project. I have read and understand the following ethics statement. I have read and understand the rules and regulations of the proposed research project. I have read and understand the following ethics statement.

2. To be completed by the local or affiliated F&E SRC

3. Final State/MS-Approved Fair SRC Approval (Required for ALL Projects)



Community Partners

Kettering
UNIVERSITY



Genesee Intermediate
School District



Flint
Public
Library
LEARN FOR LIFE



MSU St. Andrews



Donors



James A. Welch Foundation



SMG



Donors



Donors

- Arthur Bishop Charitable Trust
- Stella and Frederick Loeb Trust
- Michigan Association of Hazardous Material Professionals
- Hurley Foundation
- Anna Paulina Foundation
- Mid-States Bolt and Screw
- Women's OBGYN PC of Saginaw
- Sovita Credit Union
- Meijer



Donors - Individual

- Kavita and Suresh Tumma
- A Family Who Believes in Science
- David C. Hill
- Gupta Family - CMGF
- Qazi & Zareena Azher
- Jordan & Theresa Krell
- Linda Lee Massoud



Special Awards



American Meteorological Society

- Outstanding achievement for creative scientific endeavor in the areas of atmospheric and related oceanic and hydrologic sciences



American Meteorological Society

- Outstanding achievement for creative scientific endeavor in the areas of atmospheric and related oceanic and hydrologic sciences
- Nicole Bennett
 - Saginaw Arts And Sciences Academy
 - Albedo's Effect on Climate Change
- Jett Miller
 - Saginaw Arts And Sciences Academy
 - Early Forest Fire Detection



American Psychological Association

- Outstanding research in psychological science under the category of behavioral and social sciences or any category related to psychology.



AMERICAN
PSYCHOLOGICAL
ASSOCIATION



American Psychological Association

- Outstanding research in psychological science under the category of behavioral and social sciences or any category related to psychology.
- Nick Shepich
 - Saginaw Arts & Sciences Academy
 - An Investigation into the Impact of Online Learning on Students



AMERICAN
PSYCHOLOGICAL
ASSOCIATION



ASM Materials Education Foundation

- Most outstanding exhibit in materials science.



**ASM MATERIALS
EDUCATION FOUNDATION**



ASM Materials Education Foundation

- Most outstanding exhibit in materials science.
- Andrew Wagner
 - Saginaw Arts and Sciences Academy
 - Comparing and Optimizing the Savonius and Darrieus Renewable Energy Vertical Axis Wind Turbines



ASM MATERIALS
EDUCATION FOUNDATION



Association for Women Geoscientists

- High standard of innovativeness and scientific excellence in the geosciences.



Association for Women Geoscientists

- High standard of innovativeness and scientific excellence in the geosciences.
- Vanessa Burkhard
 - Saginaw Arts & Sciences Academy
 - Testing the Phytoremediation of Lead on Salix Species



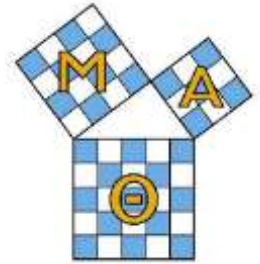
MU Alpha Theta

- Demonstrates the most challenging, original, thorough, and creative investigation of a problem involving mathematics.



MU Alpha Theta

- Demonstrates the most challenging, original, thorough, and creative investigation of a problem involving mathematics.
- Andrew Wagner
 - Saginaw Arts and Sciences Academy
 - Comparing and Optimizing the Savonius and Darrieus Renewable Energy Vertical Axis Wind Turbines



NASA EARTH System Science Award

- Best demonstrates insight into Earth's interconnected spheres.



NASA EARTH System Science Award

- Best demonstrates insight into Earth's interconnected spheres.
- Katie McCarthy
 - Saginaw Arts & Sciences Academy
 - The Great Lakes Nonmetal Concentrations: Potential Causes of Harmful Algal Blooms



National Oceanographic Atmospheric Administration

- 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.*



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- Katie McCarthy
 - Saginaw Arts & Sciences Academy
 - The Great Lakes Nonmetal Concentrations: Potential Causes of Harmful Algal Blooms



Ricoh Sustainable Development Award

- Outstanding project that addresses issues of environmental responsibility and sustainable development.

RICOH
imagine. change.



Ricoh Sustainable Development Award

- Outstanding project that addresses issues of environmental responsibility and sustainable development.
- Andrew Wagner
 - Saginaw Arts and Sciences Academy
 - Comparing and Optimizing the Savonius and Darrieus Renewable Energy Vertical Axis Wind Turbines

RICOH
imagine. change.



Stockholm Junior Water Prize

- Best water-science projects.



Stockholm Junior Water Prize

- Best water-science projects.
- Katie McCarthy
 - Saginaw Arts & Sciences Academy
 - The Great Lakes Nonmetal Concentrations: Potential Causes of Harmful Algal Blooms
- Dev Patel
 - Saginaw Arts And Sciences Academy
 - Electro-Adhesion



US AID Science Champion

- Exceptional project that has the potential to make an impact on addressing international development challenges.



US AID Science Champion

- Exceptional project that has the potential to make an impact on addressing international development challenges.
- Andrew Wagner
 - Saginaw Arts and Sciences Academy
 - Comparing and Optimizing the Savonius and Darrieus Renewable Energy Vertical Axis Wind Turbines



US EPA

- Recognition of projects in the areas of environmental sciences and engineering.



US EPA

- Recognition of projects in the areas of environmental sciences and engineering.
- Students with projects in environmental science and engineering will be receiving a letter.



US Metric Association

- Best use of the metric system



US Metric Association

- Best use of the metric system
- Addison Wagner
 - Saginaw Arts & Sciences Academy
 - Comparing Methods of Recoil Measurement



US Air Force

- Excellence in Science, Technology, Engineering and Math



U.S. AIR FORCE



US Air Force

- Excellence in Science, Technology, Engineering and Math
- Jett Miller
 - Saginaw Arts and Sciences Academy
 - Early Forest Fire Detection



U.S. AIR FORCE



US Navy and Marine Corps

- Excellence in Science, Technology, Engineering and Math



US Navy and Marine Corps

- Excellence in Science, Technology, Engineering and Math

- Ahmed Mirza
 - Saginaw Arts and Sciences Academy
 - Efficiency of Piezoelectric Materials in Comparison to Solar Energy



Yale Science and Engineering Association

- Most outstanding 11th grade project exhibiting in the areas of Computer Science, Engineering, Physics, or Chemistry.



Yale Science and Engineering Association

- Most outstanding 11th grade project exhibiting in the areas of Computer Science, Engineering, Physics, or Chemistry.
- Sinan Lal
 - Port Huron Northern
 - Lung Segmentation in Chest X-rays with Res- CR-Net



Genesee County Medical Society

- Excellence in Medical Studies
- Winner receives a plaque



Genesee County Medical Society

- Excellence in Medical Studies
- Winner receives a plaque
- Ayan Nair
 - Okemos High School
 - Smartphone Capable Lightweight Convolutional Neural Network Model for Detecting COVID-19 in Chest X-rays: Addressing the need of Resource-strapped Locations



Hurley Medical Center

- Excellence in Medical Studies
- Winner receives a trophy



Hurley Medical Center

- Excellence in Medical Studies
- Winner receives a trophy
- Aanchal Jain
 - Okemos High School
 - Downregulation of EMP2 and PID1 cell proliferation genes in Lung Cancer



City of Flint – Mayor's Office

- Outstanding achievement in the Flint Regional Science & Engineering Fair
- 1st place Grand Award Winner receives certificate



Matthew Bauerle Mathematics Award

- Excellence in Mathematics
- 1st Award: \$50 Gift Card



Matthew Bauerle Mathematics Award

- Excellence in Mathematics
- 1st Award: \$50 Gift Card
- Arohi Nair
 - Okemos High School
 - Radiomic Classification of Chest Radiographs - Identifying COVID-19, Viral Pneumonia, and Healthy Patients to Alleviate Hospital Congestion



Michigan Association of Hazardous Material Professionals

- Excellence in Environmental Science and Engineering
- Winner receives plaque and \$1000 prize, attends 2021 general membership meeting for MIAHMP



Michigan Association of Hazardous Materials Professionals



Michigan Association of Hazardous Material Professionals

- Excellence in Environmental Science and Engineering
- Winner receives plaque and \$1000 prize, attends 2021 general membership meeting for MIAHMP
- Josh Parashar
 - Saginaw Arts and Sciences Academy
 - Restricting Weed Growth with Allelopathic Silybum Marianum Extract Vs. Industrial Glyphosate Herbicides and Measuring Sustainability



Michigan Association of Hazardous Materials Professionals



MIDHHS Explore Lab Science

- Creativity and exploration
- Winners receive a medallion
- 1st, 2nd and 3rd Award



MIDHHS Explore Lab Science

- Creativity and exploration
- 3rd Award
- Harman Singh
 - Saginaw Arts And Sciences Academy
 - Effects of Essential Oils on the Growth of Staphylococcus Aureus



MIDHHS Explore Lab Science

- Creativity and exploration
- 2nd Award
- Serena Ahmad
 - Saginaw Arts and Sciences Academy
 - The Physiological Effects of Turmeric and Ginger on Oxidative Stress in *Caenorhabditis elegans*



MIDHHS Explore Lab Science

- Creativity and exploration
- 1st Award
- Anjali Debrah & Evelyn Wang
 - Herbert Henry Dow High School
 - Smart Vaccine Transportation and Storage Device



Kettering University

- \$3,000 Renewable Scholarship for 4 Years

Kettering
UNIVERSITY



Kettering University

- \$3,000 Renewable Scholarship for 4 Years
- Andrew Wagner
 - Saginaw Arts and Sciences Academy
 - Comparing and Optimizing the Savonius and Darrieus Renewable Energy Vertical Axis Wind Turbines

Kettering
UNIVERSITY



University of Michigan-Flint

- Full tuition and mandatory fee scholarship for 4 years
- Top 3 Grand Award Winners



Educator of the Year

- Student Nominated
- \$250 Prize



Educator of the Year

- Matthew Miller
 - Saginaw Arts & Sciences Academy

- Denise Facione
 - Okemos High School



Grand Awards



Honorable Mention



Honorable Mention

- Arjun Singh
- Audrey Wong
- Ben Sincissen
- Braydon Evans
- Brendan Fosgitt
- Cailan Anton
- Carlos Pazos
- Charley Tomko
- Dyllon Ouderkirk
- Elijah Weleski
- Emma Schmidt
- Gabriel Gipson
- Gavin Gutierrez
- Haider Tuma
- Helsa Thomas
- Hudson Strayer



Honorable Mention

- Isaac Wallace
- James Warner
- Jenna Szilagyi
- Jorge Moreno
- Kevin Everson
- Kole David Goychay
- Leilana Cuellar
- Lucian Snyder
- Mary Putnam
- Mason Weinstein
- Olivia Singletary
- Reece Metcalfe
- Vanessa Burkhard
- Ethan Williams
- Akshanth Bandla



Research Fellow



Research Fellow

- Abbie Wong
- Ahmed Mirza
- Alexej Goychay
- Anthony Daoud
- Anthony Moncman
- Aryan Maniar
- Cade Coonan
- Claire Theaker
- Dev Patel
- Emily Kinnicutt
- Emma Guza
- Emma Kato
- Gabe Howald
- Gavin Gwizdala
- Jett Miller
- John Adams
- Jonathan Colon
- Joseph Crachiola



Research Fellow

- Julia Barnes
- Katrina Wells
- Kelsey Bright
- Levi Asiala
- Malhar Amin
- Miranda Winkles
- Nathaniel Watson
- Nicole Bennett
- Rayen Aouadi
- Samhith Ginjupalli
- Shiloh Maliskey
- Shruti Singh
- Tara Lee



7th Award

- \$100 Cash



7th Award

- \$100 Cash
- Addison Wagner
- Andres Flores
- Andrew Wagner
- Caitlyn Dickerson
- Caleb Ellis-Hutchings
- Evan VanDriessche
- Nicholas Shepich
- Sharmitha Bandla
- Tanvi Malewar
- Devlin Wieszczecinski



6th Award

- \$250 Cash



6th Award

- \$250 Cash
- Aanchal Jain
- August Masley
- Evelyn Wang + Anjali Debrah
- Harman Singh
- Jack Starling
- Josh Parashar
- Leland Petelka
- Pratham Patel
- Ricardo Pastor



5th Award

- \$500 Cash



5th Award

- \$500 Cash
- Arohi Nair
 - ISEF Alternate
- Alexander DeMattei
- Armaan Mahajan
- Bhanu Teja Mamillapalli
- Henry Wolf
- Niloy Islam
- Noah Black + Ryan Blum



ISEF 2021 Status

- ISEF 2021 is fully virtual
 - There is judging and awards
- The Top 4 Award Winners will be attending ISEF



4th Award

- \$1000
 - \$500 Cash
 - \$500 Scholarship
- ISEF Competitor



4th Award

- \$1000
 - \$500 Cash
 - \$500 Scholarship
- ISEF Competitor

- Sinan Lal
 - Port Huron Northern High School, 11th Grade
 - Lung Segmentation in Chest X-rays with Res- CR-Net



3rd Award

- \$2000
 - \$500 Cash
 - \$1,500 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint



3rd Award

- \$2000
 - \$500 Cash
 - \$1,500 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint

- Ayan Nair
 - Okemos High School, 10th Grade
 - Smartphone Capable Lightweight Convolutional Neural Network Model for Detecting COVID-19 in Chest X-rays: Addressing the need of Resource-strapped Locations



2nd Award

- \$2,500
 - \$500 Cash
 - \$2,000 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint



2nd Award

- \$2,500
 - \$500 Cash
 - \$2,000 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint

- Serena Ahmad
 - Saginaw Arts & Sciences Academy, 12th Grade
 - The Physiological Effects of Turmeric and Ginger on Oxidative Stress in *Caenorhabditis elegans*



1st Award

- \$5,000 Award
 - \$500 Cash
 - \$4,500 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint



1st Award

- \$5,000 Award
 - \$500 Cash
 - \$4,500 Scholarship
- ISEF Competitor
- 4 Year Scholarship to UM-Flint

- Katie McCarthy
 - Saginaw Arts & Sciences Academy, 12th Grade
 - The Great Lakes Nonmetal Concentrations: Potential Causes of Harmful Algal Blooms



ISEF 2021 Activities

- Short time frame to register
- We will have an information meeting this week.
- Watch your email for more instructions!





Awards and certificates will be mailed.

Projects will be available for viewing at ***flintsciencefair.org***

Thank You



visit us online:
flintsciencefair.org