

**EPSCoR**

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



Policy,  
Decision Making,  
Outreach



Cyberinfrastructure



Climate Modeling



Education



Ecological Change



Water Resources

# Education Component

Gale M. Sinatra

Education Component Lead

# Education Component Team

- ***Abby Beck***, Graduate Student, UNLV
- ***Paul Buck***, DRI
- ***Mike Collopy***, UNR
- ***Jacque Ewing-Taylor***, UNR
- ***John Farley***, UNLV
- ***Zhongwei Liu***, UNLV
- ***Juan McAlister***, NSC
- ***Aubrey Shirk***, Graduate Student, UNLV
- ***Gale Sinatra***, UNLV
- ***Melissa Slayden***, Graduate Student, UNR
- ***Stephanie Patton***, Graduate Student, UNLV

# Fall Team Meeting



Convened Education  
Component Team in Fall

Met on October, 25<sup>th</sup> via  
WebEx

Objectives: Update on  
Activities, Identify Objectives

# Sinatra & Lombardi Climate Change Seminar Series Presentation



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



Policy, Education, Outreach   CyberInfrastructure   Climate Modeling   Education   Ecological Change   Water Resources

## Nevada Climate Change Seminar Series

*"IT WASN'T ANY COLDER WHEN I WAS A KID:  
HEATING UP INSTRUCTION  
ON CLIMATE CHANGE"*

PRESENTED BY:

**DR. GALE SINATRA**, UNLV DEPT OF EDUCATIONAL PSYCHOLOGY  
**DOUG LOMBARDI**, UNLV DOCTORAL CANDIDATE

Teaching and learning about human-induced climate change presents unique challenges. In addition to misunderstanding the fundamental scientific principles underlying climate change, individuals may be committed to their own views based on attitudes, emotions, and plausibility perceptions that inhibit deep understanding. This presentation will feature recent research into these learning barriers and discuss potential implications for instruction and further research.

**December 1, 2010**  
11 AM: Mixer with refreshments  
11:30 AM – 12:30 PM:  
Presentation

\*The presentation will also be available via live stream at:  
<http://www.nevada.edu/epscor/nsf/seminar-series.html>

RSVP to [Michela\\_Casella@nshe.nevada.edu](mailto:Michela_Casella@nshe.nevada.edu)

**Locations:**  
**\*UNLV (LIVE)**  
Greenspun Auditorium 1107

Western Nevada College, Carson City  
Bristlecone Building 131

Great Basin College, Elko  
High Tech Center 137

UNR, Reno  
Knowledge Center 110

# Survey of University Students and Professors' Views on Climate Change

Last year, UNLV & UNR Students surveyed on their views on climate change

- Data collected, preliminary analyses completed
- Served as basis for Professors' survey

This year, Beck, Sinatra, Findley developed Professor's Survey

- Developed, through IRB, data will be gathered and analyzed this Spring
- Abby will be presenting Tuesday on survey development process

# NSF/EPSCoR Summer Undergraduate Research Opportunity Program (UROP)

## UROP

Nevada EPSCoR  
Climate Change  
Project Funded.

Open to all  
NSHE students.

## Schedule

Awards are  
made during  
the Spring  
Semester.

Projects  
completed over  
summer.

## Application Process

Call went out  
Spring 2010.

Received 20  
applications.

## Review Process

5-person  
review  
committee  
(from UNR,  
DRI, UNLV)

13 awards  
totally \$58,500.

# NSF/EPSCoR Annual Undergraduate Research Opportunity Program (UROP)

## UROP

Nevada EPSCoR  
Climate Change  
Project Funded.

Open to all  
NSHE students .

## Schedule

Awards made  
in Fall.

Projects  
completed over  
academic year.

## Application Process

Call went out in  
Fall 2010.

Received 47  
applications.


## Review Process

6-person  
faculty review  
committee  
(from UNR,  
DRI, UNLV)

15 awards (7  
UNR, 8 UNLV)  
totaling  
\$67,500.

# EPSCoR Nevada Undergraduate Research Symposium (NURS)

(NURS) held on 13-14 April 2010, in the Joe Crowley Student Union




Funded Nevada EPSCoR Climate Change Project



Showcased undergraduate CC research



Outreach to all UG research programs to increase size and visibility




14 presentations and 28 posters

# UNR and UNLV Undergraduate Research Poster Conference (August)


Provide undergraduates an opportunity to present the summer research results.



All summer research programs are invited to attend.



Last summer: NSF-EPSCoR Climate Change Project, 2 NSF-REU (Tahoe-to-Pyramid, Physics), NASA Space Grant, Network for Earthquake Engineering Simulation-REU, and NIH INBRE.



33 UNR and 45 UNLV UGs presented posters on their research projects.

# Nevada Undergraduate Research and Creative Activities Symposium

Saturday, April 16th, UNLV

“Festival of Communities Event”

<http://festivals.unlv.edu>

Event include  
academic,  
cultural  
activities,  
entertainment,  
food.

UG Research  
from all  
disciplines.

15 UG funded  
by Nevada  
EPSCoR Climate  
Change Project  
will be expected  
to present.

# Task Force Meeting

## Convened Task Force

Met on Thursday, Jan. 27<sup>th</sup>

Tom Piechota  
Scott Mensing  
Gale Sinatra  
John Farley  
Matt Lachniet  
Dennis Pirages  
Danny Taylor  
Krystyna Stave

## Objectives:

Develop vision for UG minor  
and Grad Cert

Produce call for curriculum  
development proposals

# Summer Institute 2010

- Last year 13 total participants from the North and South.
- Feedback from participants:
  - “It was great to hear from researchers directly.”
  - “Being able to interact with teachers at all levels was a big bonus and being able to connect with the Ph.D.s was terrific!!
  - “The field experience with professionals was invaluable.”
  - “This was the best professional development class I have taken.”
  - “I will present information and activities that I learned in this institute to my students.”

# Summer Institute 2010

- Pre to post test scores increased as much as 24%
- Suggestions from participants:
  - “Too much material to absorb in too little time.”
  - “Too much on radiation when we have limited time.”

# Summer Institute 2011

ENV 794, Special Topics in Climate Change is being currently taught

10 students enrolled

Course set for Curriculum Committee



Recruitment is underway for Summer Institute.

6 students from the South

3 from the North

Researcher recruited for North Institute.



NSF REESE grant submitted in November

Sinatra, Nussbaum, and Ahmed

Support of Summer Institute included.

# Graduate Fellows

11 students are currently receiving or have received funds.

There are enough resources to continue funding these students, but not enough to fund any new students.

Therefore, there will be no new call issued for Graduate Fellows.