NASA Kentucky EPSCoR
ISS Flight Opportunity 2024
Request for White Papers

Announcement: RFP-24-003

Release Date: Jan 5, 2024
Amendment Date: Jan 30, 2024

White Papers Due: Wednesday, February 21, 2024

Submit via email to nasa@uky.edu

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FAQ and additional information available:
nasa.engr.uky.edu/epscor and
nasa.engr.uky.edu/requests-for-proposals

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NASA EPSCoR ISS Flight Opportunity

NASA EPSCoR is seeking proposals for an ISS Flight Opportunity available to EPSCoR jurisdictions for projects to prepare an ISS research experiment or research experimental hardware for an ISS flight. This funding opportunity is for projects that have matured and/or can be flight-ready within limited time and funding constraints.

This flight opportunity award over 3 years is intended to support researchers primarily during the performance objectives of the microgravity flight. ISS research integration, up and down flight to ISS, and any allocated use of NASA equipment will be provided by NASA ISS. No cost-share is required. Six proposals are expected to be selected by NASA.

Carefully review the FY24 NASA EPSCoR ISS CAN opportunity notice as listed on the NSPIRES website (NNH24ZHA004C). Although no cost-share is required, please make note of responsibilities required of the payload developer and consider the following for eligibility considerations:

Successful research proposals are likely to be those that provide sound contributions to both immediate and long-term scientific and technical needs of NASA as expressed in current NASA documents and communications, as well as contribute to the overall research infrastructure and economic development of the EPSCoR jurisdiction (Kentucky).

Please submit a white paper by February 21, 2024 (3 pg limit) using guidelines below if you have interest in submitting a proposal to this opportunity. NASA Kentucky will review the white papers submitted and select one project to develop for submission by NASA Kentucky as Kentucky's entry in the national competition (program limit is 1 per state). The selected proposal will be due to NASA by April 22, 2024.

Funding: $125,000 to research team; 3-year award period

Cost-share: None required, however the proposer shall be aware that costs such as hardware and/or software development and documentation development support (i.e. data to the ISS) are not covered by this award.

Eligibility: All institutions of higher education within Kentucky; no citizenship restriction

Please submit white papers through Wednesday, February 21, 2024 to: nasa@uky.edu

Contact NASA KY at 859-323-4542 with questions about this opportunity

Changes made in RFP Amendment – January 30, 2024:

- Funding amount increased to $125,000
- Added link to FY24 NASA EPSCoR ISS solicitation
- Added link to Payload Design guide

White paper guidelines – Please address the following in a submission of no more than 3 pages:

1) Abstract/Project summary, specifically addressing the benefit of a microgravity environment to the research
2) Goal and specific objectives of the envisioned experiment
3) Description of experiment hardware
4) Description of personnel and partners
5) Estimate of schedule and discussion of development efforts needed for flight readiness

Competitive proposals will:

1) Have minor or no impediment of feasibility
2) Be ready to fly in 1-2 years
3) Require no or <1 hour of crew intervention per 6 months, beyond installation and removal
4) Have less than 500w power requirement
5) Fit within equivalent volume of a 3U CubeSat (100mm x 100mm x 340.5mm) or single Express Rack Locker (2 cubic ft.)

Research Alignment and Proposal Resources

Alignment with NASA technical objectives is essential for success of the NASA EPSCoR program. Proposers should review proposal resources available on the NASA KY EPSCoR web page, including the NASA Center Core Competencies, the NASA Technology Taxonomy, and FY2024 NASA EPSCoR Focus Areas and R3 Topics. NASA points of contact are available in these documents. In addition, proposers should review NASA Techport and NASA STI to survey NASA research that has been done in their area of interest.

ISS Payload Resources:

- ISS Researchers Guide Series
- Research on the ISS
- ISS External Payloads Proposers Guide
- ISS Expressrack Overview
- NASA Quick Start Guide to Payload Design

NASA Research and Technology Development Priorities

The NASA EPSCoR Program identifies research and technology priorities based on alignment with NASA's Mission Directorates. The Aeronautics Research Mission Directorate (ARMD), Exploration Systems Development Mission Directorate (ESDMD), Science Mission Directorate (SMD), Space Operations Mission Directorate (SOMD), and the Space Technology Mission Directorate (STMD) identify their priorities on the NASA website (www.nasa.gov/about/directorates/index.html). For information on NASA's missions and technical objectives, please visit www.nasa.gov/nasa-missions/ and the following websites:

- Aeronautics Research (http://www.aeronautics.nasa.gov/)
- Exploration Systems Development (https://www.nasa.gov/directorates/exploration-systems-development)
- Science (http://science.nasa.gov/)
- Space Operations (https://www.nasa.gov/directorates/space-operations-mission-directorate
- Space Technology (http://www.nasa.gov/directorates/spacetech/home/index.html)

- NASA EPSCoR (https://www.nasa.gov/stem/epscor/home/index.html)
- NSPIRES (https://nspires.nasaprs.com/external/)
- NASA Proposal Resources (https://www.nasa.gov/general/grants-policy-and-compliance-team/#section-2)