

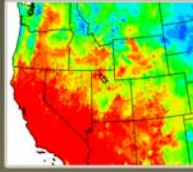
**Nevada Infrastructure for  
Climate Change Science, Education, and Outreach**



Policy,  
Decision Making,  
Outreach



Cyberinfrastructure



Climate Modeling



Education



Ecological Change



Water Resources

**REQUEST FOR PROPOSALS:**

**NSF EPSCoR Climate Change  
Seed Grant Opportunity  
2009-2010**



Nevada NSF EPSCoR Office  
Nevada System of Higher Education  
755 E. Flamingo Road  
Las Vegas, NV 89119-7363

**SUBMISSION DEADLINE**  
**May 1, 2009**

## **Introduction**

The Nevada System of Higher Education (NSHE) recently received a Research Infrastructure Improvement (RII) Award from the National Science Foundation's Experimental Program for the Stimulation of Competitive Research (NSF EPSCoR) for Climate Change research in Nevada. This award creates a statewide interdisciplinary program focused on understanding the effects of regional climate change on ecosystems, improving communication between researchers and policy makers, and better educating the public on climate change in Nevada. The program has six areas of interest: Climate modeling; Ecological change; Water resources; Education; Cyberinfrastructure; and Policy, decision making and outreach. The project encompasses a wide range of disciplines, including (but not limited to) Biology, Civil Engineering, Climatology, Computer Science, Ecology, Education, Environmental Studies, Geography, Hydrology, Journalism, Natural Resources, and Political Science. The goal is to build capacity in interdisciplinary climate change research to detect and measure environmental changes, develop climate models, translate climate-change science for decision makers, create computer systems to make climate data more accessible, and develop new ways to teach about climate change. For more information on Nevada's NSF EPSCoR Climate Change Program, visit <http://www.nevada.edu/epscor/programs-nsf.html>.

## **Seed Grant Competition Details**

As part of the NSF EPSCoR Climate Change award, \$100,000 per year has been allocated for fiscal years 2010-2013 to support a small number (3-4 per year) of innovative, short term (1 year) investigations. The intent of these seed grants is to utilize the new infrastructure being built as part of the six components noted above and help achieve the vision of creating a statewide interdisciplinary program and virtual climate change center that will stimulate transformative research, education, and outreach on the effects of regional climate change on ecosystem resources (especially water) and support use of this knowledge by policy makers and stakeholders.

This seed grant program will support research, education, and/or outreach activities that will: (1) utilize or support the new infrastructure being developed as part of the NSF EPSCoR project; (2) address basic research needs that would be supported by NSF programs; and (3) lead to follow-on proposals to NSF or other granting agencies.

- Proposals should foster the development of a **new** collaborative effort among two or more researchers. The PI must be from DRI, UNLV, or UNR.
- The proposed research should build on the expertise of the applicants but expand that expertise via a new collaboration.
- Proposals for funding can vary widely in scope, but it is expected that the activities proposed will generate new data sets, new methods of data collection, archiving, or analysis; new instruments or technologies; and/or data that would support new conceptual frameworks. Proposals to fund an existing research program will not be considered.

- Award activities must be completed by June 30, 2010
- Awardees will be expected to submit competitive funding proposals to NSF or other national funding agencies and institutions.
- In addition to the above requirements, applicants are encouraged to:
  - Include graduate research and education as an integral component of the proposal.
  - Involve faculty early in their research careers
  - Form new inter-institutional collaborations.

The first competition will fund 3-4 projects for a period of one year. Maximum funding for each project will be \$30,000 per year. Because these awards will be funded with State funds there will be no indirect cost. Projects funded in 2010 will be eligible to submit for continued funding as part of a second competition to be held in Spring 2011.

**Funds may be used for:**

- Faculty support
- Labor (e.g. hourly employees)
- Materials and supplies
- US Travel (e.g. fieldwork and conferences)

**Proposal Guidelines**

Proposals shall be limited to 3 pages of text and figures, plus references, and include a budget using the template provided. In addition, please submit a NSF-style biosketch and list of relevant publications for all investigators. The proposal must: (1) show how the project will utilize or support the infrastructure being created by the NSF EPSCoR Climate Change Project; and (2) address the NSF criteria of intellectual merit, broader impacts, and transformative research.

**Proposals must conform to the following requirements:**

- Cover Sheet (1 page, see attached)
- Project description (3 pages)
  - Single space, 10 (Arial) or 11 (Times Roman) point font, 1 inch margins
  - List of personnel including their names, titles, affiliations, and email addresses
  - Background of research topic (including appropriate background literature and relevance to project objectives and goals)
  - Research Questions or Hypotheses, Intellectual Merit and potential for Transformative Research
  - Description of research tasks
  - Roles of project participants
  - Summary of the major deliverables expected (e.g. proposals, publications; websites)
  - Broader Impacts
- Budget (2 pages total)

- One page preliminary budget for the proposed project using the template (attached)
- One page Budget Justification
  - Identify and provide a brief description of each item requested in the budget
- 2 page, NSF style biosketch for each participating faculty member

See section II.C.2.f in NSF's Grant Proposal Guide for biosketch format:  
[http://www.nsf.gov/pubs/policydocs/pappguide/nsf09\\_1/gpg\\_2.jsp#IIC2f](http://www.nsf.gov/pubs/policydocs/pappguide/nsf09_1/gpg_2.jsp#IIC2f)

## **Proposal submission**

Proposals must be submitted electronically to the Nevada EPSCoR Project office by **COB, Friday May 1, 2009.**

### **Required Format for submission of application materials:**

***All application materials are to be submitted as a single PDF document attached to an e-mail sent to Alice Ward at [alice\\_ward@nshe.nevada.edu](mailto:alice_ward@nshe.nevada.edu). The "subject" line of the email should read: < Seed Grant Proposal >***

## **Proposal Review**

Proposals will be reviewed by a panel comprised of three representatives from the project leadership team (co-PI's; component leads and steering committee members), plus two external (non NSHE) reviewers. The review panel will evaluate and rate the proposals received and make recommendations to the Project Director (Gayle Dana) who will make the final decision. Successful proposals will be funded starting July 1, 2009.

Proposals will be evaluated based on their potential for transformative research, intellectual merit, and broader impacts following NSF merit review criteria; contribution to overall NSF EPSCoR project goals (including use of infrastructure being developed and interdisciplinary science questions); scope of proposed activity; clarity of project objectives, research questions or hypotheses, and methodology; appropriateness of budget; and products to be produced.

Please view the NSF merit review criteria at:  
[http://www.nsf.gov/pubs/policydocs/pappguide/nsf09\\_1/gpg\\_3.jsp#IIIA](http://www.nsf.gov/pubs/policydocs/pappguide/nsf09_1/gpg_3.jsp#IIIA)

## **Reporting Requirements**

Team leaders must submit an annual report within one month of the completion of the first project year. In addition, a proposal to NSF or other major competitive grant program should be submitted within six months of the completion of the project. Project leaders will also be expected to provide additional information for project and award evaluation as requested.

## **Further Information**

Potential applicants are strongly encouraged to contact the Co-PIs and or Co-PI's of the NSF EPSCoR Climate Change Project:

### **NSF EPSCoR Climate Change Program:**

Nevada NSF EPSCoR Project Director and Lead PI

Dr. Gayle Dana                      775-674-7538                      [Gayle.Dana@dri.edu](mailto:Gayle.Dana@dri.edu)

Co-Principal Investigator, Desert Research Institute

Dr. Nicholas Lancaster              775-673-7304                      Nicholas.Lancaster@dri.edu

Co-Principal Investigator, University of Nevada, Las Vegas

Dr. Thomas Piechota              702-895-4412                      thomas.piechota@unlv.edu

Co-Principal Investigator, University of Nevada, Reno

Dr. Scott Mensing                      775-784-6346                      smensing@unr.edu

Climate Modeling Component Lead

Dr. Darko Koracin                      775-674-7091                      darko.koracin@dri.edu

Water Resources Component Lead

Dr. Michael Young                      702-862-5489                      Michael.Young@dri.edu

Ecological Change Component Lead

Dr. Franco Biondi                      775-784-6921                      fbiondi@unr.nevada.edu

Cyberinfrastructure Component Lead

Dr. Sergiu Dascalu                      775-784-4613                      dascalus@cse.unr.edu

Policy, Decision-making and Outreach Component Lead

Dr. William James Smith Jr.      702-895-4439                      bill.smith@unlv.edu

Education Component Lead

Dr. David M. Hassenzahl              702-895-4457                      [david.hassenzahl@unlv.edu](mailto:david.hassenzahl@unlv.edu)

Direct questions regarding applications to Ms. Alice Ward, Nevada NSF EPSCoR Outreach Research Administrator (702-862-5590; [alice\\_ward@nshe.nevada.edu](mailto:alice_ward@nshe.nevada.edu)).

Further information regarding on-going NSF EPSCoR research activities, as well as further information on the program, can be found at

<http://www.nevada.edu/epscor/programs-nsf.html>