2020-21 STEM-H Center & Central New Mexico STEM Research Challenge Sponsors/Donors

Thank you to the many donors and sponsors who not only make Research Challenge possible but also support the STEM-H Center and all of its endeavors year-round.

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Gold Sponsors
(Monetary and in-kind sponsors of $20,000-$29,000)
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The Boeing Company
Kupono Govn’t Services/Alaka’ina Foundation
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Native Health Initiative
New Mexico Mesa
New Mexico Oil & Gas Association
New Mexico Supercomputing Challenge
Society for Science
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(Individual cash & in-kind donations of $1500-$2499)
Patricia & Leonard Duda

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(Individual cash & in-kind donations of $1000-$1499)
Mary Louise Martignoni Trust

Carver Donors
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Jerry Cross
Van Pham

Ochoa Donors
(Individual cash & in-kind donations of $100-$249)
Berlinda & Kenneth Eras
Karen Kinsman
Mike Mullane

The MANY judges who donate their time and expertise to interviewing students and evaluating projects.
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Sandia National Labs  
Senior Manager of Compensation

James Vigerust  
Aptim Federal Services  
Corporate Safety Officer

Student Members
Sofia Chavez
Gianna Nilvo
Visit the RESEARCH CHALLENGE VIRTUAL LOBBY for instant access to Research Challenge events!

All events listed here can be accessed from the virtual lobby EXCEPT judging interviews.

March 22 – 27 ~ visit at your convenience!

PROJECT SHOWCASE – browse all student research projects competing in Research Challenge

STEM HALL – visit profiles and interactive exhibits from our sponsors and community partners

SPEAKERS & PANELS – view engaging discussions with STEM professionals including:
  - Research Challenge Alumni
  - Health Professions
  - Energy & Engineering Careers

SCAVENGER HUNT – Participating students, complete a scavenger hunt as you explore Virtual Research Challenge for your chance to win prizes!

Monday, March 22

4:30 pm – 5:30 pm  **Zoom Help Session – Live on Zoom** (for judges and students)
Need help with Zoom? Want to check your equipment before interviews? This is an open help session. Join anytime during the scheduled hour.

7:00 pm – 8:00 pm  **Trivia Night – Live on Zoom**
Join us for a fun evening of trivia with prizes. ALL are welcome!

Tuesday, March 23

4:30 pm – 5:30 pm  **Zoom Help Session – Live on Zoom** (for judges and students)
Need help with Zoom? Want to check your equipment before interviews? This is an open help session. Join anytime during the scheduled hour.

6:30 pm – 7:30 pm  **Judging Workshop – Live on Zoom**
Students, prepare for judging day with long-time Research Challenge Master Judge Chairs Len Duda, Richard Bild & Robert Deblassie as they provide interview tips and answer your questions.
### Wednesday, March 24

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am – 12:00 pm</td>
<td>Junior Division Category Judging Interviews – Zoom</td>
<td>Zoom meeting link and interview times will be emailed to students.</td>
</tr>
<tr>
<td>2:00 pm – 3:00 pm</td>
<td>4TH &amp; 5TH Grade STEM Activity Session with AFRL – Zoom</td>
<td>Air Force Research Lab educators will lead 4th and 5th grade participants in fun, hands-on activities.</td>
</tr>
<tr>
<td>7:00 pm – 8:30 pm</td>
<td>Movie Night – “Inventing Tomorrow”</td>
<td>We are pleased to partner with NMPBS in screening highlights from the film which follows students from across the world on their journey to the International Science &amp; Engineering Fair. Followed by a live discussion with Dr. Jessica Bean.</td>
</tr>
</tbody>
</table>

### Thursday, March 25

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>9:00 am – 12:00 pm</td>
<td>Senior Division Category Judging Interviews – Zoom</td>
<td>Zoom meeting link and interview times will be emailed to students.</td>
</tr>
<tr>
<td>6:45 pm - 7:15 pm</td>
<td>Stretch Break with Lauren Lewis – Live on Zoom</td>
<td>Free and open to everyone! Lauren is a UNM Employee Health Consultant and certified fitness trainer. Lauren’s ZoomFit classes at UNM are wildly popular – she’s fun, engaging &amp; knows her stuff.</td>
</tr>
<tr>
<td>7:30 pm – 8:00 pm</td>
<td>Mindfulness &amp; Relaxation with Dr. Anthony Fleg – Live on Zoom</td>
<td>Free and open to everyone! Dr. Fleg is a Family Medicine physician at UNM HSC with a passion for fitness/movement and mindfulness. Join us to wind down your week in a wonderful, relaxing way.</td>
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</tbody>
</table>

### Friday, March 26

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am – 12:00 pm</td>
<td>Junior &amp; Senior Divisions Grand Awards Judging Interviews – Zoom</td>
<td>Top overall placing students from Wednesday and Thursday will be invited back for a second interview to be considered for Grand Awards. Students will be emailed Zoom meeting link and their scheduled interview time.</td>
</tr>
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</table>

### Saturday, March 27

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>10:00 am – 12:00 pm</td>
<td>Grand Awards Ceremony – Live on Zoom and streaming on Facebook Live</td>
<td></td>
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</tbody>
</table>
Keynote Speaker

Erika Alden DeBenedictis, PhD
Postdoc, University of Washington

Erika’s interest in research began with her 7th grade 2005 Research Challenge project, “Simulating Snowflakes.” She participated in several research competitions throughout high school, including New Mexico Supercomputing Challenge (2007-2009), ISEF (2007-2010), Siemens Competition (2009), and Science Talent Search (2010). Erika completed her undergraduate degree in Computer Science at Caltech in 2014, and her PhD in Biological Engineering at MIT in 2021.

She has done research and software engineering at the Jet Propulsion Laboratory, Sandia National Laboratories, D. E. Shaw Research, and Dropbox. Erika is currently a postdoctoral researcher at the University of Washington’s Institute for Protein Design. She studies strategies for using machine learning and high-throughput experiments to engineer protein therapeutics.

Master of Ceremonies

Byron Morton
Broadcast Meteorologist, KOAT

Byron graduated with a Bachelor of Science degree from the College of Geosciences at the University of Oklahoma in 1996.

Before joining the KOAT Action 7 News team in December 2001, Byron was chief meteorologist at WMSN-TV in Madison, WI, and fill-in meteorologist at its sister station, WKOW-TV. Byron has also held on-air positions at WOI-TV in Des Moines and WAOW-TV in Wausau, WI, and served as weather producer for Good Morning America, The LA Times, and Televisa Mexico.

Byron is the second forecaster in the state to earn the prestigious designation of "Certified Broadcast Meteorologist" from the American Meteorological Society (AMS), and he holds a seal of approval from the National Weather Association (NWA).

When he’s not keeping an eye on the sky, Byron enjoys weight-lifting, tennis, hiking, running, and just about anything else outdoors…and of course joining us every year at Research Challenge!
Broadcom Masters
Awarded to the 1st and 2nd place winners of EACH category in the Junior Division.

Junior Division  First & Second Place: Certificate and an invitation to submit project to national competition

Regional Research Challenge ~ Top-of-Category Awards
Un-sponsored category awards are sponsored by operational funds donated by various companies.

First Place: $150, gold medallion and certificate
Second Place: $125, silver medallion and certificate
Third Place: $100, bronze medallion and certificate
Honorable Mention: $50, medallion and certificate

2021 Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Sponsor</th>
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<tbody>
<tr>
<td>Elementary Chemistry</td>
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<tr>
<td>Elementary Engineering</td>
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<tr>
<td>Elementary Life Sciences</td>
<td></td>
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<tr>
<td>Elementary Physicals</td>
<td></td>
</tr>
<tr>
<td>Junior Behavioral &amp; Social Sciences</td>
<td>Albuquerque Journal</td>
</tr>
<tr>
<td>Junior Chemistry</td>
<td>Sandia National Laboratories</td>
</tr>
<tr>
<td>Junior Computer &amp; Math</td>
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<tr>
<td>Junior Engineering</td>
<td></td>
</tr>
<tr>
<td>Junior Earth &amp; Environmental Sciences</td>
<td>PNM Resources</td>
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<tr>
<td>Junior Medicine &amp; Health</td>
<td>UNM School of Medicine</td>
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<tr>
<td>Junior Physics</td>
<td>The Boeing Company</td>
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<tr>
<td>Junior Plant Sciences</td>
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<tr>
<td>Senior Behavioral &amp; Social Sciences</td>
<td>Albuquerque Journal</td>
</tr>
<tr>
<td>Senior Chemistry</td>
<td>Sandia National Laboratories</td>
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<tr>
<td>Senior Microbiology</td>
<td>UNM School of Medicine</td>
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<tr>
<td>Senior Computer Science</td>
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<tr>
<td>Senior Engineering</td>
<td>The Boeing Company</td>
</tr>
<tr>
<td>Senior Earth &amp; Environmental Sciences</td>
<td>PNM Resources</td>
</tr>
</tbody>
</table>

Regional Research Challenge ~ Top Junior Division Winner Award
Recognition of the top Junior Division exhibitors.

Junior Division  Physical Sciences:  First Place: $250  Second Place: $200  Third Place: $150
Life Sciences:  First Place: $250  Second Place: $200  Third Place: $150

Regional Representatives to the International Science and Engineering Fair (ISEF)
Top projects will be named ISEF Finalists and compete virtually at ISEF in May, 2021

Senior Division  Excellence Award: ISEF Finalist, $250

Congratulations to all the student participants and winners!
**Albuquerque Astronomical Society Award**
For the best Astronomy related projects. Winners invited to exhibit projects at Astronomy Day. Prizes include 1-year membership in the Albuquerque Astronomical Society.

- **Junior Division**
  - First Place: $125
  - Second Place: $75
  - Third Place: $50

- **Senior Division**
  - First Place: $125
  - Second Place: $75
  - Third Place: $50

**Albuquerque Radio Control Club Award**
For outstanding exhibits in the field of aviation science. Prizes include membership to the Academy of Model Aeronautics and the Albuquerque Radio Control Club.

- **Junior Division**
  - First Place: $50, free model aircraft flight lesson,

- **Senior Division**
  - First Place: $100, free model aircraft flight lesson

**Albuquerque Rocket Society Award in Memory of Kyle Foster**
For excellent projects related to rocketry or the field of aeronautics.

- **Junior Division**
  - First Place: $100

- **Senior Division**
  - First Place: $100

**Albuquerque Soaring Club Award**
For projects related to aeronautics or aerospace.

- **Junior Division**
  - First Place: Certificate for a free sail plane ride

- **Senior Division**
  - First Place: Certificate for a free sail plane ride

A third discretionary special award of a sail plane ride (Junior or Senior Division)

**American Association of University Women Young Scientist Award**
For excellent projects by female exhibitors in the categories of Physics, Computer Science, or Engineering.

- **Elementary Division**
  - First Place (x4): $25

- **Junior Division**
  - First Place (x6): $30

**American Chemical Society Awards, Central New Mexico Section**
For the projects that best demonstrate a thorough and logical approach to the investigation and observation of a chemical phenomena or property using the principles of the scientific method.

- **Junior Division**
  - First Place: $150
  - Honorable Mention (up to 20 prizes): $25

- **Senior Division**
  - First Place: $150
  - Honorable Mention (up to 10 prizes): $50

- **Junior or Senior Division**
  - First Place: $150

**American Institute of Aeronautics and Astronautics Award**
For projects relating to the fields of Aeronautics and Astronautics.

- **Junior Division**
  - First Place (x2): $100 & certificate. Membership in AIAA.

- **Senior Division**
  - First Place (x2): $100 & certificate. Membership in AIAA.

**American Meteorological Society Award**
For creative scientific endeavor in atmospheric and related oceanic and hydrologic sciences.

- **Junior or Senior Division**
  - First Place (x2): Certificate of Outstanding Achievement

**American Psychological Association Award**
For an exhibit recognizing outstanding research in psychology in the category of behavioral and social sciences.

- **Junior or Senior Division**
  - First Place: Certificate

**American Society of Safety Professionals Award, New Mexico Chapter**
For projects related to environmental or industrial safety.

- **Elementary Division**
  - First Place: $100
  - Teacher Award: $50

- **Junior Division**
  - First Place: $100
  - Teacher Award: $50

**ASM Materials Education Foundation Award**
For the best materials engineering project that demonstrates use of materials-related concepts, some aspect of the materials paradigm, clarity in presentation, and a clear understanding of the scientific method.

- **Junior or Senior Division**
  - First Place: Certificate

**Association for Women Geoscientists Award**
For a female student whose project best exemplifies high standards of innovativeness and scientific excellence in the geosciences.

- **Junior or Senior Division**
  - First Place: Certificate

**Association of Old Crows Award**
For a project in the 4th & 5th Grade Division related to electromagnetic spectrometry or information operations.

- **Elementary Division**
  - First Place: $100

**Austin Hudson LaPore Memorial Award**
For a project by an exhibitor showcasing or expressing exceptional passion for the biochemistry sciences.

- **Senior Division**
  - First Place (x2): $100 and Certificate
BlueHalo CASE (Creative Application of Science & Engineering) Award
For a project that displays excellence and creativity in the application of Mathematics, Science, and Engineering.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
<th>Second Place</th>
<th>Third Place (x3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$150</td>
<td>$100</td>
<td>$50</td>
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</table>

Broadcom Coding with Commitment Award
For a project in any category that combines STEM Knowledge and Computation/Coding in the project’s research, design, or development that expresses passion for helping or improving one’s community.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$250 gift card &amp; Raspberry Pi Official RP Personal Computer Kit</td>
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</table>

Center for Water & the Environment Excellence Award (UNM School of Engineering)
For a project that shows excellence and interest in water science, water resources, or water engineering.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Division</td>
<td>A paid summer internship (2021) in our environmental engineering and water resources laboratories working in-person with Dr. Anjali Mulchandani and other CWE faculty</td>
</tr>
</tbody>
</table>

Chalmers Ford Award
For an excellent project in any category.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Division</td>
<td>$150</td>
</tr>
<tr>
<td>Junior or Senior Division</td>
<td>$150</td>
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</tbody>
</table>

Civil Air Patrol Awards – New Mexico Wing
For excellence in rocketry, flight or aerospace.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place (x3)</th>
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<tbody>
<tr>
<td>Junior or Senior Division</td>
<td>$25 and set of books: Astronautics History Vols 1 &amp; 2</td>
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</table>

Climate Change Award
Presented to the project that demonstrates the greatest insight into climate change using the scientific method.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
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<tbody>
<tr>
<td>Elementary Division</td>
<td>$50</td>
</tr>
<tr>
<td>Junior Division</td>
<td>$50</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$50</td>
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Directed Energy Profession Society Award
For projects that display the best use of electromagnetic spectrum to solve or diagnose a modern problem or create a new application or capability.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
<th>Second Place</th>
<th>Honorably Mention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$250</td>
<td>$150</td>
<td>$50</td>
</tr>
<tr>
<td>Teacher Award</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$250</td>
<td>$150</td>
<td>$50</td>
</tr>
<tr>
<td>Teacher Award</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
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DoD STEM Leadership Prize
For a student who demonstrates excellence in STEM knowledge, technical and problem solving skills, communication skills, creative thinking and determination to overcome challenges throughout the research project,

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
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<tbody>
<tr>
<td>Junior Division</td>
<td>$100</td>
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</table>

Dr. Donald Partridge Memorial Neuroscience Award
In memory of Dr. Donald Partridge for a project which best demonstrates and tests principles of neural science.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
<th>Second Place</th>
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</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$100</td>
<td>$50</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$100</td>
<td>$50</td>
</tr>
</tbody>
</table>

Dr. John K. Prentice “Coolness” Award
Sponsored by Randi Buck. For especially novel and ingenious projects in any category.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place (x2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$100</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$100</td>
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</tbody>
</table>

Enchanted Lens Camera Club Award
For projects which either advance the state of the art of film/digital photography, or use photography as a key diagnostic in an engineering and/or science project.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place</th>
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<tbody>
<tr>
<td>Junior Division</td>
<td>$75</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$75</td>
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</tbody>
</table>

Engineering Excellence – New Mexico Engineering Foundation
For excellence in Engineering and/or applied topic or research in Engineering, Physics, or Energy & Transportation.

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<thead>
<tr>
<th>Division</th>
<th>First Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$100</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$100</td>
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</table>

ENLACE Statewide Collaborative Excellence Award
For excellent projects in any category.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place (x2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Division</td>
<td>$25 UNM Bookstore Gift Card</td>
</tr>
<tr>
<td>Junior Division</td>
<td>$25 UNM Bookstore Gift Card</td>
</tr>
<tr>
<td>Senior Division</td>
<td>$25 UNM Bookstore Gift Card</td>
</tr>
</tbody>
</table>

Explora Science Center and Children’s Museum Award
For excellent projects in Chemistry, Environmental Science, Math, Microbiology or Physics.

<table>
<thead>
<tr>
<th>Division</th>
<th>First Place (x10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Division</td>
<td>$25 plus an invitation to exhibit project virtually at Explora.</td>
</tr>
</tbody>
</table>
Green Leaf Award
For an excellent project in the Plant Sciences Category.
Elementary Division  First Place: $25

IEEE Photonics Society Award
For an excellent project that explores and utilizes light in innovative ways.
Junior Division  First Place: $75
Senior Division  First Place: $75

International Test & Evaluation Association Awards, Roadrunner Chapter
For the best application of test and evaluation techniques in an experiment.
Junior Division  First Place: $100  Second Place: $50  Third Place: $25
Senior Division  First Place: $100  Second Place: $50  Third Place: $25

Jerran Golightly Memorial Award
Awarded to the best project addressing the issues of heart disease and cardiac health, particularly in young people.
Junior or Senior Division  First Place: $100

Kiwanis Club of Coronado Awards
For excellent projects in any category.
Junior Division  First Place: $100  Second Place: $50  Third Place: $50  Fourth Place: $25
Senior Division  First Place: $100  Second Place: $50  Third Place: $50  Fourth Place: $25

Lemelson Early Inventor Prize
For an excellent invention project which demonstrates problem-solving, empathy, and entrepreneurial and environmental-friendly thinking.
Junior Division  First Place: $100 & certificate

mauro4micro Teacher Awards
For creative and insightful science teachers in memory of Dr. Mauro Martignoni.
Junior or Senior Division  Teacher Award(x4): $250

MU Alpha Theta Award
For an individual or group project that demonstrates the most challenging, original, thorough, and creative investigation of a problem involving modern mathematics.
Senior Division  First Place: Certificate

NASA Earth System Science Award
For the project that best demonstrates insight into Earth's interconnected systems. The project should incorporate studies of the different components of Earth systems, their interactions and their evolution over time.
Junior or Senior Division  First Place: Certificate

National Oceanic and Atmospheric Administration Award
For the project whose research emphasizes NOAA's mission to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources.
Junior or Senior Division  First Place: Certificate

New Mexico Gas Company Awards
For an excellent project related to natural gas, utility efficiency, energy or engineering.
Junior Division  First Place (x2): $250
Senior Division  First Place (x2): $250

New Mexico Trout Award
For a project that supports the goals of New Mexico Trout: the study, conservation and restoration of riparian habitats.
Junior Division  First Place: $75 and membership
Senior Division  First Place: $75 and membership

NM Society of Hazardous Materials Managers Award
For projects which show a novel approach to safe handing, storage, treatment or disposal of hazardous materials, waste and other chemicals; measurement, clean up or prevention of environmental pollution; or, reducing safety hazards in the workplace.
Elementary Division  First Place: $50
Junior Division  First Place: $150
Senior Division  First Place: $500

Regional Research Challenge Ingenious Research Award
For a project involving the testing and/or use of common materials.
Junior Division  First Place (x2): $100

Regional Research Challenge Junior Encouragement Awards
Sponsored by the Foreman Family. For outstanding middle school projects in EACH category.
Junior Division  First Place: $25  Second Place: $20  Third Place: $15  HM: $10
Regional Research Challenge Scholarships to UNM
Senior Division First Place: A minimum $750 UNM scholarships to all 12th grade participants who enroll at UNM in the Fall of 2021 (one-time award for Fall 2021)

Ricoh Regional Sustainable Development Award
For a project whose principles and technical innovations offer the greatest potential for increasing our ability to grow environmentally friendly and socially responsible businesses.
Junior or Senior Division First Place: Certificate

Sandia Grotto Award
For a project related to cave conservation, cave related studies (cave geology, hydrology or biology such as bats, beetles, salamanders or cave microbes) or equipment technology related to cave research.
Elementary Division First Place: $50 and invitation to present project at a Sandia Grotto meeting.
Junior Division First Place: $75 and invitation to present project at a Sandia Grotto meeting.
Senior Division First Place: $100 and invitation to present project at a Sandia Grotto meeting.

Society for In Vitro Biology Award
For the most outstanding 11th grade students exhibiting in the areas of plant or animal in vitro biology or tissue culture.
Senior Division First Place: Certificate

Society of Women Engineers Award, Central New Mexico Section
For an exhibit in Engineering, Physics & Astronomy, Computer Science, Environmental Management or Energy & Transportation.
Junior Division First Place (x2): $100

Trinity Section of the American Nuclear Society Award
For excellence in nuclear science or engineering or a related field. Priority will be to award in nuclear science or engineering but as the nuclear field is highly interdisciplinary, the award may be given to a related discipline.
Junior Division First Place: $50
Senior Division First Place: $50

United States Air Force Awards
Naval Science Awards for excellent individual projects in science and engineering.
Junior or Senior Division First Place (x4): Certificate & Tangible Award

United States Metric Association Award
For a project that involves a significant amount of quantitative measurement and which best uses the SI Metric System.
Junior or Senior Division First Place: Certificate of achievement

United States Navy and Marine Corps Awards
Naval Science Awards for excellent individual projects in science and engineering.
Junior Division First Place: Certificate of achievement
Senior Division First Place: Certificate of achievement and $50

University of New Mexico College of Pharmacy Awards
For a project related to the Pharmaceutical Sciences which best demonstrates an innovative problem, the scientific approach to the problem, the methodology for solving the problem, and the scientific interpretation of the results.
Elementary Division First Place: $100
Senior Division First Place: $200 Teacher Award: $200

University of New Mexico Health Sciences Center Awards
For excellent projects in each of the categories of Medicine & Health, Microbiology and Biochemistry
Junior Division First Place: $150 Second Place: $100 Third Place: $50
Senior Division First Place: $150 Second Place: $100 Third Place: $50

U.S. Agency for International Development (USAID) Award
For an exceptional project that has the potential to make an impact on addressing international development challenges.
Junior or Senior Division First Place: Certificate

U.S. Stockholm Junior Water Prize - Water Environment Federation
For an outstanding project related to water quality, water resource management, water protection, water treatment.
Senior Division First Place (x3): Certificate and possible advancement to State Stockholm competition.

Wood Innovation & Sustainability Award
For excellent projects demonstrating innovation and sustainability.
Junior Division First Place: $100
Senior Division First Place: $100

Yale Science and Engineering Association, Inc. Award
For an outstanding 11th grade student exhibiting in the area of Computer Science, Engineering, Physics or Chemistry.
Senior Division First Place: Certificate
Dear Research Challenge Participants,

Congratulations on competing in the 61st Annual Central NM STEM Research Challenge. I commend you on the hard work it took to get here, especially this year during the COVID-19 pandemic with all of us working and learning remotely. I wish you the best of luck in presenting your research during the competition.

There is no doubt that this esteemed and long-running competition will help prepare you for your future academic and career path. Former participants have ventured on to win international competitions, successfully apply for patents, continue their education and pursue careers at prestigious institutions, and even become a NASA shuttle astronaut.

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STEM professionals contribute to society in very important ways, working to find solutions for a wide range of issues and disseminating information to the public. As these fields grow in New Mexico and nationwide, we need more students pursuing STEM careers to ensure we remain competitive and at the forefront of scientific thought and discovery.

I hope you will consider pursuing a career in a STEM field. We need your insights at jobs right here in New Mexico – at our military bases, national labs, universities, and companies large and small. I encourage each of you to innovate and develop revolutionary ideas that will make this a better world. May you look back on this experience as one that motivated you to become a problem solver in your community.

I hope you have an amazing experience over the next few days and as you begin thinking about your future, consider joining the Lobo pack by pursuing your passion for exploration and innovation right here at UNM, in one of our nationally ranked degree programs.

I look forward to a time when we can all safely return to UNM’s campus together. In the meantime, stay safe, stay healthy, and let’s go, Lobos!

Garnett S. Stokes
President
Dear Central NM STEM Research Challenge Participants,

Congratulations to each one of you on your accomplishments over the course of this competition. The 61st Annual Central New Mexico STEM Research Challenge is a premier opportunity to gain exposure to the important areas of Science, Technology, Engineering, Mathematics, and Health Sciences (STEM-H). I hope that this experience has sparked and even strengthened your passion for the many career opportunities within these fields.

As students, it is important to be aware of the many opportunities that are offered by educational institutions to prepare you for an ever-changing and constantly evolving world and job market. I encourage each of you, the next generation, to continue to innovate and develop revolutionary ideas that will improve the lives of New Mexicans, and the broader national and global community.

Opportunities like the Research Challenge will help to guide you throughout your educational journey as talented and motivated students. Today I join you in celebrating this accomplishment.

Thank you to all who have committed their time to ensuring this event is a success year after year—especially in this year of immense challenge and change. I look forward to seeing you reach new heights, and feel very fortunate to share in this opportunity with each of you.

Sincerely,

Valerie Romero-Leggott, MD
Vice Chancellor
Diversity & Inclusion Executive Officer
Professor of Family & Community Medicine
Executive Director, Combined BA/MD Degree Program
PI, NM HCOP Academy
March 27, 2021

Dear Participants,

Congratulations for qualifying for the 61st Annual Central NM STEM Research Challenge! Your hard work and dedication to discovery and innovation will undoubtedly pay dividends for the rest of your life. I applaud your perseverance and determination in preparing for this event, and I recognize the impressive hard work by all participants.

As a new member of the Lobo family, I am eager to experience the inspired science and engineering projects at the competition. As the Vice President for Research at The University of New Mexico, I also encourage you to explore the many quality programs in science and engineering that UNM has to offer. We are always eager to foster participation in discovery and encourage the curiosity we see in you to explore new territory.

I also thank all the parents, teachers, mentors, friends, volunteers and sponsors who work tirelessly with students on their projects, as well as making the events at the local and school levels possible. This event would not be a success without you. Science, Engineering, Math and Technology are team sports—we are better together!

I hope you take a moment to truly enjoy every aspect of this unique event and I look forward to learning more about your achievements in the years to come. Best of luck in the 2021 Central NM STEM Research Challenge!

Sincerely,

Ellen R. Fisher, Ph.D.
Vice President for Research
Professor of Chemistry
March 27, 2021

Dear Research Challenge Participants,

I would like to congratulate you for your accomplishments and wish you the best of luck as you participate in the 61st Annual Central NM STEM Research Challenge. Completing your STEM project and presenting it during this Research Challenge is a testament to your determination and success.

Through hard work, perseverance, and courage to keep trying despite challenges, you have proven yourself a shining example for all STEM students in New Mexico. May this acknowledgement serve as a reminder that you can achieve great things.

I am proud and honored that our state has such accomplished young people and I look forward to hearing more about your achievements in the future. Thank you for representing the state of New Mexico so well as young scientists and innovators. Once again, congratulations on competing in the 2021 Central New Mexico STEM Research Challenge.

Sincerely,

Ben Ray Luján
United States Senator
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- Occupational Therapy
- Nursing
- Pharmaceutical Sciences
- Physical Therapy
- Physician Assistant
- Radiological Sciences
- Certificates in Translational Science and University Science Teaching
- Undergraduate Pipeline Network

For more information on becoming a student at the UNM Health Sciences Center, visit: http://hsc.unm.edu/students/
Congratulations To All Participants At The 2019 Central NM Science & Engineering Research Challenge!

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What happens when our students get involved with research? They become part of a team of extraordinary professors and world-renowned partners. They develop skills to help them better understand and explain the world. They tackle problems and find answers to questions that no one had asked before. At The University of New Mexico, we empower our Lobos to change the world.

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The Future Starts Here
Congratulations to New Mexico’s scientists, engineers, technologists and mathematicians in the making.

PNM is proud to be a sponsor for the Central New Mexico Science & Engineering Research Challenge.

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FAMILY MATH NIGHT provides an evening of hands-on math activities held at local elementary schools.

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To learn about these and other education programs visit us at www.sandia.gov.

Our SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) DIVERSITY PROGRAMS engage middle and high school students by linking science to the real world through hands-on science and engineering activities. Students are also provided an opportunity to explore a variety of STEM careers.

The DOE REGIONAL SCIENCE BOWL is an exciting tournament-style academic competition that challenges students’ knowledge of math and science.