

# NEVADA NASA EPSCoR

## REQUEST FOR LOI and PRE-PROPOSALS: National NASA EPSCoR Research CAN

Release Date: July 27, 2020



### Announcement for:

**Faculty from 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**

**Letter of Intent Due: September 7, 2020, 5:00 pm PT**

**Pre-Proposal Due: October 13, 2020, 5:00 pm PT**

**Webinar about this solicitation will be held August 3, 2020 at  
2 pm PT. Use this Microsoft Teams link to attend: [Join  
Microsoft Teams Meeting](#)**

## INTRODUCTION

The National NASA EPSCoR Program has revised the schedule for the Research Cooperative Agreement Notice (CAN) once again. It is anticipated that the National NASA EPSCoR CAN solicitation will be released in late-November 2020 with a single full proposal submission due in early February 2021. To allow sufficient time to select and develop a single strong full proposal from Nevada, a letter of intent and pre-proposals are being solicited in advance of the Federal CAN release. The LOIs will be used to select review panel members for pre-proposal competitive external review that will result in the selection of one pre-proposal that will advance to full proposal development. Note: the National NASA EPSCoR CAN will only permit one full proposal submission per EPSCoR state. Based on past CAN solicitations no significant changes are anticipated. The CAN announcement from last year is attached to this solicitation as a paperclip.

Each funded NASA EPSCoR CAN proposal is expected to establish research activities that will make significant contributions to the strategic research and technology development priorities of the NASA's national program and/or one or more of the ten NASA Field Centers, Mission Directorates or the NASA Office of Chief Technologist as well as contributing to the overall research infrastructure, science, and technology capabilities, higher education, and economic development of Nevada.

**NASA EPSCoR Research CAN pre-proposals must include three or more statewide collaborations among NSHE institutions.** To support and strengthen statewide synergy and collaborations necessary for a strong National NASA EPSCoR CAN proposal, travel and workshop funds are available through the NV NASA EPSCoR Research Infrastructure Development (RID) grant. Solicitations for RID travel and workshop grants are open year-round and as funds are available, awards to support team building workshops or travel to NASA Centers to build collaborations will be awarded. Please check the [Nevada NASA Programs](#) website to apply for team-building workshop or travel funds.

**Important Note:** Faculty who identify a collaborative effort with NASA personnel or NASA Contractors are often more successful than faculty who have not identified collaboration with a NASA scientist. Pre-proposals demonstrating NASA collaboration are therefore, strongly encouraged.

The objective of the NASA EPSCoR Research CAN Award is to:

- Contribute to and promote the development of research infrastructure in NASA EPSCoR States in areas of strategic importance to the NASA mission; (Space Science, Mission to Planet Earth, Human Exploration and Development of Space, Aeronautics, and Space Technology.)
- Improve the capabilities of the NASA EPSCoR States to gain support directly from NASA and other sources outside the NASA EPSCoR program;
- Contribute to the overall research infrastructure, science, and technology capabilities, higher education, and economic development of the State by utilizing Nevada's unique resources and assets while developing and expanding regional interests in Climate Change, Systems Engineering, Astrophysics, Planetary Geology, and Astrobiology; and
- Work in close coordination with the NASA Space Grant program to improve the environment for science, mathematics, engineering, and technology education in the State.

For guidance on writing a pre-proposal relevant to both NASA and Nevada science mission and

goals, please carefully examine the appendix to this solicitation that contains current NASA mission priorities and review all of the documents attached via paperclip to this solicitation, which include:

- NASA Strategic Plan 2018
- NSHE Science and Technology Plan 2020
- The Governor's Economic Plan: Moving Nevada Forward: A Plan for Excellence in Economic Development 2012

NOTE: The National NASA EPSCoR Office anticipates releasing additional information on research priorities late Summer 2020. When this information is available, we will make an announcement and provide the information via the NV NASA Programs website: <https://nasa.epscorspo.nevada.edu/>

## **CAN SOLICITATION INFORMATION AND INSTRUCTIONS**

### **A. Eligibility**

Faculty at NSHE institutions, particularly junior faculty, women, and members of other underrepresented populations are encouraged to apply. Faculty who have a current National NASA EPSCoR Research CAN project are not eligible to apply while their project is on-going. Pre-proposals must include Co-PIs from at least three NSHE institutions. Note that the National NASA EPSCoR Office has made the following eligibility determinations for prior lead Science PIs:

- A researcher who is or has been a Science PI on a funded NASA EPSCoR major research grant is not eligible to be Science PI on a subsequent proposal with the same research focus.
- A current or past Science PI is eligible to serve as a Co-I on subsequent proposals including concurrent proposals.
- A past Science PI is eligible to serve as a Science PI on a subsequent proposal only if the prior research project is completed (three years) and if the new research is completely different than the prior grant (committee judgment required).

### **B. Award: Funding Information**

The NASA EPSCoR Research CAN will provide an award of \$1,125,000 total for a three-year period with the expectation of a 2:1 match; i.e., \$750K in Federal funds and \$375K in state matching funds (contingent on matching fund availability) and/or institutional match. Note: an attempt must be made to distribute Federal and state matching funds to each participating institution. If institutional match is required, that match must be met at the respective institution, i.e., if there are insufficient state matching funds, institutions receiving Federal funding must provide the 2:1 match from their institution and not through another NSHE institution's budget.

### **C. Award Obligations (If selected for Full proposal submission and receive a National award)**

Award recipients are required to prepare annual and final reports following National NASA EPSCoR guidelines, which will be provided to the lead technical PI. You will be required to provide demographic data about participants and prepare a project highlight for inclusion in an annual report prepared by the National NASA EPSCoR Office. The final report includes: 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 presentation at the annual NV NASA EPSCoR/Space Grant Meeting anticipated to occur in the spring each year. Travel for this meeting should be included in your budget.

#### **D. Letter of Intent Preparation**

Complete the online form (URL listed below) to provide the following information:

- Lead PI and Co-PI names and institutions
- Working title for the pre-proposal
- Research topic keywords
- Research abstract (300 words max)
- Suggested external reviewers (minimum of two names with email addresses required)

Go to: <https://nasa.epscorspo.nevada.edu/2021-can-loi-form/>

#### **E. Pre-proposal Preparation (merge requirements 1-4 into a single PDF)**

Pre-proposals must be typed, single-spaced, standard one-inch margins and use a Times Roman 12 pt or comparable font with numbered pages. The pre-proposals should be written such that researchers from other scientific disciplines would be able to understand the pre-proposal goals, importance of the research and how the anticipated outcomes will benefit NASA, NV and NSHE.

##### **1. Cover Page (form provided as “paperclip” attachment to this solicitation)**

- Signature of Applicant
- Signature of Office of Sponsored Projects/Programs

##### **2. Project Description (limited to 5 pages, plus additional pages for items c, d and e)**

Provide a concise description of the proposed research or research-building activities, including the following:

- a. Summary of Project; (1 page maximum of the total 5 pages allotted)
- b. The remaining 4 pages should include:
  - i. Project goals and research objectives
  - ii. Tasks and methods
  - iii. SMART objectives with measurable outcomes (see PDF “paperclip” attachment)
  - iv. An approximate timetable for project completion
  - v. List of collaborators and expertise they will contribute (including any NASA scientists)
  - vi. Brief discussion of likely outcomes (i.e., publications, patents/licenses, technology transfer, new hardware/software, new or revised courses, new proposals with potential program you will apply to, etc.)
- c. Plan for any potential student involvement; particularly from under-represented groups (1 page max)
- d. Description of how the effort will contribute (i.e., broader impact) to the **Nevada Science and Technology Plan 2020** and/or **the State of Nevada’s Economic Development Plan** and how the effort will align with the **NASA Strategic Plan 2018 and/or the list of critical NASA research topics provided by the National NASA EPSCoR Project Manager; paperclipped to this solicitation.** (1 page max)
- e. Any NASA collaborators must provide letters of support specifically stating the contribution they will make. The letters will be included in the pre-proposal appendix. (Note: Letters must be recent and dated within 45 days prior to the solicitation due date.)



### **3. Budget and Budget Justification (form provided as “paperclip” attachment)**

Provide a budget and a detailed budget justification by each institution involved in the project.

NOTE: If selected to submit a full proposal, the budget must include funding to administer the grant through the NSHE EPSCoR and Sponsored Projects Office. As required by the National NASA EPSCoR Program Manager, the budget will include funds for the administration of the project and the NV NASA EPSCoR Director must be listed as the Administrative Lead PI. (Consult with Gibran Chavez Gudino at the NSHE EPSCoR Office for an estimate on the grant administration costs.)

- a. PIs are encouraged to work with their Sponsored Programs Office and/or Business Managers well in advance to develop the budget.
- b. Follow NASA budget guidelines as well as the OMB Uniform Guidance when developing the budget.
- c. Include appropriate annual increases for salary, fringe, and tuition costs.
- d. Include travel for annual statewide meetings each year, alternating locations in Northern and Southern Nevada.
- e. Budget must be signed by Sponsored Projects Office or Business Manager.

### **4. Appendices**

- a. References Cited (the number of pages for citations is not limited)
- b. Biographical Sketch or Curriculum Vitae: limited to two pages per person, including the PI, Co-PI(s) and any collaborators or identified student(s) who will have a major role in the project.
- c. Any NASA collaborators must provide letters of support that specifically state the contribution they will make. (Note: Letters must be recent and dated within 45 days prior to the solicitation due date.)
- d. NASA Funding History Summary (limited to one page): provide a detailed list of previous & current NASA funded projects. Include the title of the project, the project period, the funded amount, and significant project outcomes.
- e. Facilities and Other Resources: list any existing facilities and major equipment that will be used for the proposed project.

### **F. Submission Guidelines:**

Letters of Intent must be submitted no later than **5:00 pm PT on September 7, 2020**. Use the online form at: <https://nasa.epscorspo.nevada.edu/2021-can-loi-form/>

Pre-proposals must be uploaded no later than **5:00 pm PT on October 13, 2020**. Please submit a single PDF document using the naming convention: **PI Last Name\_First Name\_NASA\_CAN**. Submissions that are incomplete (see requirements 1-4 above) will not be reviewed and no late submissions will be accepted. Use the online form at: <https://nasa.epscorspo.nevada.edu/funding/2021-can-loi-pre-proposal/>

### **PRE-PROPOSAL REVIEW PROCESS AND EVALUATION CRITERIA**

An external panel of reviewers will review and recommend a project for submission to the National NASA EPSCoR Research CAN. The results of this review will be forwarded to the NV EPSCoR Research Affairs Council. Project selection will be based on review of pre-proposals according to the following criteria:

1. Technical quality of the proposed research and soundness of plan to produce demonstrable near-term achievements that will serve as a catalyst to enhance the state's long-term NASA-related research capabilities.
2. The proposed research goal(s) and objectives are scientifically sound and will result in significant advancement of the topic area.
3. Methods are appropriate and will adequately address the research objectives, the pre-proposal includes quantifiable SMART objectives, and well defined outcomes and products are listed.
4. Strength of the collaborative team, representation from at least three NSHE institutions and inclusion of a NASA collaborator. Potential for student involvement is encouraged.
5. Relevance to the NASA mission as defined in NASA's 2018 Strategic Plan and or the list of top priority research topics provided by the National NASA EPSCoR Project Manager (attached to this solicitation). The degree to which the proposed research matches NASA's Strategic enterprises and serves as a catalyst to improve the ability of the state's institutions to become more competitive and involved in NASA's programs.
6. Potential of the plan and proposed activities to contribute to the State of Nevada's economic plan (e.g. through innovative approaches, technology transfer and innovative industry partnering) and/or NSHE's Science and Technology plan.
7. The budget is appropriate for the proposed work.

It is anticipated that final selection of the pre-proposal to move forward to a full proposal will be announced in early December 2020. The full proposal will be due in late February to mid March 2021.

## **Contact Information**

NV NASA EPSCoR Project Director  
Dr. Lynn Fenstermaker  
[lynn.fenstermaker@dri.edu](mailto:lynn.fenstermaker@dri.edu)  
702-862-5412

NV NASA EPSCoR Project Administrator  
Gibran Chavez-Gudino  
[gibran@nshe.nevada.edu](mailto:gibran@nshe.nevada.edu)  
702-522-7081

## **ADDITIONAL LINKS:**

NASA Headquarters: <http://www.nasa.gov>

Ames Research Center: <http://www.nasa.gov/centers/ames>

Armstrong Flight Research Center: <http://www.nasa.gov/centers/armstrong>

Glenn Research Center: <http://www.nasa.gov/centers/glenn>

Goddard Space Flight Center: <http://www.nasa.gov/centers/goddard>

Jet Propulsion Laboratory: <http://www.jpl.nasa.gov/>

Johnson Space Center: <http://www.nasa.gov/centers/johnson>

Kennedy Space Center: <http://www.nasa.gov/centers/kennedy>

Langley Research Center: <http://www.nasa.gov/langley>

Marshall Space Flight Center: <http://www.nasa.gov/centers/marshall>

Stennis Space Center: <http://www.nasa.gov/centers/stennis>