STATE OF RESEARCH



THE UNIVERSITY OF NEW MEXICO

2023 State of Research

March 22



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





Agenda:

- Land Acknowledgment: OVPR Assoc. Dir., Greg Trejo
- Opening Remarks: Provost James Holloway
- UNM State of Research: VPR Ellen Fisher
- Q&A Session





Land Acknowledgment

Founded in 1889, the University of New Mexico sits on the traditional homelands of the Pueblo of Sandia. The original peoples of New Mexico - Pueblo, Navajo, and Apache - since time immemorial, have deep connections to the land and have made significant contributions to the broader community statewide. We honor the land itself and those who remain stewards of this land throughout the generations and also acknowledge our committed relationship to Indigenous peoples. We gratefully recognize our history.



The University of New Mexico Opening Remarks





The University of New Mexico 2023 State of Research

hala hale as la



The Office of the Vice President for Research

OUR TEAM:

Ellen Fisher, Ph.D. VP for Research

Thomas Turner, Ph.D. Interim Associate VP for Research

Melissa Emery Thompson, Ph.D. Assistant VP for Research

David Hanson, Ph.D. Assistant VP for Research

Patrick Bridges Ph.D. Special Assistant to the VPR

Greg Trejo Associate Dir., Finance & Admin. Anita Grierson Operations Dir., GC Program

Grace Faustino Manager, IT Services

Marissa Lucero Manager, Comm. & Marketing

Daniel Brenden Sr. Web Designer

Linda Barril Technical Training Consultant Gloria Quintana Executive Assistant

Samuel Mascarenas Administrative Coordinator

Risa Smith Student Office Assistant

Anmol Singh Gill Student Technical Specialist

Lauren Taylor Student Office Assistant

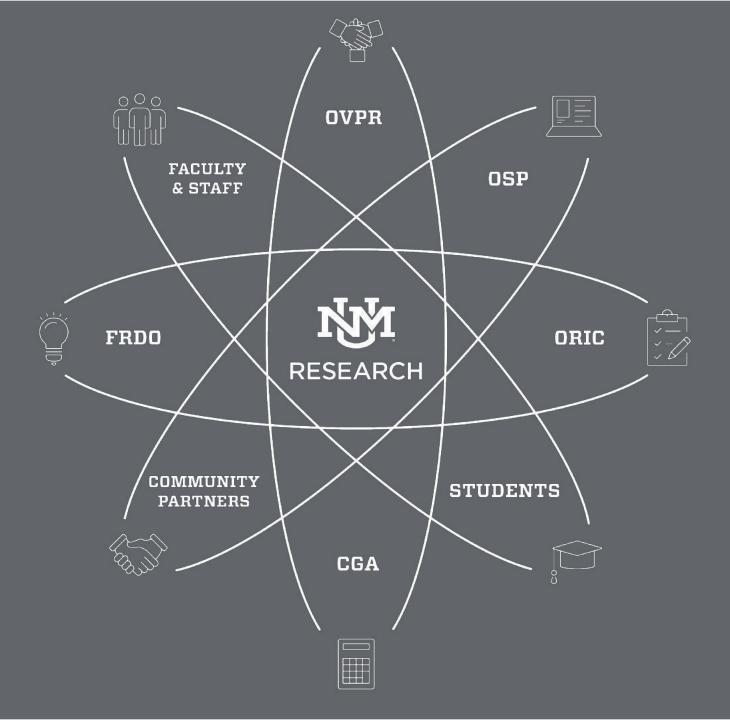




Welcome the newest member of the OVPR

Omathanu "Om" Perumal, Ph.D. UNM Associate Vice President for Research







Faculty Research Development Office (FRDO)



Hannah Torres Director

OVPR Units

Office of Sponsored Projects (OSP)



Rosa Gonzalez-Rosenblatt Director Office of Research Integrity & Compliance (ORIC)



Linda Mayo Interim Executive Director



Centers and Institutes

- Bureau of Business and Economic Research (BBER)
- Center for Advanced Research Computing (CARC)
- Center on Alcohol, Substance Use, and Addictions (CASAA)
- Center for High Technology Materials (CHTM)
- Center for Micro Engineered Materials (CMEM)
- Established Program to Stimulate Competitive Research (EPSCoR)
- Geospatial and Population Studies (GPS)
- Land Grant Studies Program (LGSP)
- Southwest Hispanic Research Institute (SHRI)





OVPR Research Council

22-MEMBER COUNCIL

- ALL MAIN CAMPUS COLLEGES/SCHOOLS
- NINE CATEGORY THREE CENTERS
- URAD
- GRADUATE STUDIES
- FACULTY SENATE



OVPR Strategic Goals





- GOAL 2: STUDENT EXPERIENCE ------ EDUCATIONAL EXPERIENCE
- GOAL 4: SUSTAINABILITY ------- ROBUST PARTNERSHIPS
- GOAL 5: ONE UNIVERSITY ------ EFFECTIVE COMMUNICATION

RESEARCH AWARDS & RECOGNITION



ANNUAL RESEARCH LECTURE 2022 RECIPIENT



Dr. Vojo Deretic Distinguished Professor MGM Department Chair & AIM Center Director

MARCH 30 | 5:30 P.M. | DOMENICI AUDITORIUM

COMMUNITY-ENGAGED RESEARCH LECTURE 2023 RECIPIENT



Dr. David Schade Distinguished Professor Division of Endocrinology & Metabolism Chief

APRIL 19 | 5 P.M. | DOMENICI AUDITORIUM



Globally-Engaged Research Award

2022 Inaugural Awardee

Earth and Planetary Sciences Professor **Tobias Fischer**



Ovation Awards

2022 Inaugural Awardees



Assoc. Professor Tiffany Florvil



Professor Marjori Krebs



Professor Richard White



Asst. Professor Diana Dragomir





Professor Subhankar Banerjee





Professor Heather Edgar



Assoc. Professor Christina Salas

Faculty-Mentored Research Award

2022 Inaugural Awardees

- Chemical & Biological Engineering **Professor Achraf Noureddine**
- Biochemistry BA/MD student Lien Tang







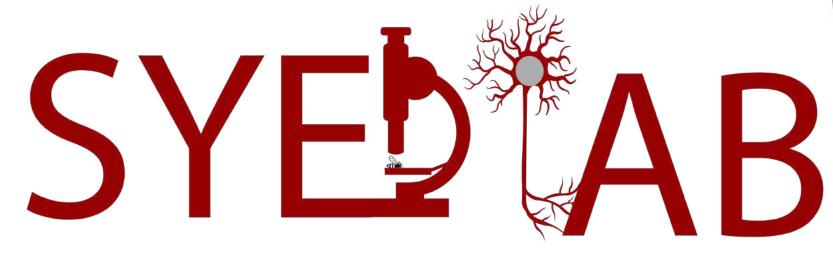


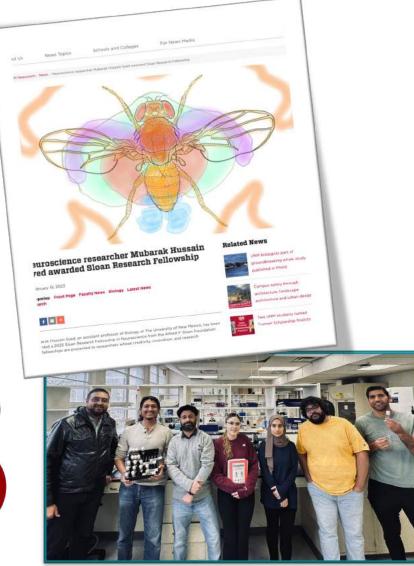


Alfred P. Sloan Foundation

2023 Sloan Research Fellowship in Neuroscience

UNM Biology Assistant Professor Mubarak Hussain Syed









UNM group receives award for Venice Biennale project

By Mary Beth King @ December 20, 2022

Categories: Front Page College of Fine Arts Tamarind Institute Latest News Research

🕑 f 🖻 🚺

The University of New Mexics Center for Environmental Arts and Humanities is celebrating, and with good cause. They recently received an award for their successful project at the prestigious 2022 Venice Biennale Art anhibition *Personal Structures*, which was organized and hosted by the European Cultural Centre (ECC) in Venice, Italy, *Personal Structures* included 192 projects from 51 countries and was seen by more than \$20,000 Vistoria.

The exhibition and award came soon after the center learned it had received a \$500,000 grant from the Mellon Foundation for continued support of the center and its programs, including the Venice project.

The UNN Venice Biennale project, a Library, a Classroom, and the World, co-produced with the Environmental Studies Department of Davidson College of North Carolina, received an award from the European Cultural Centre (ECC) to commemorate the closing of the exhibition and to henor the participants.

For the category University and Research Project, the award was presented to a Library, a Classroom, and the World for "invirging created a project which represents a successful attempt of involving the city of Venice with its culture, traditions and territory, A genuine proof of interaction



the city of Venice with its culture, traditions and territory. A genuine proof of interaction and a smart application of art in the field of eccleav²

UNM biologists part of groundbreaking whale study published in PNAS Campus safety through architecture, landscape

Related News



Going back in time and up in elevation: UNM's rare high altitude chamber



Venice Biennale Art Exhibition

Top Research Award 2022: a Library, a Classroom, and the World

UNM Art and Ecology Professor Subhankar Banerjee



RESEARCH SUCCESS



THE UNIVERSITY OF NEW MEXICO'S Grand Challenges



Successful Aging



Substance Use Disorders



Sustainable Water Resources

CREATION OF 10 LEVEL 1 CONCEPT TEAMS

- 1,500 STUDENTS ENGAGED
- 350+ FACULTY AND STAFF RESEARCHERS
- >\$50M NEW FUNDS GENERATED
- \$2.1M INITIAL INVESTMENT

Grand Challenges





LEVEL 1 CONCEPT TEAMS

- Basic Needs in Higher Education
- Child Health
- Culturally Responsive Literacy
- Data Science Education
- Housing Justice

- Indigenous Child Development
- Just Transition to Green Energy
- Mental Health & Suicide Prevention
- Space Science
- STEM Education

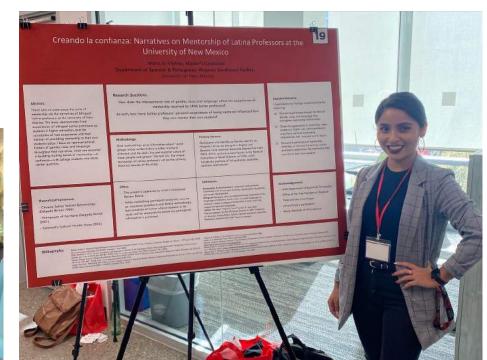


BY THE NUMBERS

- 30+ RESEARCH EVENTS
- 3 KEYNOTE LECTURES
- Attendees:
 - o Alumni
 - Primary School Students
 - Out-of-State Faculty
 - NM State Government Leaders



Research Is Education









UNM FIRST

- \$15.6M FIVE-YEAR AWARD
- NINE NEW DIVERSE FACULTY HIRES
- NOVEL MENTORING PLAN AND GENEROUS START-UPS FOR NEW HIRES
- ONGOING SEARCHES IN SIX STEM DEPARTMENTS
- GOAL IS TO ENHANCE INCLUSIVE EXCELLENCE AT UNM



FEDERAL PRIORITIES HIGHLIGHTS

- Advancing the Directed Energy Center
- Language Science Skills for Indigenous Students
- Strengthening The UNM Center for Molecular Discovery
- Methane and Other Natural Gas Monitoring
- Artemis in 3D a STEAM Challenge and Training Program
- Taos Observatory and Astronomy Center
- Reducing Alcohol-Related Mortality + Multi-tier Prevention Programs
- Sustainable Space Research
- Alliance for HSRU



WeR1 Faculty Success Support: >\$2M Invested

- Summer Research Faculty Support (SuRF)

 134 Faculty Supported in FY21-FY23
 \$481K
- Faculty Scholarship Time (FaST)

o 70 Faculty Supported since FY22o \$370K

• Program to Enhance Research Capacity (PERC)

o 21 Projects Supported FY22-FY23
o \$1.15M

- Fostering Research Expansion in the Social Sciences & Humanities (FRESSH)
 - $\circ~$ 20 Faculty Supported in FY23
 - \$60K (joint w/College of Arts & Sciences, COEHS)
 - 8 proposals submitted (thus far); 1 NEH Award Received; 1 NSF award likely
- Leadership Innovation for Faculty Transformation (LIFT) Program Pilot





Additional Faculty Development Activities

FRDO Workshops

• New Lunch & Learn Series for early career faculty in all fields (spring 2023)

- Six thematic sessions discussing resources to assist with pursuing funding for research, scholarship, or creative activities.
- Five sessions devoted to specific early career funding opportunities with a particular focus on the NSF CAREER program
- Joint workshop with URAD, opportunities to support undergraduate research
 - Workshop focus on URAD's new "Plug-and-Play" service intended to ease the process of applying for and implementing grants to increase undergraduate research opportunities at UNM



UNM Postdocs

- University Membership: National Postdoctoral Association
- Inclusive Excellence Post Doctoral and Visiting Scholars Program
- School of Medicine Postdoctoral Program
- Joint Steering Committee





ZANCADA GRADUATE FELLOWS PROGRAM

- 2022 Inaugural Cohort -

11 UNM GRADUATE STUDENTS

MENTORSHIP OPPORTUNITIES

PROMOTES INTERDISCIPLINARY COLLABORATION

11 DIVERSE DISCIPLINES



2023-2024 Cohort Applications Due: April 14

RESEARCH ADVINISTRATION



BY THE NUMBERS

- Streamlyne went live Oct. 17, 2022 •
- Permanent transition Nov. 22, 2022 •
- 242 proposals successfully submitted (\$122M) •
- Approximately 50 proposals submitted directly to Federal sponsors
- More than 80 pre-proposals or unfunded agreements processed •
- 363 IRB submissions since May 18, 2022 •
- 1,868 COI disclosures submissions since Nov. 7, 2022



RCH ADMINISTRATION PLATFORM



Streamlyne Training Videos





THANK YOU!

Research Administrators

UNM Information Technologies

Financial Systems Management



Enterprise Technology







qualtrics



RESEARCH COMMUNICATION



FROM THE DESK OF THE VICE PRESIDENT FOR RESEARCH





UNM Research 2022 Trifold



Website Re-design





The University of New Mexico serves as the state's premier institution of higher learning and provider of health care by promoting discovery, generating intellectual and cultural contributions, and honoring academic values.

UNM's distinguished research community is cultivated throughout its 14 colleges, 200+ degree programs, nine multi-disciplinary centers, six strategic Health Sciences centers, and four branch campuses.

MEASURES OF EXCELLENCE

UNM serves as a catalyst for discovery, innovation, and economic growth.

	326	\$355M
	Active Principal Investigators in FY22	Research Expenditures in FY22
	808	336
	Sponsored Projects in FY22	Patents Awarded between FYI8 - FY22
		LEARN MORE

and

RESEARCH PARTNERSHIPS



Major NSF Opportunities

- NSF mandated to increase funding to EPSCoR states
 - o Jump to 15% in FY 2023
 - $_{\odot}$ Keep increasing until 25% by 2025
- New NSF Technology, Innovation, Partnership (TIP) Directorate



Regional economic impact



> Culture of innovation

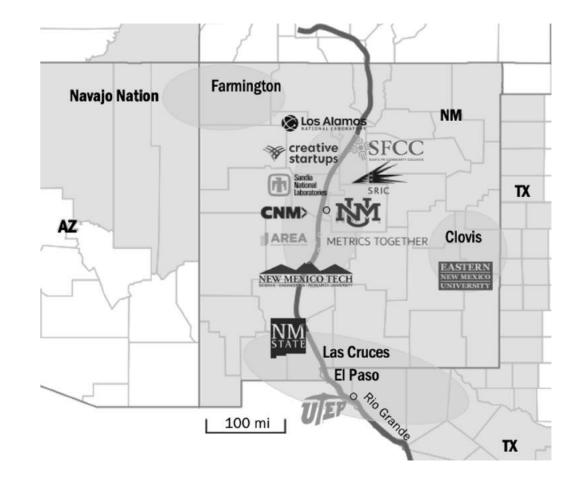


Comprehensive workforce development



Research Driven Economic Development

- RALI-WEST
 - Clean water in every tap and decarbonized energy to every door
 - 15 partnering institutions
 - UNM units: SOE, A&S, SAAP, ASM, COEHS, HSC, Fine Arts, Law, CARC, CHTM, NM EPSCoR
 - Focused on creating a diverse, inclusive, and vibrant economy to the rural and urban areas in the region.
 - 88 Senior Personnel
 - 27 Additional Collaborating Public & Private Organizations





Technology Enhancement Fund

- Research support from NM Legislative & Executive Branches
 - \$45M authorized for matching funds in STEM and related areas
 - \$20M allocated for distribution in FY23
 - \$4M secured as match for the \$20M NSF NM EPSCoR proposal
 - More than \$14M to be allocated this month, more than \$6M estimated for UNM led projects
 - Additional \$40 million currently in House Bill 2

How do YOU gain access?

- Higher Education Department (HED) distributes based on TEC recommendations
 - Technology Enhancement Committee (TEC) members are VPRs and tech transfer leads
- QUARTERLY CALLS FOR REQUESTS: Due Mid-April
- Unused funds will revert to the HED for re-allocation in subsequent quarters



Sandia National Lab Faculty Sharing Program

- 11 JOINT APPOINTMENTS SUBMITTED
- ATTRACTS, RETAINS, AND RECOGNIZES STAFF/FAULTY AT ALL LEVELS
- PROVIDES OPPORTUNITIES FOR COLLABORATION BETWEEN UNM AND SNL SCIENTISTS
- SPECIALIZED SCIENTISTS SUITED FOR ENGINEERING AND
 MATHEMATICS RESEARCH



Sandia National Lab (SNL) University Partnership Network Collaboration-Building Seed Funding

- REPLACED SNL ACADEMIC ALLIANCE LDRD SUPPLEMENTAL FUNDING
- 6 FACULTY SELECTED
- \$25K/AWARD FOR A TOTAL OF \$150K





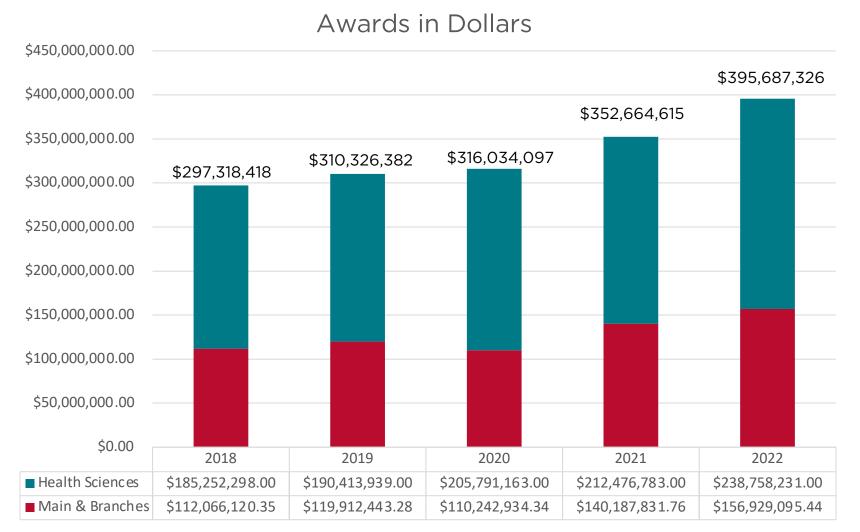
RESEARCH EXCELLENCE

1,699 1,676 1,625 1,579 1,516 Health Sciences Main & Branch

Awards Received



RESEARCH EXCELLENCE

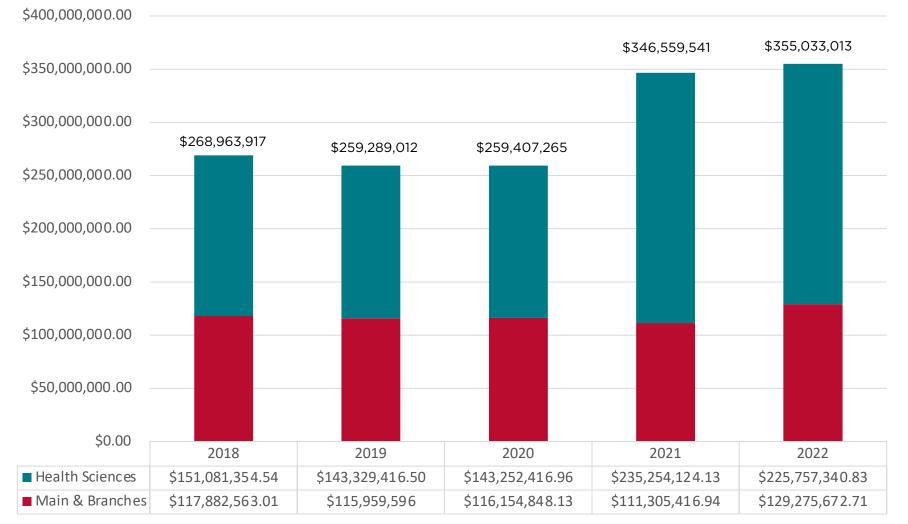


■ Main & Branches ■ Health Sciences



RESEARCH EXCELLENCE

Research Expenditures



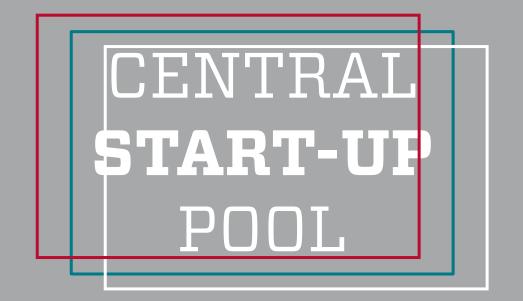
■ Main & Branches ■ Health Sciences

RESEARCH IS IS DUCATION WHAT'S NEXT?

CELEBRATING NEW LOBO LEADERSHIP

College of Arts and Sciences: Interim Dean Janie Chermak Anderson School of Management: Interim Dean Julie Coonrod School of Medicine: Dean Patricia Finn College of Education and Human Sciences: Interim Dean Kris Goodrich College of Nursing: Interim Dean Carolyn Montoya School of Engineering: Dean Donna Riley UNM Health Sciences: Interim VPR Hengameh Raissy





COLLABORATION BETWEEN OVPR, PROVOST OFFICE, AND COLLEGES
 APPROXIMATELY \$1M FOR FACULTY HIRES STARTING IN FY24

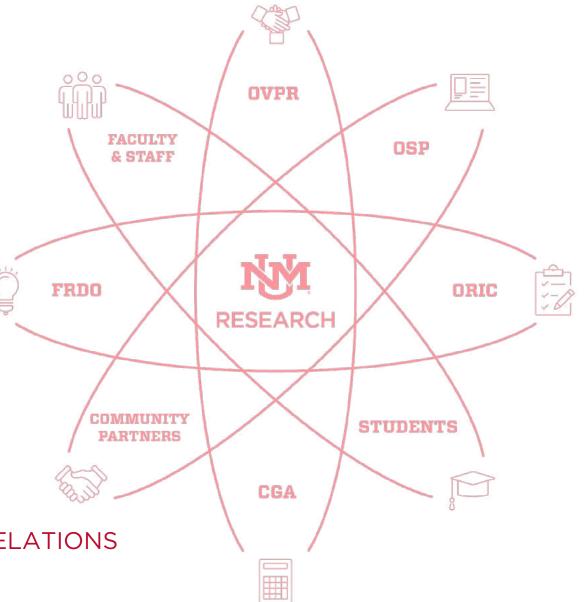
• INTENDED FOR STRATEGIC HIRES

CURRENTLY ACCEPTING REQUESTS



INCREASING SUPPORT FOR RESEARCHERS

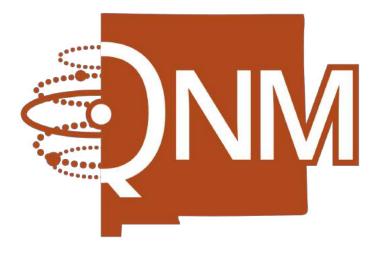
- OSP BUSINESS ANALYST
- CGA SENIOR FISCAL SERVICES SUPERVISOR
- TWO FRSO'S
- INTERDISCIPLINARY PROJECT COORDINATOR
- DEVELOPMENT OFFICER FOR FOUNDATION RELATIONS





Promising Future Category Three Centers





QUANTUM NEW MEXICO

New Mexico is a Quantum State



Research Infrastructure

- CAPITAL PROJECTS LEADERSHIP TEAM • Animal Research Facility • CHTM Roof
- EQUIPMENT • 3D Metal Printer • Post-production Lab
- ACTION GROUPS UNDER RESEARCH COUNCIL • Facilities • Research Strategy
 - o Research Strategy



UNM **OFFICE OF** RESEARCH **INTEGRITY** & COMPLIANCE



Creation of Taskforce

- Accepting UNM Community Feedback
- Evaluation of Strengths and Potential Growth





Grand Challenges

LEVEL 2 PROGRAM

REQUEST FOR PROPOSALS DUE: Monday, May 1

NEXT COHORT: 3-5 Teams

INITIAL SEED FUNDING: \$200,000

DO NOT HAVE TO BE LEVEL 1 TEAM TO APPLY



Lightning Lounge GOES NATIONAL

Washington, D.C. April 18



<section-header>STATE OF RESEARCH 2 23

