INTEL ISEF 2015 Special Awards Ceremony

May 14, 2015, Pittsburgh, PA – Society for Science & the Public, in partnership with the Intel Foundation, announced Special Awards of the Intel ISEF 2015. Student winners are ninth through twelfth graders who earned the right to compete at the Intel ISEF 2015 by winning a top prize at a local, regional, state or national science fair.

American Society for Microbiology

Founded in 1899, the American Society for Microbiology (ASM) is the largest single life science membership organization in the world. Members worldwide represent 26 disciplines of microbiological specializations plus a division for microbiology educators. The ASM's awards honors the most outstanding microbiology projects.

Fourth Award of \$750

Proteomic Characterization of Mosquito Host Cell Glycoproteins during Dengue Virus Egress

Carly Elizabeth Crump, 18, Episcopal School of Jacksonville, Jacksonville, Florida

ASU Rob and Melani Walton Sustainability Solutions Initiatives

ASU Walton Sustainability Solutions Initiatives are the result of a \$27.5 million investment in Arizona State University's Julie Ann Wrigley Global Institute of Sustainability by the Walton Family Foundation. Within the Walton Sustainability Solutions Initiatives, diverse teams of faculty, students, entrepreneurs, researchers, and innovators collaborate to deliver sustainability solutions, accelerate global impact, and inspire future leaders through eight distinct initiatives.

First Award of \$2,500

Production of Energy and Fertilizer from Ordinary Waste Materials through Micro-Scale Anaerobic Digestion

Robert Z. Halfon, 16, American Heritage School of Boca Delray, Delray Beach, Florida

Drexel University

Drexel University will award eight full scholarships to those students whose projects match Drexel's curriculum. Drexel is recognized for its focus on experiential learning through cooperative education, its commitment to cutting-edge academic technology and its growing enterprise of use-inspired research. Drexel Co-op enables students to balance classroom theory with practical, hands-on experience.

Full tuition scholarship

Effects of Morphology and Illumination on the Catalytic Properties of Gold Nanoparticles

Bo You, 17, Miami Palmetto Senior High School, Miami, Florida

Critical Point Energy Storage

Shixuan Justin Li, 17, Rutherford High School, Panama City, Florida

European Organization for Nuclear Research-CERN

CERN, the European Organization for Nuclear Research, is one of the world's largest and most respected centers for scientific research. Its business is fundamental physics, finding out what the universe is made of and how it works. At CERN, the world's largest and most complex scientific instruments are used to study the basic constituents of matter and the fundamental particles. By studying what happens when these particles collide, physicists learn about the laws of nature.

All expense paid trip to tour CERN

2015: A Photon Odyssey

Jasmine Sumpter, 14, Seacoast Collegiate High School, Santa Rosa Beach, Florida

Florida Institute of Technology

Florida Institute of Technology, located on Florida's Space Coast near Kennedy Space Center, offers full undergraduate and graduate programs in engineering, science, psychology, business and aeronautics.

Full Tuition Presidential Scholarship

The Diagnosis: Disease Identification of Airborne Pathogens Using Mobile Non-Invasive Techniques

Alexis Rose Hopkins, 16, Fort Walton Beach High School, Fort Walton Beach, Florida

Florida Tech is offering three full tuition scholarships valued at approximately \$150,000 each.

Fondazione Bruno Kessler

The Bruno Kessler Foundation (FBK) is a leading research center in Trento, Italy. WebValley is the FBK Summer School program for interdisciplinary scientific research. A team of enthusiastic and motivated high school students and FBK researchers accepts a project challenge, this year on a novel web platform for data analytics on signals from wearable sensors. FBK's Board of Directors will award 3 Intel ISEF finalists full fellowships, including travel to Italy, to be part of the WebValley team in June 2015.

Award to Travel to Trento, Italy to participate in summer school "Web Valley"

A Novel Approach to 3D Prototype Production

Andrew Kenneth Noonan, 18, International Baccalaureate School at Bartow High School, Bartow, Florida

King Abdul-Aziz & his Companions Foundation for Giftedness and Creativity

The Kingdom of Saudi Arabia seeks to build a sustainable future by encouraging youth to search for creative means that pave the way toward developing technologies for renewable energy, thereby maintaining a sustainable future of energy. To achieve this goal, King Abdul-Aziz & His Companions Foundation for Giftedness and Creativity (MAWHIBA) will award a Special Prize in the field of Water Technology at Intel ISEF. MAWHIBA is a national cultural foundation established to help develop a comprehensive environment of creativity in Saudi Arabia to enable gifted citizens from all areas to properly use their talents for prosperity of their country.

\$1,000 Award for Water Technology

H₂Oh No: Pharmaceuticals Contaminate Groundwater! Sulfamethazine Adsorption Isotherms and Kinetics with Hypercrosslinked Polymer MN250 at Varying Ionic Strengths

Maria Elena Grimmett, 16, Oxbridge Academy of the Palm Beaches, West Palm Beach, Florida

Mu Alpha Theta, National High School and Two-Year College Mathematics Honor Society

Mu Alpha Theta was formed over 50 years ago to develop strong scholarship in Mathematics and to promote the understanding and enjoyment of the subject. The Mu Alpha Theta Award is given to the most challenging, thorough, and creative investigation of a problem involving mathematics accessible to high school students. Components of the investigation may include, but are not limited to, mathematical proof, mathematical modeling, statistical analysis, visualization, simulation, and approximation.

Second Award of \$1,000

Deterministic and Stochastic Analysis in Biomedical Engineering: Chaotic Dynamics vs. Brownian Motion

Muhammad Ugur oglu Abdulla, 15, West Shore Junior-Senior High School, Melbourne, Florida

National Aeronautics and Space Administration

The National Aeronautics and Space Administration (NASA) is the United States government agency responsible for the nation's civilian space program and for aeronautics and aerospace research. Founded in 1958 by President Dwight D. Eisenhower, NASA's mission is to pioneer the future in space exploration, scientific discovery and aeronautics research, answering basic questions like: What's out there in space? How do we get there? What will we find?

Second Award of \$2,000

2015: A Photon Odyssey

Jasmine Sumpter, 14, Seacoast Collegiate High School, Santa Rosa Beach, Florida

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 US\$2.7 billion.

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

Developing Mobile Algorithms to Detect Seizures and Falls

Amir Helmy, 14, Eastside High School, Gainesville, Florida

Ricoh Americas Corporation

Ricoh is a global technology company specializing in office imaging equipment, production print solutions, document management systems and IT services. Ricoh has a long-standing environmental mission and commitment to sustainability, bringing corporate, social and environmental responsibilities into balance. Ricoh has been creating green technology and environment management systems that promote sustainability for more than three decades. Ricoh is consistently ranked high among the world's corporations for successfully balancing profit with environmental responsibility.

Ricoh Sustainable Development Award of \$12,500

Production of Energy and Fertilizer from Ordinary Waste Materials through Micro-Scale Anaerobic Digestion

Robert Z. Halfon, 16, American Heritage School of Boca Delray, Delray Beach, Florida

Winning students will receive framed Ricoh Sustainable Development Award certificates.

Spectroscopy Society of Pittsburgh

The Spectroscopy Society of Pittsburgh (SSP), along with our sister society, the Society for Analytical Chemists of Pittsburgh (SACP), is a non-profit organization dedicated to promoting science education in the Western Pennsylvania region. Using proceeds from Pittcon, the Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, we support member education programs, teacher and student awards, a wide variety of science educational programs, and grant programs for high schools, colleges, and beginning university professors.

Can Magnetic Resonance Imaging (MRI) Differentiate between Gram-positive and Gram-negative Bacteria Species in Human Blood?

Tiffany Liu, 15, Villages Charter High School, The Villages, Florida

U.S. Agency for International Development

The U.S. Agency for International Development (USAID) is the federal government agency responsible for administering foreign aid. USAID works to promote economic and social development in more than 100 countries around the world. The U.S. Global Development Lab works to accelerate the transformation of the development enterprise by opening development to people everywhere with good ideas, promoting new and deepening existing partnerships, bringing data and evidence to bear, and harnessing scientific and technological advances.

USAID Global Development Innovation award of \$10,000

Effectiveness of Influenza VLP and SAR9 Vaccination

Koushal Rao, 17, Lincoln Park Academy, Ft. Pierce, Florida

<u>United States Steel Corporation</u>

United States Steel Corporation, headquartered in Pittsburgh, Pa., is a leading integrated steel producer with major production operations in the United States and Central Europe and an annual raw steelmaking capability of 24.4 million net tons. The company manufactures a wide range of value-added steel sheet and tubular products for the automotive, appliance, container, industrial machinery, construction, and oil and gas industries.

Third Award of \$ 1000

Geometric Manipulation of Cuprous Oxide Nanocrystal Surface Morphology Enhances Photoelectrochemical Properties and Enables Fabrication of Low-Cost, High Efficiency Photovoltaic Cells

Elizabeth P. Donoway, 17, Pine Crest School, Fort Lauderdale, Florida

West Virginia University

West Virginia University will be awarding 10 Academic Excellence or Presidential Scholarships (depending on residency) to students whose research and academic aptitude align with WVU's institutional goals and research interests. Classified as a Research University (High Research Activity) by the Carnegie Foundation for the Advancement of Teaching, West Virginia University offers 184 undergraduate and graduate degree programs in 14 academic colleges.

Renewable Tuition Scholarship Awards

The Effect of the Citrus Flavonoid Naringin on Raji Burkitt Lymphoma Cells

Kendall Reed Clark, 17, South Sumter High School, Bushnell, Florida