

South Dakota NASA EPSCoR Program 2022 Research Initiation Grants Application Guidelines

Research Initiation Grants (RIGs) are intended for multiple-institution research collaborations that align with NASA research and development priorities. Proposals must involve collaboration between at least two South Dakota universities. Grants are designed to assist early-stage NASA-related research projects to become more competitive for NASA EPSCoR Major Research Awards or for other sources of long-term support. It is strongly recommended that proposals include one or more letters of support from a collaborator at NASA Headquarters, a NASA Center, or a NASA contractor.

- Objectives of the NASA EPSCoR Program are outlined at:
<http://www.nasa.gov/offices/education/programs/national/epscor/home/>
- State of South Dakota research priorities are described in the “2020 Vision: The South Dakota Science and Innovation Strategy” available at:
<https://sdepscor.org/who-we-are/science-and-technology-plan-the-2020-vision/>
- NASA is especially interested in experiments that will utilize the International Space Station:
http://www.nasa.gov/mission_pages/station/research/index.html
- NASA 2020 technology development priorities are listed at:
<https://www.nasa.gov/offices/oct/taxonomy/index.html>
- Additional NASA points of contact are listed at the end of this document.

The deadline for applications for SD NASA EPSCoR RIGs is **August 26, 2022**. Proposals may request up to \$75,000 (NASA funds) with a period of performance of 24 months. Research Initiation Grants require non-federal matching funds in the amount of \$25,000 (one third of NASA funds). See Proposal Content (item 10g) for important indirect cost restrictions. SD NASA EPSCoR expects to make two awards, and it is anticipated that award announcements will be made by September 16, 2022.

Funding is provided from two different NASA grants with different dates of coverage. Therefore, Research Initiation Grants will consist of two phases. Funding of Phase 2 is contingent upon (1) progress toward achieving research goals and (2) availability of funds from NASA. Grant application consists of:

Overall project description (24-month project)

Phase 1: Oct. 1, 2022–Sept. 30, 2023

Budget (\$37,500 NASA funds + \$12,500 match)

Brief statement of work and milestones specific to Phase 1

Phase 2: Oct. 1, 2023–Sept. 30, 2024

Budget (\$37,500 NASA funds + \$12,500 match)

Brief statement of work and milestones specific to Phase 2

A Phase 1 Progress Report will be due June 23, 2023. The report must summarize (1) expenditures, (2) progress toward achieving objectives and milestones, and (3) development of

research contacts at NASA or related industries. Projects showing excessive fund balances or insufficient progress toward objectives and milestones will not be eligible for Phase 2 support.

Grant Guidelines

- 1) Submit proposals for projects that promote and advance the objectives of the South Dakota NASA EPSCoR Program and have the potential to develop into major research programs with long-term support from NASA or other sources. The SD NASA EPSCoR Steering Committee especially seeks projects that create a bridge between NASA research goals and state research priorities. Examples include NASA-related research at the USGS Center for Earth Resources Observation and Science (USGS/EROS) and the Sanford Underground Research Facility (SURF). Collaborations with industry and with the state's tribal colleges and universities are also encouraged.
- 2) The Steering Committee is especially interested in promoting projects that foster statewide research collaborations.
- 3) Establish a partnership with a NASA researcher to implement the project. Travel Grants from the SD NASA EPSCoR office are available to fund planning visits to NASA Headquarters or NASA Centers (see accompanying travel announcement). Additional partnerships are strongly encouraged (e.g., with a K-12 school, university, business or industry, or other government agency). Research or outreach activities involving the state's tribal colleges and universities are encouraged.
- 4) Identify project matching funds at a rate of one third for all SD NASA EPSCoR dollars requested. Matching funds must be non-federal funds and can be in-kind and/or cash.
- 5) Provide specific, measurable objectives with associated metrics that will be used to evaluate the success of the project.
- 6) Grant recipients agree to the following reporting requirements:
 - a) Provide timely analysis of the project with respect to the stated evaluation metrics, further collaborations, expanded project scope, and attempts to obtain additional funding.
 - b) Maintain demographic and contact information on faculty and student participants.
 - c) Submit a final report upon completion of funded project, including detailed financial accounting (not later than Sept. 30, 2024).
 - d) Acknowledge financial support of SD NASA EPSCoR in any presentations or publications resulting from the funding.

Proposal Content

Proposals must include the following items:

- 1) Project title, name(s) of PI or Co-PI's, organization/school, address, phone, email (US citizenship is not required)
- 2) Other state or regional collaborators (names, titles, institutions) and their role in project (collaborations outside the state are encouraged, but no funds can be provided to outside collaborators or organizations)
- 3) NASA contact or technical monitor (name, title, organization) and their role in project or industry contact if proposal is for an industry partnership
- 4) Project abstract (**200 words or less**)
- 5) Project description (**limited to four pages**, 12-point font, single-spaced, minimum 1-inch margins). Description should address the cumulative two-year project.
 - a) Description of technical challenge to be investigated and plan of attack
 - b) Project partners (capabilities, organization names, role played in the project)

- c) Project timeline
 - d) Discussion of how this project will advance the objectives of the SD NASA EPSCoR Program (including NASA and state R&D priorities)
 - e) Discussion of any plans to increase participation of underrepresented groups (women, minorities, persons with disabilities)
 - f) Discussion of the potential for the project to develop into a major research program with long-term support from NASA and/or other sources
 - g) Plan and milestones for securing additional funding from NASA or other sources
 - h) Specific metrics that will be used to evaluate the success of the project
 - i) References cited (as needed); these do not count toward the four-page limit
- 6) Separate statements of work for Phase 1 and Phase 2 (limit 200 words each).
 - 7) Supporting letter or email correspondence from a NASA collaborator or industry partner who has agreed to serve as a technical point of contact for the proposed research. Proposals lacking a strong endorsement from the NASA or industry representative are not likely to receive funding. This supporting letter is not included in the page limit.
 - 8) Two-page biographical sketches for PI and Co-PI's, not included in page limit (NSF Bio Sketch template or equivalent).
 - 9) Current and pending support for research (PI and Co-PI's), not included in page limit (NSF Current and Pending Support template or equivalent); if applicant has no current support, indicate this on the form; proposals without this form may be declined.
 - 10) Budgets for Phase 1 and Phase 2 (**budgets must be submitted on the worksheet provided**; if necessary, use additional pages for justification)
 (SDSM&T researchers should prepare their budgets in consultation with SDSM&T Senior Accountant, Cassie Schweigerdt, Cassie.Schweigerdt@sdsmt.edu.)
 The following apply to budgets for each phase (Phase 1 and Phase 2):
 - a) Salary/wages (US citizenship is not required) (SD NASA EPSCoR funds may not be used to support out-of-state personnel)
 - b) Fringe benefits
 - c) Travel* (foreign travel is not allowed)
 - d) Supplies*
 - e) Equipment (includes items over \$5000; these cannot be purchased with either NASA funds or matching funds)
 - f) Other (specify)*
 - g) Facilities & Administration (F&A) costs (overhead or indirect costs): **For this solicitation, indirect costs are capped at 35.0% of the total direct costs.**
 - h) Total funds requested including F&A (limit \$37,500 NASA funds in Phase 1, \$37,500 NASA funds in Phase 2). The budget distribution does not have to be equally divided between collaborating institutions, but should demonstrate significant participation on the part of each institution.
 - i) Matching funds (one third of NASA funds from non-federal sources)**

* Brief justification required on additional page.

** Identify source of non-federal matching funds.

Proposals Submission

Submit all proposal materials (items 1-10, above) as a single PDF file. Proposals must be received by **August 26, 2022, 4:00 pm Mountain time.**

Submit to:

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