HEALTH SCIENCES

OFFICE FOR DIVERSITY, EQUITY & INCLUSION

UNM STEM-H Center

ANNUAL REPORT

2021-2022

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Mission

The UNM STEM-H Center advances STEM-H teaching and learning through outreach, research, and education programs, services, & resources.

Our mission is accomplished by, but not limited to…

- Developing strategic STEM-H education focused partnerships and collaborations among UNM faculty/staff and within the community (public-private) to increase and sustain engagement as well as create opportunities to increase
- Developing, facilitating, and/or coordinating innovative STEM-H Educator Professional Development opportunities
- Developing, facilitating, and/or coordinating STEM-H focused student learning opportunities (workshops, etc.)
- Administering the highest quality STEM-H focused academic competitions for 4^{th}-12^{th} grade students
- Engaging in STEM-H education focused policy research and advocacy

Vision

We are a recognized leader in the STEM-H teaching & learning community in New Mexico and beyond.

- We serve as a key player in the coordination of University of New Mexico STEM-H external outreach activities in order to support the University as well as the community in its efforts to collectively reach key system-wide STEM-H education goals including significantly increasing the recruitment, retention, and graduation of STEM-H majors.
- We provide a comprehensive center for STEM-H education resources, outreach programs, and support services.
- We are a hub for dissemination of information regarding STEM-H teaching and learning best practices and innovation.
- We facilitate the cultivation and support of strategic STEM-H education focused collaborations & partnerships.

Team Values

We operate with a sense of PURPOSE and the desire to leave a lasting LEGACY in the field of STEM-H education.

- We operate, at all times, with INTEGRITY and COURTESY.
- We conduct our business in the spirit of COOPERATION.
- We are open to CHANGE, encourage CREATIVITY, and strive for INNOVATION.
- We are ACCOUNTABLE for our actions and are COMMITTED to the mission of the organization.
- We are DEPENDABLE and COMPETENT. Our team members, as well as our constituents, know we will deliver what we promise.
- We value WISDOM gathered through experience, seek to instill PASSION in our work, and act with COURAGE as we strive to fulfill our mission and work toward our vision on a daily basis.

FROM THE DIRECTOR

In the past year, we have started to see life begin to return to normal as the COVID infection numbers decreased and the vaccination/booster rate increased. That meant we were able to go back to some semblance of normalcy with in-person/hybrid competitions, meetings, and trainings.

Though our overall participation numbers were still somewhat lower than in pre-COVID years, they all moved in a very positive direction from last year and we are optimistic that our numbers will return to normal levels in the upcoming year or two. We will be working to increase beyond prior years' participation to grow both our competitions and professional development trainings.

I would like to thank everyone who has had a hand in making all our efforts a success and ensuring that we are providing high quality programs, services, and resources to all of our stakeholders, but most of all to the students and teachers who are always at the heart of our work.

I want to offer up an especially heartfelt THANK YOU to all our sponsors/donors who, in spite of the continued crazy circumstances, took everything in stride, offered us nothing but flexibility and grace, and never wavered in their support. We even brought on a few new sponsors and award donors! Without our corporate and individual partners, the STEM-H Center would not be able to continue to offer successful programs for students, educators, and the community as well as work on the development of meaningful strategic collaborations/partnerships. I am humbled and grateful beyond measure.

Our competition programs flourish, whether in-person or virtual, because of the thousands of hours volunteered by hundreds of people in our community…STEM professionals, educators, business leaders, high school & college students, UNM colleagues, staff spouses/kids, and so many others.

I continue to be amazed by the number of individuals and organizations connected with the UNM STEM-H Center. I am constantly reminded by our students and alums that what we do, as a team, makes a difference in their lives…many times solidifying their decisions to pursue careers in STEM-H fields.

If you are already one of our organizational/corporate partners, thank you! If you are already an individual donor, thank you! If you have not joined our team yet, please join us as we work to ensure student success and support STEM educators in the future!

Karen M. Kinsman

Karen Kinsman, MS, PMP
Director/Sr. Program Manager

OUTREACH

RESEARCH CHALLENGE

"Science Fairs" go back to at least 1928, when the American Institute of New York City first held one for city youths at the Museum of Natural History. In 1950, science fairs went under the auspices of Science Service, a non-profit institution. It became international in 1959. The ***Central NM STEM Research Challenge*** has served students, teachers, and parents since 1959 as well. Our alumni include countless individuals who found their way into STEM careers – including a retired NASA Shuttle Astronaut and many who left NM to pursue their post-secondary education then came home to serve their home communities at Sandia National Labs, Los Alamos National Labs, UNM, and countless other businesses in our community. A number of our alumni return every year as judges to be part of the experience that meant so much to them as pre-college students.

Central NM STEM Research Challenge is a three-division (Elementary, Junior, & Senior), multi-category, regional STEM research competition. The ***Central NM STEM Research Challenge*** qualifies students to participate in the State Science Fair and sends top qualifying students to the International Science & Engineering Fair (ISEF), the world's largest pre-college research competition. Research competitions reward discovery and innovation as well as promoting creativity through the discovery of new problems, inventions, ideas, and solutions. They also provide the perfect way to help students develop the "essential" skills needed to succeed in the workplace (ex: time management, personal organization, oral & written communication skills, project management, etc.).

Research Challenge serves students and science teachers, grades 4 - 12. Over 10,000 students in the Central region participate in local school competitions. Schools then qualify students to move on to the regional level. **Approximately 225** 4th through 12th grade students **registered for the 2022 Central NM Hybrid STEM Research Challenge.** Though participation numbers are still lower than in pre-COVID years, they rebounded significantly in 2022 and the expectation is a return to pre-pandemic numbers over the next couple of years.

As an ISEF-Affiliated Fair, the ***Central NM STEM Research Challenge*** sends 4 projects to ISEF as competing Finalists and, funding allowing, up to two top 8th grade student researchers to ISEF as Student Observers. Our ISEF Finalists from the Central NM Region for 2022 were: **Akilan Sankaran** Albuquerque Academy; **Landon Flemming** Explore Academy; **Eliana Juarez** V. Sue Cleveland High School; and **Aditya Koushik** La Cueva High School. The 2022 Regeneron ISEF was held in Atlanta, Georgia and our Finalists were all able to attend in person. ISEF 2023 will be held in Dallas, TX.

SCIENCE OLYMPIAD

Science Olympiad is an international nonprofit organization devoted to improving the quality of science/STEM education, increasing student interest in STEM and providing recognition for outstanding achievement in science/STEM education by both students and teachers. These goals are accomplished through classroom activities, research, training workshops and the encouragement of intramural, district, regional, state and national tournaments. SO tournaments are rigorous academic interscholastic competitions that consist of a series of events, which students prepare for during the year. SO competitions follow the format of popular board games, TV shows and athletic games. These challenging and motivational events are well balanced between the various STEM disciplines of life sciences, physical sciences, engineering, mathematics, computers, and technology. There is a balance between events requiring knowledge of facts, concepts, processes, skills and science applications. One of the goals of Science Olympiad is to elevate STEM education and learning to a level of enthusiasm and support that is normally reserved only for varsity sports programs...celebrating academic athletes!

In 2022, the **Central NM Science Olympiad** offered **40+ events** and had **35 volunteer Event Supervisors, Event Assistants & other volunteers** from UNM and several other area organizations. There were a total of **13 competing teams from 7 middle and high schools** in the region that competed in both virtual and in-person events.

The **La Cueva High School** team placed 1st at the state competition and represented New Mexico at the 2022 Virtual National Science Olympiad competition. Our Division B top three winners were 1st **Cottonwood Classical Prep School**, 2nd **Albuquerque Area Homeschoolers**, and 3rd **Wilson Middle School B1**. The Division C top three winners were 1st **Albuquerque Area Homeschoolers**, 2nd **Albuquerque Academy** C2**,** and 3rd **La Cueva High School** C1**.**

What Do You Love About Doing Research?

JUNIOR SCIENCE & HUMANITIES SYMPOSIUM

The UNM STEM-H Center took on management of the ***Southwest Region Junior Science & Humanities Symposium (JSHS)*** several years ago and the team continues to engage in efforts to grow the program. The southwest region has recently been redefined to include the state of New Mexico, all southern Colorado counties bordering NM, and all Texas counties bordering NM to the east & south. This redefinition expanded the reach of our region, so we are hopeful that will, over time, help to grow the program.

The **Junior Science & Humanities Symposium** is a national competition program designed to challenge and engage **high school students** in science, technology, engineering or mathematics (STEM) research. Individual students compete for scholarships and recognition by presenting the results of their original research efforts before a panel of judges and an audience of their peers. Opportunities for hands-on workshops, panel discussions, career exploration, research lab visits and networking are offered during the competition as well. By participating in regional and national symposia, students may…

- Participate in a forum honoring individual achievement in STEM;
- Qualify for significant scholarships and other recognition;
- Network to enrich understanding of STEM pursuits beyond high school;
- Advance in statewide, regional, national and international symposia;
- Develop skills to help prepare for undergraduate and graduate pursuits -- skills in the application of science content to solve a problem or to gain new knowledge, writing a paper, and communicating results.

JSHS is a collaborative effort with the research arm of the Department of Defense and administered by the National Science Teaching Association (NSTA) in cooperation with colleges/universities nationwide. JSHS aims to prepare and support students to contribute as future scientists and engineers conducting STEM research on behalf of or directly for the Department of Defense, the Federal research laboratories, or for the greater good in advancing the nation's scientific and technological progress.

In 2022, the **SW Junior Science & Humanities Symposium** hosted **12 students** from **7 schools** at the in-person competition. Five students qualified to compete at the **2022 JSHS National Competition** – **Marissa Martinez** Monte Vista Senior High School (CO); **Sherwin Thiyagarajan** Albuquerque School of Excellence (NM); **Carlos Ochoa-Marquez** Monte Vista Senior High School (CO); **Gavin Rodriguez** Harmony Science Academy (TX); and **William Burris** San Juan College High School (NM).

EDUCATION & TRAINING

PROFESSIONAL DEVELOPMENT

The **STEM-H Educator Professional Development Workshops** provide teachers with opportunities to engage in professional development specific to including inquiry-based science/math in their classrooms and supporting students in independent inquiry-based research projects leading to local and/or regional as well as potentially state and/or international competition. By engaging in one or more of the workshops, STEM-H educators can prepare themselves to establish or enhance a student research program in their schools/classrooms.

In 2021-2022, Research Challenge Bootcamp (self-paced online & live virtual) was offered and educators from well over three dozen schools participated. Educators came from within Central NM, throughout the state of NM, and outside our great state (including California, Colorado, etc.). **Alakaina Foundation/Kupono Government Services** continued as the sponsor of the UNM STEM-H Center Learning Lab which has allowed us to utilize a robust online learning management system in Moodle Cloud. In addition to RC Bootcamp, five new modules were added (funded by National JSHS). The STEM-H Educator Professional Development offerings, both online and in-person, will continue to evolve over time as needs and funding are identified. Thanks to our amazing community partners, we have also begun to build a video library of **STEM Careers Panels**. Please check out the panels from 2021 & 2022 on our **STEM-H Center YouTube Channel**...and share to your heart's content!

STUDENT RESEARCHER BOOTCAMP

The **STEM-H Center's Student Researcher Bootcamp** provides 4th-8th grade student researchers with project development skills/support/ resources along with an introduction to topics like Project Development, Responsible Conduct of Research, Statistics/Data Analysis, Judging Preparation, etc. Workshops are conducted in in partnership with Explora Science Center which provides the space and facilitators for the student workshops. This partnership continued in 2021-2022 with four sessions of the Student Researcher Bootcamps being offered by Explora educators in person. Approximately **72 4th-8th grade students completed Student Researcher Bootcamp** in Fall 2021.

STEM-H LENDING LIBRARY

The **UNM STEM-H Lending Library** is a short-term small equipment & curriculum materials lending library for teachers, schools, homeschool/middle/high school students & community groups as well as University level students/ faculty. The **UNM STEM-H Lending Library** was gifted a wonderful space by the UNM College of Education in mid-2022. A grand re-opening will be planned later in the Fall.

PARTNERSHIPS/POLICY/ADVOCACY

STRATEGIC PARTNERSHIPS & COLLABORATIONS

Below are examples (not an exhaustive list) of strategic STEM-H Education relationships/ collaborations/partnerships that have been developed or are in the process of development out of the STEM-H Center:

- Advancing Science (STEM) Research Teaching Program (ASRT)
- Air Force Research Laboratory – New Mexico
- APS Engineering the Future Program
- Advancing Science (STEM) Research Teaching Program
- EPSCoR
- Explora Science Center
- Honeywell/Sandia National Laboratories
- HSC Institutional Animal Care & Use Committee
- Intel Corporation
- Kupono Government Services
- Los Alamos National Laboratories Foundation
- New Mexico PBS
- NM Academy of Science
- NM MESA
- NM Museum of Natural History & Science
- NM Partnership for Mathematics & Science Education
- NM Public Education Department
- NM Science Teachers Association/NM Council of Teachers of Mathematics/Environmental Education Assoc of NM
- NM Supercomputing Challenge
- Oak Ridge Institute for Science Education
- Project ECHO – Education (Dr. Michael Stanton)
- Science Buddies
- STEM NM Learning Ecosystem
- UNM Engineering Student Services & Outreach Programs
- UNM Biosafety Office
- UNM College of Education
- UNM HSC Office for Diversity, Equity & Inclusion
- UNM Human Protections Office
- UNM Office of VP for Research (faculty research support)
- UNM Responsible Conduct of Research Program
- UNM School of Engineering
- US Army Corps of Engineers – Albuquerque District

POLICY/ADVOCACY

As part of the HSC Office for Diversity, STEM-H Center leadership continued to work with the UNM Office of Government & Community Relations as well as the HSC Office of the Chancellor to support STEM-H education related strategic collaborations, policy research/development as well as with federal and state legislative and executive branch contacts (PED/HED, NM State Legislature, US Congressional offices, and NSF). This work will expand and continue as deemed strategically appropriate and valuable. The STEM-H Center's Director currently serves on several regional and statewide STEM-H education related boards/councils including the NM Partnership for Mathematics & Science Education, the Internal Advisory Committee for the UNM School of Engineering: Center for Water and the Environment – NSF CREST Grant (2014-2024), the STEM NM Learning Ecosystem, Leadership Team for the STEM NM Ecosystem, the Advisory Committee for Explora/STEM NM Ecosystem's NSF INCLUDES Grant (Math FACESS), and the NM Public Education Department Secretary's Community Advisory Council.

ADVISORY COUNCIL & STAFF

Connie Beimer
VP UNM Alumni Relations
Executive Director UNM Alumni Association

Dr. Reg Bourgeois, PhD
Chief, Strategic Initiatives Group
US Army Corps of Engineers – ABQ District

Sofia Chavez
High School Student
RC & JSHS Alumna

Dr. Mary Jo Daniel, PhD
Associate Vice President for Research
UNM Office of the Vice President for Research

Robert Deblassie
Senior Technical Staff, Sandia National Laboratories
Research Challenge Senior Division Master Judge Chair

Dr. Leonard Duda, PhD
Sandia National Laboratories (Retired)
Research Challenge JR Division Master Judge Chair
Event Supervisor, Central NM Science Olympiad
Lead Judge, SW JSHS

Deborah Green
Science Teacher, St. Pius X High School
Reviewer, Regional SRC/IRB Committee

Mary Homan
NAIOP NM
Commercial Real Estate Development Assoc.
Science Fair Committee

Franz Joachim, CHAIR
General Manager, New Mexico PBS
Parent, RC Alumnus

Ray Nance, PhD Cand.
Retired STEM Educator
PhD Cand. in Educ. Leadership
UNM College of Education

Nilvo, Gianna
High School Student, School of Dreams Academy
RC & JSHS Alumna

Nilvo, Jennifer
Research Teacher & STEM Coordinator
School of Dreams Academy

Debra Novak
Director of Education
NM Museum of Natural History & Science

Dr. Heather Pratt-Chavez, MD
Associate Professor, Pediatrics, UNM Health Sciences
Parent, RC & JSHS Alumna
Reviewer, Regional SRC/IRB Committee

Michael Rogers
Engineer
Peraton

Dr. Valerie Romero-Leggott, MD
Vice Chancellor for Diversity
HSC Office for Diversity, Equity & Inclusion
Executive Director, UNM BA/MD Program

Karen Stockham
Licensed Professional Clinical Counselor
Parent, RC & JSHS Alumnus
Reviewer, Regional SRC/IRB Committee

Gail Vavruska-Marcum
Senior Manager of Compensation
Sandia National Laboratories
Research Challenge Judge

James Vigerust
Corporate Safety Officer, Aptim Federal Services
Co-Chair, Research Challenge Display & Safety
Floor Manager, Research Challenge

STEM-H Center Staff

Karen Kinsman, MS, PMP
Director/Sr. Program Manager

Erin Garcia, JD, MBA Cand.
Asst Director/Program Specialist

Laura Arguelles, MA
Web Developer/LMS Manager

FINANCIAL INFORMATION

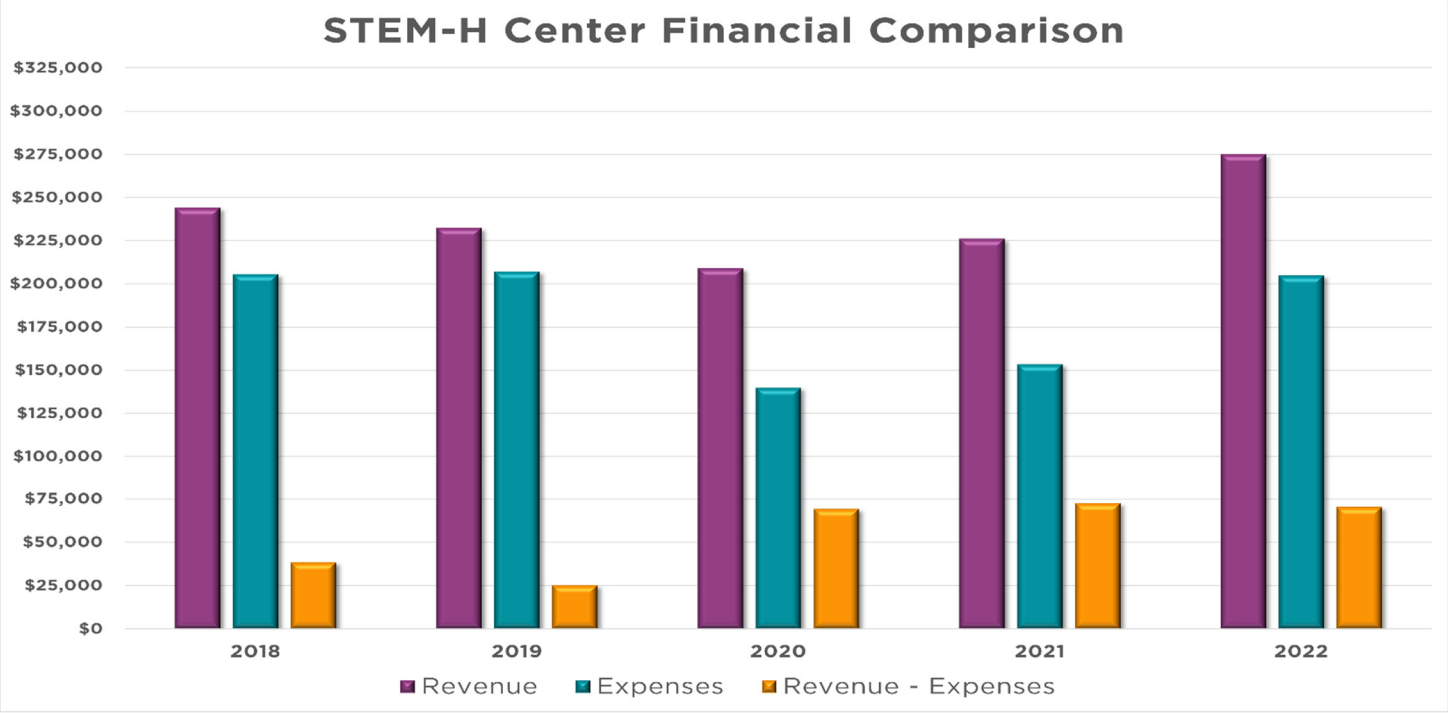
The 5-year graph below depicting STEM-H Center's revenues and expenses offers a visual comparison, year to year, of the Center's financial performance. In FY22, the STEM-H Center team continued to identify efficiencies as well as areas in which additional fundraising efforts could be focused. With the ongoing COVID-19 pandemic precautions necessitating predominantly virtual operations with some programs returning in hybrid format (partly virtual/partly in-person), some of our normal expenses (catering, space, materials, etc.) continued to be reduced and the fiscal year ended with a very comfortable positive balance forward. FY23's budget has been crafted to utilize the balance remaining to support Center operations and our continued commitment to ensuring a robust virtual footprint for all our programs.

NOTE: The overall revenue/expenses reported for the STEM-H Center do not include the institutional support received from UNM Health Sciences because those funds are part of the Office for Diversity, Equity & Inclusion's budget. Meaning, the STEM-H Center's true total expenses & revenues are approximately $90,000 greater than the graph below indicates.

CURRENT FINANCIAL IMPLICATIONS

The STEM-H Center team has continued to work very hard to identify areas in which savings could be realized and costs could be reduced while still providing the highest quality programs and services possible. A portion of the FY22 Balance Forward represents FY23 funds received prior to the June 30th end of FY22. Additionally, a small portion of revenue anticipated in FY23 are funds that were actually for FY22, but not received until after June 30, 2022.

What's the bottom line? The STEM-H Center continues to be in solid financial shape entering the first quarter of FY23. The team will continue to be good stewards of the funding dollars received and work to provide the highest quality programs, services, and resources while ensuring fiscal responsibility.



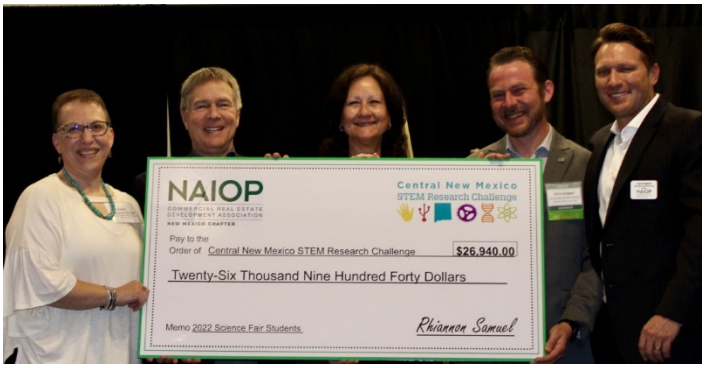
FY22 BUSINESS/COMMUNITY GROUP DONORS

(Unrestricted Donations, Awards Donations, & In-Kind Donations for which value is known)

DONOR ORGANIZATION	VALUE	LEVEL
UNM Health Sciences Center *(institutional sponsorship)*	$90,000.00	Plutonium
UNM Office of the Vice President for Research *(institutional sponsorship)*	$85,000.00	Plutonium
UNM Scholarship Office - Jackling Fund	$15,000.00	Platinum
Honeywell/Sandia National Laboratories	$10,000.00	Silver
National Science Teaching Association	$8,300.00	Zinc
Kupono Government Services	$7,000.00	Zinc
Peraton	$6,500.00	Zinc
PNM/Avangrid	$6,000.00	Zinc
Albuquerque Publishing Company	$5,000.00	Zinc
General Mills Foundation	$5,000.00	Zinc
UNM School of Engineering	$5,000.00	Zinc
UNM Health Sciences Center *(category and special award sponsorships)*	$4,500.00	Copper
The Boeing Company	$4,000.00	Copper
NM Oil & Gas Association	$3,000.00	Copper
PNM Resources	$3,000.00	Copper
UNM Alumni Association	$2,500.00	Copper
Broadcom Foundation	$2,000.00	Aluminum
The AEROspace Corporation	$2,000.00	Aluminum
Directed Energy Profession Society	$1,500.00	Aluminum
Advanced Communications (IN-KIND)	$1,000.00	Aluminum
American Chemical Society, Central NM Section	$1,000.00	Aluminum
New Mexico Gas Company	$1,000.00	Aluminum
Nusenda Credit Union	$1,000.00	Aluminum
SpringHill Suites by Marriott	$1,000.00	Aluminum
WaFd	$1,000.00	Aluminum
Jaynes Corporation	$750.00	Carbon
Sandia Peak Tram Company	$750.00	Carbon
REA Real Estate Advisors	$640.00	Carbon
Kiwanis Club of Coronado	$550.00	Carbon

Allen Sigmon Real Estate Group	$500.00	Carbon
American Institute of Aeronautics and Astronautics	$500.00	Carbon
ARGUS Investment Realty	$500.00	Carbon
Baca & Howard P.C.	$500.00	Carbon
Bohannan Huston	$500.00	Carbon
Bridgers & Paxton Consulting Engineers, Inc.	$500.00	Carbon
C & S Realty and Development Advisors, LLC	$500.00	Carbon
CREW NM (Commercial Real Estate Women)	$500.00	Carbon
Enterprise Builders Corporation	$500.00	Carbon
Greater Albuquerque Association of Realtors	$500.00	Carbon
Huning, LLC	$500.00	Carbon
International Test & Evaluation Association, Roadrunner Chapter	$500.00	Carbon
Main Bank	$500.00	Carbon
OE Solar	$500.00	Carbon
Sandia Laboratory Federal Credit Union	$500.00	Carbon
UNM College of Pharmacy	$500.00	Carbon
BlueHalo and Appel Family	$400.00	Helium
Consensus Planning	$350.00	Helium
American Association of University Women	$300.00	Helium
American Society of Safety Professionals	$300.00	Helium
AVS New Mexico Chapter	$300.00	Helium
Bank of Albuquerque	$300.00	Helium
Chalmers Ford	$300.00	Helium
ENLACE NM	$300.00	Helium
FBT Architects	$300.00	Helium
New Mexico Engineering Foundation	$300.00	Hydrogen
New Mexico Trout	$300.00	Helium
Studio Southwest Architects	$300.00	Helium
UNM Department of Neurosciences	$300.00	Helium
AIC General Contractors, Inc.	$250.00	Helium
Century Sign Builders	$250.00	Helium
Explora Science Center & Children’s Museum	$250.00	Helium

Geltmore, LLC	$250.00	Helium
Goodman Realty Group	$250.00	Helium
Installation Service Heating & Cooling	$250.00	Helium
NAI SunVista Commercial	$250.00	Helium
Peacock Law P.C.	$250.00	Helium
Sun Vista Enterprises, Inc.	$250.00	Helium
Titan Development	$250.00	Helium
Albuquerque Area Extension Master Gardeners	$225.00	Hydrogen
Albuquerque Rocket Society	$200.00	Hydrogen
Klinger Constructors, LLC	$200.00	Hydrogen
KW Commercial	$200.00	Hydrogen
Old Republic National Title Insurance	$200.00	Hydrogen
Society of Women Engineers	$200.00	Hydrogen
Springer5 Investments	$200.00	Hydrogen
Wood Group PLC	$200.00	Hydrogen
Albuquerque Astronomical Society	$150.00	Hydrogen
Albuquerque Radio Control Club	$150.00	Hydrogen
Climate Change New Mexico	$150.00	Hydrogen
DS Interiors	$150.00	Hydrogen
Enchanted Lens Camera Club	$150.00	Hydrogen
Albuquerque African Violet Club	$150.00	Hydrogen
Sutin, Thayer & Browne	$150.00	Hydrogen
Association of Old Crows	$100.00	Hydrogen
CBRE	$100.00	Hydrogen
FY2022 BUSINESS & COMMUNITY ORGANIZATION TOTAL VALUE OF SPONSORSHIPS/DONATIONS =	**$291,490.00**	



FY22 INDIVIDUAL DONORS

(Includes Individual Award Donors and Individual In-Kind Donations for which the value is known)

DONOR	VALUE	LEVEL
Pat & Len Duda	$2,500.00	Curie
Mary Louise Martignoni	$2,000.00	Curie
Foreman Family	$1,360.00	Darwin
Karen Robinson	$1,000.00	Darwin
Randi Buck	$600.00	Carver
Tom Grossman	$600.00	Carver
Nancy Schmierbach	$500.00	Carver
Van Pham & Khe Tang	$500.00	Carver
Lorine & Joe De Rusha	$360.00	Newton
James Topmiller	$300.00	Newton
Karen Kinsman & Holly Lowe	$270.00	Newton
Benjamin Chavez & Heather Pratt-Chavez	$250.00	Newton
David Leith	$250.00	Newton
Dave & Rhonda Hill	$200.00	Ochoa
Keith & Mary Meyer	$200.00	Ochoa
James Vigerust	$200.00	Ochoa
Thomas Keleher	$200.00	Ochoa
Kenneth & Belinda Eras	$108.00	Ochoa
Patrick Burton	$100.00	Ochoa
Selena Connealy	$100.00	Ochoa
Benjamin Gardner	$100.00	Ochoa
Sheila Doucette	$25.00	Ross
FY2022 INDIVIDUAL SPONSORSHIPS/DONATIONS = *****Vast majority of individual donations currently reflect either student/teacher awards at Research Challenge OR in-kind donations of consultation services.*****	**$11,723.00**	
FY2022 COMBINED MONETARY/IN-KIND SPONSORSHIPS & DONATIONS TOTAL =	**$302,213.00**	

FY22 IN-KIND DONORS

We would also like to acknowledge the many companies and organizations that donated raffle prizes for the STEM Research Challenge. Exact value not known.

Advanced Communications

AFRL NM

Alaka'ina Foundation/Kupono Government Services

Albuquerque Isotopes

APS Engineering the Future

Be Greater Than Average

¡Explora!

New Mexico Oil & Gas Association

NM PBS

Sandia Mountain Natural History Center

Sandia National Labs

STEAMatWORK4kids

Tricore Reference Laboratories

UNM American Indian Student Services

UNM Alumni Association

UNM HSC Office for Diversity, Equity & Inclusion

UNM School of Engineering

SCHOOLS SERVED

ALL public, private, parochial, charter, and home schools in Central New Mexico are eligible to participate in Research Challenge and Science Olympiad. Participation in SW Junior Science & Humanities Symposium is open to high school students throughout NM, the El Paso area of west Texas, and southern Colorado. All participating schools along with the programs in which their students participated, the type of school, and the school's Title 1 status are indicated *(Title I, Part A [Title I] of the Elementary and Secondary Education Act or ESEA, as amended, provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards)*.

REGISTERED SCHOOLS	**Research Challenge Bootcamp** Teacher PD Training	**Central NM STEM Research Challenge**	**Central NM 4th/5th Grade Research Expo**	**Central NM Science Olympiad**	**SW Junior Science & Humanities Symposium**	**School Type**	**Title I School**
Academy for Technology & Classics	X					CHARTER	✘
ABQ Academy	X	X		X[4]		PRIVATE	✘
ABQ Area Homeschoolers				X[2]		HOME	✘
ABQ Christian School	X	X	X			PRIVATE	✘
ABQ Institute of Math & Science	X	X				CHARTER	✓
ABQ School of Excellence	X	X	X		X	CHARTER	✓
ABQ Sign Language Academy	X	X	X			CHARTER	✓
Alice King Community School		X				CHARTER	✘
Amy Biehl Charter High School	X					CHARTER	✓
The ASK Academy	X	X				CHARTER	✓
Aspen Community School				X		PUBLIC	✓
Bosque Farms Elementary	X	X	X			PUBLIC	✓
Cottonwood Classical				X[2]		CHARTER	✘
Desert Ridge Middle School		X				PUBLIC	✘
Explore Academy		X				CHARTER	✓
Farmington Municipal Schools	X					PUBLIC	✓
Ganado Unified School District	X					PUBLIC	unknown
Harmony Science Academy					X	CHARTER	✓
Hayes Middle School	X					PUBLIC	✓
Holy Child Catholic School	X	X	X			PRIVATE	✘
Holy Ghost Middle School	X	X	X			PRIVATE	✘
Immanuel Lutheran	X	X				PRIVATE	✘
Jefferson Middle School	X	X				PUBLIC	✓
Katherine Gallegos Elementary			X			PUBLIC	✓
La Cueva High School		X		X[2]	X	PUBLIC	✘
Los Alamos Public School	X					PUBLIC	✘
Mescalero Apache School	X				X	BUREAU OF INDIAN ED	✓
Monte Vista High School (CO)					X	PUBLIC	✘

REGISTERED SCHOOLS	Research Challenge Bootcamp (workshop)*	Central NM Science & Engineering Research Challenge	Central NM 4th/5th Grade Research Expo	Central NM Science Olympiad	SW Junior Science & Humanities Symposium	School Type	Title I School
NM International School	X					CHARTER	✘
NM Military Institute	X					PRIVATE	✘
North Star Elementary			X			PUBLIC	✘
Oak Grove Classical Academy	X					PRIVATE	✘
Our Lady of the Assumption	X					PRIVATE	✘
Our Lady of Fatima Catholic School	X	X	X			PRIVATE	✘
Rio Grande Enrichment Studies	X					HOME	✘
Rio Rancho High School	X	X				PUBLIC	✘
Salam Academy	X	X	X			PRIVATE	✘
San Bernardino County Schools	X					PUBLIC	unknown
San Felipe de Neri School	X	X				PRIVATE	✘
San Juan College High School	X				X	PUBLIC	✘
School of Dreams Academy	X	X	X			CHARTER	✓
St. Pius X High School		X				PRIVATE	✘
St. Therese Catholic School	X	X				PRIVATE	✘
St. Thomas Aquinas School		X				PRIVATE	✘
V. Sue Cleveland High School	X	X		X		PUBLIC	✘
Sundance Elementary School	X	X				PUBLIC	✓
United World College					X	PRIVATE	✘
Wilson Middle School				X^2		PUBLIC	✓
TOTALS =	**33**	**25**	**11**	**Schools 7 Teams 14**	**7**	**Public = 19 Private = 15 Charter = 12 Home = 2 BIE = 1**	**Title I 38.3%**

✓ = Title I School ✘ = Not Title I School ^{X} = Fielded "x" # Regional Science Olympiad Teams

APPENDICES

Volunteer Hours & Value of Time

Research Challenge Statistics

JSHS Statistics

Science Olympiad Statistics

Awards Values

Award Donors List

2021-2022 Volunteer Hours & Value of Time

2022 Central New Mexico STEM Research Challenge	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Category Judges *(8 hrs per judge @ $35/hr avg in-kind time donation)*	100	800	$28,000.00
Judge Chairs/Master Chairs *(25 hrs per judge @ $35/hr avg in-kind time donation)*	23	575	$20,125.00
Special Awards Judges *(4 hrs per judge @ $35/hr avg in-kind time donation)*	47	188	$6,580.00
Registration Volunteers *(3 hrs per volunteer @ $35/hr avg in-kind time donation)*	10	30	$1,050.00
Registration Coordinator *(20 hrs @ $35/hr avg in-kind time donation)*	1	20	$700.00
Display & Safety Inspectors *(4 hrs per volunteer @ $35/hr avg in-kind time donation)*	20	80	$2,800.00
Display & Safety Committee Chairs *(20 hrs per volunteer @ $35/hr avg in-kind time donation)*	2	40	$1,400.00
Speakers – Panels and Other Individual Speakers *(2-3 hrs per speaker/moderator @ $35/hr avg in-kind time donation)*	12	36	$1,260.00
Speakers-Keynote *(8 hrs @ $35/hr avg in-kind time donation)*	1	8	$280.00
Safety, Security & Floor Monitors *(8 hrs per volunteer @ $35/hr avg in-kind time donation)*	12	96	$3,360.00
TOTAL RC VOLUNTEERS =	**228**	**1873**	**$65,555.00**

2022 Advisory Board Members	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Board Members - Volunteer *(8 hrs per board member @ $35/hr avg in-kind time donation)*	17	136	$4,760.00
ADVISORY COUNCIL =	**17**	**136**	**$4,760.00**

2022 Central NM Science Olympiad	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Event Supervisors *(12 hrs per ES for prep & facilitation @ $35/hr avg in-kind time donation; some ES's prepared & supervised more than one of the 40+ events; time for each event is counted here)*	39	468	$16,380.00
Other Volunteers *(Average 4 hrs each; Average 1 per event @$35/hr avg in-kind time donation)*	22	88	$3,080.00
SO VOLUNTEERS =	**61**	**556**	**$19,460.00**

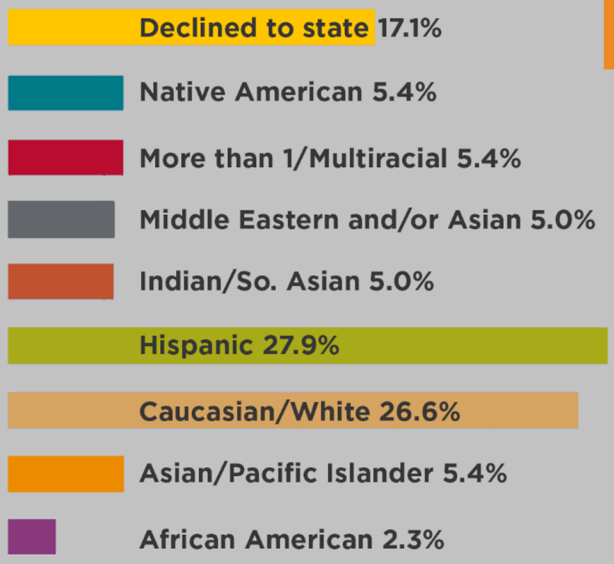
2022 SW Junior Science & Humanities Symposium (JSHS)	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Judges *(8 hrs per judge @ $35/hr avg in-kind time donation)*	8	64	$2,240.00
Other Volunteers *(Average 4 hrs each @$35/hr avg in-kind time donation)*	8	32	$1,120.00
Keynote Speaker *(3 hrs @$35/hr avg in-kind time donation)*	1	3	$105.00
JSHS VOLUNTEERS =	**17**	**99**	**$3,465.00**

	TOTAL # Volunteers	TOTAL # Volunteer Hours	TOTAL Value Volunteer Hours
FY22 VOLUNTEERS GRAND TOTALS =	**323**	**2,664**	**$93,240.00**

Volunteer time value calculated at $35/hour which is higher than standard $29.95/hour, but majority of our judges/volunteers are STEM professionals/retirees whose hourly pay rate is significantly higher than even $30/hour. VIP Speakers/Presenters are all high level professionals, so their time was valued at an average of all their hourly rates combined, which averages out to significantly less than the hourly rate of several of them.

Central NM STEM Research Challenege 2022

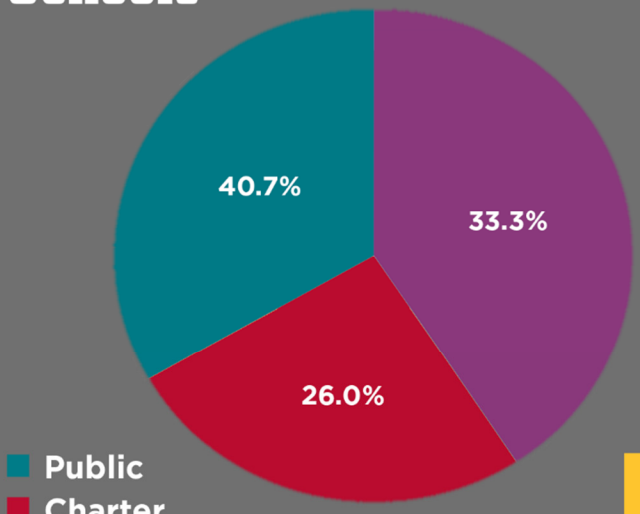
Race/Ethnicity



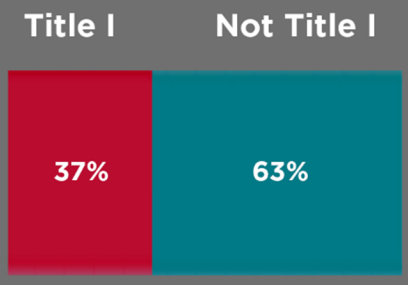
New Mexico student competitors were awarded over $60,000.00!

Gender

Schools



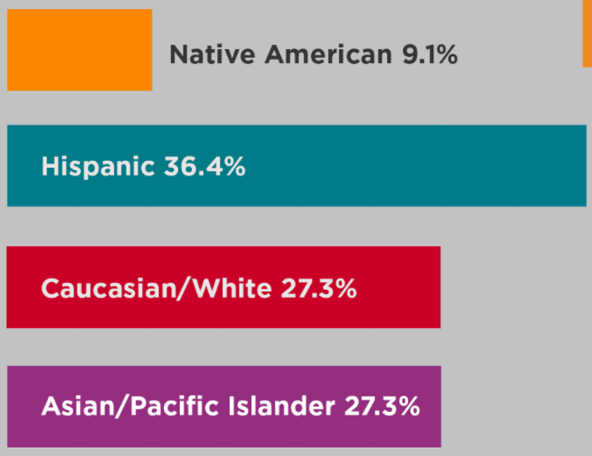
Title I



Over 200 students participated in our competition in 2022!

Junior Science and Humanities Symposium 2022

Race/Ethnicity



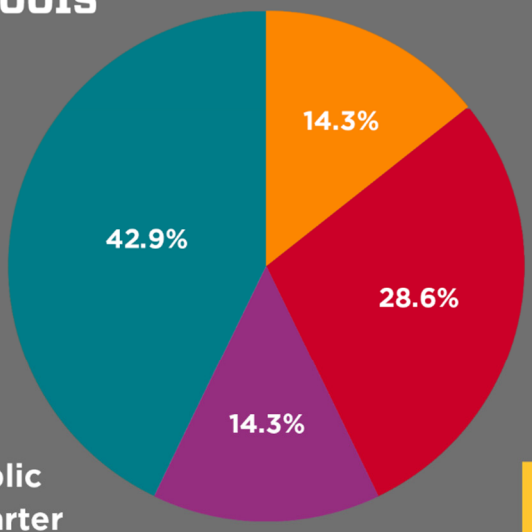
In 2022 the SW Region JSHS hosted 11 students from 7 schools

Gender

36.4% Females

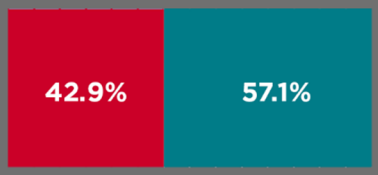
63.6% Males

Schools

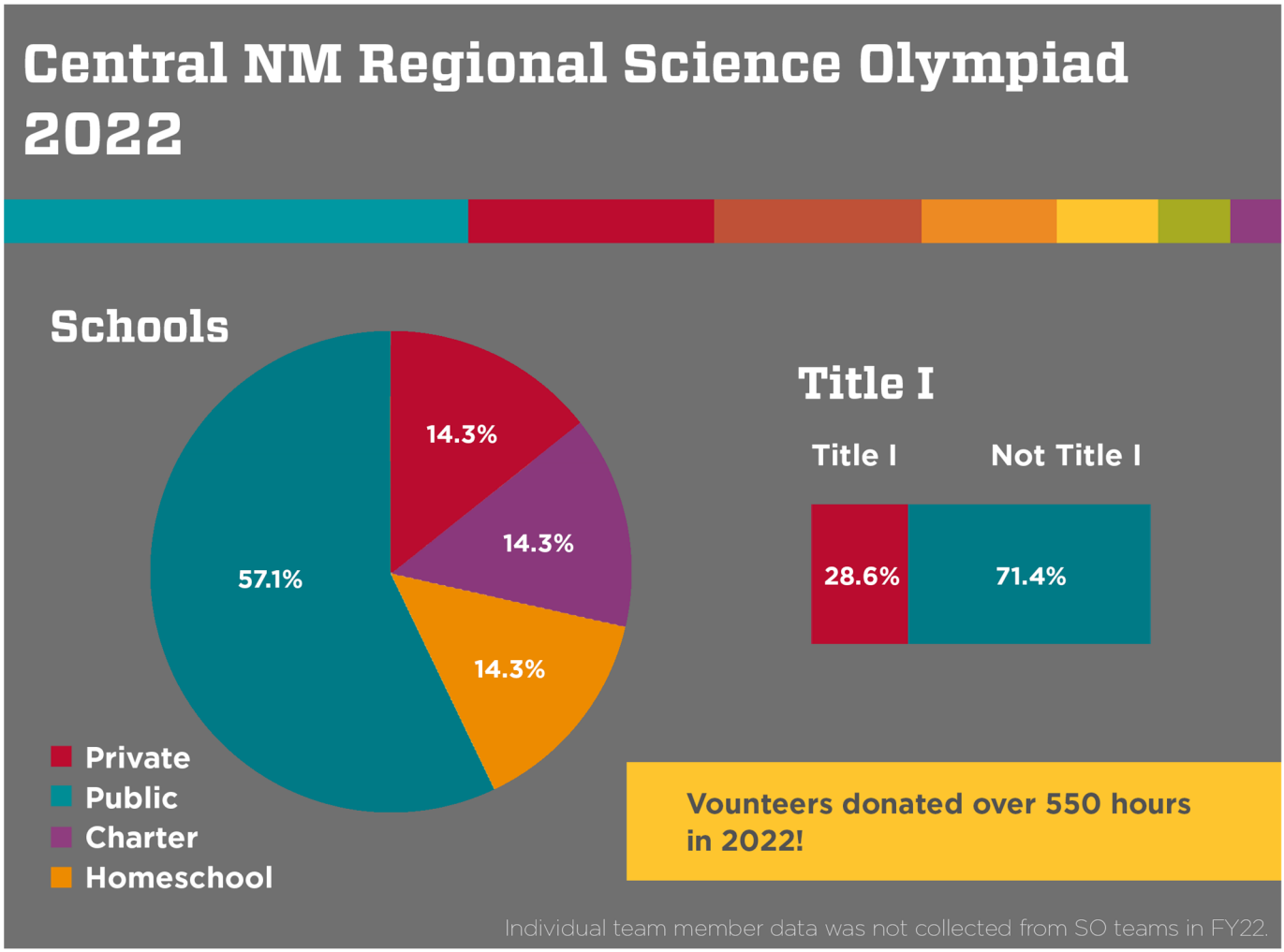


- Public
- Charter
- Bureau of Indian Education
- Private

Title I



Participants received $4,250.00 in awards!



Because the registration process for Science Olympiad takes place through the State Science Olympiad office and individual student demographic information is not collected, at present, we are exploring the best ways to be able to gather the same demographic information on participants as is collected for Research Challenge and SW JSHS. Once we have determined the best mechanism for ensuring we can get accurate data, we will add that to future Annual Reports.

2022 Central New Mexico STEM Research Challenge AWARDS

Special Awards - Donor Paid	$11,000.00
Special Awards - Office Paid	$41,220.00
Top of Category Awards – Office Paid	$9,125.00
CNM-SERC AWARDS =	**$61,345.00**

2022 Central NM Science Olympiad AWARDS

Science Olympiad - Trophies, Medals, etc.	$1,000.00
SCIENCE OLYMPIAD AWARDS =	**$1,000.00**

2022 SW Junior Science & Humanities Symposium AWARDS

SW Region JSHS – Donor Paid (scholarships)	$4,000.00
SW Region JSHS – Office Paid (cash)	$250.00
SW JSHS AWARDS =	**$4,250.00**

TOTAL AWARDS *(all programs)* **= $66,595.00**

AWARD DONORS

Aerospace Corporation
AIC General Contractors
Albuquerque African Violet Club
Albuquerque Area Extension Master Gardeners
Albuquerque Astronomical Society
Albuquerque Radio Control Club
Albuquerque Rocket Society
Allen Sigmon Real Estate
American Association of University Women
American Chemical Society - Central NM Section
American Institute of Aeronautics and Astronautics
American Meteorological Society
American Psychological Association
American Society of Safety Professionals - NM Chapter
Argus Investment Realty, Inc.
ASM (Materials Information Society)
Association for Women Geoscientists
Association of Old Crows
Avangrid
Baca & Howard P.C.
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Benjamin Gardner, AIA, LEED, AP
BlueHalo & the Appel Family
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Bridgers & Paxton Consulting Engineers
Broadcom Foundation
Broadcom, Inc.
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Consensus Planning
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David Leith, CPA
Directed Energy Profession Society
Department of Defense
Enchanted Lens Camera Club
ENLACE New Mexico
Enterprise Builders Corporation
Explora Science Center and Children's Museum
FBT Architects
Foreman Family
Geltmore, LLC
Goodman Realty Group
Greater Albuquerque Association of Realtors
Huning, LLC
Installation Service Heating & Cooling
Int'l Test & Evaluation Association, Roadrunner Chapter
Jackling Fund- UNM
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James Vigerust
Jaynes Corporation
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Kiwanis Club of Coronado
KW Commercial
Lemelson Foundation
Mary Louise Martignoni
MU Alpha Theta
NAI SunVista Commercial
Nancy Schmierbach
NASA
National Geographic
National Oceanic and Atmospheric Administration
New Mexico Engineering Foundation
New Mexico Gas Company
New Mexico Trout
Nusenda Credit Union
OE Solar
Old Republic National Title Insurance
Peacock Law P.C.
REA Real Estate Advisors
Randi Buck
Regeneron
Ricoh
Sandia Laboratory Federal Credit Union
Sandia Peak Tram Company
Sheila Doucette
Society for In Vitro Biology
Society of Women Engineers, Central NM Section
Springer5 Investments
Springhill Suites by Marriott (Journal Center)
Studio Southwest Architects
Sun Vista Enterprises, Inc.
Sutin, Thayer & Browne
Thomas Keleher
Titan Development
Tom Grossman
United States Air Force
United States Metric Association
United States Navy and Marine Corps
University of New Mexico Health Sciences Center
UNM College of Pharmacy
UNM Department of Neurosciences
U.S. Agency for International Development (USAID)
WaFd
Water Environment Federation
Wood Group PLC
Yale Science & Engineering Association, Inc.

THANK YOU to all our sponsors & award donors for their spectacular commitment in helping us recognize the hard work of our student and teacher participants!

We are humbled by your support!

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