**After cancellation of the on-site competition at EXPO NM due to the COVID-19 public health crisis, a modified & fully virtual judging process was developed for the 2020 Research Challenge Senior Division entrants. These students were given an opportunity to submit their projects for consideration in a virtual judging process leading to the identification of 12 projects whose researchers were individually interviewed via ZOOM by the Research Challenge Senior Category & Master Judge Chairs. The following reflects the outcome of those 12 interviews and the final judges’ caucus that identified winners at three levels plus a Grand Award winning project.**
THANK YOU!
Institutional & Corporate Sponsors

OFFICE OF THE VICE PRESIDENT FOR RESEARCH - HEALTH SCIENCES CENTER
HSC OFFICE FOR DIVERSITY, EQUITY & INCLUSION
SCHOOL OF ENGINEERING - SCHOOL OF MEDICINE - COMMUNICATIONS & MARKETING
Welcome

Karen Kinsman, MS, PMP
Director/Sr. Program Manager, UNM STEM-H Center
HSC Office for Diversity, Equity & Inclusion

Congratulations from the UNM HSC Office for Diversity, Equity & Inclusion

Dr. Valerie Romero-Leggott, MD
Vice Chancellor for Diversity, Equity & Inclusion
HSC Chief Diversity Officer

Dr. Lawrence Roybal
Associate Vice Chancellor for Community Projects
HSC Office for Diversity, Equity & Inclusion
Executive Director, ENLACE NM

Dr. Jennifer Gomez-Chavez
Special Assistant to the Assoc. Vice Chancellor for Community Projects
Director, ENLANCE NM Central Region
Top 12 Student Researcher Introductions

Maya Barrientos & Kenji Helms
Stephen Chu
Gabriel Gurule
Isaac Huber
Milidu Jayaweera
Nastassja Martin
Paulina Naydenkov
Gianna Nilvo
Tristan Oper
AnaMaria Perez
Jacob Sandusky
George Santarpia
ANNOUNCEMENT OF 2020 GRAND AWARD WINNERS
3rd Place
SENIOR DIVISION - $250 Awards

* MAYA BARRIENTOS & KENJI HELMS
  * Rio Rancho High School
  * Flute Angles Part 2

* TRISTAN OPER
  * Albuquerque Institute of Math & Science
  * Evaluating the Chemical Structures of Inorganic and Organic Compounds Alongside the Application of Mordant for its Effects on UV Absorband

* ISAAC HUBER
  * Eldorado High School
  * Separation of Magnetite Nanoparticles from Oleic Acid Using Partition Coefficients
3rd Place
SENIOR DIVISION - $250 Awards

★ GIANNA NILVO
★ School of Dreams Academy
   ★ The Effect of Fermented and Cultured Supplements on a Dog’s Gut Biome

★ JACOB SANDUSKY
★ The ASK Academy
   ★ Rediscovering Electronegativity

★ GABRIEL GURULE
★ Albuquerque Institute of Math & Science
   ★ Application of Photovoltaic Cells on 3D Printed Wind Turbine Blades v.2
2nd Place
SENIOR DIVISION - $350 Awards

* NASTASSJA MARTIN
  * Rio Rancho High School
  * Study of Antimony Alkoxy Carboxylates as Dopants for Zinc Oxide Varistors

* STEPHEN CHU
  * Albuquerque Academy
  * A Sustainable and Low Operational Cost Greenhouse
1st Place
ISEF Finalist Qualifiers
SENIOR DIVISION - $500 Awards

* GEORGE SANTARPIA
  * Albuquerque Institute of Math & Science
  * Lifestyle Determination qPCR Assays for S. Aureus Bacteriophage

* MILIDU JAYAWEERA
  * La Cueva High School
  * Mission-Critical Communications Planning Over Contested RF Spectrum with Deep Reinforcement Learning Aided Artificial Intelligence

* PAULINA NAYDENKOV
  * Albuquerque Institute of Math & Science
  * Hierarchically Engineered Nanotheranostic for Ovarian Cancer
Overall Grand Award
1st Place
ISEF Finalist Qualifier
SENIOR DIVISION - $750 Award

ANAMARIA PEREZ

Albuquerque Academy

On a Variation of the Witsenhausen Problem Concerning Maximal $\pi/2$ - Avoiding Spherical Sets
Thank you!
The Central NM STEM Research Challenge will be back & better than ever in 2021!