

# Welcome

Economic and Rural Development Committee

Overview of UNM Research and its  
Economic Impact on New Mexico

Michael J. Dougher, Ph.D.  
Vice President for Research

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The University of New Mexico

Office of the VP for Research

# Research at UNM

UNM is New Mexico's flagship Research University

- It has a special roll in the state
- Its mission is **discovery and dissemination** of knowledge
- Both** are definitive and critical
  - STEM-H demand
  - Retention at UNM and NM
  - Preparation to Compete
  - Research Match Application

UNM's Carnegie Classification is "Research University with Very High Research Activity"

- Highest designation there is

UNM is an Hispanic and Minority Serving University

- Provides unique opportunities
- One of the highest producers of minority undergraduate and graduate degrees in US

# Research at UNM

## What is Research at UNM?

Collectively refers to *all* of the creative, academic, scientific, and technical activities of all of our faculty across campus. Includes works of art and literature as well as the range of basic and applied discovery oriented activities of our faculty across and within all academic disciplines

All of this work has economic impact

The focus, though, is usually on extramurally funded research

BBER 2011 report demonstrates that UNM is a huge economic engine in NM: 48% of expenditures based on out-of-state funding

Supported \$620M in UNM output, \$155 in additional income and 4325 additional jobs

A large part of that is research funding

# Research at UNM

## Areas of National Standing

- Materials Science and Optical Sciences
- Sustainability & Energy
- Computation and Visualization
- Water, Climate Change, and the Environment
- Pulsed Power-Driven High Power Microwave (HPM)
- Policy in Science, Technology and Health
- Quantum Information Science
- Arts of the American West
- Arts of Latin America
- Human behavioral sciences

## Emerging Areas of Strength

- Cyber-security
- Humanities Research Center
- Digital Arts, Film, and Data Visualization
- Informatics Research, Data Sciences and Curation

## Cross-Cutting Strengths

- STEM & Diversity Education
- Southwest Historical, Cultural and Social Research, Southwest Biology
- Hispanic, Native American and Latin American Studies
- Women Studies

# Research Centers

Centers of excellence and research centers have become the measure of success and reputation for research-intensive universities. At the University of New Mexico there are over 50 institutes and research centers addressing a broad range of interests and industries. UNM centers and institutes enables researchers the freedom to look across disciplines for solutions, benefiting from many perspectives. UNM research centers play a significant role in the New Mexico economy by serving as key drivers in human development, research & development (R&D), and service.

## UNM Center Structure

### Category I

#### Academic Departments

- **Increases** interdisciplinary activity within the School/College
- **Enhances quality** and productivity of school/college faculty
- **Aligns** with the teaching, research, and service mission of the school/college

### Category II

#### Schools/Colleges

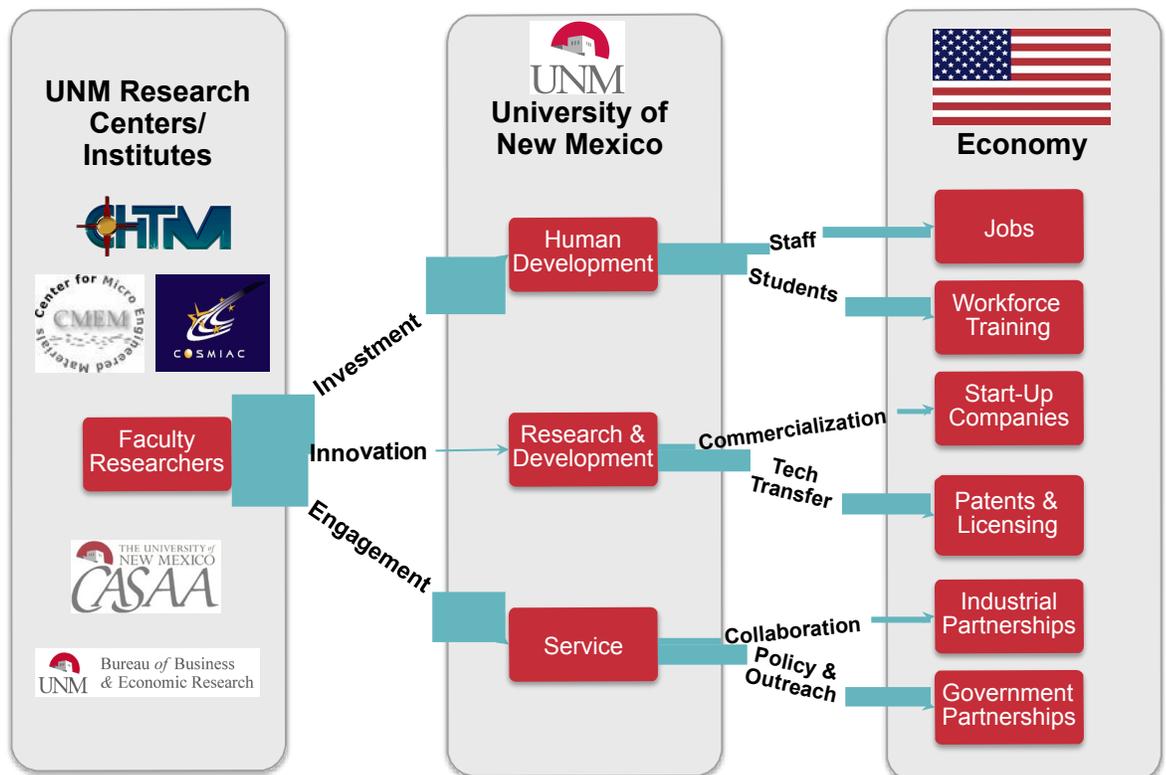
- **Strengthens** the overall ability of the University to accomplish its mission
- **Promotes** interaction of different units from several schools/colleges
- **Enables** the University to take advantage of opportunities available through funding agencies

### Category III

#### Provost/VPR

- **Involves** core research faculty
- **Contributes** to the research mission of the University
- **Independence** from, but close affiliation with more than one school/college
- **Broad** focus with multiple sources of funding and external collaboration
- **Self-sustaining** with a viable management and financial plan

## Mapping the Impact of Research Centers



# Some Data

## Fiscal Year 2013

|                        |               |
|------------------------|---------------|
| Number of Proposals:   | 846           |
| Proposal Dollars:      | \$263,667,359 |
| Number of Awards:      | 1135          |
| Award Dollars:         | \$119,732,442 |
| Research Expenditures: | \$190,147,982 |

## Numbers by Award Type

| Category                    | Amount       |
|-----------------------------|--------------|
| Grant                       | \$61,711,767 |
| Contract                    | \$42,138,839 |
| Cooperative Agreement       | \$9,224,662  |
| Incoming Subaward           | \$6,122,627  |
| Memorandum of Understanding | \$476,940    |
| Fellowship                  | \$57,608     |

# Some Data

## Awards since 2008 (by Major Sponsor)

| <b>Agency</b> | <b>PIs</b> | <b>Total Amount</b> |
|---------------|------------|---------------------|
| NSF           | 186        | \$135,787,282       |
| DOD           | 77         | \$89,947,824        |
| NIH           | 55         | \$65,596,71         |
| DOEd          | 25         | \$43244293          |
| DOE           | 33         | \$23,471,690        |
| National Labs | 83         | \$21,048,208        |

## Intellectual Property Fiscal Year '13

Disclosures = 138

Patents Filed = 117

US Patents issued = 51

Options/license agreements = 63

Start-up Companies = 9

Income = \$ 2.1M

Recently ranked #56 in Nation by NAI!

# Looking Ahead

Traditional sources of research funding are being reduced:

- Cuts to virtually all research budgets
- Fewer awards and for less money/award
- Need to enhance our competitiveness

NM Research Collaborative

Relations with National Labs-Joint hires and titles

- Need to find alternative sources of research funding

Industry-but not just at the end of the pipeline

- Need investment at the front end
- Students, endowed chairs, labs, equipment

- New IP arrangements
- Office of Corporate/Industry Alliance

# Looking Ahead

## Areas of Concern

### -Research Infrastructure

Research Space/laboratories

Research Equipment-Renewal and Replacement

-Without investment in the early stages of the pipeline, there will be no commercialization, tech transfer or ability to train students competitively for STEM jobs.

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