# NSF EPSCoR\* Research Infrastructure Improvement (RII) Track-1 Team Building Workshop

September 18, 2018 University of Nevada, Reno

\*Established Program to Stimulate Competitive Research

#### AGENDA

11:00 - 11:15 am 11:15 am - 12:15 pm 12:15 pm - 1:30 pm 1:30 pm - 2:00 pm 2:00 pm - 3:00 pm Overview of Track 1 Program
Poster session/informal networking
Lunch and roundtable discussions
Poster session/informal networking
Facilitated roundtable discussions

# NSF EPSCoR RII Track-1 Program

Gayle Dana, Nevada NSF EPSCoR Project Director

#### RII Track-1 Awards

- NSF's only state-based program
- Primary goal is to improve research competitiveness of the jurisdiction
- A jurisdiction can submit only <u>one proposal</u> to the Track-1 program
- This internal NSHE competition will determine the pre-proposal most likely to result in an award under NSF's 2019 competition

#### **Foremost**

 Intellectual merit, broader impacts, and research hypotheses/questions provide the rationale for the infrastructure investments requested in pre-proposal



# NSF and NSHE Topic Requirements

- Alignment with priorities in the 2015 NSHE Science and Technology Plan;
- Alignment with <u>current scientific and engineering</u> <u>grand challenges</u>, either NSF's Big Research Ideas or NSF-relevant grand challenges put forth by other agencies or entities;
- Topics funded by NSF's regular programmatic and cross-cutting areas; and
- Leverage the strengths of all three NSHE research institutions.

## Important Deadlines

Due by 5pm on dates shown

October 1, 2018 Letter of Intent Due

Use online form:

https://epscorspo.nevada.edu/nevada-nsf-rii-track-1-letter-of-intent/

#### November 19, 2018 Pre-proposal Due

Follow solicitation guidelines

Upload at:

https://epscorspo.nevada.edu/opportunity/nevada-nsf-rii-track-1-program-pre-proposal/

Pre-proposals will only be accepted if signed by and submitted by the PI's authorized organization representative.

# Preparing a competitive preproposal

Dr. Kelvin Chu Vice President The Implementation Group kchu@tigdc.com

#### RII Track-1 Overview

- Hypothesis-driven, not discovery-based, research is key. The infrastructure and increased research capacity are consequences of the cutting-edge research that happens as part of the project
  - Review includes non-EPSCoR NSF program staff, Director's Review Board
- The goal should not be the RII Track-1 award. The award helps you achieve is the means to achieve a goal.
  - Sustainability, strategy, execution

#### RII Track-1 Overview +

- "These proposals are unique in their jurisdiction-wide scope and complexity; in their integration of individual researchers, institutions, and organizations; and in their role in developing the diverse, well-prepared, STEM-enabled workforce necessary to sustain research competitiveness and catalyze economic development." (NSF 17-562)
- Project alignment is critical:
  - Topic
  - Teams

T.I.G.

the Implementation Group

## 7 new RII Track-1 projects in FY 2018

- 1757348 "RII Track-1: Fire and Ice: Navigating Variability in Boreal Wildfire Regimes and Subarctic Coastal Ecosystems"
- 1757353 "RII Track 1: Water Security in Delaware's Changing Coastal Environment"
- 1757351 "RII Track-1 Consortium for Research on Environmental Water Systems"
- 1757324 "- RII Track-1: Linking Genome to Phenome to Predict Adaptive Responses of Organisms to Changing Landscapes"
- 1757220- "RII Track-1 Mississippi EPSCoR: Center for Emergent Molecular Optoelectronics (CEMOs)"
- 1757371 "RII-Track 1: New Hampshire Center for Multiscale Modeling and Manufacturing of Biomaterials (NH Bio-Made)"
- 1757207 "RII Track-1: The New Mexico SMART Grid Center: Sustainable, Modular, Adaptive, Resilient, and Transactive"

# Topic: Alignment with NSF

#### • Topic area:

- Have a "Grand Challenge" question;
- Consider alignment with an NSF priority area (Big 10 ideas, agency-wide initiatives)

#### Questions to consider:

- Is the topic area an area funded by NSF?
- Do you know what NSF program areas you would apply to for this topic area?
- Do you have success in being funded by these programs?
- Do you know NSF staff in the program area?

# Topic: Alignment with Nevada

- Why is your project right for Nevada?
- Need to be aligned with state Science and Technology plan;
- Need to have buy-in across the jurisdiction (HEIs including MSIs, State, private sector);
- Need to convince panel that Nevada is the BEST place to do this project;

# Strategies

- EPSCoR dollars are catalytic, not foundational.
- The award is not the goal. The award is the means to achieve the goal.
- Collaboration and teamwork are critical.

## Recommendations for pre-proposals

- Problem has national, state importance
- Hypothesis-driven
- Broadening participation
- Representation from across Nevada institutions
- Has an NSF focus
- Is able to result in a sustainable center that will live beyond the award period
- Has an economic impact
- Is the right project for Nevada

