

Researchers,

As we find ourselves at just about the halfway mark of this bustling Spring semester, it becomes increasingly evident that our true strength lies in the spirit of collaboration and the sense of community that defines us as Lobos. UNM faculty, staff, and students are resilient, vibrant, and dedicated to ensuring that our research remains creative and reflective of our goals to uplift the communities around us. Together, we are not merely participants in the academic journey; we are innovators shaping the future through our groundbreaking research and forward-thinking scholarship.

Next week, we are thrilled to host the 4th annual State of Research, a new UNM tradition dedicated to honoring the spirit of collaboration that fuels our journey towards shaping the future of research. This gathering is not merely a celebration; it is a testament to our shared commitment to pushing boundaries and inspiring the next generation of scholars. Moreover, the State of Research is intended to foster open dialogue and ensure our commitment to transparent communication continues even amid uncertainty. So, let's come together to reflect on our achievements and envision the exciting and innovative possibilities that lie ahead.



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

March Safety Spotlight

Have you ever had "Dipping Dots" at an Isotopes game (or other sporting event)? Or seen ice cream made quickly in a chemistry demo...you know, without all that hand cranking? These yummy, and highly edible treats are created through the use of liquid nitrogen (often abbreviated LN_2 or LN) that freezes the ice cream base quickly. LN_2 is a cryogen (a substance used to produce very low temperatures) that is used extensively in research for everything from isolating new compounds in synthetic organic chemistry to lowering sample temperatures to increase signal-to-noise ratios and studying how matter responds to ultralow temperatures to preserving biological samples, tissues and organs for biomedical research.

Despite our familiarity with LN₂, there are numerous hazards associated with the use of LN₂. Because of its extremely low temperature, LN₂ can cause severe tissue damage and frostbite in seconds. If splashed into an eye, it can cause permanent eye damage, even upon short exposure. LN₂ also expands tremendously in volume as it vaporizes which, in a closed environment, could eliminate the oxygen from the air and ultimately cause asphyxiation.

For all these reasons, LN_2 should be handled in well-ventilated areas with eye/face protection and loose-fitting thermal insulated or leather gloves, as well as long sleeves to protect skin from contact. Given the seemingly ubiquitous use of LN_2 , it is easy to see why some researchers think it's essentially harmless. It's not.

Research News

Request to Spend Funds

With the support of your department chair/director and/or dean, the purpose of the Request to Spend Funds (RTSF) process allows an index to be generated in Contract & Grant Accounting and spending on a project to begin prior to an award document being received and/or fully processed by the Office of Sponsored Projects.

The use of RTSFs should be considered when funding is highly anticipated, such as with a non-competitive continuation. The use of the RTSF provides for a smooth transition from year-to-year without interruption. Be mindful with your specific projects and award documents as they must allow for spending to be incurred during the period you wish the RTSF to be active.

With departmental approval, RTSFs can be considered for up to 25% of the anticipated total award for a maximum of 90-days. For submission, please submit your signed RTSF form along with an Award Budget Sheet for the anticipated award total to awards@unm.edu.

OSP Essential Reviews

OSP is seeing an increase in requests for essential reviews for the OSP proposal team. Essential reviews are meant to be conducted for last minute requests that are outside of the Pl's control. The proposal review expectation is that appointments be made as soon as possible, with the review conducted (at a minimum of) two days prior to the sponsor deadline.

The <u>scheduling system</u> allows the PI/department to book appointments as far in advance as desired. You can find the proposal preparation and submission guidelines on the <u>OSP website</u>.

PI Eligibility Form Changes

In an effort to ensure efficiency with tracking PI's that do not meet the criteria to be a PI on a sponsored project, the PI Eligibility form has been updated effective Feb. 24.

It is an OSP requirement that this form be completed "per project". The signed and completed form should be uploaded in the Streamlyne record at the start of the proposal review appointment. You can find the form on the OSP website. Additional information about the PI eligibility process can be found here.

Representation and Certification Requests

OSP has noticed additional compliance requests from federal sponsors that include data coming from the Compliance, Ethics and Equal Opportunity (CEEO) Department or the Office of University Council (OUC). These requests require information related to Civil Rights and employment data or other compliance information that OSP does not manage.

CEEO and OUC require lead time to gather and prepare the data for these federal requests that may impact a sponsor deadline. If you are responding to a federal opportunity, please review the sponsor requirements as soon as possible and if you see a form that requires compliance information, notify OSP immediately at ospappointment@unm.edu.

Graphic design support for UNM research activities

The Faculty Research Development Office is excited to offer graphic design support to UNM researchers for a range of research-related materials. Roman, our graduate research graphic design assistant, can support the creation of dynamic graphs, illustrations, and other visual materials to elevate your research presentations and activities. To submit a request, visit frdo.unm.edu.

Right on track: Researchers use new tech to improve railroad safety

Railroads may evoke images of the Old West and the Industrial Revolution, but researchers at the UNM School of Engineering are working to bring new, cutting-edge technologies to even the smallest and most remote railroad systems as part of a national center led by Penn State University and funded by the Federal Railroad Administration (FRA).

The new Rail Center for Research Enhancing Short Line Transportation (CREST), established by a \$6.8 million grant from the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program and set to begin this fall.

Overwhelmed at work? New research reveals the power of asking for help

In recent years, the word "burnout" has become more prevalent within our society and vocabulary. Now, how many of you are still experiencing exhaustion within today's workforce? A new study out of UNM's Anderson School of Management showcases how receiving help at work will mitigate exhaustion levels.

UNM Associate Professor Andrea Hetrick and UNM Professor Ryan Jacobson recently published "Receiving help at work mitigates the negative consequences of performance pressure: implications for depletion and citizenship behavior" in the Journal of Social Psychology.

2025 State of Research

There is still time to register for the 2025 State of Research. We are changing things up this year to include a town hall panel Q&A with EVP for Academic Affairs & Provost James Holloway, EVP for Health Sciences Mike Richards, and HSC Vice President for Research Hengameh Raissy. The event is set to take place on Wednesday, March 12 at 4 p.m.

Fluid Geographies Book Panel

Join a panel of UNM experts Friday, March 7 from 3-4 p.m., as they discuss water and climate in New Mexico as part of the release of Dean of Graduate Studies Maria Lane's newly published book, *Fluid Geographies: Water, Science, and Settler Colonialism in New Mexico.*

The event will be held in the Frank Waters Room of Zimmerman Library (Room 105), immediately followed by a reception at the University Club from 4-5 p.m. Bookworks will be onsite selling copies of the panelists' recent books and authors will be available for book signing during the reception. Eight lucky attendees will receive a free book of their choice.

Postdoc Research Symposium

UNM is hosting the 3rd annual New Mexico Postdoc Research Symposium on March 28. All NM postdocs, students, staff, and faculty are invited to attend this event where postdocs from multiple institutions around the state will showcase their work.

We will also feature an early career advice panel and keynote speaker.

Research Celebrations

Annual Research Lecture Awardee

Congratulations to Dr. David Schade on his most recent honor, the 2024 UNM Annual Research Lecture award. **The ARL** has been presented at UNM since 1954 and is one of the highest honors the University bestows on its faculty member in recognition of research/creative activity. Dr. Schade was UNM's 2023 recipient of the Community Engaged Research Lecture Award and ma

Dr. Schade was UNM's 2023 recipient of the Community Engaged Research Lecture Award and may be the first faculty in history to receive both honors.

Research Reads

This month, we bring you 48 Hours to Kill, a thriller written by UNM's own Andrew Bourelle, associate professor in the Department of English, who teaches creative writing, rhetoric, and technical communication. I first read this captivating novel almost three years ago and picked it up again this past month as I was looking for a "quick read." It did not disappoint, even the second time around.

The action is non-stop, and I found myself wandering around my house, book in hand so that I didn't have to put it down! The lead character is released from prison on a 48-hour furlough to attend his sister's funeral and find her killer. Although the premise was perhaps a bit contrived, it's hard to beat the constraints such a deadline presents when telling an adrenaline-fueled story. Indeed, each chapter begins with a reference to the ticking clock that Ethan Lockhart has remaining to find justice for his sister, which further serves to ramp up the suspense. If you're looking to escape, even if just for a little while, I highly recommend!