

FEBRUARY 2023



## FROM THE DESK OF THE **Vice President for Research**

Lobos,

February is Black History Month! Join me in celebrating, remembering, and paying tribute to generations of African Americans who have played a vital role in shaping society, enriching culture, and creating opportunity for those who follow in their footsteps.

At UNM, Dr. Kirsten Buick leads the newly established Department of Africana Studies – a department created to honor the past while building a brighter future for Black students, faculty, staff, and members of our research community. Throughout the next few weeks, UNM's Africana American Student Services will be hosting special events in celebration of Black History Month.

Just last week, we celebrated many groundbreaking discoveries during UNM Day at the state capitol in Santa Fe. It was the perfect opportunity to share with our legislators the impact Lobos researchers have across the state and around the globe. In FY22 between main, north, and branch campuses, UNM received more than 1,600 research awards, supported more than 1,400 student researchers and had more than \$355 million in research expenditures.

Let's continue to strive for success!



Ellen Fisher, Ph.D.  
Vice President for Research  
Professor of Chemistry

## UNM Alum Makes History



Albuquerque native and UNM alum Daniel Casey is part of the team that made history last year by achieving *fusion* at the Lawrence Livermore National Laboratory's (LLNL) National Ignition Facility (NIF).

Secretary of Energy Jennifer Granholm called the achievement "one of the most impressive achievements of the 21st century."

Casey, a physicist studying the properties and performance of inertial confinement fusion implosions, graduated from UNM in 2005 with his bachelor's degree in nuclear engineering.

## Research Events

### 2023 State of Research

Join us Wednesday, March 22 from 4-6 p.m., in the PAIS Auditorium for the 2023 UNM State of Research.

Since becoming a Lobo in 2021, it's been VPR Ellen Fisher's firm belief that Research *Is* Education. During her 2023 UNM State of Research, she will address the very important pillars that contribute to our institution's research strength and excellence. Where we are now and where we are headed.

The event will also include a 15-minute Q&A session and a reception beginning at 5 p.m., in the PAIS foyer. Food & beverage will be provided.

### Early Career Lunch and Learn Series

The [Faculty Research Development Office](#) (FRDO) is pleased to invite you to register for its upcoming Lunch and Learn Series for early career faculty. Faculty from all disciplines are invited to participate in any part of the series.

There will be six thematic sessions on big-picture skills and resources to enable you to procure funding for research, scholarship, or creative activities. Five additional sessions will be devoted to specific early career funding opportunities with a particular focus on the [NSF CAREER](#) grant.

Registration is required for each session.

## Research Spotlight

### Center for High Technology Materials

In 1983, UNM's [Center for High Technology Materials](#) (CHTM) was first established with an initial \$10 million in funding from the State Legislature and served as one of five Centers of Technical Excellence. For the last 40 years, CHTM has been committed to providing diverse interdisciplinary research across the State of New Mexico.

Currently, CHTM scientists engage in research in epitaxial growth, photonics, microelectronics, quantum materials, optical sensors, and wide-band-gap semiconductors. This broad range of scientific focus areas and CHTM's cross-disciplinary structure allows for opportunities for discoveries impacting many different research fields. The CHIPS and Science Act, enacted last year to implement an industrial strategy to revitalize domestic manufacturing, has put a new focus on American semiconductor research and manufacturing. CHTM is already engaged with several research opportunities in this area, including a \$2 billion Department of Defense Microelectronics Commons and the NSF's Future of Semiconductors (FuSe) opportunities.

To date, CHTM faculty have received 266 patents, but more importantly have mentored more than 600 graduate students working toward their master and doctoral degrees. CHTM's outstanding record of integrated discovery, innovation, and education truly reflects the ethos of Research /s Education.

CHTM's contributions to development of next generation materials for a range of applications ensures they will continue to create and sustain a culture of excellence to promote interdisciplinary research and education at UNM. Moreover, CHTM seeks to further foster interaction between UNM, federal laboratories, and industry partners, all while promoting an entrepreneurial spirit for economic development in New Mexico.

## Research News

### Grand Challenges Level 2 RFP

The University of New Mexico is now [accepting applications](#) to become a Level 2 Grand Challenges team. The Request for Proposals (RFP) will be open for all interdisciplinary research teams until Monday, May 1.

A team does **not** have to be a Level 1 team to [apply](#).

## Call for Nominations

The Global Education Office (GEO) and OVPR are seeking nominations for the Globally-Engaged Research Awards to highlight the dynamic international research conducted by UNM faculty and students.

Three awards will be given:

- Faculty award (\$5,000)
- Graduate student award (\$1,500)
- Deborah Rifkenbary Memorial Undergraduate Student Award (\$1,000).

Nominations for the 2023 awards must be submitted via [InfoReady](#) by Friday, March 10. Eligibility is limited to main and branch campuses.



### New CHTM Director

Help me celebrate the new director of UNM's Center for High Technology Materials (CHTM), Professor Payman Zarkesh-Ha.

Zarkesh-Ha is a professor Electrical & Computer Engineering Department. His research interests are analog and digital electronics, statistical modeling of nanoelectronic devices and systems, design for manufacturability, as well as low-power and high-performance VLSI design.

**Fun fact:** When Professor Zarkesh-Ha was a child, he wanted to become an astronaut.

## Linda Mayo Named ORIC Interim Executive Director

Congratulations, Linda Mayo!

As interim executive director of the UNM Office of Research Integrity and Compliance (ORIC), Linda's responsibilities will include oversight of IRB, Research Misconduct, and COI.

Linda has worked as the IRB director for the last eight years. In 2016, Linda co-founded the Public Responsibility in Medicine & Research (PRIM&R) SBER Network – a national collaborative of IRB professionals that focus on the unique issues and challenges of ethical oversight of Social Behavioral Educational Research.



## New Mexico Climate, Health, and Equity Report

UNM researchers Gabriel Pacyniak and Shannon Sanchez-Youngman recently co-authored and released a report examining which communities in New Mexico are most impacted by pollution from large facilities.

Pacyniak and Sanchez-Youngman are co-conveners in the UNM Grand Challenges Program, and Pacyniak was part of the inaugural cohort for the [UNM FRESSH program](#).

The report supports UNM's [Just Transition Grand Challenge](#) initiative, an interdisciplinary team working to support and ensure solutions to climate change that are equitable to disadvantaged groups and create economic opportunity for workers in the fossil fuel industry.

## Wednesday Writing Time

Wednesday afternoons from 2-4 p.m., are Wednesday Writing Time with ADVANCE and FRDO. Last month, staff began alternating between in-person and virtual writing times.

In-person sessions will be held at ADVANCE.

## Technology Updates

### Research Computing and Technology Service Catalog

Last month, the updated National Institute of Health (NIH) data sharing policy went into effect. In response, the UNM Research IT Advisory Board has formed a new group in collaboration with the Health Sciences Center (HSC), tasked with developing strategies, guidelines, and resources to help UNM researchers navigate the new policy.

During the early stages of the new policy implementation, the group's primary goal is to consolidate and distribute information regarding UNM services and other resources available to help develop data management and share (DMS) plans, as well as identify appropriate repositories for future data sharing.

Later this year, we will provide additional information on how UNM plans to monitor and support data management plans in the future.

## Did you know?

UNM hosts one of the world's longest-running field studies of wild chimpanzees. A young chimpanzee, Lobo, was named in honor of UNM's support for the project.

UNM Assistant Vice President for Research Melissa Emery Thompson, an evolutionary anthropologist, co-directs the [Kibale Chimpanzee Project](#), which has been conducting non-invasive research on the biology and behavior of a community of wild chimpanzees in Uganda for more than 35 years.

