

Awards earned by SEFMD and MSEF Students at the International Science and Engineering Fair-2017

Air Force Research Laboratory

The United States Air Force is dedicated to science & technology, focusing on innovative and creative projects with sustainability. U-S-A-F selects projects that are directly aligned with their mission.

First Award of \$750

ENBM046 - Investigating Tuned Magneto-Rheological Reservoirs, Compression Systems, and Shear Thickening Fluids to Improve Mean Peak Acceleration as Measured by High-G Accelerometers in Hockey Headgear

- Clara Wagner, Saginaw Arts and Sciences Academy, MI, United States of America

American Statistical Association

The American Statistical Association is the world's largest community of statisticians. The ASA supports excellence in the development, application, and dissemination of statistical science through meetings, publications, membership services, education, accreditation, and advocacy. Our members serve in industry, government, and academia in more than 90 countries, advancing research and promoting sound statistical practice to inform public policy and improve human welfare

Honorable Mentions

EGCH017 - A Smart Light-Tracker Using Machine Learning and Dye-Sensitized Solar Cells

- Malini Mukherji, Notre Dame Preparatory, MI, United States of America

Oracle Academy

Oracle Academy, is the flagship program under Oracle's corporate social responsibility education pillar. Its mission is to advance computer science education and make it accessible to students globally to drive knowledge, innovation, skills development, and diversity in technology fields. In 2013, Oracle Academy supported more than 2.5 million secondary and post-secondary students globally, providing software, curriculum, professional development, and other resources with an in-kind grant value of more than U.S. \$2.7 billion.

Award of \$5,000 for outstanding project in the systems software category

SOFT020 - Cloud-Based Data Preparation for Medical Observational Research

- Varun Sathyan, Athens High School, MI, United States of America

CATEGORY AWARDS

FOURTH PLACE AWARDS of \$500

Biomedical and Health Sciences - BMED037 - *A Novel Application of Microfluidic Assay to Evaluate the Role of Calponin in Platelet Function and Clot Formation*

- Neha Seshadri, Skyline High School, MI, United States of America

Biomedical Engineering = ENBM035 - *High-Dimensional Single-Cell Cytometry Analysis for Understanding Cancer Stemness*

- Madeleine Yang, Detroit Country Day School, MI, United States of America

Earth & Environmental Sciences EAEV033 - *Impact of Road Salt Usage on Atmospheric Concentrations of Cl & Na PM 2.5*

- Rashad Prendergast, Cass Technical High School, MI, United States of America

THIRD PLACE AWARD OF \$1000

A Novel Zwitterionic Superparamagnetic Iron Oxide Nanoparticle Synthesis

- Marlies Michielssen, Washtenaw International High School, MI, United States of America and Shrikant Chand, Detroit Country Day School

Energy: Chemical - EGCH017 - *A Smart Light-Tracker Using Machine Learning and Dye-Sensitized Solar Cells*

- Malini Mukherji, Notre Dame Preparatory, MI, United States of America

FIRST PLACE AWARD OF \$3,000

Biomedical Engineering - Clara Wagner

**BEST OF CATEGORY AWARD OF \$5,000 in Biomedical Engineering
Plus \$1,000 to School and \$1,000 to Affiliated Fair
Clara Wagner**

Indo-U.S. Science & Technology Visit to India Award

Travel to India

Biomedical Engineering - ENBM046 - *Investigating Tuned Magneto-Rheological Reservoirs, Compression Systems, and Shear Thickening Fluids to Improve Mean Peak Acceleration as Measured by High-G Accelerometers in Hockey Headgear*

- Clara Wagner, Saginaw Arts and Sciences Academy, MI, United States of America

American Committee for the Weizmann Institute of Science

The American Committee for the Weizmann Institute of Science, founded in 1944, develops philanthropic support for the Weizmann Institute of Science in Israel, one of the world's premier scientific research institutions. The Dr. Bessie F. Lawrence International Summer Science Institute at the Weizmann Institute provides students with a unique opportunity to participate in hands-on studies in professional academic laboratories at the forefront of scientific research.

All-expense paid four-week trip and scholarship to the Bessie Lawrence International Summer Science Institute

Winner is: Rashad Pendergast, Cass Technical High School, Detroit