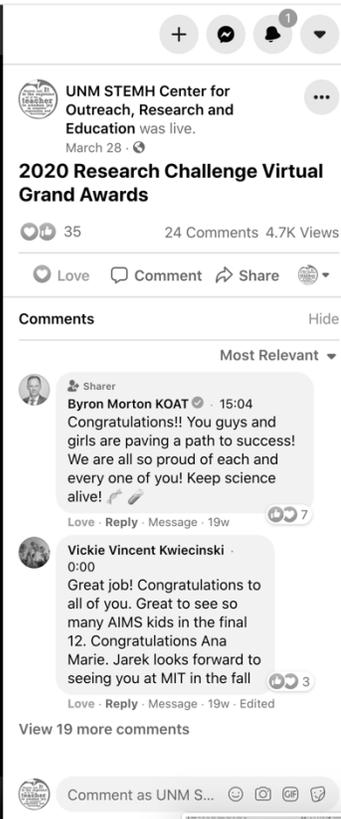
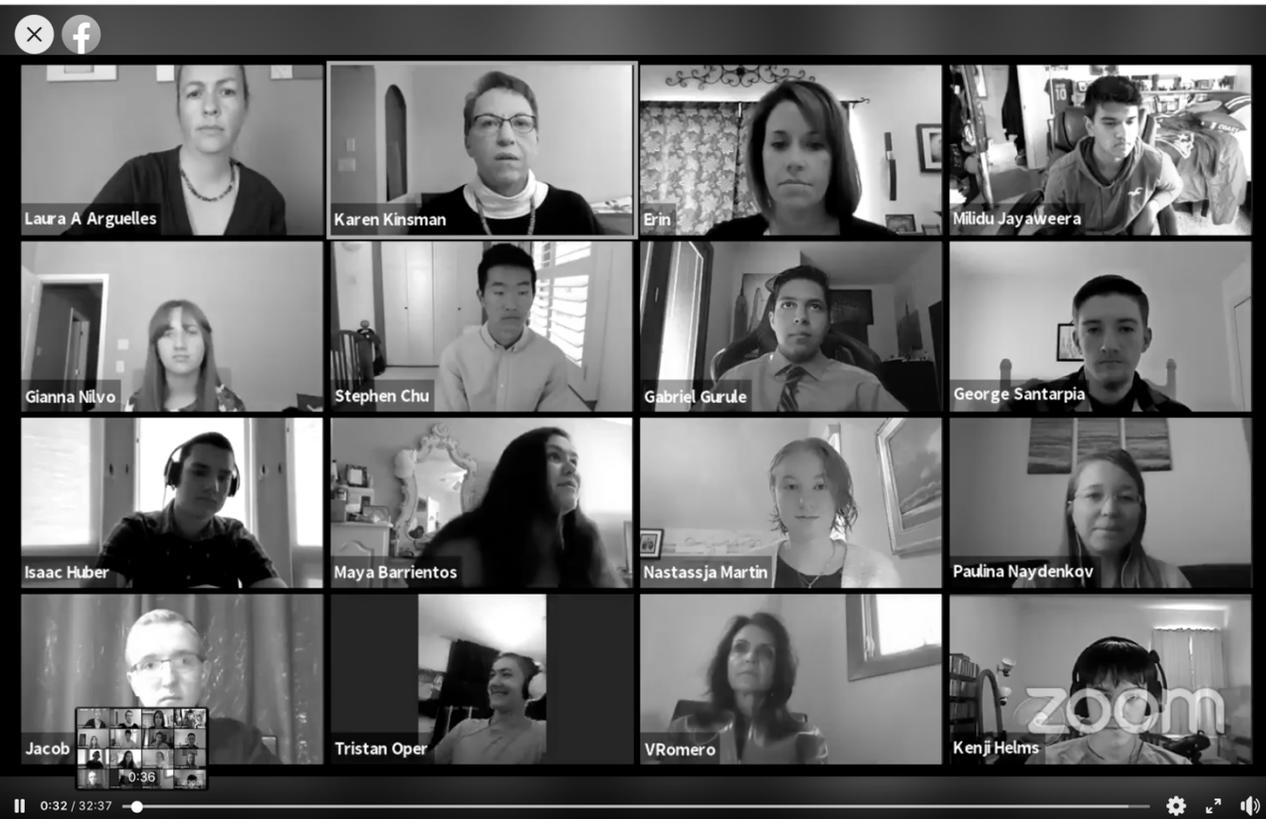




HEALTH SCIENCES

OFFICE FOR DIVERSITY,
EQUITY & INCLUSION



UNM STEM-H Center for Outreach, Research & Education

ANNUAL REPORT 2019-2020

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TABLE OF CONTENTS

Mission & Vision	3
STEM-H Center Team Values	3
From the Director	4
Outreach	
Research Challenge	5
Science Olympiad	6
Junior Science & Humanities Symposium	7
Education	
Educator Professional Development	8
Student Researcher Bootcamp	8
UNM STEM-H Resource Center/Lending Library	8
Research/Policy/Advocacy	
UNM STEM-H Connection Statewide Website	9
Development of Strategic Collaborations/Partnerships	9
Policy/Advocacy	10
Staff & Advisory Council	10
Financial Information	
Current Information & Implications	11
FY20 Business/Community Group Donors	13
FY20 Individual Donors	14
Schools Served	16
Appendices	
Volunteer Hours & Value of Time	18
Research Challenge Statistics	21
Science Olympiad Statistics	22
JSHS Statistics	23
Awards Values	24
Awards Donors List	25

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 4th-12th 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



Wow! 2019-2020 certainly did not end the way any of us expected. With the enormous impact of the COVID-19 virus from school closures to remote work to stay-at-home orders, mandatory masks, and social distancing, we like many other organizations, went into contingency planning mode while adapting to working from home and getting comfortable navigating a lot of Zoom meetings!

Science Olympiad went on as planned in early February before the virus took hold in the U.S. The SW JSHS competition was very quickly converted to a hybrid model so that we could offer all registered students the opportunity to do their presentations whether they were allowed to travel into

Albuquerque or not. Unfortunately, in mid-March, with the closure of EXPO NM as well as the statewide stay-at-home orders designed to “flatten the curve” of the virus, we were forced to make the very difficult decision to cancel the Central NM STEM Research Challenge for the first time in its 60 year history. Though a devastating blow to the students who had worked so hard and qualified to compete at Regionals, it was critical to us that we salvage what we could and provide at least some kind of meaningful judging experience for our high school students since, for many, this would be their last opportunity. We were able to create a virtual judging experience as well as a Zoom Grand Awards Ceremony live-streamed on Facebook. That one post alone garnered close to 20,000 hits – more than nearly all our previous posts on Facebook combined!

Especially during these very uncertain and scary times when everything seems to change by the moment, 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. 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 and the forward momentum needed in STEM-H education on the state/national policy fronts.

I want to offer up an especially heartfelt THANK YOU to all our sponsors/donors who, in spite of the crazy circumstances and rapidly changing event plans this spring, took everything in stride, offered us nothing but flexibility and grace, and never wavered in their support. 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, and so many others. Even our JSHS and Research Challenge judges did some serious “turning on a dime” to roll with us as we figured out how to operate in a very different virtual landscape.

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 partners, thank you! If you have not joined our team yet, please join us as we work to ensure success in the future!

***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 1960. The **Central NM STEM Research Challenge** has served students, teachers, and parents since 1959. Science fairs clearly require students to research and demonstrate scientific principles or answer propositions through the development of the scientific or engineering method.

Central NM STEM Research Challenge is a two-division (junior division for middle school students and senior division for high school students), fourteen category, regional student competition of science and engineering projects. 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.

For the well-being of the United States, this nation needs to play a significant role in scientific research and development, and in the specialized educational training required for such research and development. Our nation may be in the process of abandoning its leadership role in science. There is a foreseeable future shortage of manpower to complete such research and development. To “turn the tide,” America must address this foreseeable shortcoming by increasing student interest in the various STEM-H fields by promoting those fields as feasible academic and career choices. “Science Fair” and other related STEM-H inquiry-based research competitions encourage curiosity, which is the start of the discovery process. Research competitions reward discovery and innovation as well as promoting creativity through the discovery of new problems, inventions, ideas, and solutions. The Regional competition 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. **Nearly 500** 4th through 12th grade students **registered for the 2020 STEM Research Challenge**. However, due to the event being cancelled as a result of COVID-19, 56 high school students were able to participate in the virtual competition offered in place of the full Research Challenge.



As an International Science & Engineering Fair Affiliated Fair, the **Central NM Science & Engineering Research Challenge** sends a pre-determined number of projects to ISEF as

competing Finalists and up to two top 8th grade student researchers to ISEF as Student Observers each year. Four ISEF finalists were selected during the condensed virtual judging, however, due to the COVID-19 pandemic, the competition portion of ISEF was not held so the four finalists were not able to compete for prizes. The four ISEF Finalists from the Central NM Region were: **AnaMaria Perez** Albuquerque Academy, **Paulina Naydenkov** Albuquerque Institute of Math & Science, **Milidu Jayaweera** La Cueva High School, and **George Santarpia** Albuquerque Institute of Math & Science.

SCIENCE OLYMPIAD

Science Olympiad is an international nonprofit organization devoted to improving the quality of science education, increasing student interest in science and providing recognition for outstanding achievement in science 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. Science Olympiad tournaments are rigorous academic interscholastic competitions that consist of a series of individual and team events, which students prepare for during the year. The competitions follow the format of popular board games, TV shows and athletic games. These challenging and motivational events are well balanced between the various science disciplines of biology, earth science, chemistry, physics, computers and technology. There is also a balance between events requiring knowledge of science facts, concepts, processes, skills and science applications. One of the goals of Science Olympiad is to elevate science education and learning to a level of enthusiasm and support that is normally reserved only for varsity sports programs.



In 2020, the **Central NM Science Olympiad** offered **43 events** and had **27 volunteer Event Supervisors and Event Assistants** from UNM School of Engineering, Presbyterian, UNM Hospital, Sandia Labs, National Weather Service, Transcore, Intera, Inc., NM Museum of Natural History, and more. There were a total of **17 competing teams from 8 middle and high schools** in the region.

Both the middle and high school teams from **Albuquerque Academy** placed 1st at the state competition and were set to represent New Mexico at the 2020 National Science Olympiad competition; unfortunately the competition was cancelled due to COVID-19. The Division B top three winners were 1st **Albuquerque Area Homeschoolers**, 2nd **Wilson Middle School B1**, 3rd 1 **Albuquerque Academy B1**, and 3rd **Albuquerque Academy B1**. The Division C top three winners were 1st **La Cueva High School C1**, 2nd **Albuquerque Area Homeschoolers**, and 3rd **Cottonwood Classical Prep School**.

JUNIOR SCIENCE & HUMANITIES SYMPOSIUM

The UNM STEM-H Center took on management of the **Southwest Region Junior Science & Humanities Symposium (JSHS)** in 2013-2014 and has continued to engage in efforts to grow the program over the next several years. The southwest region includes all of New Mexico, Southern Colorado and northwest Texas (El Paso).

The **Junior Science & Humanities Symposium** is a national competition program designed to challenge and engage students (Grades 9-12) in science, technology, engineering or mathematics (STEM). 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 planned. 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 nationwide colleges and universities. 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 2020, the **SW Region Junior Science & Humanities Symposium** hosted **30 students** from **15 schools** at the onsite level of the competition. Five students qualified to compete at the **2020 JSHS National Competition** – **Lillian Petersen**, *Los Alamos High School*, **Paulina Naydenkov**, *Albuquerque Institute of Math & Science*, **AnaMaria Perez**, *Albuquerque Academy*, **Milidu Jayaweera**, *La Cueva High School*, and **Gianna Nilvo**, *School of Dreams Academy*. **AnaMaria Perez placed 3rd** in the poster category of Mathematics & Computer Science at the national competition.



STEM EDUCATOR 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 2019-2020, workshops included Research Challenge Bootcamp (on-site and online), Managing Local STEM-H Competitions (online), and Responsible Conduct of Research & Human/Animal Protections in Student Research (online). The STEM-H Educator Professional Development Workshops will continue to evolve over time as needs are identified and incorporated.

STUDENT RESEARCHER BOOTCAMP

The **STEM-H Center's Student Researcher Bootcamp** provides 5th-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. The **STEM-H Student Researcher Bootcamp** will be expanded over time as needs are identified and incorporated. Workshops are conducted in collaboration with UNM and community partners who generously share their time/talent. In the Fall of 2016, a collaboration between the STEM-H Center and Explora Science Center was created and it has continued since that time. Explora's amazing STEM-H educators facilitated the **Student Researcher Bootcamps** AND physically hosted them at Explora! This partnership will continue and grow in 2020-2021 with the Student Researcher Bootcamps being offered by Explora educators live via Zoom.

STEM-H RESOURCE CENTER/LENDING LIBRARY

The **UNM STEM-H Resource Center/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 Resource Center** also offers internet access and printing capability for individuals who need a place to do online research. As there is no longer ongoing funding to expand the Lending Library, the STEM-H Center is maintaining it with its current inventory and there are no plans in place for expansion in FY20. However, the possibility of moving the lending library to an off-campus, climate controlled facility that would be more easily accessible to everyone will be under consideration in FY21 in an effort to increase the library's usage.

Research/Policy/Advocacy

NM STEM-H CONNECTION STATEWIDE WEBSITE

The **NM STEM-H Connection Website** contains searchable, web-based databases of STEM-H education related people, programs, and initiatives. It is also a comprehensive website of NM STEM-H Education resources and tools with links to New Mexico specific and National sites. It is designed to encourage increased collaboration/communication throughout the NM STEM-H Education communities as well as to offer the public opportunities to access statewide STEM-H experts along with their programs, projects, and initiatives whether they be teacher professional development, summer programs, research opportunities, connections with potential mentors, consultants, volunteers, judges, etc. Additional funding is always being sought to support requested development and enhancements to the site. For the past few years, no supplemental funding has been available, so the site is being maintained without any additional enhancements or functionality and the databases are only updated as new information becomes available for programs (new, outdated, etc.). Should funding become available, the web developer will begin work on the growing list of desired site functions.

Development of Strategic STEM-H Education 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:

- Air Force Research Laboratory – New Mexico
- EPSCoR
- Explora Science Center
- Honeywell/Sandia National Laboratories
- HSC Institutional Animal Care & Use Committee
- Los Alamos National Laboratories Foundation
- New Mexico PBS
- NM Academy of Science
- NM MESA
- NM Museum of Natural History & Science
- NM Oil & Gas Association
- NM Partnership for Mathematics & Science Education
- NM Public Education Department (including Math & Science Advisory Council; College & Career Readiness Bureau)
- 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 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 (CREST Grant – Dr. Kerry Howe; Internal Advisory Committee)
- 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 is currently serving 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), and the STEM NM Learning Ecosystem, Leadership Team for the STEM NM Ecosystem, and the Advisory Committee for Explora/STEM NM Ecosystem's NSF INCLUDES Grant (Math FACESS).

2019-2020 Advisory Council & Staff

COUNCIL MEMBERS

Lynne Andersen

NAIOP NM - Commercial Real Estate Development Association

Connie Beimer

Interim VP UNM Alumni Relations & Executive Director UNM Alumni Association

Reg Bourgeois

US Army Corps of Engineers - ABQ District

Dr. Mary Jo Daniel

UNM Office of the Vice President for Research

Robert Deblassie

Sandia National Laboratories

Dr. Leonard Duda

Sandia National Laboratories (Retired)

John Gallegos

NAIOP NM - Commercial Real Estate Development Association

Deborah Green

St. Pius X High School Science Teacher

Nels Hoenig, CO-CHAIR

American Society for Quality/PNM Resources

Franz Joachim, CO-CHAIR

New Mexico PBS

Ray Nance

Retired STEM Educator/PhD Cand. in Educ. Leadership

Debra Novak

NM Museum of Natural History & Science/NSTA

Michael Rogers

Northrop Grumman

Dr. Valerie Romero-Leggott

Vice Chancellor, HSC Office for Diversity

Karen Stockham

Licensed Counselor

James Vigerust

CBI Federal Services, Inc.

STEM-H CENTER STAFF

Karen Kinsman, MS, PMP

Director/Senior Program Manager

Erin Garcia, JD

Asst. Director/Program Specialist

Laura Arguelles, BS

Sr. Web Developer

Financial Information

The 6-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 FY20, the STEM-H Center team continued to identify areas in which operations could be carried out more efficiently as well as areas in which additional fundraising efforts could be focused. With the COVID-19 pandemic necessitating the cancellation of nearly all the 2020 Research Challenge events and our ability to cancel scheduled venues, catering, and other related event expenses without penalty, the fiscal year ended with a significant positive balance forward. FY21's budget has been crafted to utilize the balance remaining to support programmatic operations in anticipation of ongoing need to shift/redesign our professional development and very likely many of our competition related events in 2021 into a virtual environment which means expenses for needed technology, programming, IT support, etc.

Approximately \$10,000 from FY20 fundraised monies were utilized to supplement the \$85,000 from main campus Office of the VP for Research as that support does not fully cover ½ of our total personnel costs. The remaining balance of our personnel costs are charged to the Office for Diversity, Equity, & Inclusion index where the \$85,000+ in Health Sciences Center support for the STEM-H Center is deposited annually.

The STEM-H Center receives half of its Institutional Sponsorship from the main campus Office of the Vice President for Research of \$85,000 annually which goes into what is called an F&A Index. The Health Sciences Center provides another \$85,000+ in Institutional Sponsorship via the Office for Diversity, so just over half of the salary/fringe and other support expenses for the STEM-H Center have been taken on by the HSC Office for Diversity. All funds raised via sponsorships and donations go into the STEM-H Center's UNM Foundation Index out of which all operational program expenses are paid with the exception of salaries/fringe benefits for regular and student employees. Participant fees are deposited into the Administrative Index per UNM and normally utilized to cover the remaining balance in that index at the end of the year. In FY20, all entry fees for Research Challenge were refunded due to the cancellation of competition events.

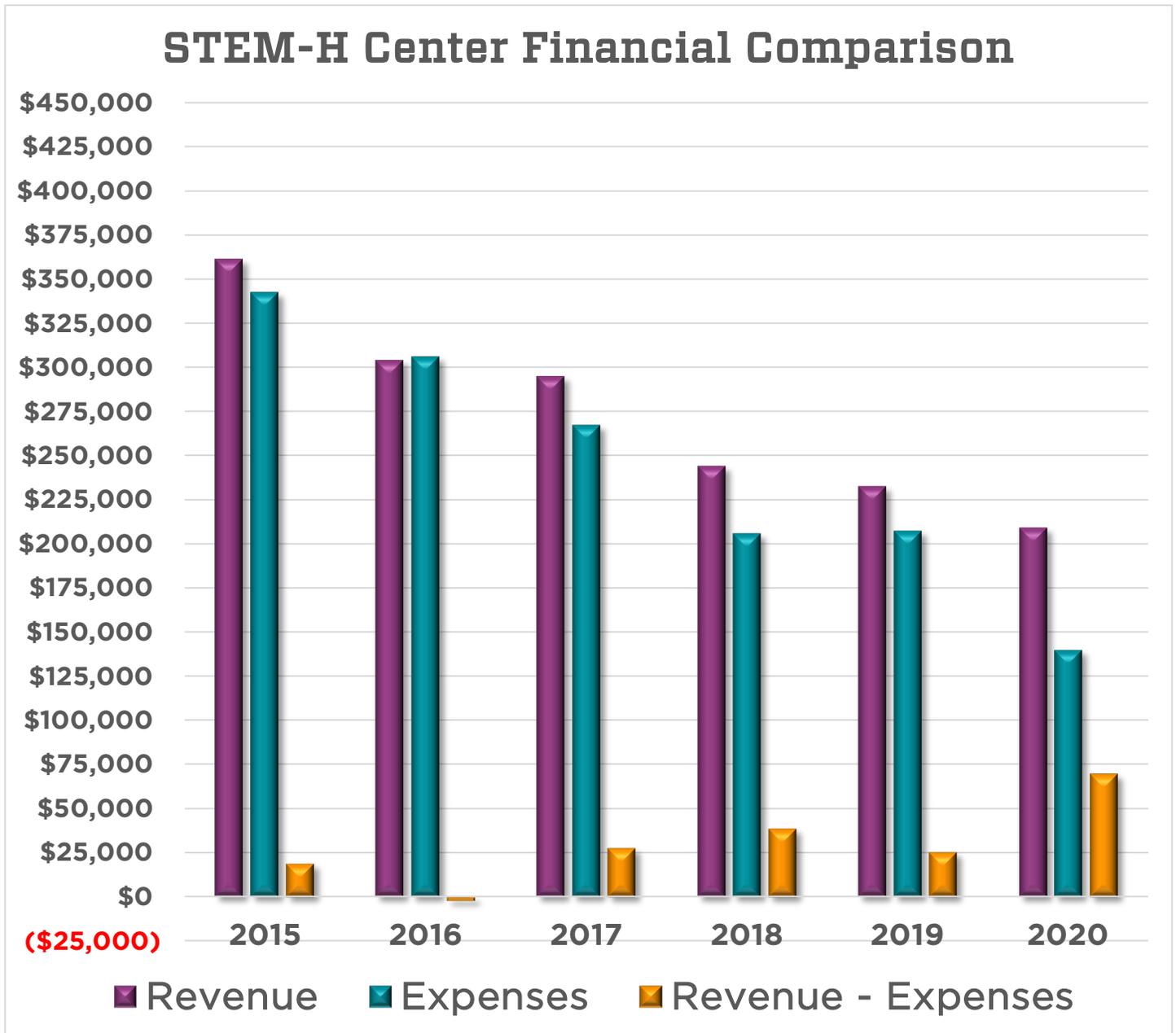
Remaining in force for FY21 is the Memorandum of Agreement between the Office of the Provost on main campus and the Chancellor of the Health Sciences Center that went into effect in mid-2015. Beginning in FY18, the MOU dictated a 50/50 split of the sponsorship between the Office of Research and the Health Sciences Center. As has been the case for a number of years, that \$170,000 covers the vast majority of staff salaries/fringe benefits, but covers no other expenses and does not account for any salary increases. The UNM Mass Salary Increases mandated at the state level for FY20 were absorbed by the Office for Diversity, Equity, & Inclusion.

NOTE: The overall revenue/expenses reported for the STEM-H Center do not include the \$85,000 institutional support from the UNM Health Sciences Center which covers slightly more than 50% of the STEM-H Center's staff salaries/fringe and is part of the Office for Diversity, Equity & Inclusion's budget.

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. As a result of those measures as well as cost savings from Research Challenge cancellation, the Center ended FY20 with a significant Balance Forward in its Foundation index. A portion of the FY20 Balance Forward represents FY21 funds received prior to the June 30th end of FY20.

What's the bottom line? The STEM-H Center is in solid financial shape entering the first quarter of FY21. 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.



2019-2020 Student & Teacher Award Donors

Unfortunately, in 2020 we were not able to give out many of the numerous special awards we receive from our generous donors every year; however, we still want to recognize both those who committed to giving awards in 2020 but did not award any monies due to the cancellation and those that committed funds and chose to award prizes to students who participated in the smaller virtual competition held in place of the full-scale Research Challenge.

FY20 BUSINESS/COMMUNITY GROUP DONORS

(Includes In-Kind Donors for which donation value is known)

DONOR ORGANIZATION	VALUE	LEVEL
UNM Office of the Vice President for Research <i>(institutional sponsorship)</i>	\$85,000.00	Plutonium
UNM Health Sciences Center <i>(institutional sponsorship)</i>	\$85,000.00	Plutonium
NAIOP <i>(includes \$20,850 from member orgs w/in list)</i>	\$25,850.00	Gold
UNM Scholarship Office - Jackling Fund	\$15,000.00	Platinum
UNM Health Sciences Center <i>(category and special award sponsorships)</i>	\$12,000.00	Silver
Honeywell/Sandia National Laboratories	\$10,000.00	Silver
National Science Teaching Association	\$7,125.00	Zinc
Albuquerque Journal	\$5,000.00	Zinc
Boeing	\$5,000.00	Zinc
General Mills Foundation	\$5,000.00	Zinc
PNM Resources	\$5,000.00	Zinc
UNM School of Engineering	\$5,000.00	Zinc
UNM Division of Enrollment Management	\$3,000.00	Copper
NMPBS ("Inventing Tomorrow" Event)	\$1,250.00	Aluminum
bigbyte.cc	\$1,000.00	Aluminum
New Mexico Gas Company	\$1,000.00	Aluminum
Sandia Peak Tram Company	\$1,100.00	Aluminum
Wilger Enterprises, Inc.	\$1,000.00	Aluminum
Abrazo Homes	\$500.00	Carbon
Baca & Howard P.C.	\$500.00	Carbon
Bridgers & Paxton Consulting Engineers	\$500.00	Carbon
CliftonLarsonAllen LLP	\$500.00	Carbon
CREW (Commerical Real Estate Women)	\$500.00	Carbon
Dekker/Perich/Sabatini	\$500.00	Carbon
Enterprise Builders Corporation	\$500.00	Carbon

Huning LLLP	\$500.00	Carbon
Improve Group	\$500.00	Carbon
Kaufman Fire Protection Systems	\$500.00	Carbon
New Mexico Bank & Trust	\$500.00	Carbon
NM Oil & Gas Association	\$500.00	Carbon
Northrup Grumman Mission Systems	\$500.00	Carbon
R.E.M. Properties	\$500.00	Carbon
Sedberry & Associates	\$500.00	Carbon
UNM Communications & Marketing	\$500.00	Carbon
UNM Grand Challenges	\$500.00	Carbon
AEgis Technology Group & the Appel Family	\$400.00	Helium
Bohannan Huston	\$400.00	Helium
ARGUS Investment Realty, Inc.	\$350.00	Helium
Sun Vista Enterprises, Inc.	\$350.00	Helium
Bank of Albuquerque	\$300.00	Helium
FBT Architects	\$300.00	Helium
First Citizens Bank	\$300.00	Helium
AIC General Contractors, Inc.	\$250.00	Helium
Chavez-Grieves Consulting Engineers	\$250.00	Helium
Consensus Planning	\$250.00	Helium
Geltmore, Inc.	\$250.00	Helium
Goodman Realty Group	\$250.00	Helium
Home Builders Association of Central NM	\$250.00	Helium
Rodey Law Firm	\$250.00	Helium
SMPC Architects	\$250.00	Helium
Titan Development	\$250.00	Helium
Allen Sigmon Real Estate	\$200.00	Hydrogen
American Association of University Women	\$200.00	Hydrogen
NAI Maestas & Ward	\$200.00	Hydrogen
Old Republic National Title Insurance	\$200.00	Hydrogen
Sparling Construction Co.	\$200.00	Hydrogen
Studio Southwest Architects	\$200.00	Hydrogen

Wells Fargo Bank	\$200.00	Hydrogen
Springer5 Investments	\$150.00	Hydrogen
Sutin, Thayer & Browne	\$150.00	Hydrogen
CBRE	\$100.00	Hydrogen
The Hartman + Majewski Design Group	\$100.00	Hydrogen
Osceola Engery	\$100.00	Hydrogen
FY2020 BUSINESS & COMMUNITY ORGANIZATION TOTAL VALUE OF SPONSORSHIPS/DONATIONS =		\$271,825.00
<i>**Total is less \$20,850 that reflects NAIOP member organizations' donations for student/teacher awards that are reflected in individual business listings above.**</i>		

STEM-H Center: FY20 INDIVIDUAL DONORS

(Includes In-Kind Donations for which the value is known)

DONOR	VALUE	LEVEL
Pat & Len Duda	\$2,000.00	Curie
Karen & Tommy Hudson	\$1,000.00	Darwin
Mary Louise Martignoni	\$1,000.00	Curie
Keith Meyer & Mary Meyer, Ph.D	\$500.00	Carver
Lawrence M. Wells, Attorney at Law	\$500.00	Carver
Tim Eichenberg	\$500.00	Gates
John R. Lewinger	\$250.00	Newton
Lynne Anderson & John Gallegos	\$250.00	Newton
Dave and Rhonda Hill	\$200.00	Ochoa
James Topmiller	\$200.00	Ochoa
Kenneth & Belinda Eras	\$112.24	Ochoa
Mary & William Chambers	\$100.00	Ochoa
Mike Pattengale	\$100.00	Ochoa
FY2020 INDIVIDUAL SPONSORSHIPS/DONATIONS =		\$6,712.24
<i>**Vast majority of Individual donations currently reflect either student/teacher awards at Research Challenge OR in-kind donations of consultation services.**</i>		
FY2020 COMBINED MONETARY/IN-KIND SPONSORSHIPS & DONATIONS TOTAL =		\$278,537.24

FY20 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	Central NM Research Challenge	Central NM 4th/5th Grade Expo	Central NM Science Olympiad	SW Junior Science & Humanities	School Type	Title I School
Albuquerque Academy		X		X ⁴	X	PRIVATE	X▪
Albuquerque Area Homeschoolers				X ²		HOME	X▪
Albuquerque Christian School	X	X	X			PRIVATE	X▪
Albuquerque High School		X				PUBLIC	✓▪
Albuquerque Institute of Math & Science	X	X			X	CHARTER	X▪
Albuquerque School of Excellence	X	X	X			CHARTER	✓▪
Albuquerque Sign Language Academy	X	X				CHARTER	✓▪
Alice King Charter School	X	X				CHARTER	X▪
Alta Vista Early College High School					X	PUBLIC	✓▪
Amy Biehl Charter High	X	X			X	CHARTER	✓▪
Annunciation Middle School		X				PRIVATE	X▪
The ASK Academy	X	X			X	CHARTER	✓▪
Bosque Farms Elementary	X	X	X			PUBLIC	✓▪
Bosque School				X ²	X	PRIVATE	X▪
Cien Aguas International School	X		X			CHARTER	X▪
Cleveland Middle School	X	X				PUBLIC	✓▪
Corrales Elementary School			X			PUBLIC	X▪
Cottonwood Classical				X ²		CHARTER	X▪
East Mountain High School		X				PUBLIC	X▪
Eisenhower Middle School	X	X				PUBLIC	X▪
Eldorado High School		X				PUBLIC	X▪
Grants Cibola County Schools	X					PUBLIC	✓▪
Griegos Elementary School			X			PUBLIC	✓▪
Holy Child Catholic School	X	X	X			PRIVATE	X▪
Holy Ghost Middle School		X				PRIVATE	X▪
Hope Christian School		X				PRIVATE	X▪
Immanuel Lutheran	X	X				PRIVATE	X▪
James Monroe Middle School	X					PUBLIC	X▪
Jefferson Middle School		X				PUBLIC	✓▪
La Cueva High School		X		X ²	X	PUBLIC	X▪

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
Los Alamos High School	X				X	PUBLIC	✗
Los Lunas High School		X		X ²		PUBLIC	✓
Media Arts Collaborative Charter School	X	X			X	CHARTER	✓
Mescalero Apache School	X					BUREAU OF INDIAN ED	✓
Monte Vista High School (CO)	X				X	PUBLIC	✗
Oak Grove Classical Academy	X	X				PRIVATE	✗
Our Lady of Fatima	X	X	X			PRIVATE	✗
Our Lady of the Assumption	X	X	X			PRIVATE	✗
Peralta Elementary	X	X	X			PUBLIC	✓
Prince of Peace Lutheran		X	X			PRIVATE	✗
Rio Grande Enrichment Studies	X	X				HOME	✗
Rio Rancho High School	X	X				PUBLIC	✗
Route 66 Elementary School			X			PUBLIC	✓
Salam Academy	X	X	X			PRIVATE	✗
SAMS Academy	X					CHARTER	✓
San Antonito Elementary School			X			PUBLIC	✗
San Felipe de Neri School		X	X			PRIVATE	✗
San Juan College High School	X				X	PUBLIC	✗
Santa Fe High School					X	PUBLIC	✓
School of Dreams Academy	X	X	X		X	CHARTER	✓
St. Mary's School (Abq)	X	X				PRIVATE	✗
St. Pius X High School	X	X				PRIVATE	✗
St. Therese Catholic School	X	X				PRIVATE	✗
St. Thomas Aquinas School	X	X	X			PRIVATE	✗
Sue Cleveland High School	X	X		X	X	PUBLIC	✗
Sundance Elementary	X	X				PUBLIC	✓
S Y Jackson Elementary			X			PUBLIC	✗
Taos Academy					X	CHARTER	✓
Tohatchi High School	X					PUBLIC	✓
Wilson Middle School				X ²		PUBLIC	✓
TOTALS =	36	39	18	8 Schools 17 Teams	15	Public = 27 Private = 18 Charter = 12 Home = 2 BIE = 1	Title I = 38.3%

✓ = Title I School

✗ = Not Title I School

x = Fielded "x" # Regional Science Olympiad Teams

*In addition to K-12 schools, several other STEM partners attended the Research Challenge Bootcamp including those from: UNM Valencia, New Mexico State University, Adams State University (CO), and The Supercomputing Challenge

APPENDICES

Volunteer Hours & Value of Time

Research Challenge Statistics

JSHS Statistics

Science Olympiad Statistics

Awards Values

Award Donors List

Schools Served

2019-2020 Volunteer Hours & Value of Time

2020 Central NM Science & Engineering Research Challenge	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Category Judges <i>(8 hrs per judge @ \$30/hr avg in-kind time donation; includes 4th/5th Judges)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Judge Chairs/Master Chairs <i>(25 hrs per judge @ \$30/hr avg in-kind time donation)</i>	30	750	\$22,500.00
Special Awards Judges <i>(4 hrs per judge @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
4th/5th Grade Judging Coordinator <i>(8 hrs @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Special Awards Judging Coordinator <i>(40 hrs @ \$30/hr avg in-kind time donation)</i>	1	20	\$600.00
Registration Volunteers <i>(3 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Registration Volunteers Coordinator <i>(40 hrs @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Display & Safety Inspectors <i>(4 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Display & Safety Committee Chairs <i>(15 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Speakers & Presenters <i>(2 hrs per speaker/presenter @ \$50/hr avg in-kind time donation)</i>	<i>Due to the cancellation of most Research Challenge activities this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
TOTAL SERC VOLUNTEERS =	31	770	\$23,100.00

2020 Advisory Board Members	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Board Members - Volunteer <i>(8 hrs per board member @ \$30/hr avg in-kind time donation)</i>	17	136	\$4,080.00
ADVISORY COUNCIL =	17	136	\$4,080.00

2020 Central NM Science Olympiad	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Events with Volunteer Event Supervisors <i>(16 hrs per ES for prep & facilitation @ \$30/hr avg in-kind time donation; some ES's prepared & supervised more than one of the 44 events; time for each event is counted here)</i>	44	704	\$21,120.00
Other Volunteers <i>(Average 4 hrs each; Average 1 per event @ \$30/hr avg in-kind time donation)</i>	40	160	\$4,800.00
SO VOLUNTEERS =	84	864	\$25,920.00

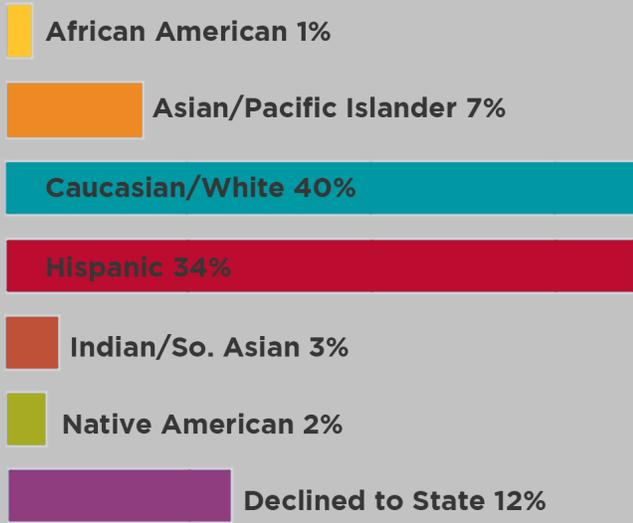
2020 SW Junior Science & Humanities Symposium (JSHS)	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
Judges <i>(8 hrs per judge @ \$30/hr avg in-kind time donation)</i>	18	144	\$4,320.00
Judging Coordinator <i>(40 hours @ \$30/hr avg in-kind time donation)</i>	<i>Due to the cancellation of many JSHS activities, this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
Keynote Speaker <i>(4 hrs @ \$40/hr avg in-kind time donation)</i>	<i>Due to the cancellation of many JSHS activities, this category of volunteer was not utilized in 2020, however, we did have a number of volunteers sign up before the cancellation.</i>		
JSHS VOLUNTEERS =	18	144	\$4,320.00

	TOTAL # Volunteers	TOTAL # Volunteer Hours	TOTAL Value Volunteer Hours
FY20 GRAND TOTALS =	150	1914	\$57,420.00

Volunteer time value calculated at \$30/hour which is higher than standard \$22.14/hour, but majority of our judges/volunteers are STEM professionals/retirees whose hourly pay rate is significantly higher than even \$30/hour. Speakers/Presenters all high level professionals, so their time was valued at an average of \$50/hour - significantly less than the hourly rate of several of them.

Central NM STEM Research Challenge 2020

Race/Ethnicity

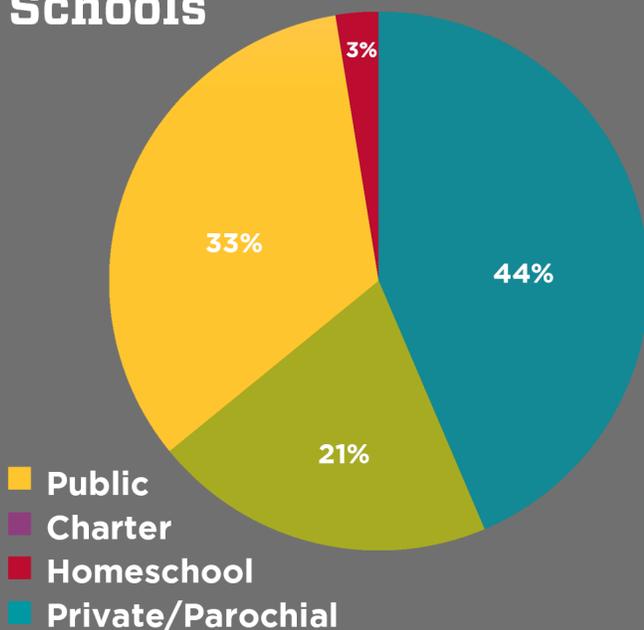


New Mexico students competitors were awarded over \$42,000.00!

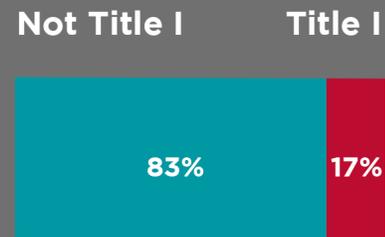
Gender



Schools



Title I

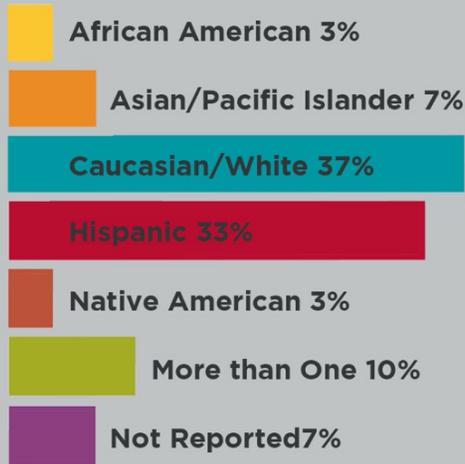


Over 50 high school students participated in our 100% virtual competition in 2020

*Showing data for those schools/500 students registered versus those that fully participated due to COVID-19

Junior Science and Humanities Symposium 2020

Race/Ethnicity

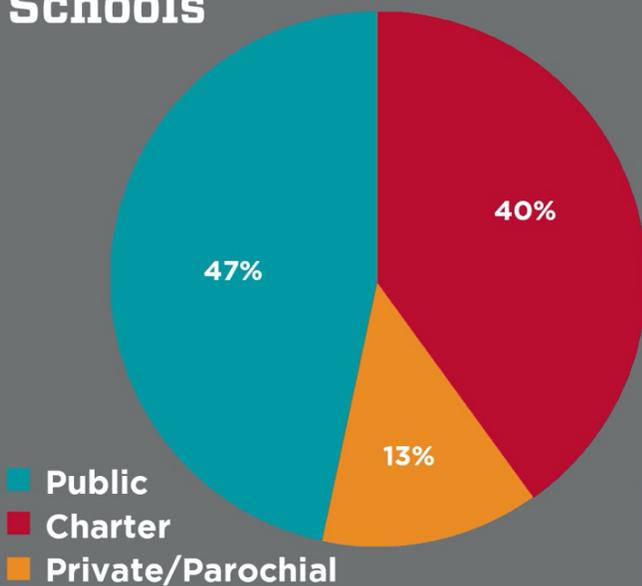


In 2020 the SW Region JSHS hosted 30 students from 15 schools

Gender



Schools



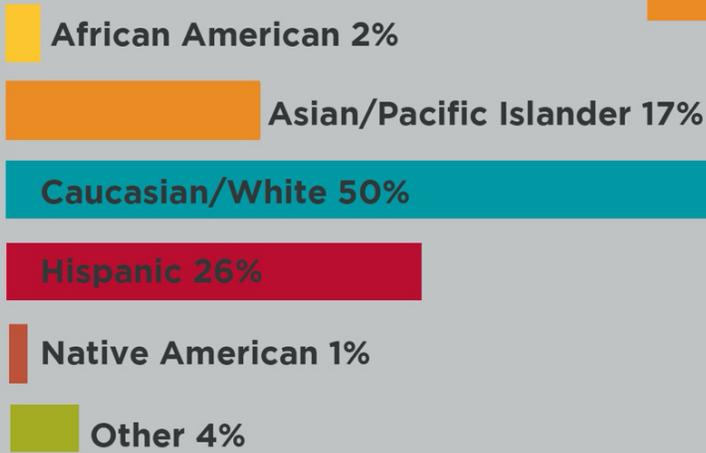
Title I



Donors paid \$4,000.00 in awards!

Science Olympiad 2020

Race/Ethnicity

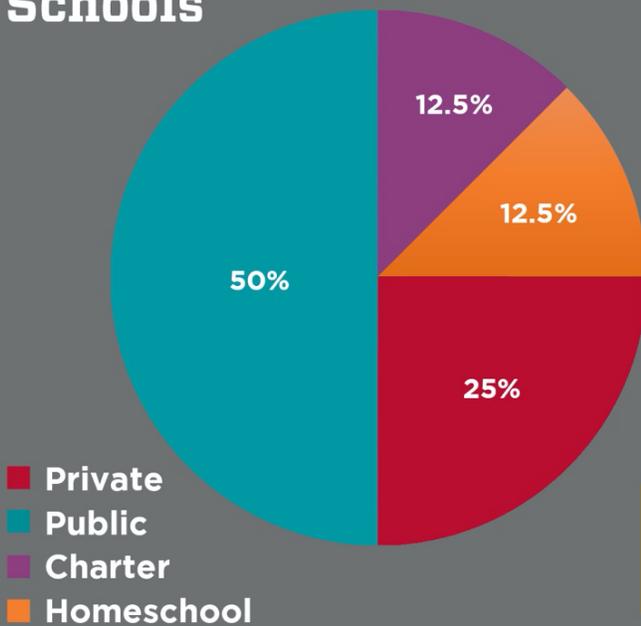


Science Olympiad offered 43 events and had 27 volunteers

Gender



Schools



Title I



Volunteers donated over 900 hours in 2020!

2020 Central NM Science & Engineering Research Challenge AWARDS

Special Awards - Directly Donor Paid \$625.00

Special Awards - Office Paid \$35,850.00

Top of Category Awards - Office Paid \$5,725.00

CNM-SERC AWARDS = \$42,200.00

2020 Central NM Science Olympiad AWARDS

Science Olympiad - Trophies, Medals, etc. \$1,000.00

SCIENCE OLYMPIAD AWARDS = \$1,000.00

2020 SW Region Junior Science & Humanities Symposium AWARDS

SW Region JSHS - Donor Paid \$4,000.00

SW JSHS AWARDS = \$4,000.00

TOTAL AWARDS *(all programs)* = **\$47,200.00**



Italic - committed to donate special award(s) in 2020 but unable to award monies due to cancellation of 2020 Research Challenge

BOLD - did award prize money in 2020 to students who participated in the smaller virtual competition.

Abrazo Homes

AEgis Technology Group & the Appel Family

AIC General Contractors, Inc.

Albuquerque African Violet Club

Albuquerque Area Extension Master Gardeners

Albuquerque Astronomical Society

Albuquerque Radio Control Club

Albuquerque Rocket Society

Albuquerque Soaring Club

Allen Sigmon Real Estate Group

American Association of University Women

American Chemical Society - Central New Mexico Section

American Institute of Aeronautics and Astronautics

American Meteorological Society

American Psychological Association

American Society of Safety Professionals - NM Chapter

Argus Investment Realty, Inc.

ASHRAE NM Chapter

ASM (Materials Information Society)

Association for Women Geoscientists

Association of Old Crows

Baca & Howard P.C.

Bank of Albuquerque

bigbyte.cc

Bohannon Huston

Bridgers & Paxton Consulting Engineers

Broadcom

CBRE

Chavez-Grieves Consulting Engineers

Civil Air Patrol - New Mexico Wing

CliftonLarsonAllen

Climate Change New Mexico

Consensus Planning

CREW (Commerical Real Estate Women)

Dave & Rhonda Hill

Dekker/Perich/Sabatini

Directed Energy Profession Society

Department of Defense

Duke City Commercial

Enchanted Lens Camera Club

ENLACE Statewide Collaborative

Enterprise Builders Corporation

Explora Science Center and Children's Museum

FBT Architects

First Citizens Bank

Foreman Family

Geltmore, Inc.

Genius Olympiad

Goodman Realty Group

The Hartman & Majewski Design Group

Home Builders Association of Central NM

Huning LLLP

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Improve Group

International Test & Evaluation Association, Roadrunner Chapter

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Sedberry & Associates

Sheila Doucette

SIARZA Social Digital

SMPC Architects

Society for In Vitro Biology

Society of Women Engineers, Central New Mexico Section

Sparling Construction Co.

Springer 5 Investments

Studio Southwest Architects, Inc.

Sun Vista Enterprises, Inc.

Sutin, Thayer & Browne

Tim Eichenberg, NM State Treasurer

Titan Development

Todd Thompson

Tom Grossman

Trinity Section of the American Nuclear Society

United States Air Force

United States Metric Association

United States Navy and Marine Corps

University of New Mexico College of Pharmacy

University of New Mexico Health Sciences Center

UNM Department of Neurosciences

U.S. Agency for International Development (USAID)

Vigerust Family

Water Environment Federation

Wells Fargo Bank

Wilger Enterprises Inc.

Wood Group PLC

Yale Science & Engineering Association, Inc.

Wood Group PLC

Yale Science & Engineering Association, Inc.

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teacher participants!**

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NM STEM-H Connection Website

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