

Grand Awards Ceremony

2 Central New Mexico
0 STEM Research Challenge



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!

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OFFICE OF THE VICE PRESIDENT FOR RESEARCH - HEALTH SCIENCES CENTER
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ALBUQUERQUE JOURNAL



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NORTHROP GRUMMAN

NMOGA

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

The background features abstract teal and blue geometric shapes, including triangles and polygons, arranged in a modern, layered style. The text is centered in the white space.

ANNOUNCEMENT OF 2020 GRAND AWARD WINNERS

3rd Place

SENIOR DIVISION - \$250 Awards

- * **MAYA BARRIENTOS & KENJI HELMS**

- * **Rio Rancho High School**

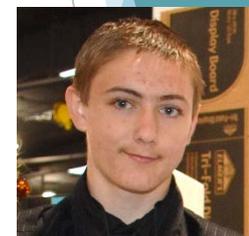
- * *Flute Angles Part 2*



- * **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 Absorbance*



- * **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*



2020 Central New Mexico
STEM Research Challenge
2020      

Thank you!

**The Central NM STEM Research
Challenge will be back & better
than ever in 2021!**