Request for Proposals

Kansas NASA EPSCoR Program

Seed Research Initiation (SRI) Grant

NASA in Kansas

Proposal Due: Noon, May 9, 2025
Anticipated Grant End Date: May 31, 2026

With support from NASA and the Kansas Board of Regents, the Kansas NASA EPSCoR Program (KNEP) anticipates awarding one Seed Research Initiation (SRI) grant under the KNEP Research Infrastructure Development (RID) program. SRI grants are designed to assist investigators in starting research projects having a high probability for sustained growth and value to NASA and Kansas.

A successful SRI grant leads to productive collaborations, joint publications, and additional grant awards. A direct impact on state economic development is also extremely desirable. Ultimately, the goal is to form long-term self-sustaining nationally competitive capabilities that meet both NASA and Kansas' research infrastructure development goals.

Award Criteria

SRI Awards are competitive, with a strong emphasis on:

- Addressing NASA and Kansas interests (required)
- Developing new, meaningful, and sustained collaborations (in Kansas and with NASA)
- Involving U.S. students, undergraduate and graduate, in research (required)
- Strengthening collaboration among industry, government agencies, and academia
- Exploring new and unique R&D opportunities
- Generating publications and future EPSCoR and non-EPSCoR grant submissions
- Contributing to Kansas' economic development

Additional information on NASA and Kansas strategic objectives and other resources can be found in the appendices of this document.

Proposals must detail other important infrastructure development-related components, including:

- Investigator experience and long-term research plans
- Investigator-specific goals, objectives, and priorities
- Measurable, award-related deliverables or metrics
- Information on the proper coordination and management of proposed multi-investigator teams
- Detailed budget information; including all costs, matching funds, and any indirect cost waivers

The KNEP SRI program cannot support proposals augmenting existing funded or well-established research projects. NASA specifically states: "*EPSCoR RID elements should not augment existing funded research projects. RID activities should target unique activities that increase jurisdiction competitiveness.*" New and unique activities increasing Kansas' research infrastructure and competitiveness are essential and required.

Funding, Required Match, and Restrictions

KNEP expects to make a single one-year award, of **$168,265**.

- WSU proposers should plan their budget for **$168,265** in NASA funding and use a reduced indirect cost rate of 8.5%.
- Proposers outside of WSU should plan their budget for **$166,140**, which considers the WSU indirect cost recovery on the first $25,000 of the subaward.

The following KNEP SRI program restrictions apply:

- Proposers are required to provide at least **$23,700 in matching funds** (cash or in-kind) from non-federal sources
- Funds cannot be used for equipment (items under $5,000 are "supplies")
- Funds cannot be used for foreign travel
- Funds cannot be used for civil-service personnel labor or travel
- Proposals augmenting existing funded or well-established research projects cannot be supported; new and unique activities are essential and required (as noted in a previous section)
- Awarded funds must be expended within the award period (no-cost extensions are highly unlikely)

Grant Reporting

Grant recipients must submit progress and final reports addressing KNEP Research Infrastructure Development (RID) program objectives. Reports will include the following:

- Grant-related publications, presentations, and theses and dissertations
- Additional proposals, submitted or accepted, owing directly to the KNEP award
- Additional funding secured from industry or other sources
- Detailed information on the faculty and students supported (e.g., number of people involved, demographics, funding amounts, activities, performance, student plans, etc.)
- New collaborations formed with NASA and industry
- Impact on Kansas' economic development
- Other quantifiable items, as defined by individual investigators (in the original proposal)
- An update on short- and long-term research plans
- Patent applications, awards, or technical transfer activities
- Other products (courses developed, websites, software and hardware, models, etc.)

Some specific KNEP SRI target outcomes, per award, include:

- Two or more publications per year, with NASA or relevant industry co-authors
- Two or more successful EPSCoR or non-EPSCoR grant awards, as a product of the KNEP SRI award
- Significant project involvement by five or more students per year

Increasing Access to the Results of Scientific Research

In keeping with the NASA Plan for Increasing Access to Results of Scientific Research, new terms and conditions consistent with the Rights in Data clause in the award which make manuscripts and data publicly accessible may be attached to NASA EPSCoR Research awards. All proposals will be required to provide a Data Management Plan (DMP) or an explanation of why one is not necessary given the nature of the work proposed. See Appendix VI for additional information.

Additionally, researchers submitting NASA-funded articles in peer-reviewed journals or papers from conferences now shall make their work accessible to the public through NASA's PubSpace.

PubSpace provides free access to NASA-funded and archived scientific publications. Research papers will be available within one year of publication to download and read.

Special Note:

Investigators must ensure the proposed work is accurately planned and completed by the noted KNEP grant end date. Requests for no-cost extensions (NCEs) will be reviewed with increased scrutiny.

Proposal Submission:

There is a 12-page limit for all SRI proposal content, with the exception of the biographical sketches and current and pending support documents. Biographical sketches and current and pending support documents should be included for all investigators, and these sections may exceed the 12-page limit. Use one-inch margins, a 12-pt times new roman font, and single-spaced text. A specific proposal format or style (e.g., NSF) is not expected or required. Proposers simply need to effectively address the expectations outlined in this RFP.

The proposal budget must identify the distribution of available KNEP and matching funds.

Proposals must include the submitting Organization's Authorizing Official signature.

Submit a single proposal document in PDF format (less than 2-MB in size) to the KNEP director, Linda.Kliment@wichita.edu, and NASA in Kansas, NASAinKansas@wichita.edu, by noon on the noted date which is included in the header on page 1.

Contact the KNEP Director (Linda.Kliment@wichita.edu or 316-978-6354) with any RFP-related questions.

Availability of Funds and Period of Performance:

KNEP's ability to make awards is contingent upon the availability of NASA and Kansas Board of Regents appropriated funds from which payment can be made. The award period of performance is for approximately 12 months.

Appendices

SRI awards are designed to help researchers establish sustainable research of significant interest to NASA Mission Directorates and Field Centers, and possibly industry, as appropriate. The efforts must also address areas of Kansas interest.

The following material outlines Kansas and NASA strategic interests. Additional NASA specific resources and contact information is also included.

Appendix I

Kansas Strategic Interests

State science and technology strategic interests are outlined in a strategic planning document entitled *Kansas Building an Environment for Science and Technology for Innovation* or "*Kansas B.E.S.T. for Innovation*."

An approach to meeting Kansas' strategic objectives is outlined in this document using four goals, listed as follows:

- *"Stimulate discovery and innovation through partnerships by building on current areas of strength in agriculture, transportation, health, and education, and nurturing emerging areas of opportunity in bioscience, energy, and the environment"*
- *"Translate the results of research into meaningful solutions to societal challenges by fabricating new and patentable devices and methodologies, and providing invaluable in- formation for better-informed policies and partnerships with stakeholders"*
- *"Grow the economy by applying new technologies and expanding access to information technology, resulting in vibrant economic development that brings tangible benefits to the citizens of Kansas and attracts new business to the state"*
- *"Educate the next generation of science, technology, and business leaders"*

Kansas' relevant areas of strength and focus include:

- Health and well-being
- Aviation and transportation
- Bioscience
- Materials
- Energy and environment

The creation of new multidisciplinary groups, industrial collaborations, partnerships, and an appropriately educated workforce leading to new products, jobs, and industry in Kansas is highly desirable.

Appendix II

NASA Strategic Goals

KNEP focuses its program and project elements on NASA's interests. From the Kansas perspective, as outlined in previous sections, the following specific "NASA Strategic Plan 2014" goals and objectives are significant:

- Strategic Goal 1 - "*Expand the frontiers of knowledge, capability, and opportunity in space.*"
  - Objective 1.2: "*Conduct research on the International Space Station (ISS) to enable future space exploration, facilitate a commercial space economy, and advance the fundamental biological and physical sciences for the benefit of humanity.*"
  - Objective 1.4: "*Understand the Sun and its interactions with Earth and the solar system, including space weather.*"
- Strategic Goal 2 - "*Advance understanding of Earth and develop technologies to improve the quality of life on our home planet.*"
  - Objective 2.1: "*Enable a revolutionary transformation for safe and sustainable U.S. and global aviation by advancing aeronautics research.*"
  - Objective 2.2: "*Advance knowledge of Earth as a system to meet the challenges of environmental change, and to improve life on our planet.*"
  - Objective 2.3: "*Optimize Agency technology investments, foster open innovation, and facilitate technology infusion, ensuring the greatest national benefit.*"
  - Objective 2.4: "*Advance the Nation's STEM education and workforce pipeline by working collaboratively with other agencies to engage students, teachers, and faculty in NASA's missions and unique assets.*"

The underlined portions of NASA's strategic objectives are particularly important to Kansas. Specific state interests intersect strongly with NASA's in the science and aeronautics related areas. Kansas has notable expertise in aviation, advanced materials, biotechnology, energy, and earth sciences. Logically, it is within these common areas Kansas is positioned to do well. KNEP is eager to grow research infrastructure to assist NASA and Kansas in meeting its goals.

Appendix III

NASA Mission Directorates, Points Of Contact, and Recent Areas Of NASA Research Interest

The following websites provide additional useful information and links as you prepare your proposal.

NASA Research Focus Areas:
https://www.nasa.gov/learning-resources/established-program-to-stimulate-competitive-research/nasa-epscor-research-focus-areas/#Research-Focus-Areas

Kansas NASA EPSCoR Program (KNEP) Information:
https://nasainkansas.org/index.php/kansas-nasa-epscor-program-knep/

Appendix IV

Other Useful Reference Web Sites (Cut and paste into URL bar if link is not operative)

NASA:
http://www.nasa.gov

NASA Office of STEM Engagement:
http://stem.nasa.gov

NASA Strategic Plan:
https://www.nasa.gov/ocfo/strategic-plan/

Title 2 CFR Part 1800, NASA Uniform Administration Requirements, Cost Principles, and Audit Requirements for Federal Awards of grants and cooperative agreements:
https://www.ecfr.gov/cgi-bin/text-idx?SID=97cf3e395c43128cdbf6f3de586ff048&mc=true&node=pt2.1.1800&rgn=div5

NASA Regulations, Guidance, and Forms:
https://www.nasa.gov/grants-policy-and-compliance-team/#Regulations

NASA Proposer's Guide:
https://www.nasa.gov/wp-content/uploads/2023/09/2023-nasa-proposers-guide-final.pdf?emrc=7b5d89

NASA Solicitation and Proposal Integrated Review and Evaluation System (NSPIRES):
http://nspires.nasaprs.com

NASA Plan for Increasing Access to Results of Scientific Research
https://www.nasa.gov/wp-content/uploads/2021/12/206985_2015_nasa_plan-for-web.pdf

*For non-NASA websites, NASA provides such information for reference only. NASA does not endorse or approve content on non-NASA websites.

Appendix V

Sub Appendix D: Definitions

- Center – The nine NASA Centers located throughout the United States, plus NASA's Jet Propulsion Laboratory (JPL), which is NASA's only Federally-Funded Research and Development Center. Only for the purposes of collaboration in NASA EPSCoR, JPL is in the same category as NASA Centers.
- Cooperative Agreement – A legal instrument similar to a grant in that the recipient carries out a public purpose with the exception that NASA and the recipient are each expected to have substantial technical interaction with each other for the performance of the project.NASA's cooperative agreements are managed pursuant to the policies set forth in 2 CFR 200, 2 CFR 1800, and the *NASA Grant and Cooperative Agreement Manual*. NASA awards both grants and cooperative agreements.
- Jurisdiction – States or Commonwealths eligible to submit proposals in response to this Notice of Funding Opportunity (NOFO).
- Mission Directorate – NASA is broken down into five Mission Directorates: Aeronautics, Exploration Systems, Science, Space Operations, and Space Technology.
- NASA Research Contact – The NASA Research Contact is the primary NASA point of contact during the proposal writing stage for the proposed research area. If the proposer has contacted and received permission from a NASA scientific or technical person, that individual may be listed in the proposal as the NASA Research Contact. Otherwise, the NASA Research Contact is the Chief Center Technologist at the Center, or the NASA Mission Directorate contact at NASA Headquarters.
- Partnership – A reciprocal and voluntary relationship between the project personnel and NASA, industry, or other entities, to cooperatively achieve the goals of the proposed research.
- Research Area – One of the areas of research interest for the NASA Mission Directorate(s).
- STEM – Science, Technology, Engineering, and Mathematics

Appendix VI

Data Management Plan - Increasing Access to the Results of Scientific Research

In keeping with *NASA Plan for Increasing Access to Results of Scientific Research*, new terms and conditions consistent with the Rights in Data clause in the award which make manuscripts and data publicly accessible may be attached to NASA EPSCoR Research awards. All proposals will be required to provide a Data Management Plan (DMP) or an explanation of why one is not necessary given the nature of the work proposed. *The DMP will be submitted by responding to the NSPIRES cover page question about the DMP (limited to 4000 characters).* Any research project in which a DMP is not necessary shall provide an explanation in the DMP block. Example explanations:

- *This is a development effort for flight technology that will not generate any data that we can release, so a DMP is not applicable.*
- *The data that we will generate will be ITAR.*
- *Or, simply explain why the proposed project is not going to generate data.*

The type of proposal that requires a DMP is described in the *NASA Plan for Increasing Access to Results of Federally-Funded Research* (see link Section 4.4). The DMP shall contain the following elements, as appropriate to the project:

- A description of data types, volume, formats, and (where relevant) standards;
- A description of the schedule for data archiving and sharing;
- A description of the intended repositories for archived data, including mechanisms for public access and distribution;
- A discussion of how the plan enables long-term preservation of data; and
- A discussion of roles and responsibilities of team members in accomplishing the DMP. (If funds are required for data management activities, these shall be covered in the normal budget and budget justification sections of the proposal).

Proposers that include a plan to archive data shall allocate suitable time for this task. Unless otherwise stated, this requirement supersedes the data sharing plan mentioned in the *NASA Guidebook for Proposers.* In addition, researchers submitting NASA-funded articles in peer-reviewed journals or papers from conferences now shall make their work accessible to the public through NASA's PubSpace. PubSpace provides free access to NASA-funded and archived scientific publications. Research papers will be available within one year of publication to download and read.