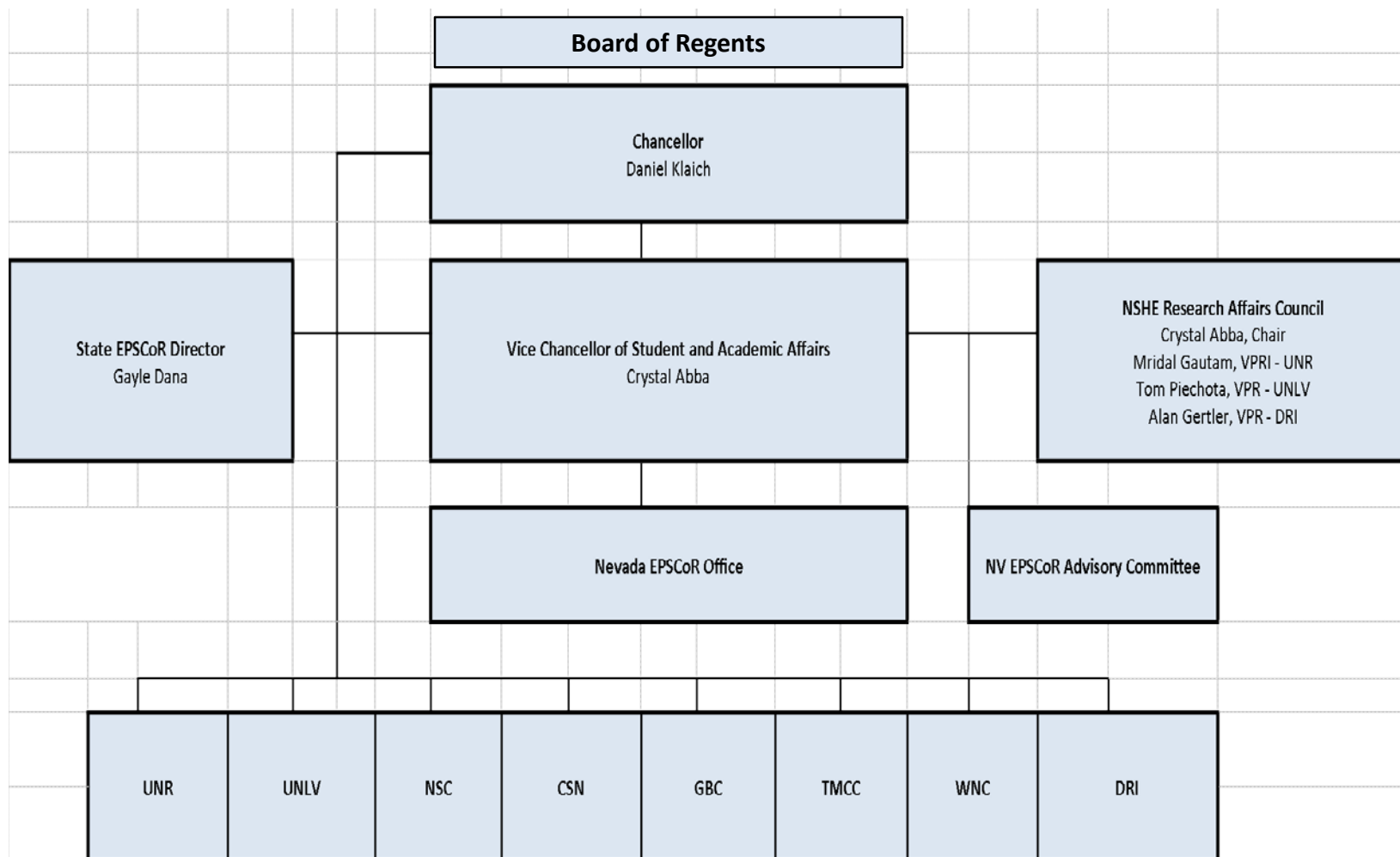


Nevada System of Higher Education Sponsored Programs



# What is NSHE?



# System Sponsored Programs and EPSCoR

To promote the opportunities and collaborations within science, research, education, and technology for NSHE institutions in Nevada

- ❑ Housed within the Chancellor's office in System administration
- ❑ Charged with administrative and financial regulations and compliance requirements that govern grants and contracts for EPSCoR and other statewide programs
- ❑ Facilitate statewide and system-wide collaborations
- ❑ Promote research administration infrastructure improvement throughout NSHE

# Continued Services

- ❑ Currently manage approximately \$25 million/year in sponsored projects
- ❑ Administration for EPSCoR
- ❑ Administration of special projects match
- ❑ Interact with the Research Affairs Council
- ❑ Liaison with EPSCoR Coalition
- ❑ Capitol Hill visits



**What is EPSCoR?**

**Established Program to  
Stimulate Competitive Research**

# National EPSCoR Programs

## Congressional Mandate in 1979

- ☐ National Science Foundation (NSF) \*NV 1985
- ☐ National Aeronautics and Space Administration (NASA) \*NV 1993
- ☐ Department of Energy (DOE)
- ☐ Department of Defense (DOD)
- ☐ United States Department of Agriculture (USDA)
- ☐ National Institutes of Health (NIH) – Institutional Development Award (IDeA)



# EPSCoR JURISDICTIONS

<0.75% of NSF's funding

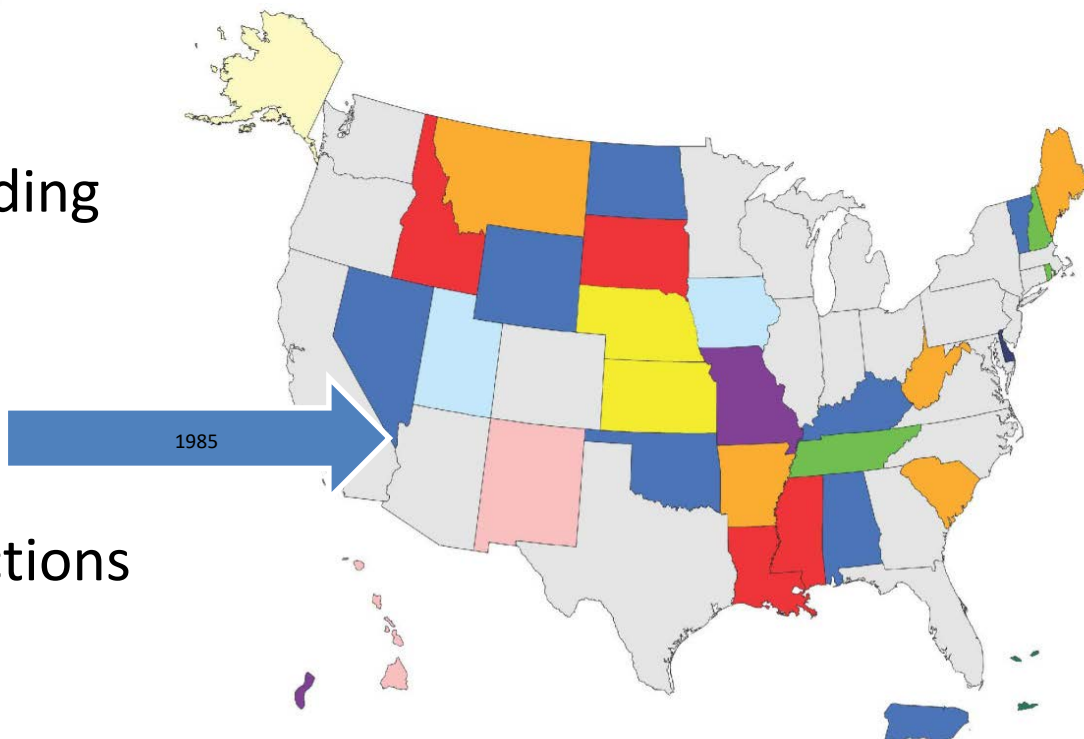
Nevada = 0.24%

California = 14%

25 states + 3 jurisdictions

Hold 20% of U.S.  
academics

Receive 10% of  
federal research  
dollars



1980	1985	1987	2000	2003	2009
Arkansas Maine Montana South Carolina West Virginia	Alabama Kentucky Nevada North Dakota Oklahoma Puerto Rico Vermont Wyoming	Idaho Louisiana Mississippi South Dakota	Alaska	Delaware	Iowa Utah
			2001 Hawaii New Mexico	2004 New Hampshire Rhode Island Tennessee	2012 Guam Missouri
		1992 Kansas Nebraska	2002 U.S. Virgin Islands		

\* Utah, Tennessee, and Iowa are no longer eligible.

# The Purpose of EPSCoR

- ☐ Stimulate R&D capacity and competitiveness in EPSCoR jurisdictions
- ☐ Advance and broaden participation in science & engineering
- ☐ Utilize statewide participation
- ☐ Catalyze key research themes
- ☐ Activate collaborations among academic, government, and private sector stakeholders



# EPSCoR/IDeA Impacts

Ensuring the benefits of scientific research in all states

## Bolstering

### NATIONAL RESEARCH COMMUNITY

Employing the expertise, experience, and efforts of all states to advance innovation and the quality of life

## Building

### STATES' PARTICIPATION

Integrating 25 states and 3 territories more fully into federal research opportunities and benefits

Guaranteeing that all states and regions benefit from the U.S. research investment

## Benefiting

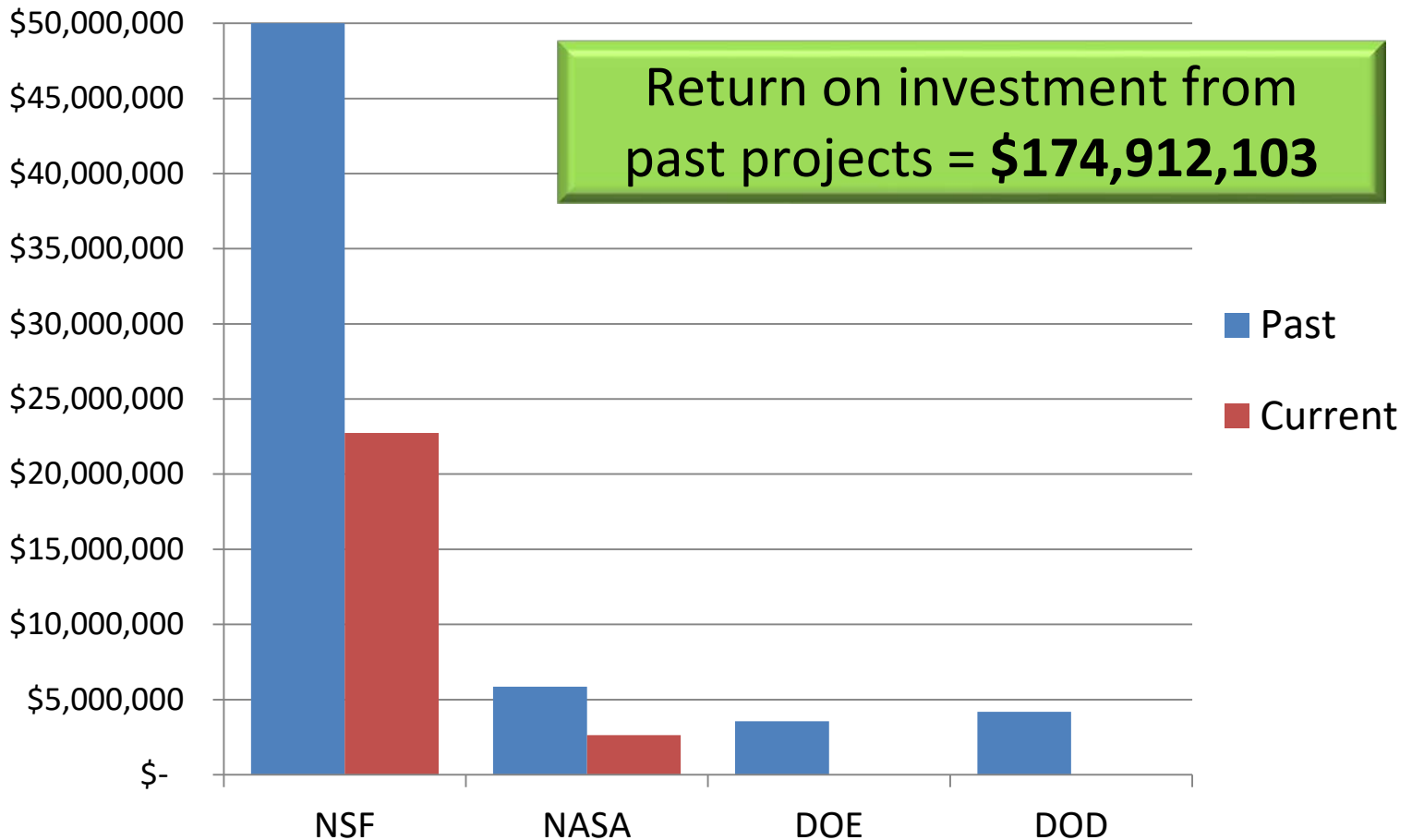
### INDIVIDUALS AND COMMUNITIES

Training our students for high-paying jobs in today's 'high tech' workforce

Bringing science and engineering solutions to state and local issues

Enhancing knowledge and research potential of our world class faculty and graduate students

# Nevada EPSCoR Funding 1985 - 2016



# EPSCoR Myths

- ☐ *EPSCoR funding is an entitlement*
  - ☐ No – funding is competitive, peer-reviewed
- ☐ *Each institution gets equal amounts of funding*
  - ☐ No – funding to each institution can range 20 – 50% of total budget
- ☐ *The same faculty are involved in EPSCoR proposals*
  - ☐ There is minor overlap – of the 101 faculty involved in the last 3 NSF EPSCoR proposals (2005-present):
    - ☐ 85 faculty have participated in only 1 proposal
    - ☐ 14 faculty have participated in 2 proposals
    - ☐ 2 faculty have participated in all 3 proposals
- ☐ *Nevada should graduate from EPSCoR*
  - ☐ There is no graduation
  - ☐ EPSCoR status is determined by federal research funding in the state

# NV EPSCoR Office Roles

- ❑ A Research Administrator is assigned to each proposal/award/project.
- ❑ The RA works collaboratively with the Project Director/Principal Investigator.
- ❑ RA is an integral part of the management team.

# Research Administrator Functions

## Proposal Phase

- ☐ Prepare solicitation and schedule review panel
- ☐ Organize planning meetings and setting timelines
- ☐ Budget
  - ☐ Preparation of proposal budget sheets and budget narrative
  - ☐ Work with institution Sponsored Programs/Business Offices
- ☐ Supporting documentation
  - ☐ Gathers all supporting documentation (facilities, biosketches, etc.)
- ☐ Load all proposal documents
- ☐ Authorized Official to submit proposals

# Research Administrator Functions

## Pre-Award

- ☐ Work with PD/PI to answer any questions from Sponsor
- ☐ Review and approve terms and conditions
- ☐ Ensure compliance documents are in order (IACUC, human subjects)
- ☐ Negotiate any changes with the Sponsor

# Research Administrator Functions

## Implementation

- ☐ Organize implementation meetings
- ☐ Set up NSHE accounts
- ☐ Complete subawards for the partner institutions
- ☐ Ensure independent contractor agreements are in place (external evaluator or other vendors)

# Research Administrator Functions

## Life of the Award

- ☐ Organize regular leadership team meetings
- ☐ Manage incoming funds (if awarded incrementally)
- ☐ Approve all invoices from subawardees
- ☐ Monitor all spending on subawards
- ☐ Manage annual report process
  - ☐ PD/PI leads the narrative development
  - ☐ RA leads data collection
  - ☐ Ensures all standard and specific terms & conditions are met
- ☐ Attend required meetings with Sponsor
- ☐ Work with external evaluator as required
- ☐ Work with Communications Specialist to market the project (websites, social media, news stories)



# Research Administrator Functions

## Close Out

- ☐ Monitor spending on all subawards
- ☐ Ensure subawards are closed
- ☐ Work with post award on final financial reporting
- ☐ Organize final report
- ☐ Ensure compliance documents are completed

# NV EPSCoR Office

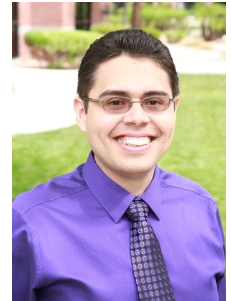
## Research Administrators



**Michele Casella**

NSF EPSCoR Track 3

EOD on NSF EPSCoR Track 1 & 2



**Gibran Chavez-Gudino**

NASA EPSCoR & Space Grant

RID and CAN



**Marcie Jackson**

NSF EPSCoR

Track 1 and Track 2



**MinSun Park**

Department of Education

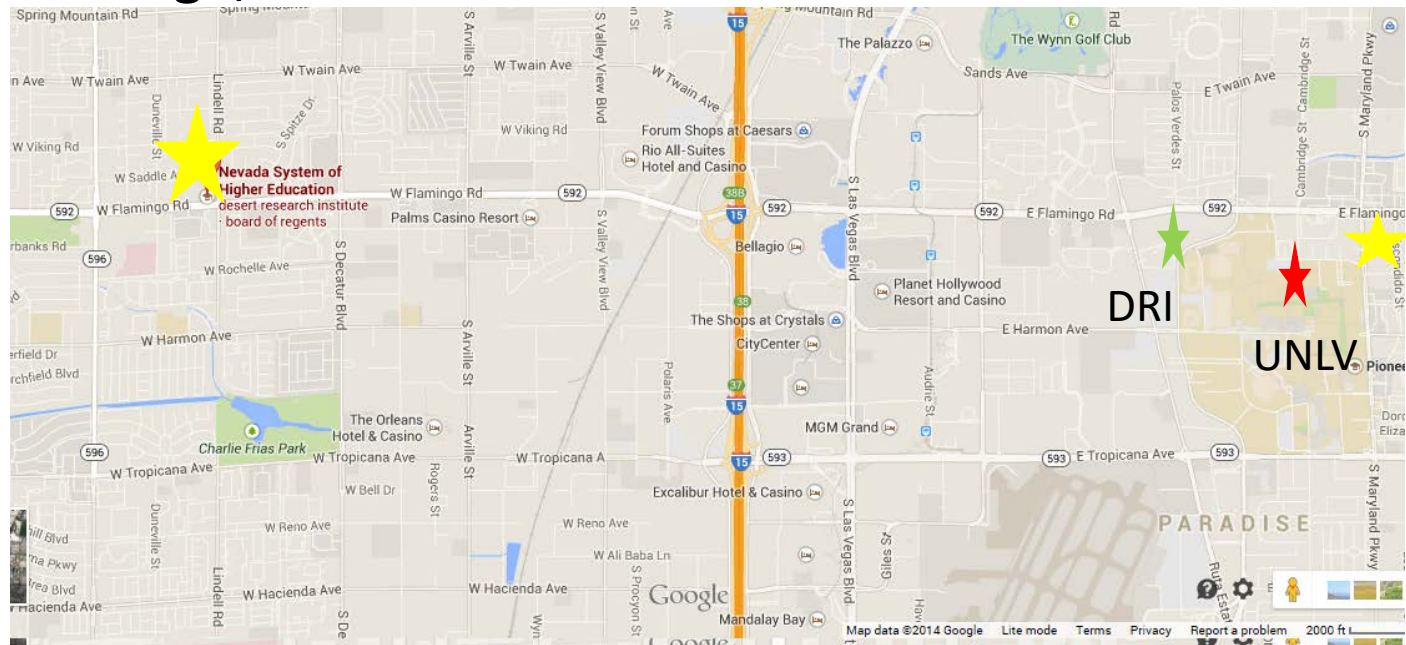
Gear Up, NeCoTIP

# Location

5550 W. Flamingo Road, Ste A2

Las Vegas, NV 89103

W. Flamingo/Lindell



# Nevada EPSCoR Advisory Committee

# Nevada EPSCoR Advisory Committee

Provides guidance to Nevada's EPSCoR Programs by:

- Supporting development of science, technology and education in Nevada
- Connecting STEM advancements to NV workforce and economic development
- Advising State EPSCoR Director on strategic directions for sustained health and growth of NV EPSCoR programs
- Ensuring NV EPSCoR programs are aligned with the NV S&T and Governor's economic development plans
- Facilitating linkages of NV EPSCoR programs with legislators, businesses, committees, associations

Support – Connect – Advise – Link

# Nevada EPSCoR Advisory Committee

Consists of up to 15 members, with representatives from:

- Nevada State Department of Education with STEM/GEAR UP/P-20 background
- Private sector entity related to NV EPSCoR's technology and/or research focus
- Academia: 1 each from DRI, UNR, and UNLV in the following positions and/or expertise: Provost; government relations; or economic development/technology transfer
- Nevada Governor's Office of Economic Development (GOED)
- Nevada Legislature
- Aerospace/defense sector (private or federal)
- Business information technology sector
- Business, entrepreneurship and technology sector
- Nevada EPSCoR Director as ex officio member

# Nevada EPSCoR Advisory Committee

- Greg Ihde, URS Corporation, Chair
- Joe Grzynski, Desert Research Institute, Vice Chair
- Dave Archer, Nevada's Center for Entrepreneurship and Technology
- Tammy Bolen, Nevada Department of Education
- Cory Hunt, Governor's Office of Economic Development
- Jason Mendenhall, Switch
- Zach Miles, University of Nevada, Las Vegas
- Ellen Purpus, University of Nevada, Reno
- Carl Reiber, University of Nevada, Las Vegas
- Joyce Woodhouse, State Senator District 5
- \*Ex officio, Gayle Dana, NV EPSCoR
- \*Administrative, Lori Brazfield, NV EPSCoR

# **EPSCoR Activities**

## **Education, Outreach, and Diversity**



# Broadening Participation

## Priorities:

- ☐ Increase participation of women and underrepresented minorities in science, technology, engineering, and math (STEM)
- ☐ Coordinate resources to help faculty, staff, and students create a more welcoming environment with sustainable support systems for success of all participants in STEM disciplines
- ☐ Foster collaborations in order to leverage and sustain EOD programs and events
  - ☐ Internal and external engagement

# Current EOD Efforts

- ❑ Undergraduate Research Opportunity Program (UROP)

***Current solicitation available***

<http://epscorspo.nevada.edu/solicitations-2/>

- ❑ Field trip and laboratory experiences

- Nexus Solar Labs
- Green Power Kits
- CI Days (UNLV/UNR)
- Science Careers Investigation Program
- NERDS



- ❑ Student application writing workshops

- ❑ STEM Mentor assistance

(<https://stemmentor.epscorspo.nevada.edu/>)

- ❑ Nevada STEM Pipeline ([www.nvstempipeline.org](http://www.nvstempipeline.org))

# Current EOD Efforts

## Faculty workshops/trainings

- ❑ New Faculty Training (June 2017)
- ❑ Undergraduate and Graduate Writing Workshops
- ❑ BrightStars workshops



Participation – Coordination – Collaboration

# Current EPSCoR Programs

# Nevada EPSCoR Project Directors



Dr. Gayle Dana (DRI) - NSF EPSCoR Project Director & Nevada State EPSCoR Director



Dr. Lynn Fenstermaker (DRI) - NASA EPSCoR and Space Grant Consortium Project Director



Dr. Ana de Bettencourt-Dias (UNR)- DOE EPSCoR Project Director

*EPSCoR projects require that the Project Director must be the lead Principal Investigator and be employed by the fiscal agent/proposing organization*

# NSF EPSCoR Portfolio

- ☐ **Research Infrastructure Improvement (RII)**
  - ☐ **Track-1**
  - ☐ **Track-2**
  - ☐ **Track-3**
  
- ☐ **Co-Funding with NSF Directorates and Offices**
  
- ☐ **Workshops & Outreach**

# NSF EPSCoR RII

## Track-1

*(NSF 15-566)*

- ☐ Research topics in fields supported by both NSF and State's S&T Plan
- ☐ NSF Merit Review Criteria
  - ☐ Intellectual Merit
  - ☐ Broader Impacts
- ☐ Up to \$4M/year for  $\leq 5$  years



## (Track-1)

**Gayle Dana (DRI), Bob Boehm (UNLV), Jaci Batista (UNLV),  
Markus Berli (DRI), Sergiu Dascalu (UNR)**

- ☐ 5 years (2013-2018)
- ☐ \$20M federal and \$4M in state matching
- ☐ Research on solar energy generation technology, its environmental impacts and associated water issues, accelerated by cyberinfrastructure





# NSF EPSCoR RII

## Track-2

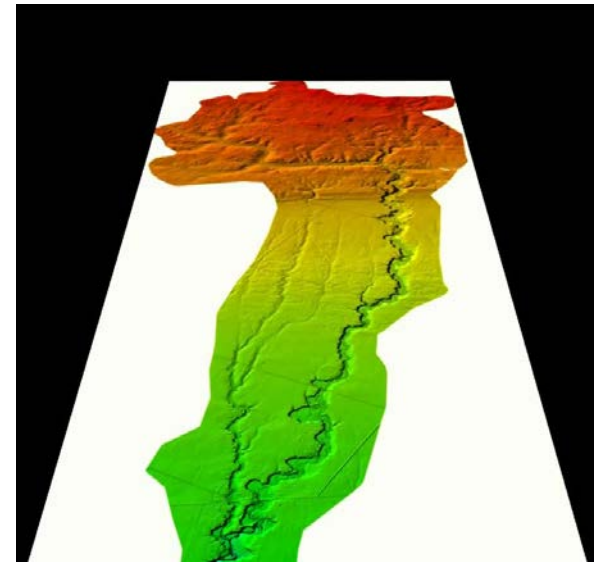
*(NSF 15-517)*

- ☐ Disciplinary collaborations among EPSCoR jurisdictions
- ☐ Aligned with NSF and national priorities
  - ☐ BRAIN
  - ☐ Food-Energy-Water Nexus
- ☐ Investigator driven
- ☐ Emphasis on development of junior faculty
- ☐ Up to \$1.5M/year for  $\leq 4$  years
- ☐ Nevada eligible to submit in 2016

# Western Consortium for Watershed Analysis, Visualization, and Exploration (Track-2)

Gayle Dana (DRI), Fred Harris (UNR),  
Sajjad Ahmad (UNLV), Lynn Fenstermaker (DRI)

- ❑ 3 years (2013-2016)
- ❑ \$2M
- ❑ Advance watershed science, workforce development, and education with cyberinfrastructure (CI)-enabled discovery and innovation



# NSF EPSCoR RII

## Track-3

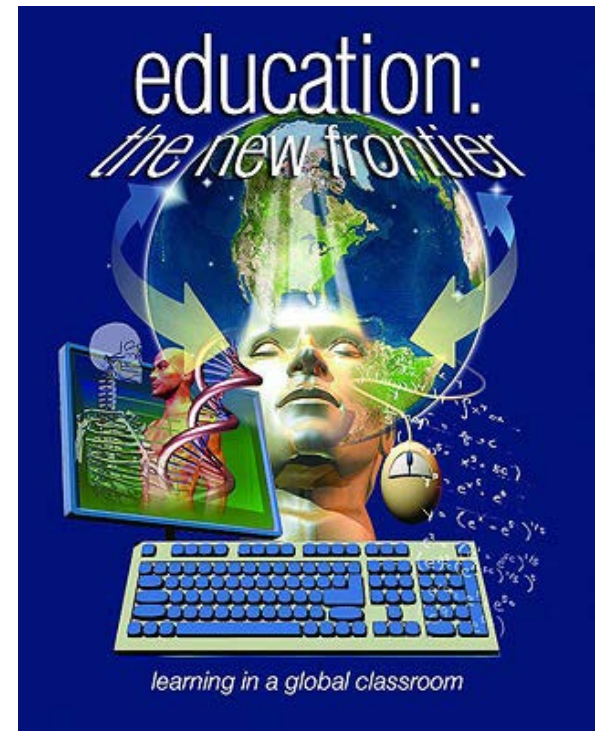
- ☐ Pilot in FY13
- ☐ Educational program to support strategic goal of broadening participation to improve future R&D competitiveness of EPSCoR jurisdictions
- ☐ Up to \$750K for 3-5 years
- ☐ May or may not be offered again

# Cyber-Learning Activities to Scaffold STEM Practices

(Track-3)

PG Schrader (UNLV) and MaryKay Orgill (Co-PI, UNLV)

- ❑ 3 years (2013-2016)
- ❑ \$749,700
- ❑ Cyber-learning methodologies/trainings for teachers to enhance STEM learning opportunities and achievement for underrepresented minorities and rural students



# NSF EPSCoR Co-Funding

- ❑ Joint support of meritorious NSF proposals
- ❑ Steps
  - ❑ Proposal submittal to specific NSF Directorate/office (main point-of-contact for PI)
  - ❑ Merit review in accordance with NSF policies
  - ❑ EPSCoR review and co-funding decision
    - Merit review
    - Geographical and topical distribution
    - Availability of funds
- ❑ Co-funding priorities

<b>New PI</b>	<b>Student involvement</b>
<b>Collaborative/Multidisciplinary</b>	<b>Synergistic with NSF investments</b>
<b>Broaden participation</b>	<b>Integration of research and education</b>

# NSF EPSCoR

## Workshops and Outreach Support

- ☐ Multi-jurisdictional workshops on themes of regional and national importance
  - ☐ Specific procedures for applying
- ☐ Travel by NSF Program Officers to jurisdictions to provide information on NSF programs and policies
  - ☐ Requests must be made by Project Director
  - ☐ Do not contact NSF PO

# USDA EPSCoR Opportunities in Agriculture, Food, and Environmental Sciences

- NIFA-AFRI\* Strengthening Grants and Pre- and Post-Doctoral Fellowship Grants
- Offered each funding cycle
- 15% of AFRI funds go to EPSCoR jurisdictions
- Eligibility: Degree-granting institution\*\*
- **Sign up for NIFA's Newsletter**
  - E-mail Judy Rude [jrude@nifa.usda.gov](mailto:jrude@nifa.usda.gov)
  - In body of message, type: subscribe NIFA Update

\*National Institute of Food and Agriculture (NIFA) – Agricultural and Food Research Initiative (AFRI)

\*\*DRI not eligible to apply directly, but may partner with UNLV or UNR

# Current USDA NIFA-AFRI Awards

Title	Amount	Duration	PIs	Inst.
Water quality implications of unique transformation processes of synthetic steroids used as agricultural pharmaceuticals	\$496,000	2013-2016	E Kolodziej	UNR
Arid lands biofuels and bioproducts	\$499,182	2013-2017	G C Miller	UNR
Water quality implications of unique transformation of synthetic steroids used as agricultural pharmaceuticals	\$496,000	2013-2016	C Jeffrey	UNR
Sustainable rural development using the area sector analysis process	\$490,486	2014-2017	T Harris	UNR
Mountain pine beetle pheromone production	\$364,697	2014-2017	C Ttiger, GA Blomquist, KA Schlauch	UNR
Aromatic carbon-degrading microorganism-mediated uptake of carbon nanotubes by tomato plants	\$150,000	2015-2017	Y Yang	UNR
Water for agriculture challenge are: enhancing climate resiliency and agriculture on American Indian land	\$516,844	2015-2016	McCarthy, Emm, Singletary, Kauneckis, Phillips, Colby, Flint, Daniels, Curtis, Edwards, Dettinger	UNR



# Current NASA EPSCoR Awards

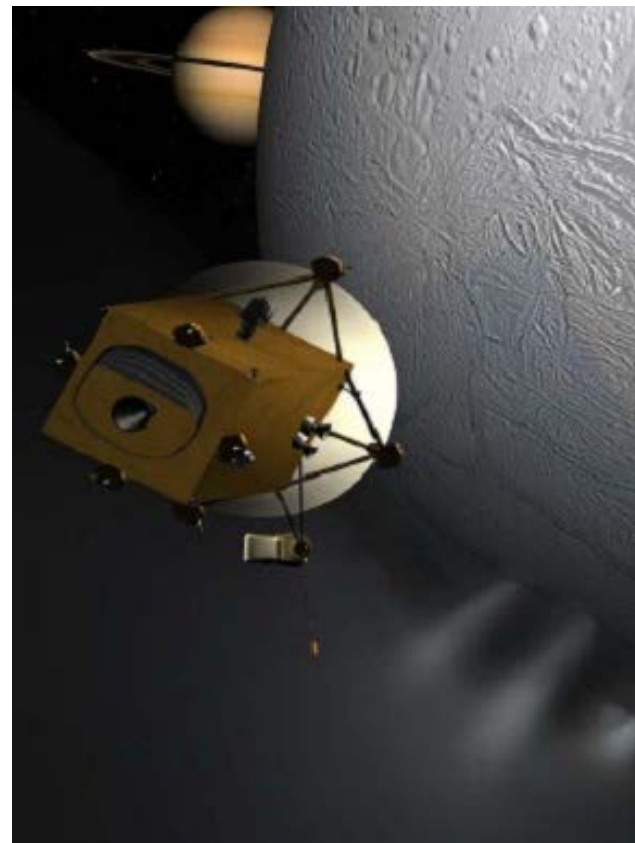
- ☐ Two Cooperative Agreement Notice (CAN) Awards (\$750K federal + \$375K match)
  - ☐ Topic specific addressing high-priority NASA research and technology needs
  
- ☐ Research Infrastructure Development (RID) Award (\$375K federal + \$375K match)
  - ☐ Enables states to build and strengthen relationships with NASA researchers



# Current NASA EPSCoR Awards

**Advanced Transport Technologies for NASA  
Thermal Management/Control Systems**  
(Miles Greiner, UNR) (2015-2018)

**Building Capacity in Interdisciplinary Snow  
Sciences for a Changing World**  
(Daniel Obrist, DRI) (2014-2017)



# DOE EPSCoR New Opportunities

- ☐ DOE Implementation Program
- ☐ Three years
- ☐ Up to \$2.5M per year
- ☐ 20% program office support



Not currently funded

# Proposal Process for EPSCoR Programs

# EPSCoR Proposal Process

- ❑ Statewide solicitation for white papers or pre-proposals with defined focus
  - ❑ Focus areas are defined by Agency or strategically selected by NSHE leadership (RAC, Project Director and NVEAC) which aligns to the state Science and Technology Plan
- ❑ Pre-Proposals/white papers are submitted from researchers to NSHE SPO/EPSCoR
- ❑ Proposal packets then are compiled and sent out for external review
  - ❑ External reviewers are independent peers outside of Nevada and content experts
- ❑ The reviews are then compiled and presented to the RAC with a summary and recommendations
  - ❑ The RAC then approves the pre-proposal(s) that will move forward for the State submission to the Agency

# EPSCoR Proposal Process

- ☐ The NSHE Project Director then appoints proposal development team(s) to work on the proposal
- ☐ The NSHE Project Director assembles the full proposal with the assistance of the EPSCoR staff
- ☐ If time allows, the proposal will be sent out for another external review and technical writing assistance may be obtained
- ☐ Final proposal is submitted to the agency by the Nevada EPSCoR office





# NSF Track-1 Proposal Process

- ☐ Each state/jurisdiction can submit only one proposal
- ☐ State can have only one active Track-1 at a time
- ☐ NSHE runs internal pre-proposal competition
- ☐ Topics must be in alignment with Nevada Science and Technology Plan and NSF priorities
- ☐ Participation by UNLV, UNR, and DRI mandatory
- ☐ Budgets should be comprised of no less than 20% and no more than 50% of the total project budget from any given institution



# Track- 1 Timeline

- ☐ Fall 2015 NSHE announcement released  
<http://epscorspo.nevada.edu/nevada-nsf-epscor-rii-track-1-program-announcement/>
- ☐ Summer 2016 LOI/RPF/submission of pre proposals
- ☐ Fall 2016 Pre proposal review
- ☐ Winter 2016 Pre proposal(s) selected
- ☐ Winter-Summer 2017 Full proposal development
- ☐ August 2017 Submit Proposal
- ☐ June 2018 Award made



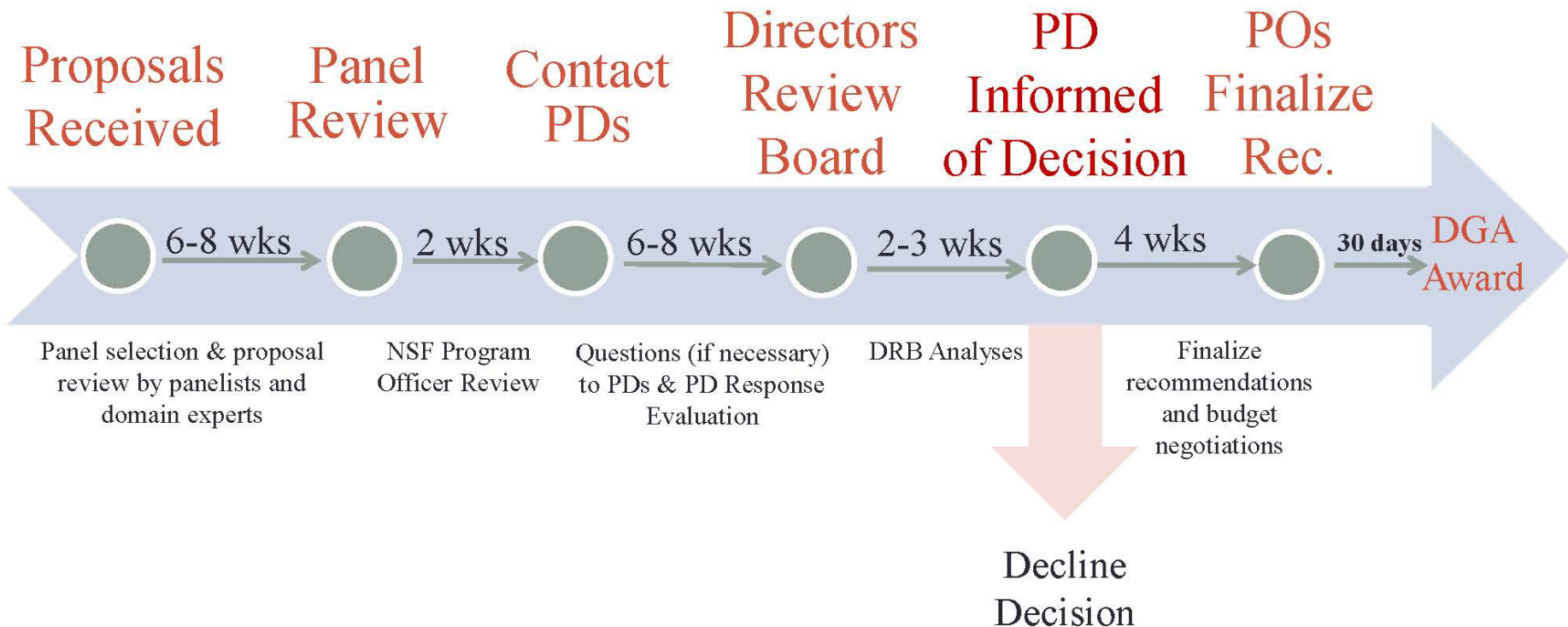


# NSF Track-2 Proposal Process

- ☐ Each institution can submit one proposal
- ☐ Internal pre-proposal competition by institution
- ☐ Requires extensive coordination with partner jurisdiction(s)
- ☐ No limit on # of proposals in which an institution/jurisdiction can participate as a non-lead collaborator
- ☐ Prior submissions/awards do not affect eligibility
- ☐ FY2018 solicitation to be released before end of 2017 calendar year

# NSF RII Track-1 Formal Process

## National Science Foundation



Total time for review process for a successful proposal is **approximately 6 months**

# USDA Proposal Process



United States Department of Agriculture  
National Institute of Food and Agriculture

- Only degree-granting institutions can apply (UNR, UNLV)
- PI submits directly to the NIFA-AFRI program , following institutional policies
- Does not go through the EPSCoR office – only institutional submission
- Multiple submissions allowed
- Have to be an EPSCoR jurisdiction to be eligible

# NASA Proposal Process

## CAN – 6 month timeline

Fall Release of RFP for pre proposals

- LOI due

Winter Pre proposals due to NSHE

- Proposals sent out for external review

Early Spring NASA CAN released

- Proposals reviewed, summary sent to RAC
- RAC recommends – proposal team determined
- Full proposal development

Spring Submit Proposal

- Award made

## RID – 2 month timeline

Spring

Project Director developed the statewide narrative

- Internal solicitations are posted throughout the project period (3 years) for multiple RID focused projects
- RFP posted
- Proposals are submitted per RFP
- Review of proposals
- Internal awards made



# DOE Proposal Process

## NSHE - Targeted Annual Solicitation –

This is a draft process\*\*

- |             |  |
|-------------|--|
| Fall 201X   | Release of RFP for pre proposals   |
| Winter 201X | Pre proposals to be reviewed by RAC <ul style="list-style-type: none"><li>○ Determination by RAC for teams/collaborations, if applicable</li><li>○ Full proposal development of selected pre proposals</li></ul> |
| Early 201X  | Proposal(s) sent out for external reviews <ul style="list-style-type: none"><li>○ Summary and reviews sent to RAC</li><li>○ Determination of final proposal to move forward</li></ul>                            |
| Spring 201X | DOE announces FOA <ul style="list-style-type: none"><li>○ Finalize and submit proposal</li><li>○ Award made</li></ul>  |

Nevada System of Higher Education Sponsored Programs



**Main: 702.522.7070**

**Sign Up for Listserv:**  
**[www.epscorspo.nevada.edu](http://www.epscorspo.nevada.edu)**

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