

Nevada System of Higher Education



NSF EPSCoR RII Award EPS-0814372
*“Nevada Infrastructure for Climate Change Science,
Education, and Outreach”*



Announcement for

Nevada NSF EPSCoR
Undergraduate Research Opportunity Program
ANNUAL SCHOLARSHIP

Submission Deadline: Monday, October 27, 2008

I. INTRODUCTION

The Nevada System of Higher Education 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 for interdisciplinary science teams to build capacity in climate change research to 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/>

II. PROGRAM DESCRIPTION AND INSTRUCTIONS

A. Program Solicitation

The Nevada System of Higher Education announces the 2008-2009 Annual Scholarship program to promote undergraduate research in all NSHE institutions. The program is supported by funding from Nevada's NSF EPSCoR Climate Change Program and the State of Nevada. Students in any major are eligible, but must propose research focused on climate change, including, but not limited to, climate modeling, ecological change, water resources, cyberinfrastructure, and policy and decision making. Limited funding may also be available to projects not related to climate change; these are limited to students majoring in science, technology, mathematics, or engineering, or majoring in education and specializing in teaching K-12.

The research must be conducted during the 2008-09 academic year under the guidance of a faculty research mentor at the University of Nevada, Reno (UNR), the University of Nevada, Las Vegas (UNLV), or the Desert Research Institute (DRI). Scholarships will provide \$3900 per student awardee and \$400 to the faculty mentor overseeing the project.

B. Eligibility

Applicants must be:

- US Citizens or permanent residents of the United States,
- Full time students in a degree program with a GPA of 3.0 studying at one of the NSHE institutions: UNLV, UNR, NSC, CSN, GBC, TMCC, WNC, or Sierra Nevada College,

- Supervised by a faculty mentor,
- Students maintaining their undergraduate status throughout the entire program; students graduating in (December 2008) are not eligible.

C. Award Information

• *The Nevada System of Higher Education does not provide tax advice. If you have questions about possible tax liabilities, you may refer to the IRS web sites: <http://www.irs.ustreas.gov>*

• *Acceptance of this award may impact a student's income level to a degree that could affect eligibility for student loans, and other scholarship or fellowship opportunities. If an applicant has any concerns in this area, it is the student's duty to consult with a campus financial aid advisor.*

Participants are generally not allowed to have other work or employment. Special permission must be received from the NSF EPSCoR Project Director for exceptions to this rule. Requests should be made through Alice Ward at alice_ward@nshe.nevada.edu

D. Program Guidelines

1. Research must be conducted under the direction of a faculty mentor who has agreed to supervise the research project.
2. Students in any major are eligible, but must propose research focused on climate change, including, but not limited to, climate modeling, ecological change, water resources, cyberinfrastructure, and policy and decision making. Limited funding may also be available to projects not related to climate change; these are limited to students majoring in mathematics, science, or engineering, or majoring in education and specializing in teaching K-12.
3. The research is to be completed by May 31, 2009.
4. Awardees must be present during the entire program period.
5. Successful applicants agree to present their research results at the Nevada Undergraduate Research Symposium to be scheduled in April 2009.
6. Successful applicants agree to attend a safety class as necessary depending on the nature of their research.
7. Successful candidates will be expected to provide programmatic feedback for an NSF Evaluation.
8. Further programmatic dates and details will be provided to successful candidates.

Please contact Drs. Nick Lancaster (DRI) – Nicholas.Lancaster@dri.edu, Tom Piechota (UNLV) – Thomas.Piechota@unlv.edu, or Scott Mensing (UNR) – smensing@unr.edu, for suggested Climate Change mentors and project topics. For other science areas, a list of possible mentors can be found at <http://www.nevada.edu/epscor/mentor.html>. Applicants are not limited to mentors on this list. Students may also consult the research institutions departmental websites for additional faculty engaged in an area of research of their interest.

We encourage members of underrepresented groups to submit proposals.

E. Proposal Preparation Instructions

Upon receipt of each proposal/submission as a **single pdf document**, applicants will be sent a project information document that must be completed and returned within three days. If an applicant does not receive the project information document, he/she should contact Ms. Ward to verify receipt of proposal by the NSHE Sponsored Programs Office.

- 1. Cover Page (form in Appendix):** Applicants will need to get required signatures.
- 2. Project Description (limit two pages):** The project description should be a concise statement including clear hypotheses to be tested or questions to be asked. It must be written in a way that is understandable to reviewers whose background may be outside the applicant's field. The two page project description should be single-spaced with 1" margins, in 12-pt. font and must include the following sections:
 1. Abstract (50-100 words)
 2. Introduction
 3. Objectives
 4. Plans for research and/or creative work
 5. Timetable
 6. Plans for dissemination of results
- 3. Official Transcripts:** Transcripts of all courses completed, including a list of courses currently enrolled in for Fall 2008.
- 4. Endorsement letter(s):** from supervising faculty mentor(s) that indicates their approval of the proposal and describes their level of involvement in the project.
- 5. References/citations:** not included in the two page limit for the project description.
- 6. Biographical Sketch or CV:** One each from applicant/student and mentor, limited to two pages per person, for the applicant/student and mentor.

F. Projects Involving Human Subjects or Vertebrate Animals

Prior approval by the human subjects (IRB) and/or the animal subjects (IACUC) review boards is not required for proposal submission. However, students chosen to receive a scholarship under this program who anticipate the use of human or animal subjects in their research must receive approval of their research protocols by the appropriate review board prior to the beginning of research and release of funds.

- 1. Human Subjects:** If this proposed project involves the collection of information from human beings through interaction or observation, include an attachment (not included in the two page limit) that provides sufficient information to enable reviewers to evaluate

potential risks to subjects. Include information concerning the subject population, type(s) of information to be gathered, and measures to be taken to protect privacy and reduce risks.

2. Vertebrate Subjects: If this proposed project involves living vertebrate animals in any way, include an attachment (not included in the two page limit) that provides sufficient information to enable reviewers to evaluate the choice of species, number of animals to be used, and any exposure of animals to discomfort, pain, or injury.

III. PROPOSAL REVIEW PROCESS AND EVALUATION CRITERIA

Proposals will be selected based on a statewide merit-based review. The screening and selection process will include a review committee that will focus on these review criteria:

- 1) Has the applicant demonstrated a level of academic preparation and excellence in the form of GPA, appropriate coursework and/or other measures that would predict success in a research experience? (___/10)
- 2) Does the applicant have other background experience and/or extracurricular activities which would help predict success in a research experience? (___/10)
- 3) Has the applicant clearly articulated his/her motivation and reasons for seeking this appointment? (___/10)
- 4) Are the applicant's letters of reference supportive of his/her participation in the program - are there specific references to potential and high promise for success? (___/10)
- 5) Is the project proposal a climate change topic? (___/10)

IV. PROPOSAL SUBMISSION, AWARD NOTIFICIATON, AND TIMELINE

A. Submission of Proposals

All required documentation *listed in this announcement under "E. Proposal Preparation"* should be scanned into the complete proposal and converted into one pdf. file for submission.

Applicants must submit their complete proposal via e-mail to Alice Ward at: alice_ward@nshe.nevada.edu.

**The subject line should be specific to each applicant and read:
Last Name_First Name_NSF EPSCoR Scholarship
Example: (Jones_Tom_NSF EPSCoR Scholarship)**

NOTE: Application deadline: Monday, October 27, 2008 by 5:00 p.m.

B. Notification

Letters of award as well as letters of regret will be sent to all applicants after a statewide review has been held.

C. Obligation to the Government

Applicants for the award will be considered without regard to race, creed, color, sex, age, national origin and/or physical impairment.

D. Contacts

Potential applicants with questions regarding this program are strongly encouraged to contact a Program Leader.

University of Nevada, Reno:

Dr. Saiid Saiidi E-mail: ugresearch@unr.edu

University of Nevada, Las Vegas:

Dr. John Farley E-mail: farley@unlv.nevada.edu

Nevada NSF EPSCoR Climate Change Program:

Dr. Nick Lancaster (DRI) E-mail: Nicholas.Lancaster@dri.edu

Dr. Tom Piechota (UNLV) E-mail: Thomas.Piechota@unlv.edu

Dr. Scott Mensing (UNR) E-mail: smensing@unr.edu

Application information and submission:

Nevada NSF EPSCoR Program Office:

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

Alice Ward, NSHE Research Administrator

Phone: 702.862.5593 E-mail: alice_ward@nshe.nevada.edu

APPENDIX: FORMS (See “Cover Page” below)

