Mega Research Awards Program (MegaRAP)

A NASA EPSCoR Research Infrastructure Development (RID) Project

Sponsored by NASA & the Louisiana Board of Regents (BoR)
With Technical & Management Support from the
Louisiana NASA EPSCoR Team at LSU

LA NASA EPSCoR Management Office
364 Nicholson Hall, Department of Physics and Astronomy
Louisiana State University, Baton Rouge, LA 70803
https://lanasaepscor.lsu.edu/ | laspace@lsu.edu

MegaRAP Program Summary Page

About the MegaRAP

The Mega Research Award Program (MegaRAP) is a one-time competition designed to assist Louisiana university researchers in advancing projects that directly contribute to active NASA research missions and priorities. Modelled on our longstanding RAP program, the MegaRAP will provide more than double the funding and a slightly longer period of performance. The MegaRAP program aims to support the overall NASA EPSCoR Goal of improving NASA research networks, research capacity in Louisiana, and contributions to research and development in areas of priority to both the state and the agency. We anticipate awarding three MegaRAPs for $100,000 each for a 15-month period of performance with a required cost-match of at least $50,000.

Proposals must explicitly identify the current research at NASA which aligns with the work being proposed. Researchers working in areas identified as a priority announced earlier this year at the NASA Ignition event are highly encouraged to propose. These areas included contributions to the Artemis program, strategies for low Earth orbit (LEO), quantum science, and nuclear power in space.

Limited Submission, NOI Requirement, & PI Eligibility

Each institution will be limited to two proposal submissions to the MegaRAP competition; submission selection (PI Name, proposal title, abstract) must be identified at the NOI stage.

An NOI is required in advance of proposal submission. Thus, institutions should conduct an internal competition and down selection prior to submitting the NOI. **Institutional sign-off IS required for the NOI.**

The project PI must be a faculty researcher at one of Louisiana's institutions of higher education who received their PhD in 2016 or later.

Proposal Submissions

- Submit a signed MegaRAP NOI to laspace@lsu.edu by 11:59 pm on Wednesday, December 16, 2026
- Submit a fully compliant, signed proposal via email as a fully searchable pdf document to laspace@lsu.edu by 11:59 pm on Wednesday, February 10, 2027.
- **Important Dates:**
  - Proposal Release Date: Friday, October 16, 2026
  - **NOI Due Date: Wednesday, December 16, 2026**
  - **Proposal Due Date: Wednesday, February 10, 2027**
  - Anticipated Award Announcements: April 2027
  - Anticipated Period of Performance: June 1, 2027 – August 31, 2028

MegaRAP Program Guidelines

NASA EPSCoR

The NASA Established Program to Stimulate Competitive Research (EPSCoR) is administered through NASA's Office of STEM Engagement. The purpose of NASA EPSCoR is to strengthen the research capability of jurisdictions that have not participated equitably in competitive federal research and development activities.

The NASA Authorization Act for Fiscal Year 1993, Public Law 102-588, authorized NASA to initiate NASA EPSCoR. The goal of NASA EPSCoR is to provide seed funding that will enable jurisdictions to develop an academic research enterprise directed toward long-term, self-sustaining, and nationally-competitive capabilities in aerospace and aerospace-related research. This capability will, in turn, contribute to the jurisdiction's economic viability and expand the nation's base for aerospace research and development.

The following are the specific objectives of the NASA EPSCoR program:

- Contribute to and promote the development of research infrastructure in NASA EPSCoR jurisdictions in areas of strategic importance to the NASA mission;
- Improve the capabilities of the NASA EPSCoR jurisdictions to gain support from sources outside the NASA EPSCoR program;
- Develop partnerships among NASA research assets, academic institutions, commercial space programs, and industry; and
- Contribute to the overall research infrastructure, science and technology capabilities of higher education, and/or economic development of the jurisdiction.

NASA EPSCoR Research Infrastructure Development (RID) Award

The NASA EPSCoR Research Infrastructure Development (RID) program for 2022-2028 focuses on building the core strength needed to develop competitive research and technology development methods and activities for the solution of scientific and technical problems of importance to NASA. RID programs will also contribute to the overall research infrastructure, science and technology capabilities, higher education, and/or economic development goals of the EPSCoR jurisdiction. An emphasis should be placed on developing a core expertise and robust research program capable of successfully competing for funds offered by NASA, industry, other federal agencies, and additional external sources beyond the EPSCoR program.

NASA Priorities / NASA Ignition

Proposals should align with initiatives unveiled for the nation's space policy in March 2026 during the NASA Ignition Event. The NASA Ignition web page provides numerous documents and resources laying out the current priorities and goals at NASA.

NASA Research Focus Areas

The NASA EPSCoR Program Office compiled a collection of research focus areas of high interest to NASA in 2026. Please consult the online listing of NASA Basic Research Focus Areas as you develop your proposal.

NASA EPSCoR RID Program in Louisiana

Moving a jurisdiction forward in competitiveness is the foundational goal of all EPSCoR programs. Achieving this goal requires a number of plans and actions: (a) expanding university educational opportunities, (b) enhancing research infrastructure and capacity, (c) fostering R & D capabilities, and (d) capitalizing upon the resultant intellectual property. NASA EPSCoR provides university students and faculty exposure to and involvement in the Aerospace research enterprise, improves faculty research capabilities (both at a given institution and between institutions), enhances research facilities and infrastructure, and opens opportunities for faculty (particularly junior faculty), post-doctoral researchers, and students to engage in meaningful Aerospace R&D all with the goal increasing capacity and expertise in the whole nation. The Research Infrastructure Development (RID) component of NASA EPSCoR is of critical importance to prepare Louisiana's researchers to become involved in larger projects which can be proposed as NASA EPSCoR Research Implementation Projects or proposed to NASA opportunities issued by the directorates. Thus, the overall goal for the NASA EPSCoR RID is to elevate the competitiveness of the state's researchers in aerospace science and technology Development.

The Louisiana NASA EPSCoR program office was awarded a supplement to our existing RID award for one-time programming with the potential to augment and accelerate efforts already underway. We have chosen to allocate these funds toward a scaled-up version of our existing seed funding opportunity, the Research Award Program (RAP). We are calling the new opportunity the MegaRAP.

MegaRAP Rules & Requirements

The MegaRAP sub-program provides funding for early-career Louisiana researchers working on a research project in alignment with current NASA priorities, which shows the promise of demonstrably advancing the work being done at NASA. For this competition, we define early career as anyone who completed their doctoral degree in 2016 or later. Proposed work could be an expansion of an existing collaboration with NASA. Letters of endorsement or support from NASA researchers are allowed, however, an established relationship is not necessary. Demonstrating relevance to NASA through references to existing research programs, project teams, and publicly available documents is required.

Review the links provided earlier in this document to the NASA Ignition event and the Research Focus Areas compiled by the NASA HQ EPSCoR Program Office to ensure your research aligns with current needs. A strong proposal will find additional evidence of alignment and relevance to NASA. Post-doctoral associates, graduate students, and undergraduate student researchers should be involved as needed. MegaRAP Projects may involve more than one faculty researcher, but only one faculty member can serve as the PI. These grants from NASA EPSCoR are not just research grants. Excellent research must be performed, but the project should also be designed to increase research capacity and competitiveness and contribute to the development of a skilled aerospace and space science workforce in Louisiana. Proposals should show evidence of both.

Eligibility

This solicitation is open to early-career researchers at Louisiana institutions of higher education. To be eligible for this solicitation, a researcher must have received their PhD in calendar year 2016 or later. The project PI must be a faculty member at one of Louisiana's institutions of higher education and actively researching in areas of high priority to NASA. This is a limited submission competition, and institutions will only be permitted to submit two proposals each.

MegaRAP and FY2027 RAP Submissions

There will be significant overlap in the MegaRAP and FY 2027 RAP proposal submission and selection cycles. Submitting a MegaRAP proposal does not disqualify a researcher from submitting a proposal to the FY 2027 RAP competition. However, if a researcher is selected for a MegaRAP award, this may result in their FY 2027 RAP proposal being removed from competition if the two proposals seek funding for the same work.

Period of Performance & No Cost Extensions

MegaRAP awards will be issued for a 15-month period of performance, from June 1, 2027 – August 31, 2028. The initial contract will be written for 13 months (June 1, 2027 – June 30, 2028) to coincide with the current end date of the parent award from NASA. Upon receipt of our NCE from NASA, we will extend subawards by two months. PIs will also have the option of extending up to an additional 5 months for a total PoP of 20 months (June 1, 2027 – January 31, 2029) if they submit an adequate progress report and an NCE request (routed through their campus OSP office) no later than April 30, 2028. PIs must use the **LaSPACE Progress Report** located on the LaSPACE document center (https://laspace.lsu.edu/laspace-document-center/). Failure to make reasonable progress and spend down funds on the project without notifying our office early to seek a solution is not an adequate justification for an NCE. Projects will not be extended past January 31, 2029.

Award Funding Amounts

We anticipate funding 3 proposals at $100,000 each for this one-time competition. Mega-RAP projects are funded by a NASA supplement to the 2022-2029 RID program award. A 50% Cost-match ($50,000) is required.

Proposed Costs

This program is intended to improve research capability in Louisiana and, consequently, costs should primarily support effort within the state. Direct labor costs will be allowed *exclusively* for faculty, staff, and students at Louisiana institutions. Funding allocated outside of the state is not recommended. If proposed, it should be minimal, must be well justified with compelling evidence that such an investment would still offer substantial permanent improvement to Louisiana's research infrastructure. For example, funding to utilize a piece of equipment or testing facility outside the state may be a reasonable expense. Project costs should be documented in the

proposal as necessary to meet the project goals and objectives. Reasonable costs include salary and wages for faculty, research associates, and student researchers, travel to NASA centers for collaboration development meetings or to access/use NASA facilities, and basic materials and supplies to conduct the research. Unlike RAP awards, **student tuition IS an allowable expense on MegaRAP Awards**. Any rebudgeting in excess of 20% requires prior approval from the Board of Regents. Rebudget requests must be submitted in writing to laspace@lsu.edu and the Board of Regents using the Budget Revision Request Form available on LaSPACE Document Center. Rebudget requests should include a complete explanation as to why the funds could not be spent as proposed, why a rebudget is necessary, and how the newly structured budget will still meet the spirit of the award. Rebudget requests must include the original budget and budget justifications along with the proposed revised budget and budget justification.

Cost-Share

Proposing institutions are expected to provide a 50% cost-match. For example, the MegaRAP funding is $100,000, so your institution must commit to at least $50,000 in cost-share. Cost-share in the form of waived in-direct and in-kind faculty time is an adequate and appropriate source of cost-share. All cost sharing must be certified in the invoices and the final financial report.

Indirect (F&A) Costs

MegaRAP awards will be funded using NASA RID funds, and as such, institutions may use their standard federal indirect (F&A) rates. Waived indirect costs are allowable (and recommended) cost sharing. You must include a copy of the letter (or a link to an online posting) of official federally negotiated indirect rate.

Award Subcontract

Award funds will be provided by subcontract from the Board of Regents to the lead applicants' college or university, which will assume responsibility for administering the funds according to standard procedures.

Animal Use

Any project proposing the use of an animal model for validation must include a local IACUC approval letter, fully signed, which specifies a validity period longer than the proposed project period. Failure to obtain the Institutional Animal Care and Use Committee's approval in advance is grounds for returning the proposal unreviewed. Attach the IACUC material as an additional appendix.

Human Subjects

Projects that involve human subjects are not acceptable for this program.

Certifications

When preparing a proposal that requires institutional certification, waiver, or approval the proposers will need to address applicable compliance issues in advance. **All necessary internal approvals from the proposing institution must be secured before submitting a proposal.**

Public Nature of Applications

Once an application is received, it becomes public record. Although the staff will not disseminate applications to individuals other than to reviewers, applicants should be aware that, if a request for information is made by the public (e.g., the news media), a copy of the application, by law, must be provided.

Disclosure of Information

All La NASA EPSCoR programs must conform to applicable Federal, State, and NASA Agency regulations and stipulations. This includes annual reporting of award participant information to both the Louisiana Board of Regents and NASA. Part of this information will include both directory information such as name, address, telephone number, date of birth, and demographic information such as gender, ethnicity, and race for all award participants including faculty, staff, and students. Further, outreach includes public dissemination of its supported programs through newsletters, press releases, the La NASA EPSCoR website (https://lanasaepscor.lsu.edu/), as well as papers and/or presentations at Space Grant or related Education & Public Outreach conferences. The contents of award reports, including participant names, titles, institution, project summaries, results or conclusions, and images, might be included in such public outreach articles. It is not intended that these public articles will disclose directory or demographic information except as aggregated statistical data.

LaSPACE Annual Meeting Participation

Funded participants are expected to make every effort to attend the LaSPACE Annual Meeting held during the fall semester on a Friday and Saturday at a different affiliate institution each year. MegaRAP awardees should be prepared to participate in both the 2027 and 2028 meetings. Information will be sent to our affiliate representatives and funded awardees as soon as we know the dates and location for the next meeting. We will also post it to our website here. Funded students are expected to present a poster at the student poster session on Saturday.

Final Deliverables

At the end of the project, two final reports are required: the Final Technical Report and the Final Financial Report. These reports are due within 30 days after the subcontract expiration date.

The Final Technical Report shall be submitted using the final report link posted on the LaSPACE Document Center of the LaSPACE website. A final report must be submitted by the PI/Project Lead no later than 30 days after the project end date. Photographs and citations of all papers, presentations, and posters generated should be shared with LaSPACE in the final report. Final

Report guidelines can be downloaded from the LaSPACE website's document center. Please review the reporting guidelines at the start of your project to identify in advance the kinds of information you must share at the end of your award. For example, you must track participation hours & total funding per student and collect reflective statements from your students. Develop a plan to collect this info early! The Final Financial Report is an official report that shows the final expenditure of the funds and certifies the cost-sharing. This report is to be submitted to the Board of Regents by your university's financial office using the BoR electronic reporting system, LOGAN. Additional instructions for reporting are given in the sub-award document.

Evaluation Criteria

A panel of external reviewers will evaluate all the proposals on the following criteria.

- **(20%) The degree to which this proposal is relevant to NASA and advances current R&D priorities at NASA with explicit references to active programs and projects.**
- **(20%) Scientific and technical merit of the proposed project.**
- **(10%) Demonstrated ability to carry out the research plan and achieve the stated goals.**
- **(10%) Probability for the project to develop new capabilities and secure additional funding.**
- **(10%) Clarity and appropriateness of the budget to carry out the project, including institutional commitments & matching funds.**
- **(10%) Clarity and appropriate degree of student involvement in the Research Plan.**
- **(10%) Degree to which the project contributes to workforce and/or economic development.**
- **(10%) Contribution of the proposed project to research infrastructure development in the state, specifically by increasing the scope and geographic representation of NASA research disciplines and institutional participation throughout Louisiana.**

MegaRAP Proposal Format & Submittal

MegaRAP proposals should be submitted as fully searchable pdf documents via email to laspace@lsu.edu.

A MegaRAP proposal must include the following completed sections in the order presented:

- **MegaRAP Cover Page**
- **Proposed Project Summary Page**
- **Current & Pending Support Form**
- **Proposal Narrative (*not to exceed 10 pages, including figures and tables, no smaller than 11 point font & one-inch margins*)**
  1) Introduction (Overview of the scope of work for this proposal and high-level summation of alignment to current NASA priorities).
  2) Background (Provide a bigger picture of how the proposed work fits into your overall research plans and the field of study at large).
  3) Research Objectives (Clearly identify all science and technical objectives for this proposal).
  4) Relevance to NASA and Evidence of Advancing NASA R&D Priorities (Identify all the current and potential applications/relevance to NASA, including future scalability of this project and where a larger scale project would fit in. Explicitly identify the active projects, current missions, and known priorities at NASA that your work will directly impact and support).
  5) Implementation Strategy and Milestone Schedule (Detail exactly what deliverables are expected, when, and by whom; be specific).
  6) Management Plan (Lay out a hierarchy of individuals/roles working on the project, a recruitment plan for team members not yet identified, and methods for tracking and reporting progress throughout the project; partnership proposals must clearly divide tasks and lay out a clear plan for managing work in multiple labs).
  7) Anticipated Outcomes/Plans for Future Endeavors/Future Collaborations with NASA (Include anticipated impacts on LA research infrastructure growth and workforce development; plans for publications, conferences, funding opportunities, and full-scale collaborations).
- **References Cited within the proposal**
- **Budget Section: Budget Form followed by a narrative explanation of all costs listed on the form. Explanations are required for both requested funds and proposed cost-share budget lines.**
- **Short Vita for Principal Investigator**

Attachments
Required Proposal Forms

Required Forms for Proposal

All proposals submitted must use the forms following this page. Proposals not using these forms will be rejected without review.

- **NOI (due December 16, 2026)**
- **Cover Sheet**
- **Proposed Project Summary**
- **Current & Pending Support Form**
- **Proposal Budget Form**

La NASA EPSCoR MegaRAP Program Notice of Intent (NOI) to Propose

This NOI must be submitted by the PI to LaSPACE on, or before, Wednesday, December 16, 2026 via email to laspace@lsu.edu. An institutional signature is required for the NOI; no proposals will be accepted from PIs who fail to submit this NOI.

NAME OF PRINCIPAL INVESTIGATOR (PI):	NAME INSTITUTION:
PI DEPARTMENT/ MAILING ADDRESS	PI PHONE NUMBER and EMAIL ADDRESS
TITLE OF PROPOSED PROJECT:	
LIST PROJECT DISCIPLINES:	
THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES OF NASA IN ALIGNMENT WITH THESE CURRENT PROJECTS/PROGRAMS: _____ _____ LIST ASSOCIATED NASA FIELD CENTERS HERE: _____	
PROJECT ABSTRACT (maximum 250 words):	

Signature of Principal Investigator:_____

Name of Authorized Institutional Rep:_____

Signature of Authorized Institutional Rep:_____

Date Signed:_____

A NASA EPSCoR – La BoR RID Project

Research Awards Program (MegaRAP) Cover Sheet

1. Title of Proposed Project: _____

_____

2. Principal Investigator: _____
(Name)

_____
(Department)

3. Institution of Higher Education: _____

4. PI Address: _____
(Street Address/P.O. Box Number)

_____
(City, State) (Zip Code)

5. Telephone: _____ FAX: _____

PI E-mail: _____

6. Total Funds Requested:$ _____ Institutional Commitment:$ _____

****

Certification of Compliance with Applicable Executive Orders and U.S. Code: By signing and submitting this proposal, the signatories certify that the statements made in this proposal are true and complete to the best of their knowledge; they agree to comply with LaSPACE award terms and conditions if an award is made as a result of this proposal; and the institution and proposed project are in compliance with all applicable Federal and State laws and regulations including, but not limited to, Executive Order 12549, Debarment and Suspension, 34 CFR Part 85, Section 85.510, Participant's responsibilities; Non-Discrimination; Certification against Lobbying imposed by section 1352, title 31, U.S. Code; Compliance with China Funding Restriction as detailed in Public Laws 112-10 Section 1340(a) and 112-55, Section 539; ACORN Compliance in accordance with 534 of the Consolidated and Further Continuing Appropriations Act of 2012 (Pub. L.112-55); and does not have a federal tax liability or federal felony conviction (sections 544 and 543 of Public Law 112-55).

7. Signature of Principal Investigator: _____

8. Name of Authorized Institutional Rep: _____

9. Signature of Authorized Institutional Rep: _____

10. Date Signed: _____

Proposed MegaRAP Project Summary

NAME OF INSTITUTION (INCLUDE BRANCH/CAMPUS AND SCHOOL OR DIVISION)
ADDRESS (INCLUDE DEPARTMENT)
PRINCIPAL INVESTIGATOR
NASA PROJECTS/PROGRAMS/CENTERS/MISSIONS ALIGNED WITH THE PROPOSAL
PROJECT TITLE
ABSTRACT (DO NOT EXCEED 250 WORDS, suitable for general distribution)

Current and Pending Support Form

This Form is to be filled out for the Principal Investigator. For each Project provide the following information: Funding Agency, Title, Funding Amount, Starting and Ending Dates, and Personnel Effort Committed to the Project (person-months or % of effort). Please add additional pages as needed.

1. Current Support

Agency/Grant No.:
Title:
Amount
Period:
Effort:
Location:

Agency/Grant No.:
Title:
Amount
Period:
Effort:
Location:

2. Pending Support

Agency:
Title:
Amount
Period:
Effort:
Location:

Agency:
Title:
Amount
Period:
Effort:
Location:

A NASA EPSCoR – La BoR RID Project
Mega Research Awards Program (MegaRAP) Budget Request Sheet

Include a budget narrative page with explanations and justifications for all costs following each budget form submitted.

Proposal Title: _____

Principal Investigator: _____

Institution: _____

		Funds Requested	Institutional Proposed Cost Share*
A.	**Direct Labor**		
	1. Faculty/Staff Researchers	$	$
	2. Graduate Student(s)	$	$
	3. Undergraduate Student(s)	$	$
	4. Fringe Benefits	$	$
	5. Total A	$	$
B.	**Supportive Expenses**		
	1. Travel	$	$
	2. Supplies & Materials	$	$
	3. Other Direct Costs (Identify)	$	$
	4. Total B	$	$
C.	**Facilities & Administration**		
	1. F&A (Indirect Costs)**	$	$
D.	**Total Budget**		
	Total Budget (A5+B4+C1)	**$**	**$**

***Must be certified on all financial billings/reports.*

Proposed Budget Justification

NASA Requested Funds

A. Direct Labor

1. Describe any faculty/staff support costs with explicit calculations.
2. Describe any graduate student support costs with explicit calculations.
3. Describe any undergraduate student support costs with explicit calculations.
4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees, printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable costs for which you will apply your F&A rate OR a modified F&A rate. Be explicit and show calculations.

Institution Name Proposed Cost Share

A. Direct Labor

1. Describe any faculty/staff support costs with explicit calculations.
2. Describe any graduate student support costs with explicit calculations.
3. Describe any undergraduate student support costs with explicit calculations.
4. Describe any fringe benefit costs with explicit calculations.

B. Supportive Expenses

1. Describe any proposed travel costs with explicit details regarding proposed travelers, destination, and estimated costs.
2. Describe any proposed supplies & materials costs with explicit details regarding proposed purchases, estimated costs, and justification of need.
3. Other Direct Costs must be explicitly named and defined and may include things like facility usage fees and printing services.

C. Facilities & Administration

1. Provide a letter or link to the official F&A rate for your campus. Describe all applicable cost-sharing costs for which you will apply your F&A rate. Show calculations. Describe any unrecovered F&A costs you are claiming for cost share.