



New Mexico Partnerships

NEWSLETTER

June 2022



Announcements

UNM and partners offering Nuclear Security Summer School July 5-15

The University of New Mexico (UNM) Nuclear Engineering department has partnered with the U.S. Department of Energy (DOE) National Nuclear Security Administration Office of International Nuclear Security (NNSA-INS) and experts from Sandia, Los Alamos, and Idaho national laboratories to offer a two-week, executive-style [Nuclear Security Summer School](#) course. This course focuses on the theory, current practices, advancements in, and design and analysis of nuclear security systems. There will be both class-based discussion and hands-on experience, with students visiting the renown Nuclear Security Technology Complex at Sandia National Laboratories (Sandia) in Albuquerque.



Did you know?

Dr. Gabe Garcia gifted appreciation dog tags to students and mentors

Dr. Gabe Garcia, Dean of Student Success at New Mexico State University (NMSU) and Faculty Advisor for the NM Capstone Challenge III (*Operation Humpty Dumpty*) gifted the Capstone Challenge with Annual Appreciation Dog Tags to all student and mentor participants.

UNM signed Master Faculty Loan Agreement

UNM has signed the Master Faculty Loan Agreement which will enable joint appointments between UNM and Sandia.

Dr. Deborah Fowler presented Nonlinear Structural Dynamics

Dr. Deborah Fowler, Mechanical Engineer in Component Science and Mechanics, presented to the UNM American Society of Mechanical Engineers on April 1 about Nonlinear Structural Dynamics.

Climate Security announces Laboratory Directed Research and Development (LDRD) late start projects

The Climate Security Initiative announced five late start LDRD projects in February. University Partnership supplemental funding was awarded to UNM and the University of Texas (UT) Austin.



Partnership Highlights

NM Capstone competition gives students an understanding of national security work

The final aspect of *Operation Humpty Dumpty*, the FY22 NM Capstone Challenge sponsored by Sandia, brought together 23 students and their faculty advisors from UNM, NMSU, and NM Tech. This year's goal was to design an efficient 3D-printed cradle that could withstand the accident environment (temperature changes, vibration, and shockwave from explosion). On April 20, students conducted environmental testing at Sandia and gave presentations on the April 21. NMSU's team won the competition.



NMSU Campus Executive visit extends opportunities for future collaboration

Campus Executive Scott Hutchinson and Kim Haulenbeek from Sandia's Experimental Solid Mechanics group met with NMSU leadership on February 17 to continue collaboration between Sandia, the Physical Sciences Laboratory, the College of Engineering, and the Digital Learning group. Scott also spoke with the students in the Classified Ready Employee Workforce program, and Kim gave a distinguished engineering lecture entitled, "Developing a Rapid Decompression Testing Capability. "

Sandia and NM Tech hosted "Growing STEMs" annual meeting

NM Partnerships, Dr. Michael Hargather, Ron Baker, and Scott Klenke hosted the Minority Serving Institution Partnership Plan (MSIPP) Annual Grant Meeting April 12 at the Nuclear Museum. It was attended by approximately 75 students, faculty, laboratory staff, and the DOE



program manager. The participants came from NM Tech, Texas Tech, Amarillo College, Sandia, and Los Alamos National Laboratory (LANL). Basil Hassan, Sandia's Deputy Chief Research Officer, delivered the keynote address. Jane Ferrizz, mechanical engineer in Energetic Environments, gave a presentation with videos of the work Sandia does at the sled track, the cable drop site, and other experimental venues. A poster session offered an opportunity for students to engage in discussions about their research.

Quantum NM Symposium launches the Quantum NM Institute (QNM-I)

UNM and Sandia, leaders in the field of Quantum Information Science and Technology (QIST), held a [symposium on March 31-April 1](#) to celebrate the new QNM-I and the Quantum NM Coalition. The QNM-I will create opportunities for workforce and economic development in NM's emerging "Quantum Economy." The Quantum NM Coalition is a statewide, multi-sector effort to grow NM as a national hub for the rapidly growing field of QIST.



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