# NEVADA NASA EPSCoR

# **REQUEST FOR LOI and PRE-PROPOSALS:** National NASA EPSCoR Basic Research Opportunity

NOFO Research Collaboration

Release Date: July 19, 2024



Announcement for:

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

Letter of Intent Due: August 12, 2024, 5:00 pm PT Pre-Proposal Due: August 26, 2024 5:00 pm PT A webinar about this solicitation will be held Monday, <u>August</u> <u>5</u>, at 11 am PT. Use <u>this</u> Microsoft Teams link to attend. <u>Meeting ID: 294 522 136 936; Passcode: iwSDqf</u>

# INTRODUCTION

The National NASA EPSCoR Program will be releasing the 2025 Basic Research Opportunity (formerly Research Collaboration) Notice of Funding Opportunity (NOFO) in October 2024 NV NASA EPSCoR will be permitted to submit a single full proposal, which will likely be due in mid-January 2025. To allow sufficient time to select and develop a single strong full proposal from Nevada, letters of intent and pre-proposals are being solicited in advance of the Federal NOFO release. The LOIs are required to submit a pre-proposal and will be used to select review panel members for the pre-proposal competitive external review. The results of the external review will result in the selection of one pre-proposal that will advance to full proposal development. Note: The National NASA EPSCoR NOFO will only permit one full proposal submission per EPSCoR state. An amendment to this solicitation will be released if we learn of any significant changes from past federal NOFOs. The NOFO (formerly CAN) announcement from last year is attached to this solicitation as an e-paperclip.

Each funded NASA EPSCOR Basic Research Opportunity NOFO proposal is expected to establish collaborative research activities with a NASA Center scientist(s) such that the project will make significant contributions to the strategic research and technology development priorities of NASA's national program. NASA's national program includes the ten NASA Field Centers, Mission Directorates, and the NASA Office of the Chief Technologist. In addition to meeting NASA research priorities, a strong pre-proposal will also contribute to the overall research infrastructure, science, and technology capabilities, higher education, and economic development of Nevada. The anticipated 2025 NOFO list of research topics that are high priority for NASA is attached. This research NOFO Appendix document was provided by the NASA EPSCOR Deputy Program Manager.

NASA EPSCoR Research NOFO pre-proposals must include three or more statewide collaborations among NSHE institutions and a NASA Center or NASA Contractor Collaborator. To support and strengthen statewide synergy and collaborations necessary for a strong National NASA EPSCoR NOFO 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 <u>Nevada NASA Programs</u> website to apply for team-building workshop or travel funds.

<u>Important Note</u>: In the past, faculty who identified a collaborative effort with NASA personnel or NASA Contractors were often more successful than faculty who had not identified collaboration with a NASA scientist. Pre-proposals demonstrating NASA collaboration are therefore now required.

The objective of the NASA EPSCoR Research Collaboration NOFO 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 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 all documents attached via e-paperclip to this solicitation, which include:

- The anticipated NASA EPSCoR Appendix A list of high priority research. The National NASA EPSCoR Office does not anticipate any significant changes to this list when the NOFO is released in October.
- NSHE Science and Technology Plan 2020
- The Governor's Economic Plan: Revitalizing <u>Nevada's</u> Electric, Innovative, and Connected Future

# NOFO 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/ NOFO project are not eligible to apply while their project is on-going. Pre-proposals must include Co-PIs from at least two other NSHE institutions.

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

It is anticipated that the NASA EPSCoR Basic Research Opportunity NOFO will provide an award of \$750,000 in Federal funds along with \$375,000 in cost share (state provided and institutional match) total for a three-year period. State matching funds are contingent on matching fund availability. 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 Science PI. You will be required to provide demographic data about participants and prepare a project highlight for inclusion in an annual report that will be delivered to the National NASA EPSCoR Office. The annual and final reports include: grant proposals submitted; grant proposals funded; papers submitted and/or published in refereed journals; presentations or abstracts at professional meetings, collaborations with NASA centers and institutions across the state; patents and/or licenses; websites; and any other project product.

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:

- 1) Lead Science PI and Co-PI names and institutions
- 2) Working title for the pre-proposal
- 3) Research topic keywords
- 4) Research abstract (300 words max)
- 5) Suggested external reviewers (minimum of two names with email addresses required, more are appreciated). Please note that reviewers can be from any institution nationally or internationally, but must not have a conflict of interest (COI) with the PI. We are using the NSF definition of COI:

Conflicts would exist for:

- PhD advisors
- PhD thesis advisees
- co-authors on any book, article, report abstract or paper collaboration within the last 48 months
- collaborators on projects such as funded grants, graduate research or others within the last 48 months
- any editorial board with whom the nominee interacts
- 6) AOR Authorized Organization Representative (OSP/SPO or Business Manager) name and contact information

Go to: https://nasa.epscorspo.nevada.edu/2025-nofo-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, Nevada 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 inclusion of undergraduate students, graduate students, and/or postdoctoral fellows as active members of the research team. (1 page max)
- d. Description of how the effort will contribute (i.e., broader impact) to the **State of Nevada's Economic Development Plan** and how the effort will align with the anticipated **NASA EPSCoR Basic Research Opportunity NOFO Appendix A; epaperclipped to this solicitation**. (1 page max)
- e. 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 "e-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 Project 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 Carol Luna at the NSHE EPSCOR Office for an estimate on the grant administration costs approximately \$100,000 over the life of the project.) The anticipated start date for selected proposals would be sometime in Summer 2025.

- 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 the 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. 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 for the Science PI (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:

<u>Letters of Intent</u> must be submitted no later than **5:00 pm PT on August 12, 2024**. Use the online form at: <u>https://nasa.epscorspo.nevada.edu/2025-nofo-loi-form/</u>

<u>Pre-proposals</u> must be uploaded no later than **5:00 pm PT on August 26, 2024.** Please submit a single PDF document using the naming convention: **PI Last Name\_First Name\_NASA\_NOFO.** 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: <u>https://nasa.epscorspo.nevada.edu/funding/2025-nofo-loi-pre-proposal/</u>

# PRE-PROPOSAL REVIEW PROCESS AND EVALUATION CRITERIA

An external panel (experienced individuals outside Nevada knowledgeable of NASA EPSCoR and at least one reviewer knowledgeable of the topic area) will review and recommend a project for submission to the National NASA EPSCoR Basic Research Opportunity NOFO. The results of this review will be forwarded to the Nevada EPSCoR Research Affairs Council for review prior to an announcement of the pre-proposal selected for full proposal development. 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 preproposal 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. Student or postdoctoral fellow involvement in research is required.
- 5. Relevance to the NASA mission as defined in the anticipated NASA EPSCoR Research NOFO Appendix A. 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.
- 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 late September 2024. The full proposal will likely be due in mid-January 2025.

# **Contact Information**

NV NASA EPSCoR Project Director Dr. Eric Wilcox Eric.Wilcox@dri.edu 775-673-7686

NV NASA EPSCoR Research Administrator Carol Luna <u>cluna@nshe.nevada.edu</u> 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: <u>http://www.ipl.nasa.gov/</u> Johnson Space Center: <u>http://www.nasa.gov/centers/johnson</u> Kennedy Space Center: <u>http://www.nasa.gov/centers/kennedy</u> 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