



UNM

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*STEM-H Center*



# Annual Report

## 2015-2016

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# MISSION

*The **UNM STEM-H Center** advances **K-12 STEM-H** teaching and learning through outreach, research and education activities. **STEM-H = Science Technology Engineering Math & Health.***

Our mission is accomplished by, but not limited to...

- Cultivating strategic STEM-H education focused partnerships and collaborations among UNM faculty/staff and within the community (public-private) to increase and sustain engagement and create opportunities to increase the collective impact of STEM-H education related endeavours
- Developing, facilitation and/or coordination of innovative STEM-H Educator Professional Development opportunities
- Developing, facilitation and/or coordination of STEM-H-focused student researcher workshops
- Managing STEM-H focused academic competitions for 4<sup>th</sup>-12<sup>th</sup> grade students
- Engaging in STEM-H education focused policy research and advocacy
- Providing excellent customer service throughout all of our activities

# VISION

*We are a **recognized leader** in the K-12 STEM-H teaching & learning community in NM and beyond.*

*We serve as a **coordinating body** for University of New Mexico K-12 STEM-H education outreach activities in order to support the University community in its efforts to collectively reach key system-wide STEM-H education goals including increasing the recruitment, retention, and graduation of STEM-H majors.*

*We provide a **comprehensive center** for K-12 STEM-H education resources, outreach programs, and support services.*

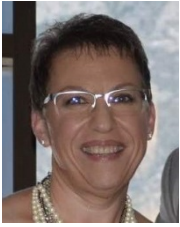
*We are a **hub** for K-12 STEM-H teaching and learning best practices and innovation.*

*We facilitate the **cultivation** and **support** of strategic STEM-H education focused **collaborations and partnerships.***

# STEM-H CENTER TEAM VALUES

1. We operate with a sense of **PURPOSE** and the desire to leave a lasting **LEGACY** in the field of STEM-H education.
2. We operate, at all times, with **INTEGRITY** and **COURTESY**.
3. We conduct our business in the spirit of **COOPERATION**.
4. We are open to **CHANGE**, encourage **CREATIVITY**, and strive for **INNOVATION**.
5. We are **ACCOUNTABLE** for our actions and are **COMMITTED** to the mission of the organization.
6. We are **DEPENDABLE** and **COMPETENT**. Our team members, as well as our constituents, know we will deliver what we promise.
7. 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



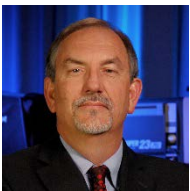
As I close out my 14<sup>th</sup> year as Director of this amazing organization, there is still much ongoing discussion on a national level regarding that fact that U.S. students continue to lag behind those in other countries, especially in math and science. Employers attest to the fact that there are too few minority & female graduates in the pool of available STEM-H talent. Gains in those and other areas are not just dependent upon providing students with in-depth, meaningful (& real-world connected), hands-on STEM-H learning opportunities, but also upon providing STEM-H educators with high quality professional development that will impact the students in their classrooms. According to New Mexico's Federal R&D and STEM Jobs Report 2013, there will be 53,000 STEM related jobs to fill in New Mexico by 2018. There is work to be done!!

It takes a team of partners/collaborators/supporters to make the STEM-H Center successful in its efforts to advance STEM-H education in Central NM and beyond! 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.

As a now integrated part of the UNM Health Sciences Center Office for Diversity, the STEM-H Center, while retaining its identity and function as a center, now has more opportunities to share resources, offer mutual support, and create growth in the future. We have found a strong, passionate, and supportive home! I continue to be amazed by the number of individuals and organizations connected to the STEM-H Center and its programs/services. 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 M. Kinsman, MS, PMP, Director/Senior Program Manager***

## From the Advisory Board



The UNM STEM-H Advisory Board reflects a robust and diverse group of community members and educators united in our common desire to build a vibrant STEM-H framework for New Mexico's students. We began the year with discussions about how best to encourage participation by students, parents, and educators. While participation is still robust, we all recognize the effects a weak economy, disruption in the education establishment, and pressures on working and underemployed families can have on extracurricular activities. The UNM STEM-H Advisory Board also recognizes a decline in familiarity and comfort with STEM-H concepts.

To that end, the Advisory Board seeks to expand the impact our programs can have, not just on our students, but on the community as a whole. Attacking flagging interest and fear of STEM-H concepts is seen as a precondition to increasing participation across the board. To advance a solution, the Advisory Board authorized a subcommittee to coordinate with New Mexico PBS in the creation of a series of television spots designed to "de-mythologize" the scientific/engineering methods. The approach is to help all of us understand that we use these methods to solve problems every day in the most mundane activities, usually without recognizing we are doing so.

Helping parents, students, and educators overcome a lack of familiarity with these tried and true ways to go about solving problems, is fundamental to the mission and vision of UNM STEM-H.

***Franz Joachim, Chair of the UNM STEM-H Advisory Board, General Manager & CEO of New Mexico PBS***

# Host Institution

## About UNM



Founded in 1889 as New Mexico's flagship institution, the [University of New Mexico](#) now occupies nearly 800 acres along old Route 66 in the heart of Albuquerque, a metropolitan area of more than 900,000 people. From the magnificent mesas to the west, past the banks of the historic Rio Grande to the Sandia Mountains to the east, Albuquerque is a blend of culture and cuisine, styles and stories, people, pursuits and panoramas. Offering a distinctive campus environment with a Pueblo Revival architectural theme, the campus buildings echo nearby Pueblo Indian villages. The nationally recognized campus arboretum and the popular duck pond offer an

outstanding botanical experience in the midst of one of New Mexico's great public open spaces.

## The People

As a Hispanic-Serving Institution, the University represents a cross-section of cultures and backgrounds. Approximately 28,500 students attend main campus with another approximately 7,600 students at branch campuses and education centers.

UNM boasts an outstanding faculty that includes a Nobel Laureate, two MacArthur Fellows, 35 Fulbright scholars and several members of national academies. Faculty at UNM publish in many professional journals including *Scientific American*, *The New England Journal of Medicine* and *Nature*. UNM professors have been quoted in *Newsweek*, *Los Angeles Times*, *Business Week*, *People Magazine*, *Parade Magazine*, *U.S. News and World Report*, and *The New Yorker*, among others. They have shared their expertise on CNN, the Today Show, Good Morning America, Nova National Geographic and other news shows.

UNM employs more than 20,000 people statewide, including employees of [University Hospital](#). It has more than 159,000 active alumni, with Lobos in every state and more than 1,400 alumni outside the U.S. More than half of UNM's alumni choose to remain in New Mexico.

## The Programs

UNM is a place where cutting-edge research and creative endeavors flourish. UNM research injects millions of dollars into New Mexico's economy, funds new advancements in healthcare, and augments teaching – giving students valuable hands-on training in state-of-the-art laboratories.

The Health Sciences Center is the state's largest integrated health care treatment, research and education organization. U.S. News and World Report's 2015 edition of "America's Best Graduate Schools" ranks the [UNM School of Medicine](#) 40th in primary care and 83rd in research, while specific areas also rank again among the top 10 – [rural medicine](#), second, and [family medicine](#), ninth. Additionally, in health disciplines, UNM's [nursing/midwifery program](#) is ranked 5<sup>th</sup>, [UNM School of Law](#) is ranked 72<sup>nd</sup>, while ranking ninth in clinical training. [UNM College of Fine Arts](#) is ranked 53rd, with its [photography program](#) ranked fifth in the nation. The engineering program is ranked 87th nationally, with [electrical engineering](#) coming in at 53rd, and [Chemical Engineering](#) ranking at 58th.

UNM is the only Hispanic-Serving Institution in the U.S. that is also classified a Carnegie Research University with Very High Activity. Recently, Hispanic Business Magazine ranked four University schools among the top 10. The list included: UNM School of Law, seventh; UNM [Anderson School of Management](#), fourth; UNM School of Medicine, seventh; and the UNM [School of Engineering](#), sixth.

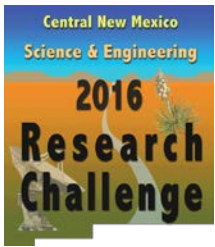
Among the University's outstanding research units are the [Center for Advanced Research Computing](#), [Cancer Center](#), New Mexico Engineering Research Institute, [Center for High Technology Materials](#), [Design Planning Assistance Center](#), and the [Mind Research Network](#).

General information regarding the University of New Mexico obtained from the UNM website located at <http://www.unm.edu/welcome/about/index.html>.



# 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 Science & Engineering 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 Science & Engineering 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 Science & Engineering Research Challenge* qualifies students to participate in the State Science Fair and sends top qualifying students and their teacher/sponsors to the Intel International Science & Engineering Fair.

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. Unwittingly, this nation is 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 scientific and engineering fields by promoting those fields as feasible academic and career choices. “Science Fair” competitions encourage curiosity, which is the start of the discovery process. Research competitions reward discovery and innovation. They promote creativity through the discovery of new problems, inventions, ideas, and solutions.

The Regional competition serves students and science teachers, grades 6 - 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 500 students participated in the *2016 Central NM Science & Engineering Research Challenge* with minimal growth anticipated again in 2017. In 2016, a *4<sup>th</sup> & 5<sup>th</sup> Grade Research Expo* continued in conjunction with the *Central NM Science & Engineering Research Challenge* and hosted over 40 students from the region. *Central NM Science & Engineering Research Challenge* does not discriminate on the basis of race, color, religion, national origin, physical or mental disability, age, sex, sexual orientation, ancestry, or medical condition.

As an Intel 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 8<sup>th</sup> grade student researchers to ISEF as Student Observers each year. In 2016, **Priyanka Jain** (*senior, La Cueva High School*) took a 2<sup>nd</sup> Place Grand Award in her category and **Rusty Ludwigen** (*freshman, Early College Academy*) won a 4<sup>th</sup> Place Grand Award in his category.

## 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 2016, the **Central NM Science Olympiad** offered 41 events and had 35 volunteer Event Supervisors and Event Assistants from UNM School of Engineering, UNM Department of Orthopedics & Rehabilitation, Eastern New Mexico University, US Army Corps of Engineers, Sandia Labs, National Weather Service, Engineering for Kids, U.S. Bureau of Reclamation, City of Albuquerque Forensic Science Center, PNM, and the NM Museum of Natural History & Science. There were a total of 24 competing teams from 16 middle and high schools in the region.

In 2016, two of **Central NM Science Olympiad's** teams won the NM State Science Olympiad and went on to compete at the National Science Olympiad Tournament in May 2016. Congratulations to the **Albuquerque Area Homeschoolers High School Team** and the **Albuquerque Area Homeschoolers Middle School Team** on making it to the National Science Olympiad competition!

## JUNIOR SCIENCE & HUMANITIES SYMPOSIUM



The UNM STEM-H Center took on management of the **SW Region Junior Science & Humanities Symposium (JSHS)** in 2013-2014 and continues engage in efforts to grow the program over the next several years. The STEM-H Center hosts the Southwest regional JSHS symposium. 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 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 2016, the *SW Region Junior Science & Humanities Symposium* hosted **23 students** from **14 schools** at the onsite level of the competition. Five students qualified to compete at the **2016 JSHS National Competition** – **Priyanka Jain** (La Cueva HS), **Baris Ekim** (United World College), **Elise Koskelo** (Los Alamos HS), **Rusty Ludwigsen** (APS Early College Academy), and **Evan Crockett** (V. Sue Cleveland HS). At the JSHS Nationals, **Rusty Ludwigsen** was awarded **3<sup>rd</sup> Place in Life Sciences and a \$4,000 scholarship**.

## **Education** *(K-12 STEM-H Educator focus)*

### **STEM EDUCATOR PROFESSIONAL DEVELOPMENT WORKSHOP SERIES**

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 school. The capstone workshop, unique to the STEM-H Center, is *“Project Management for STEM-H Educators”*, the development of which was a collaborative effort with the Continuing & Professional Education Department at Virginia Tech (Jennifer Carter, MA, PMP). This workshop offers STEM-H educators project management skills that not only give them the tools to manage a student research program, but also the ability to easily apply for supplemental funding using the language of business/industry, thus giving them a leg up in the world of competitive philanthropy!

In 2015-2016, workshops included Research Challenge Bootcamp (on-site and online), PM for STEM-H Educators, Managing Local STEM-H Competitions, and Responsible Conduct of Research & Human/Animal Protections in Student Research (on-site & online). The STEM-H Educator Professional Development Workshops will continue to evolve over time as needs are identified and incorporated.

In June 2016, the STEM-H Center Director presented workshops at the NM Public Education Department’s STEM Symposium at which 400 teachers from around the state spent two days participating in high quality professional development opportunities.

### **STUDENT PROJECT DEVELOPMENT BOOTCAMP**



The **STEM-H Student Project Development Bootcamp** provides 5<sup>th</sup>-12<sup>th</sup> grade student researchers with project development skills/support/resources along with training in Project Development, Responsible Conduct of Research, Statistics/Data Analysis, Judging Preparation, etc. The **STEM-H Student Project Development 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.

New in the Fall of 2016 is a collaboration with Explora Science Center whose amazing STEM-H educators will facilitate the Student Project Development Bootcamps AND physically host them at Explora!



## 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 FY17.

## PROJECT MANAGEMENT FOR STEM-H EDUCATORS PILOT PROJECT



With funding provided by Conoco Phillips, Project Management for STEM-H Educators was piloted by UNM's STEM-H Center for Outreach, Research & Education (STEM-H Center). It was designed to test the effectiveness of project management methodologies in education.

Project-based learning (PBL), the method of teaching through investigation and problem solving surrounding a specific topic or project, has become increasingly embedded in K-12 education as a result of both Common Core State Standards (CCSS) and the introduction of Next Generation Science Standards (NGSS). Research demonstrates that students in PBL classrooms receive higher scores than those in traditional classrooms, yet most K-12 STEM-H teachers are unprepared to manage such activities. UNM STEM-H Center posited that providing educators with Project Management skills proven effective in industry will better prepare teachers to execute problem/project-based learning methods.

UNM STEM-H Center recruited K-12 STEM educators who wanted to implement a STEM-related project. Teachers were identified in both the Albuquerque and Farmington, New Mexico areas (2 from Farmington, 4 from Albuquerque) to participate. In late summer 2015, participants received foundational training in project management methodologies and skills including planning, scheduling, facilitation, assessment, and evaluation. This training was provided in a hybrid manner involving both on-site and online modalities. The online training was not mandatory, but was made available to our participants free of charge via a pilot online PM course for educators offered by the Project Management Institute Educational Foundation (PMI-EF). Three out of six educators took and passed the “micro-credential” certificate program.

As indicated by analyses of responses to the PM Skills Assessments given prior to training, at the project mid-point, and again at the conclusion of the pilot project, all participants reported significant gains in their skill level and confidence with regard to most of the identified areas of Project Management. Five out of six of the participants managed fairly complex projects and integrated the vast majority of the PM knowledge areas into their practice. They all encountered some roadblocks (administrative support, funding, timing, other workload, etc.) which provided for them opportunities to identify “lessons learned” that will inform their future practice of PM skills. About half of the educators involved integrated opportunities to teach their students basic PM skills and by the end of the school year, had very functional student project teams who were employing project management principles and whose skill level in planning and executing fairly complex projects was significantly improved from the year previous. At the conclusion of the Fall 2015 training, one of the educators said, “Why exactly don’t they teach teachers about project management when they’re in college learning to be teachers? I wish I had learned this a LONG time ago!” There are still some obstacles to overcome in terms of “selling” the value of educators learning, using, and transferring to their students PM skills. However, in this small pilot, all six of the

participating educators found significant value in the skill set they developed and have integrated, to varying degrees, the use of PM skills in their everyday classroom teaching practices.

It would be useful, given adequate funding, to carry out a larger pilot of this project perhaps in collaboration with PMI-EF's new micro-credentials program for educators and perhaps focus on working with a co-located team of educators in one school to see if training a cohort of teachers to implement PM across their classrooms over a period of time as part of the implementation of Project Based Learning (PBL) increases student achievement as well as building a set of 21<sup>st</sup> Century Essential Skills in those students making them better prepared to enter post-secondary education and their future careers.



## Research/Policy/Advocacy

### NM STEM-H CONNECTION STATEWIDE WEBSITE



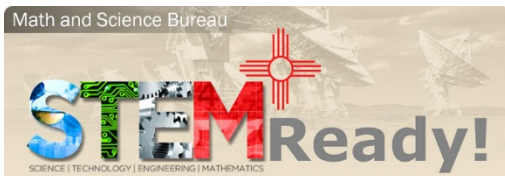
The **NM STEM-H Connection Website** contains robust, searchable, web-based databases of STEM-H education related people, programs, and initiatives. It is also a comprehensive website of NM STEM-H Education resources and tools with links to New Mexico specific and National sites. It is designed to encourage 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. Initial development funding for this project was provided by Conoco Phillips and Bank of America. Additional start-up and ongoing in-kind support from NM EPSCoR was also critical (URL for the site as well as ongoing site hosting). The site contents have been informed by the NM STEM Collective Impact Team's high priority action items. Phase 2 of the project has included several enhancements to the user experience, analytics/reporting development, and addition of a STEM-H Careers Exploration component.

Partnerships have been developed as part of the growth of the **NM STEM-H Connection** website with Science Buddies, NM PBS, STEMfinity, Arbor Scientific, and others...with more actively being cultivated and finalized. Phase 3 of development has begun with plans for a K-12 STEM Educators Community of Practice. This eSTEMH Community of Practice will include opportunities for STEM-H educators to connect and share information/resources, access free online professional development courses, find grant writing resources, and more. Enhancements to the Careers Exploration Area as well as an ongoing updating/improvements process will continue in the coming year. Grant funding via the UNM Health Sciences Center Office for Diversity for 2014-2015 paid some of the programming/management/ maintenance staffing costs for the website. Additional funding is always being sought to support other requested development and enhancements to the site.

## Development of Strategic STEM-H Education Partnerships/Collaborations

Below are examples (not an exhaustive list) of strategic STEM-H Education relationships/collaborations/partnerships that were developed, maintained, or cultivated out of the STEM-H Center for Outreach, Research & Education in 2015-2016:

- UNM Project ECHO & ECHO Education Collaborative
- ASU Center for Gender Equity in Science & Technology
- AISES
- Arbor Scientific
- EPSCoR
- HSC Institutional Animal Care & Use Committee
- UNM Human Protections Office
- Mission Graduate STEM Council
- National Girls Collaborative Project
- National Science Foundation
- NM Academy of Science
- NM Coalition of Charter Schools
- NM MESA
- NM Partnership for Mathematics & Science Education
- New Mexico PBS
- Santa Fe Indian School (w/ Office for Diversity)
- Community FaithLinks
- Foundations 4 Success, Inc.
- BrainHackers
- NM Public Education Department Math & Science Advisory Council
- NM Science Teachers Association
- Central NM STEM Ecosystem
- NM Supercomputing Challenge
- Science Buddies national website
- Southwest Indian Polytechnic Institute (NASA Grant Advisory Council)
- Southern Illinois University at Edwardsville STEM Center
- STEMConnector
- STEMfinity
- UNM Engineering Student Services & Outreach Programs
- Central NM STEM-H Ecosystem
- Explora Science Center
- UNM Los Alamos (Title 3 Grant)
- UNM Office of Research (faculty research support)
- UNM HSC Office for Diversity
- 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
- Virginia Tech Division of Continuing & Professional Development – Jennifer Carter



In June 2016, the STEM-H Center's Director concluded a 4-year appointment to the **NM Public Education Department's Math & Science Advisory Council** and was recognized for her service by the NM PED Math & Science Bureau Chief on behalf of the Secretary of Education on June 2, 2016 during the NM PED STEM Symposium.

## Policy/Advocacy

As part of the HSC Office for Diversity, we have continued working with the UNM Office of Government & Community Relations 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 Public Education Department's Math & Science Advisory Council, NM Partnership for Mathematics & Science Education, Mission Graduate STEM Council, External Advisory Committee for the Southwest Indian Polytechnic Institute – NASA Grant *"Information Technology Experiences Using Simulated Tele-Science Exploration of Mars"* (2014-2017), and the Internal Advisory Committee for the UNM School of Engineering: Center for Water and the Environment – NSF CREST Grant (2014-2019).

# 2015-2016 Advisory Board & Staff

## BOARD MEMBERS

### **Lynne Andersen**

NAIOP NM – Commercial Real Estate Development Association

### **Dr. Heather Allen, CPE**

Heather Allen & Associates

### **Dr. Mary Jo Daniel**

UNM Office of Research

### **Franz Joachim**

New Mexico PBS

### **Nels Hoenig**

American Society for Quality/PNM Resources

### **Leslie Keeney**

Rio Rancho High School

### **Reg Bourgeois**

US Army Corps of Engineers – ABQ District

### **Elaine Foreman**

Retired Nurse/Former Science Fair Parent

### **James Vigerust**

CBI Federal Services, Inc.

### **Dr. Patricia Wagner**

Albuquerque Public Schools – Retired

### **Connie Beimer**

Director, UNM Office of Government & Community Relations

### **Ray Nance**

Retired STEM Educator/PhD Candidate in Educational Leadership

### **Dr. Lorna Joachim**

UNM Department of Psychology

### **Turtle Haste**

APS Middle School Science Educator

### **Dr. Valerie Romero-Leggott**

HSC Office for Diversity

### **Dr. Leonard Duda**

Sandia National Laboratories

### **Joshua Corbin**

HSC Office for Diversity

### **Gail Vavruska-Marcum**

PNM Resources

### **John Gallegos**

NAIOP-NM Commercial Real Estate Devel. Assoc.

### **Debra Novak**

NM Museum of Natural History & Science/NMSTA

## STAFF MEMBERS

### **Karen Kinsman, MS, PMP**

Director/Senior Program Manager

### **Erin Garcia, JD**

Program Specialist

### **Diana Padilla**

Administrative Assistant

### **Laura Arguelles**

Analyst/Programmer/Web Developer



# **Financial Information & Implications:**

## **Background**

The 5-year comparison of STEM-H Center revenues, expenses, and (revenues – expenses) brings to light several issues. From FY12 through FY15, the STEM-H Center carried forward positive balances at the end of each fiscal year. The STEM-H Center receives an Institutional Sponsorship from the Office of Research of \$170,000 annually which goes into what is called an F&A Index. Student/Participant Entry Fees are also deposited into the F&A Index as they are not considered donations and are not allowable Foundation Index deposits. All remaining funds are raised via sponsorships and donations which 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.

A Memorandum of Understanding exists between the Office of the Provost and the Health Sciences Center that went into effect in mid-2015. That MOU contains an agreement that the main campus Office of Research will continue providing the \$170,000 Institutional Sponsorship through FY17. Beginning in FY18, the MOU dictates a 50/50 split of that sponsorship between the Office of Research and the Health Sciences Center. At this time, that \$170,000 covers the vast majority of staff salaries/fringe benefits, but covers no other expenses and does not allow for any salary increases in the foreseeable future. Given UNM's current financial position along with the impending probable cuts in State funding due to the dismal condition of the NM State budget, we are unable, at this time, to make any predictions about the future of the Institutional Sponsorship. It is certainly our hope that the support will continue as a joint sponsorship from the Office of Research and the Health Sciences Center as laid out in the 2015 MOU.

Historically, the STEM-H Center has raised the revenue needed to cover its program operating expenses (aside from staff salaries and fringe benefits covered by the Office for Research Institutional Sponsorship as well as some administrative expenses now covered by the Health Sciences Center Office for Diversity where the STEM-H Center resides). For the past three years, the STEM-H Center staff has worked hard to identify ways to decrease expenses knowing the economy was not favorable for robust fundraising.

## **Current Financial Issues**

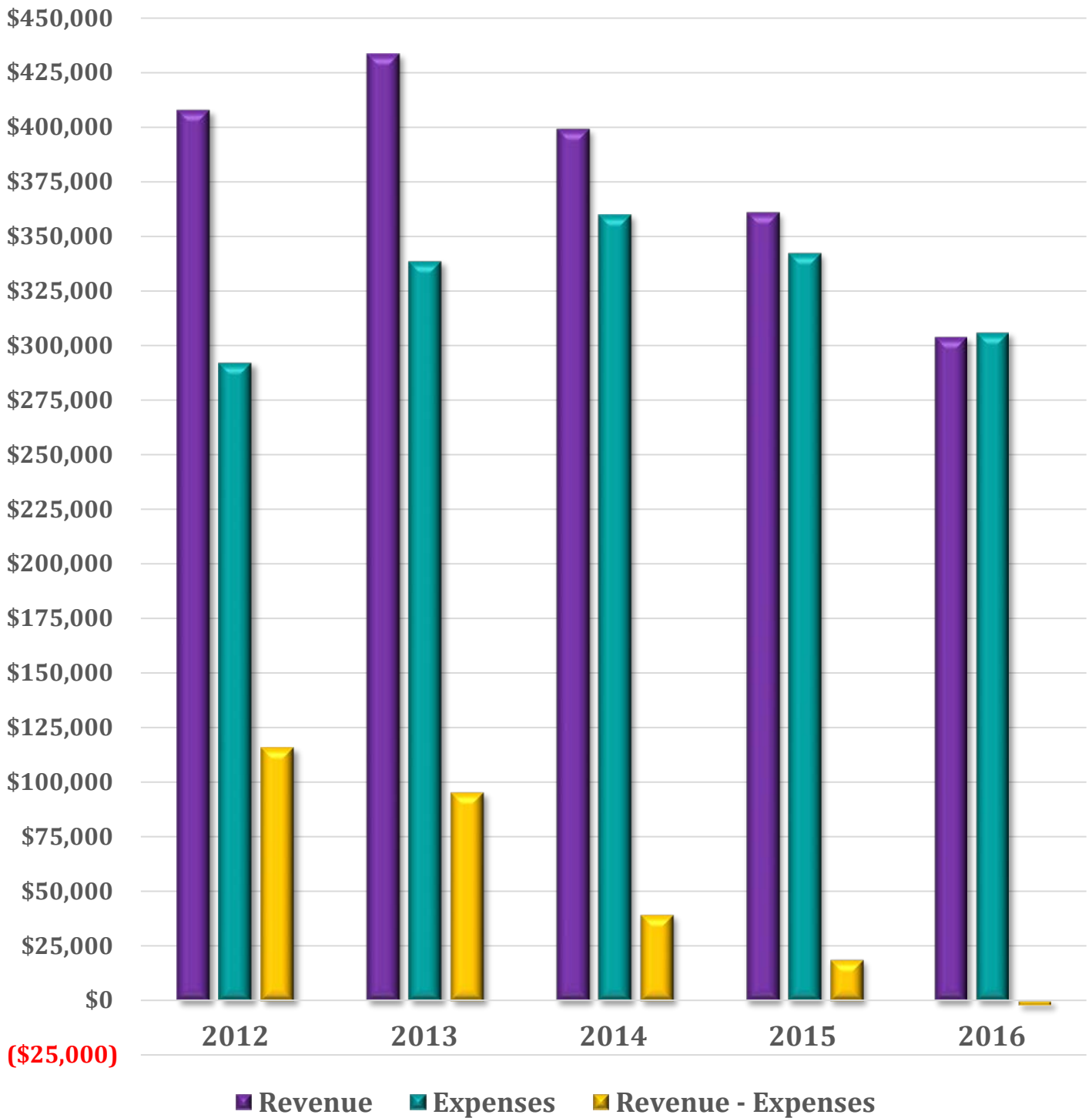
While overall annual expenses have decreased by nearly \$54,000 from the 2014 level, annual revenue has also, unfortunately, decreased by nearly three times that amount creating a situation in which revenue generation has not kept pace with program operating costs. The decrease in revenue has resulted predominantly from a troubled economy that necessitated funders pulling back the amount of money they were able to donate in support of organizations like the STEM-H Center as well as the gradual spending down of the carryover mentioned above. Since our economy took a turn for the worse a few years ago, donor organizations have, in many cases, had to revisit their giving strategies, redefine their giving priorities, and those decisions resulted in organizations like ours often receiving either lesser amounts from long-time funders or those long-time supporters pulling back completely.

Also impacting the STEM-H Center's bottom line is the fact that the organization went through three physical moves in under 18 months. Those moves created expenses that had been unanticipated and served to be a significant contributing factor to the depletion of the remaining reserves the STEM-H Center had in its indexes. Increases in personnel costs that have not been matched by increases in the amount of the institutional sponsorship from the UNM Office for Research have also impacted the STEM-H Center's bottom line.



In FY16, for the first time in many years, the STEM-H Center ended the fiscal year with a deficit of just over \$2,000. The STEM-H Center staff is working to carefully identify more ways to decrease expenses as well as considering a variety of ideas for raising additional revenue (ex: individual donor campaign, etc.) moving forward.

## STEM-H Center 5 Year Financial Comparison



## FY16 BUSINESS/COMMUNITY GROUP DONORS

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

DONOR ORGANIZATION	VALUE	LEVEL
UNM Office of Research	\$170,000.00	Plutonium
NAIOP - NM Chapter <i>(includes \$20k from member org's w/in list)</i>	\$25,000.00	Gold
UNM HSC Office for Diversity	\$25,000.00	Gold
Lockheed Martin/Sandia National Laboratories	\$20,000.00	Gold
UNM Scholarship Office	\$15,000.00	Platinum
American Academy of Science - JSHS	\$12,500.00	Silver
PNM Resources	\$8,000.00	Zinc
UNM School of Engineering	\$8,000.00	Zinc
UNM Health Sciences Center/School of Medicine	\$7,500.00	Zinc
Albuquerque Journal	\$5,000.00	Zinc
Intel	\$5,000.00	Zinc
Ethicon Endosurgery	\$3,500.00	Copper
NM PBS	\$2,500.00	Copper
Northrop Grumman Mission Systems	\$2,000.00	Aluminum
Advanced Communications	\$1,500.00	Aluminum
NM Biomechanical & Biomedical Association	\$1,500.00	Aluminum
Bohannon Huston	\$1,400.00	Aluminum
UNM Center for Water and the Environment	\$1,200.00	Aluminum
Albuquerque Geological Society	\$1,030.00	Aluminum
bigbyte.cc Corp	\$1,000.00	Aluminum
KOAT-7/Byron Morton	\$1,000.00	Aluminum
American Society for Quality, (ASQ), Albuquerque Section 1400	\$600.00	Carbon
UNM College of Pharmacy	\$550.00	Carbon
Boeing	\$500.00	Carbon
Bridgers & Paxton Consulting Engineers	\$500.00	Carbon
Cauwels & Stuve Realty and Development Advisors, LLC	\$500.00	Carbon
CliftonLarsonAllen	\$500.00	Carbon
CREW (Commercial Real Estate Women)	\$500.00	Carbon
CYRQ Lightning Dock Geothermal Energy	\$500.00	Carbon
Flintco	\$500.00	Carbon
Home Builders Association of Central NM	\$500.00	Carbon
Huning Ltd. Partnership	\$500.00	Carbon

IEEE Photonics Society International Year of Light	\$500.00	Carbon
Jaynes Corporation	\$500.00	Carbon
Keleher & McLeod	\$500.00	Carbon
Kiwanis Club of Coronado	\$500.00	Carbon
New Mexico Bank & Trust	\$500.00	Carbon
New Mexico Gas Company	\$500.00	Carbon
Old Republic National Title Insurance	\$500.00	Carbon
Raytheon	\$500.00	Carbon
UNM Communications & Marketing	\$500.00	Carbon
International Test & Evaluation Association , Roadrunner Chapter	\$460.00	Helium
American Chemical Society - Central NM Section	\$450.00	Helium
American Institute of Aeronautics and Astronautics	\$400.00	Helium
Albuquerque Soaring Club	\$360.00	Helium
American Vacuum Society	\$350.00	Helium
Explora Science Center and Children's Museum	\$350.00	Helium
New Mexico Solar Energy Association	\$320.00	Helium
Civil Air Patrol - New Mexico Wing	\$308.00	Helium
Albuquerque Area Extension Master Gardeners	\$300.00	Helium
Argus Realty & Development	\$300.00	Helium
Associated Contractors of New Mexico	\$300.00	Helium
CenturyLink	\$300.00	Helium
Dekker/Perich/Sabatini	\$300.00	Helium
Frontier Restaurant	\$300.00	Helium
General Mills	\$300.00	Helium
New Mexico Museum of Natural History and Science	\$300.00	Helium
Pure Water Technologies LLC	\$300.00	Helium
Sun Vista General Contractors	\$300.00	Helium
West Wood Realty LLC	\$300.00	Helium
Western States Fire	\$300.00	Helium
AIC General Contractors, Inc.	\$250.00	Helium
Brycon Construction	\$250.00	Helium
Century Sign Builders	\$250.00	Helium
Chavez-Grieves Consulting Engineers	\$250.00	Helium
CURB, Inc.	\$250.00	Helium
Economic Forum/ R.E.M. Properties	\$250.00	Helium
Enterprise Builders Corporation	\$250.00	Helium

Garrett Development	\$250.00	Helium
Geltmore, Inc.	\$250.00	Helium
Klinger Constructors	\$250.00	Helium
Los Alamos National Bank	\$250.00	Helium
Peacock Myers, P.C.	\$250.00	Helium
Pulte Homes	\$250.00	Helium
Sedberry & Associates	\$250.00	Helium
SMPC Architects	\$250.00	Helium
Titan Development	\$250.00	Helium
UNM Chapter of Sigma XI : The Scientific Research Society	\$250.00	Helium
Wilger Enterprises Inc.	\$250.00	Helium
Albuquerque Association for Gifted and Talented Students	\$200.00	Hydrogen
Allen Sigmon Real Estate	\$200.00	Hydrogen
AMEC Foster Wheeler	\$200.00	Hydrogen
Bank of New Mexico	\$200.00	Hydrogen
Build Green New Mexico	\$200.00	Hydrogen
Build New Mexico	\$200.00	Hydrogen
FBT Architects	\$200.00	Hydrogen
First Citizens Bank	\$200.00	Hydrogen
Installation Service Heating Cooling	\$200.00	Hydrogen
Lastrapes, Spangler & Pacheco, PA	\$200.00	Hydrogen
Lawrence M. Wells/ Montgomery & Andrews P.A.	\$200.00	Hydrogen
NM Engineering Foundation	\$200.00	Hydrogen
Society of Women Engineers , Central NM Section	\$200.00	Hydrogen
Terracon	\$200.00	Hydrogen
United States Public Health Service	\$200.00	Hydrogen
Anderson Abruzzo International Balloon Museum Foundation	\$180.00	Hydrogen
Albuquerque Astronomical Society and Accent Southwest Windows	\$175.00	Hydrogen
Carnes & Co.	\$175.00	Hydrogen
United States Navy and Marine Corps	\$175.00	Hydrogen
Alvarado Management	\$100.00	Hydrogen
American Society of Safety Engineers - NM Chapter	\$150.00	Hydrogen
Enchanted Lens Camera Club	\$150.00	Hydrogen
Land Advisors Corp.	\$150.00	Hydrogen
National Museum of Nuclear Science & History	\$150.00	Hydrogen
New Mexico Trout	\$150.00	Hydrogen

Sutin, Thayer & Browne	\$150.00	Hydrogen
American Council of Engineering Companies New Mexico	\$150.00	Hydrogen
Albuquerque African Violet Club	\$100.00	Hydrogen
Catherine J. Cullen - RE/MAX Alliance Realtors	\$100.00	Hydrogen
CBRE	\$100.00	Hydrogen
Coldwell Banker Las Colinas	\$150.00	Hydrogen
Daskalos Properties	\$100.00	Hydrogen
Don Chalmers Ford	\$100.00	Hydrogen
ENLACE Statewide Collaborative Excellence	\$100.00	Hydrogen
Myers, Oliver & Price	\$100.00	Hydrogen
New Mexico MESA, Inc.	\$100.00	Hydrogen
Reid & Associates	\$100.00	Hydrogen
Springer 5 Investments	\$100.00	Hydrogen
Trinity Section of the American Nuclear Society	\$100.00	Hydrogen
Albuquerque Isotopes	\$60.00	Hydrogen
Cliffs Amusement Park	\$60.00	Hydrogen
Highway Employees Assoc. of the NM Dept. of Transportation	\$60.00	Hydrogen
New Mexico Science Teachers Association	\$50.00	Hydrogen
NM Speech, Language & Hearing Association	\$50.00	Hydrogen
UNM Bookstores	\$50.00	Hydrogen
<b>FY2016 BUSINESS &amp; COMMUNITY ORGANIZATION TOTAL VALUE OF SPONSORSHIPS/DONATIONS =</b> <i>**Total is less \$20,000 that reflects NAIOP member organizations' donations for student/teacher awards that are reflected in individual business listings above.**</i>	<b>\$325,313.00</b>	

## STEM-H Center: FY16 INDIVIDUAL DONORS

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

<b>DONOR</b>	<b>VALUE</b>	<b>LEVEL</b>
Dennis Spanogle	\$2,500.00	Einstein
Len & Pat Duda	\$1,500.00	Darwin
Foreman Family	\$1,350.00	Darwin
Marie Martignoni	\$1,000.00	Darwin
Mary Fuka	\$800.00	Carver
Gail Vavruska-Marcum	\$650.00	Carver
Jerry Cross	\$600.00	Carver
Randi Buck	\$600.00	Carver



Van Pham	\$600.00	Carver
Gerard & Mildred Kaye	\$500.00	Carver
Keith Meyer & Mary Meyer, Ph.D	\$500.00	Carver
Ed Thomas	\$400.00	Newton
Kris Jaffa	\$400.00	Newton
Cordwell Family	\$250.00	Darwin
Lynne Anderson & John Gallegos	\$250.00	Newton
Paula Hayden	\$250.00	Newton
James Topmiller	\$200.00	Ochoa
Todd Thompson	\$200.00	Ochoa
Charles P. Price III	\$150.00	Ochoa
Patricia Wagner	\$150.00	Ochoa
Bobbi Kay & Rob Nelson	\$100.00	Ochoa
Dave and Rhonda Hill	\$100.00	Ochoa
Dave Giddens and Elizabeth Jeppesen Family	\$100.00	Ochoa
John Henderson & Trudy Jones	\$100.00	Ochoa
John Lewinger	\$100.00	Ochoa
Michelle Henry	\$100.00	Ochoa
Tom Grossman	\$100.00	Ochoa
Jeff Tsao	\$75.00	Gates
Debbie Dupes	\$50.00	Gates
James Vigerust & Family	\$50.00	Gates
Mark Burton	\$50.00	Ross
Richard Cuddihy	\$50.00	Gates
Appel Family	\$25.00	Ross
Sheila Doucette	\$25.00	Ross
<b>FY2016 INDIVIDUAL SPONSORSHIPS/DONATIONS =</b> <i>**Vast majority of Individual donations currently reflect either student/ teacher awards at Research Challenge OR in-kind donations of consultation services.**</i>	<b>\$13,875.00</b>	
<b>FY2016 COMBINED MONETARY/IN-KIND SPONSORSHIPS &amp; DONATIONS TOTAL =</b>	<b>\$339,188.00</b>	

**Thank You!**

# Schools Served in FY16

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. The schools listed below participated in the Central NM Science & Engineering Research Challenge in 2016 unless otherwise noted. Schools that participated in additional programs or other programs are also indicated (*see legend at end of list*).

- |  |  |
|--|--|
| Albuquerque Academy <sup>1</sup>                       | Legacy Academy                               |
| Albuquerque Christian School <sup>5</sup>              | Manzano High School <sup>3</sup>             |
| Albuquerque High School                                | Media Arts Collaborative Charter School      |
| Albuquerque Institute of Math & Science <sup>1,3</sup> | North Valley Academy                         |
| Albuquerque School of Excellence <sup>1</sup>          | Our Lady of Fatima Catholic School           |
| Amy Biehl Charter High School <sup>3</sup>             | Our Lady's Assumption Catholic School        |
| Annunciation Catholic School                           | Peralta Elementary School                    |
| The ASK Academy <sup>3</sup>                           | Prince of Peace Lutheran School <sup>5</sup> |
| Bernalillo Middle School                               | Rio Grande Enrichment Studies                |
| Bosque Farms Elementary School <sup>5</sup>            | Rio Rancho High School <sup>1,3</sup>        |
| Canon Christian Academy                                | Roosevelt Middle School                      |
| Center High School (Center, CO) <sup>4</sup>           | Salam Academy <sup>3,5</sup>                 |
| Christ Lutheran School                                 | Sandia High School <sup>1</sup>              |
| Cleveland Middle School                                | St. Charles Borromeo Catholic School         |
| Coral Community Charter School <sup>5</sup>            | St. Mary's Catholic School (ABQ)             |
| Desert Ridge Middle School                             | St. Mary's Catholic School (Belen)           |
| Early College Academy                                  | St. Pius X High School <sup>1,3</sup>        |
| Edgewood Middle School                                 | St. Therese Catholic School                  |
| Grant Middle School                                    | St. Thomas Aquinas School                    |
| Holy Child Catholic School                             | V. Sue Cleveland High School <sup>1,3</sup>  |
| Holy Ghost Catholic School <sup>5</sup>                | Valencia Middle School                       |
| Hoover Middle School <sup>1</sup>                      |  |
| Hope Christian School                                  |  |
| Immanuel Lutheran School                               |  |
| Jefferson Middle School                                |  |
| La Cueva High School <sup>1,3</sup>                    |  |

\*\*\*\*\*

<sup>1</sup> Science Olympiad ALSO (in addition to Research Challenge)

<sup>2</sup> Science Olympiad ONLY (did not compete in Research Challenge)

<sup>3</sup> Junior Science & Humanities Symposium ALSO (in addition to Research Challenge)

<sup>4</sup> Junior Science & Humanities Symposium ONLY (did not compete in Research Challenge)

<sup>5</sup> Participated in 4th/5th Grade Research Expo

# **APPENDICES**

**Volunteer Hours & Value of Time**

**Research Challenge Statistics**

**JSHS Statistics**

**Science Olympiad Statistics**

**Awards Values**

**Award Donors List**

# 2016 Volunteer Hours & Value of Time

## 2016 Central NM Science & Engineering Research Challenge

	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
<b>Category Judges</b> <i>(8 hrs per judge @ \$30/hr avg in-kind time donation)</i>	207	1656	\$49,680.00
<b>Judge Chairs/Master Chairs</b> <i>(25 hrs per judge @ \$30/hr avg in-kind time donation)</i>	26	650	\$19,500.00
<b>Special Awards Judges</b> <i>(4 hrs per judge @ \$30/hr avg in-kind time donation)</i>	125	500	\$15,000.00
<b>Special Awards Judging Coordinator</b> <i>(40 hrs @ \$30/hr avg in-kind time donation)</i>	1	40	\$1,200.00
<b>Registration Volunteers</b> <i>(4 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	10	40	\$1,200.00
<b>Registration Volunteers Coordinator</b> <i>(40 hrs @ \$30/hr avg in-kind time donation)</i>	1	25	\$750.00
<b>Display &amp; Safety Inspectors</b> <i>(4 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	20	100	\$3,000.00
<b>Display &amp; Safety Committee Chairs</b> <i>(15 hrs per volunteer @ \$30/hr avg in-kind time donation)</i>	2	30	\$900.00
<b>TOTAL SERC VOLUNTEERS =</b>	392	3041	\$91,230.00

## 2016 Advisory Board Members

	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
<b>Board Members - Volunteer</b> <i>(8 hrs per board member @ \$30/hr avg in-kind time donation)</i>	19	152	\$4,560.00
<b>TOTAL ADVISORY BOARD VOLUNTEERS =</b>	19	152	\$4,560.00

## 2016 Central NM Science Olympiad

	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
<b>Events with Volunteer Event Supervisors</b> <i>(16 hrs per ES for prep &amp; facilitation @ \$30/hr avg in-kind time donation)</i>	31	496	\$14,880.00
<b>Other Volunteers</b> <i>(Average 4 hrs each; Average 1 per event @ \$30/hr avg in-kind time donation)</i>	25	100	\$3,000.00
<b>TOTAL SO VOLUNTEERS =</b>	56	596	\$17,880.00

## 2016 SW Junior Science & Humanities Symposium (JSHS)

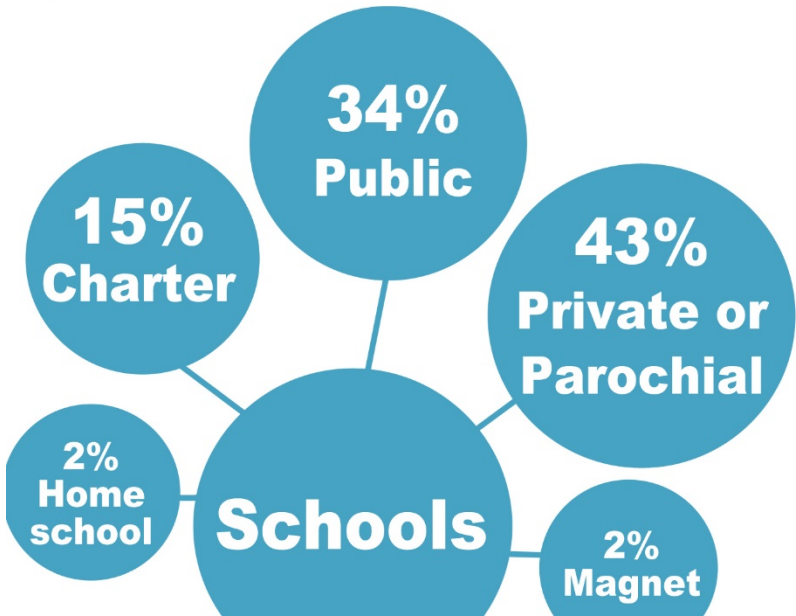
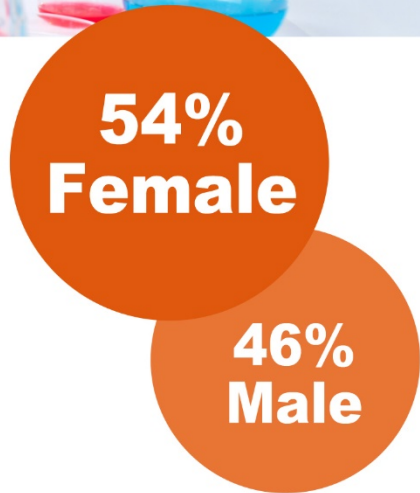
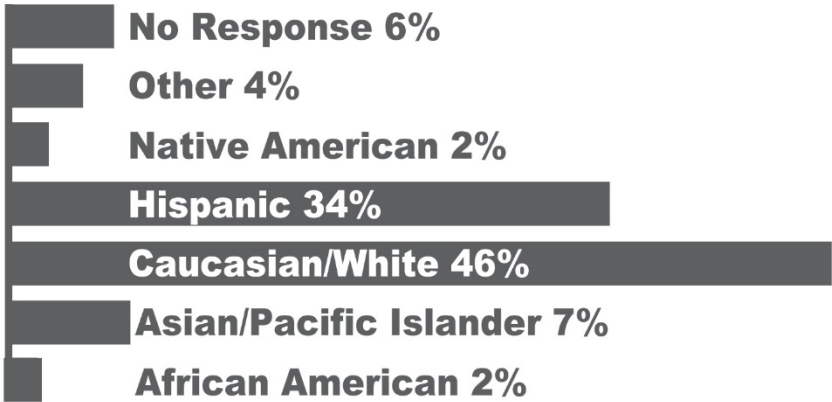
	# of Volunteers	# of Volunteer Hours	Value of Volunteer Hours
<b>Judges</b> <i>(8 hrs per judge @ \$30/hr avg in-kind time donation)</i>	22	176	\$5,280.00
<b>Judging Coordinator</b> <i>(40 hours @ \$30/hr avg in-kind time donation)</i>	1	40	\$1,200.00
<b>TOTAL JSHS VOLUNTEERS =</b>	23	216	\$6,480.00

	TOTAL # Volunteers	TOTAL # Volunteer Hours	TOTAL Value Volunteer Hours
<b>FY16 GRAND TOTALS =</b>	490	4005	\$120,150.00

*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.*

# 2016

# Central New Mexico Research Challenge



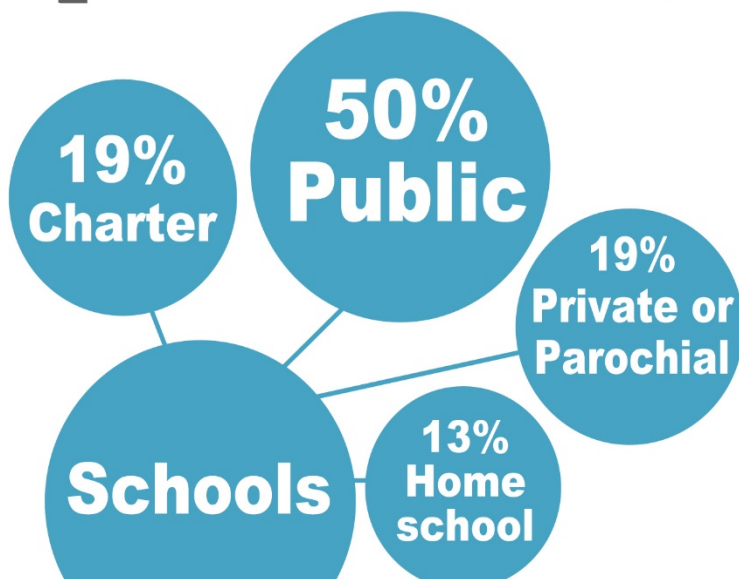
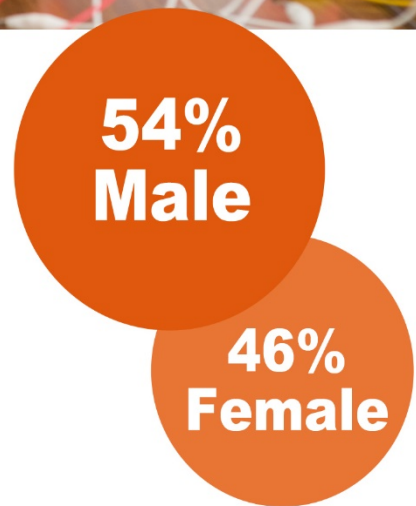
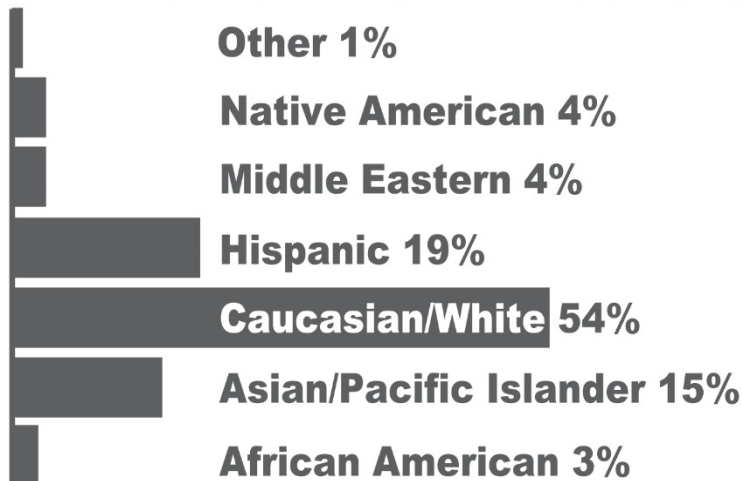
These 2016 statistics were gathered from our participants during the registration process.





# 2016

# Central New Mexico Science Olympiad

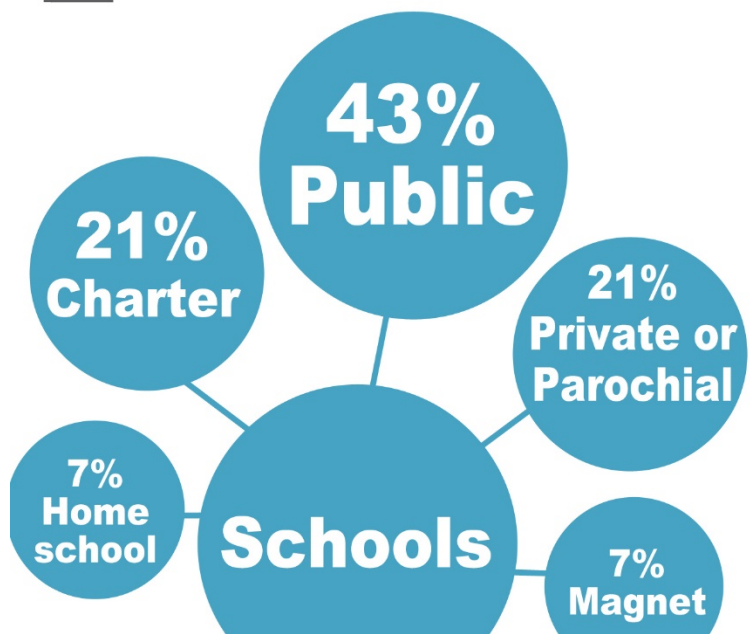
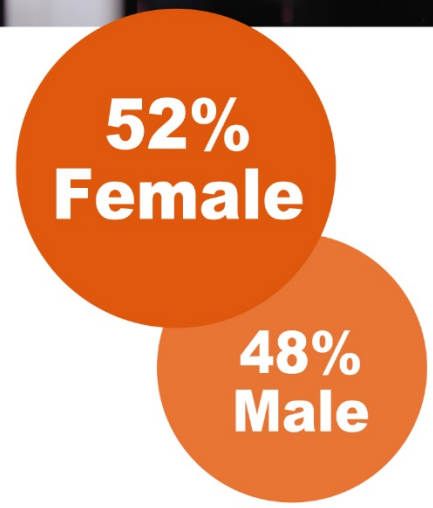
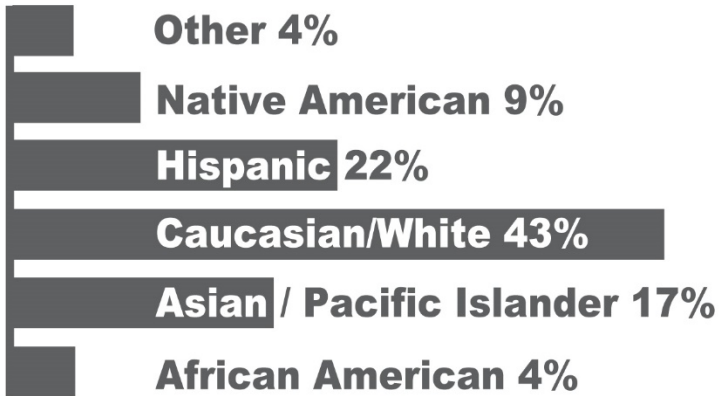


These 2016 statistics were gathered from our participants during the registration process.



# 2016

## SW Junior Science & Humanities Symposium



These 2016 statistics were gathered from our participants during the registration process.



## 2016 Central NM Science & Engineering Research Challenge AWARDS

Special Awards - Directly Donor Paid	\$9,020.00
Special Awards - Office Paid <i>(includes Top of Category Awards)</i>	\$48,578.00

**CNM-SERC AWARDS = \$57,598.00**

## 2016 Central NM Science Olympiad AWARDS

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

## 2016 SW Region Junior Science & Humanities Symposium AWARDS

SW Region JSHS – Donor Paid	\$4,000.00
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**SW JSHS AWARDS = \$4,000.00**

**TOTAL AWARDS *(all programs)* = \$62,598.00**



# 2015-2016 Student & Teacher Award Donors

AIC General Contractors, Inc.	Argus Realty & Development
Albuquerque African Violet Club	ASM Materials Education Foundation
Albuquerque Amateur Radio Club	Associated Contractors of New Mexico
Albuquerque Area Extension Master Gardeners	Association for Women Geoscientists
Albuquerque Association for Gifted and Talented Students	ASU Walton Sustainability Solutions
Albuquerque Astronomical Society and Accent Southwest Windows	Bank of New Mexico
Albuquerque Geological Society	bigbyte.cc Corp
Albuquerque Soaring Club	Bobbi Kay & Rob Nelson
Allen Sigmon Real Estate	Bohannon Huston
Alvarado Management	Bridgers & Paxton Consulting Engineers
AMEC Foster Wheeler	Broadcom
American Chemical Society -Central New Mexico Section	Brycon Construction
American Council of Engineering Companies New Mexico	Build Green New Mexico
American Institute of Aeronautics and Astronautics	Build New Mexico
American Meteorological Society	Carnes & Co.
American Psychological Association	Catherine J. Cullen - RE/MAX Alliance Realtors
American Society for Quality, (ASQ), Albuquerque Section 1400	Cauwels & Stuve Realty and Development Advisors, LLC
American Society of Safety Engineers - New Mexico Chapter	CBRE
Anderson-Abruzzo International Balloon Museum Foundation	Century Sign Builders
Appel Family	CenturyLink
Charles P. Price III	Enterprise Builders Corporation
Chavez-Grievens Consulting Engineers	Explora Science Center and Children's Museum
Civil Air Patrol - New Mexico Wing	FBT Architects
CliftonLarsonAllen	First Citizens Bank
Coldwell Banker Las Colinas	Flintco
Cordwell Family	Foreman Family
CREW (Commercial Real Estate Women)	Garrett Development
CURB Inc.	Geltmore, Inc.
CYRQ Lightning Dock Geothermal Energy	Genius Olympiad
Daskalos Properties	Highway Employees Association of the NM Department of Transportation

Dave and Rhonda Hill	Home Builders Association of Central New Mexico
Dave Giddens & Elizabeth Jeppesen	Huning Ltd. Partnership
Debbie Dupes	IEEE Photonics Society
Dekker/Perich/Sabatini	Installation Service Heating Cooling
Don Chalmers Ford	Intel
Dr. Gerard and Mildred Kaye	International Test & Evaluation Association, Roadrunner Chapter
Economic Forum/ R.E.M. Properties	I-SWEEEP
Ed Thomas	Jackling Fund - UNM
Enchanted Lens Camera Club	James Topmiller
ENLACE Statewide Collaborative	Jaynes Corporation
Jeff Tsao	National Museum of Nuclear Science & History
John Henderson & Trudy Jones	New Mexico Bank & Trust
John Lewinger	New Mexico Engineering Foundation
Junior Academy of Science	New Mexico Gas Company
Keith Meyer & Mary Meyer	New Mexico MESA, Inc.
Keleher & McLeod	New Mexico Museum of Natural History and Science
Kiwanis Club of Coronado	New Mexico Science Teachers Association
Klinger Constructors	New Mexico Solar Energy Association
Kris Jaffa	New Mexico Trout
Land Advisors Corp.	NM Speech, Language & Hearing Association
Lastrapes, Spangler & Pacheco PA	Old Republic National Title Insurance
Lawrence Wells/ Montgomery & Andrews P.A.	Patricia Wagner
Los Alamos National Bank	Paula Hayden
Lynne Anderson & John Gallegos	Peacock Myers, P.C.
Marie Louise Martignoni	Pulte Homes
Mark Burton	Pure Water Technologies LLC
Mary Fuka	Randi Buck
Michelle Henry	Reid & Associates
MU Alpha Theta	Richard Cuddihy
Myers, Oliver & Price	Ricoh
Sedberry & Associates	

Sheila Doucette  
SMPC Architects  
Society for In Vitro Biology  
Society of Women Engineers , Central New Mexico  
Section  
Springer 5 Investments  
Sun Vista General Contracting  
Sutin, Thayer & Browne  
Terracon  
Titan Development  
Todd Thompson  
Tom Grossman  
Trinity Section of the American Nuclear Society  
United States Navy and Marine Corps  
United States Public Health Service  
University of New Mexico College of Pharmacy  
University of New Mexico School of Medicine/Health  
Sciences Center  
UNM Center for Water and the Environment  
UNM Chapter of Sigma XI : The Scientific Research  
Society  
Vigerust Family  
Water Environment Federation  
West Wood Realty, LLC  
Wilger Enterprises Inc.  
Yale Science and Engineering Association, Inc.







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# Office for Diversity



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*STEM-H Center for  
Outreach, Research & Education*

MSC 09 5233 – Health Sciences & Services Building, Suite 102  
1 University of New Mexico  
Albuquerque, NM 87131-0001  
(505) 277-4916 STEM-H Center  
(505) 272-2728 Office for Diversity

**STEM-H Center Website**

<http://stemed.unm.edu>

**NM STEM-H Connection Statewide Collaborative Website**

<http://www.nmstemh.org>