Students earn TOP awards at 2019 International Science and Engineering Fair

Special TOP Awards

Craig R Barrett Award for Innovation, First award of $10,000

BMED046 — *A Novel, Noninvasive Approach to Melanoma Diagnosis Using Optical Coherence Tomography and Bioconjugated Gold Nanoparticles*

Shriya Reddy, Northville High School, MI, United States of America

Category Awards

Biomedical and Health Sciences, Best of Category Award of $5000 plus $1,000 to School and $1,000 to local Science Fair

BMED046 — *A Novel, Noninvasive Approach to Melanoma Diagnosis Using Optical Coherence Tomography and Bioconjugated Gold Nanoparticles*

Shriya Reddy, Northville High School, MI, United States of America

Biomedical and Health Sciences, First Award of $3000

BMED046 — *A Novel, Noninvasive Approach to Melanoma Diagnosis Using Optical Coherence Tomography and Bioconjugated Gold Nanoparticles*

Shriya Reddy, Northville High School, MI, United States of America

Biomedical and Health Sciences, Second Award of $1,500

BMED047 — *Enabling Influenza Virus-like Particles (VLPs) as a Universal Vaccine*

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

Behavioral and Social Sciences, Third Award of $1,000

BEHA033 — *A Data-Driven Optimization of Economic Resource Allocation*

Vihaar Nandigala, Walled Lake Western, MI, United States of America

Computational Biology and Bioinformatics, Fourth Award of $500

CBIO020 — *Deep Learning to Evaluate the Combinatorial Impact of Genetic Variants on Gene Expression*

Collin Wang, Detroit Country Day School, MI, United States of America

Professional Award Organization Awards
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, NASA drives advances in science, technology, aeronautics, and space exploration to enhance knowledge, education, innovation, economic vitality, and stewardship of Earth.

Second Award of $750

ROBO037 — *Hardware Integrated LiDAR Simulation for the Development of Collision Avoidance Algorithms*

Matthew Tan, Cranbrook Kingswood School, Stevensville, MI, United States of America