

2017-2018 Faculty Competition

Research Infrastructure



Announcement for faculty at:

**University of Nevada, Las Vegas; University of Nevada, Reno;
Nevada State College; College of Southern Nevada; Great Basin College;
Truckee Meadows Community College; Western Nevada College;
Desert Research Institute**

Applications Due:

April 10, 2017; 5:00 pm Pacific Time



National Aeronautics and Space Administration
(NASA) Space Grant College and Fellowship
Training Program Cooperative Agreement #:
NNX15AI02H



NEVADA SPACE GRANT CONSORTIUM RESEARCH INFRASTRUCTURE SOLICITATION

I. INTRODUCTION:

The Nevada Space Grant Consortium (NVSGC) seeks to develop a diverse and capable Nevada STEM workforce by providing funds for NASA-related faculty research projects. Selected faculty research projects will provide authentic “hands-on” research opportunities for students in topic areas such as: unmanned aerial systems, aeronautics (including high altitude balloon projects), planetary geology, astrochemistry, astrophysics, astrobiology, biodiversity/biology, new satellite data systems, remote sensing, sustainability, agricultural science, climate change, hydrological impacts under a changing climate, and STEM education. These funds should not augment existing funded research projects.

II. PROPOSAL INFORMATION AND INSTRUCTIONS

A. Eligibility:

- Faculty within any Nevada System of Higher Education Institution, particularly junior faculty, women, and members of other underrepresented populations are encouraged to apply.
- Participants receiving direct funding **must be US citizens, including:** Citizens of Puerto Rico, Washington DC, Guam, the U.S. Virgin Islands and the Northern Mariana Islands. Permanent residents, green card holders, or student visa holders (F, J, or M) are not eligible to receive direct funding.
 - Students selected as Space Grant Fellows or Scholars and faculty who receive direct support must be citizens of the United States.
 - Faculty involved in Space Grant activities at the state level, who are not compensated from the award funds, need not be US citizens.
 - Faculty involved in Space Grant activities may be permanent residents, green card holders, or US visa holders as long as they are not compensated from the award funds.

B. Award: Funding Information

NVSGC seeks to fund 1-3 projects with a maximum federal contribution of \$15,000 each. Due to requirements of the Space Grant program, a 1:1 match is required and will be provided by NSHE through Nevada Special Projects match. The total maximum funding amount with match per proposal is \$30,000 (maximum \$15,000 federal + \$15,000 Special Projects match). Each submitted proposal must include signed budgets from collaborating campuses with the amount of the collaborators’ total budget listed under section 1.A. Subcontracts on the NSHE budget form.

C. Deadline:

The deadline for application submission is 5:00 pm Pacific Time, on Monday, April 10, 2017. Only applications for which all materials have been received will be reviewed. Incomplete applications will NOT be reviewed.

*NEVADA SPACE GRANT CONSORTIUM
RESEARCH INFRASTRUCTURE SOLICITATION*

Your reported information is used for required reporting to NASA Headquarters. Failure to report will lead to ineligibility for NCE's and subsequent awards.

D. Proposal Guidelines

Proposals must be typed, single-spaced, standard one-inch margins and use a Times New Roman 12 pt. font with numbered pages. The proposals should be written such that researchers from most scientific disciplines would be able to understand the proposal goals, importance of the research and how the anticipated outcomes will benefit NASA, NV and NSHE. Review panel members may not all have specific expertise within the topic area of each pre-proposal submitted.

1. Cover Page Form: All Forms are available at: https://nasa.epscorspo.nevada.edu/wp-content/uploads/2016/03/Cover_Page_ProposalsFillable.pdf

2. Project Description (limited to 5 pages)

Provide a concise description of the proposed research, including the following:

Abstract: (500 words or less detailing the overall proposed activity);

Who: Roles and responsibilities of project participants. Name all participants that are known at the time of submission, including student.

What: 1. The objectives, methods and anticipated outcomes of the project.
2. A plan for sustained or additional institutional support of the results after the project end date.
3. Details regarding industry, other campus, or NASA-Center involvement in the project (NASA collaboration is highly encouraged).
4. Please state if this proposal is in collaboration with another proposal submission.

When: Provide a timeline for the proposed project listing all critical project steps.

Where: Campus(s) and locations where the research will take place

How: 1. State how the activity will result in the research enhancement and potential inclusion in new course materials, procedures, or hands-on activities.
2. State plans for outreach to underrepresented groups
3. Provide a publication and proposal development plan.
4. Specify how this proposal is aligned with NASA's Strategic Plan 2014, missions or directorates (ARMD, SMD, SOMD), which can be found at:
https://www.nasa.gov/sites/default/files/files/FY2014_NASA_SP_508c.pdf
For your reference, ARMD, SMD, SOMD directorate information is provided at:
<http://www.nasa.gov/about/directorates/index.html>

3. Budget and Budget Justification

There is a 1:1 match requirement. Please calculate unrecovered F&A, as applicable, along with the direct costs funded by State Special Projects Match as part of the required match. Please

NEVADA SPACE GRANT CONSORTIUM RESEARCH INFRASTRUCTURE SOLICITATION

work with your campus Sponsored Programs Office/Business Officers to determine the match. A budget and budget summary are required and **must be completed using the template provided at: <https://nasa.epscorspo.nevada.edu/wp-content/uploads/2016/03/Budget-Summary-Form.xls>**

Budget – A signed budget by your institutional representative (SPO, Grants, Contracts, etc.).

Budget Justification – Proposed travel should include the number of trips, destination, duration, etc. Student participants must be identified individually. Dollar amounts proposed with no explanation may reduce proposal acceptability.

*All reasonable costs are allowable **with the following exceptions:***

- a. No foreign travel;
- b. No equipment may be purchased; this also includes desktop equipment;
- c. Funds may not be used for construction or remodeling of facilities; and
- d. Only direct support of US-citizens is allowed.

4. Results of Prior Nevada NASA Space Grant Consortium or Nevada NASA EPSCoR support (limited to one page): Any faculty on the project who has received NVSGC or Nevada NASA EPSCoR award(s) in the past five years must provide the following:

- a. The amount and period of support.
- b. Summary of the results, including tangible outcomes, which could include, but are not limited to; resulting publications, proposals, new collaborations or partnerships, thesis/dissertations, student successes, and engagement of underrepresented groups.

5. References/Citations

6. Biographical Sketch or Curriculum Vitae

Limited to two pages per person, including the PI, Co-PI(s) and student(s) involved who have a major role in the project.

7. Letters of collaboration from NASA Centers or industry.

III. SUBMISSION GUIDELINES:

- Proposals must be uploaded as one (1) complete PDF file (above mentioned documents **1-7**) by your SPO, Grants & Contract, Business office, etc.at <https://nasa.epscorspo.nevada.edu/funding/2017-2018-research-infrastructure-faculty-competition/> by the deadline of: **Monday, April 10, 2017 at 5:00 pm, PT.**
- Proposals received after that date and time and without all of the above required information will not be reviewed.
- PDFS should be named: **NVSGC_RI_(your last name).**

NEVADA SPACE GRANT CONSORTIUM RESEARCH INFRASTRUCTURE SOLICITATION

IV. EVALUATION AND AWARD CRITERIA:

The screening and selection process will include statewide representatives from NSHE and /or Industry and will focus on the following areas:

- Clear benefits to enhancement of Nevada’s STEM research infrastructure
- Quality of the research proposal as evidenced by:
 - a. Well defined research objectives
 - b. Clearly defined methods that adequately address the objectives
 - c. Demonstrated ability of faculty to conduct the anticipated work
- Alignment of the proposal with NASA’s national missions and goals and the Nevada Science and Technology Plan 2015 and/or the State of Nevada’s Economic Development Plan.
- Student participation plan is appropriate and includes outreach to students from under-represented groups.
- Budget is appropriate for scope of work.
- Anticipated products and/or outcomes are defined.
- Publications, presentations and proposal development plans are addressed.

Diversity and inclusion are integral to the mission success of NASA. *To stay competitive in today’s global marketplace, we must have “an organizational culture and work environment where the best and brightest minds – employees with varying perspectives, education levels, skills, life experiences, and backgrounds – work together to achieve excellence and realize individual and organizational potential.” “NASA must reach out to educate a more diverse American public on the need for robust space and aeronautics programs and their value in advancing the U.S. scientific, security, and economic interests.” “To do so, NASA will increase outreach efforts to encourage and motivate people, especially young people, in diverse and underserved communities.”*

Proposals to Nevada Space Grant Consortium competitions should include a goal to engage faculty and students that reflect the demographic diversity in Nevada.

V. AWARD OBLIGATIONS

Award recipients are required to prepare an interim report for the spring 2018 Space Grant annual report and a final project report following Nevada Space Grant guidelines. Reporting will be performed through online forms. You will be required to provide demographic data about participants and prepare a project highlight for submission to the National Space Grant Office. The final report includes a summary of project results and outcomes such as: grant proposals submitted; grant proposals funded; papers submitted and/or published in refereed journals; presentations or abstracts at professional meetings, and collaborations with NASA centers and institutions across the state. Award recipients are also expected to attend and make a

NEVADA SPACE GRANT CONSORTIUM RESEARCH INFRASTRUCTURE SOLICITATION

presentation at the annual Nevada NASA EPSCoR/Space Grant Meeting anticipated to occur in October 2017. Travel for this meeting should be included in your budget.

- Reporting is the responsibility of the principal investigator of each successful submission. PI's will be responsible for working with the NVSGC program office and all project participants to provide text and data through an online reporting form.
- Profiles/identifier information must be reported for all students receiving significant funding and/or significant engagement (≥ 160 contact hours) for all undergraduate, graduate, and or post-doctoral student participants. An online form is provided.
- Information to be furnished in the report includes:
 - Project participants (i.e. Faculty, students, etc...) provide titles, roles, demographics; any NASA Center contacts (name, location, title)
 - Highlights and results of the project activities (photos of activities are encouraged);
 - Progress of the proposed activity(ies) as requested;
 - Indirect and Direct Participants information: You will need to capture the total number of direct and indirect attendees reached via your activity(ies). *Direct participants are individuals who are direct beneficiaries of the activity (i.e. participants and/or attendees who may have registered for the activity) indirect participants are individuals who indirectly benefit from the NASA activity and/or can only be estimated (i.e. Students participating in revised courses that are developed);*
 - Full citations for publications, presentations, etc.; and
 - Information on all proposals submitted as a result of this project. Information should include Funding agency, amount, NASA collaborators and proposal status (submitted, funded, not selected for funding).

Contact Information:

Gibran Chavez-Gudino

Nevada NASA Research Administrator
EPSCoR Office, System Sponsored Projects
gibran@nshe.nevada.edu; phone: 702 522-7081

Lynn Fenstermaker, Director

Nevada NASA Space Grant Consortium
lynn.fenstermaker@dri.edu; phone: 702 862-5412

More information about Nevada Space Grant may be found at:
<https://nasa.epscorspo.nevada.edu/>