



DELAWARE VALLEY SCIENCE FAIRS, INC.

Regeneron International Science and Engineering Fair 2022 Awards Ceremony May 13, 2022 Atlanta Georgia

The Society for Science, in partnership with Regeneron Pharmaceuticals, announced the awards of the Regeneron International Science and Engineering Fair (ISEF) 2022. Student winners are ninth through twelve graders who earned the right to compete at the Regeneron ISEF 2022 by winning a top prize at the 2022 Delaware Valley Science Fair. This year's Regeneron International Science and Engineering Fair featured over 1600 young scientists selected from 400 affiliated fairs in more than 80 countries, regions and territories.

Award Winners from the Delaware Valley Science Fairs

Biochemistry:

Maya Butani, 17, 12th Grade, Moorestown High School, Moorestown, NJ; *Novel Plant-Derived Scaffolds Influence Cellular Mechanotransduction and Differentiation*

Grand Award: First Place - \$5000

Special Award: National Anti-Vivisection Society – Third Place - \$2500

Biomedical Engineering:

Okezue Bell, 16, 11th Grade, Moravian Academy, Allentown, PA; *A Novel Robust and Low-Cost Anthropomorphic Myoprosthesis: Utilizing an Articulated Soft Robotic System and Convolution Kernel Compensation-Based Non-Invasive EMG Decoding for Bionic Restoration of Upper Limb Function to Amputees*

Grand Award: Second Place - \$2000

Special Award: International Council on Systems Engineering – Engineering Award - \$1000

Microbiology:

Rayan Jawa, 17, 12th Grade, Holmdel High School, Holmdel, NJ; *Monitoring the Cellular Immune Profiles of COVID-Vaccinated Donors Using in silico-Designed Immunogenic Epitopes from SARS-CoV-2 Proteins*

Grand Award: Third Place - \$1000

Maryam Abdel-Azim, 15, 10th Grade, Central Bucks High School East, Doylestown, PA;
*Modeling Quorum Sensing Cycles in Pseudomonas aeruginosa Using Longitudinal Approaches
by Measuring Gene Expression*

Grand Award: Fourth Place - \$500

Since 1949, Delaware Valley Science Fairs, Inc. (DVSF) has stimulated interest in science, technology, engineering, and mathematics (STEM) among middle and high school students in the tri-state region. Our vision is to bring parents, teachers, and industry together to stimulate and nurture young people so they can grow and develop into contributing members of the community. DVSF's philosophy is that students learn by doing. They learn how to think, how to identify problems that need to be solved, and to design solutions to those problems.