

# NASA EPSCoR

## FY2013 Request for Pre-proposals

### TIMETABLE:

Issue Date: **November 13, 2012**

Notice of Intent (required) due: **December 12, 2012**

Last day for questions and answers about this solicitation: **January 14, 2013**

Pre-proposals due: **January 23, 2013**

Anticipated Notification of Selection(s): on or about **February 6, 2013**



# LA EPSCoR

## LOUISIANA EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEARCH (EPSCoR)

Louisiana Board of Regents  
1201 North Third Street, Suite 6-200  
Baton Rouge, Louisiana 70802  
(225) 342-4253

## **I. PROGRAM DESCRIPTION**

### **I.A. OVERVIEW**

This Request for Pre-Proposals (RFP) is being issued in anticipation of the release of the FY2013 NASA EPSCoR Cooperative Agreement Notice (CAN). The FY2013 CAN is expected to be similar to last year's FY2012 CAN, number NNH12ZHA002C, which is available at: [http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=330774/solicitationId=%7B36283FDE-A756-ED4D-426B-A7C0EA1FD9A3%7D/viewSolicitationDocument=1/EPSCoR\\_2012\\_Research\\_CAN\\_Version%20FINAL\\_18%20Jun%2012%20%284%29.pdf%20](http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=330774/solicitationId=%7B36283FDE-A756-ED4D-426B-A7C0EA1FD9A3%7D/viewSolicitationDocument=1/EPSCoR_2012_Research_CAN_Version%20FINAL_18%20Jun%2012%20%284%29.pdf%20).

One potential difference in the FY2013 CAN is the possibility that each of twenty-eight EPSCoR jurisdictions will be eligible to submit only one proposal, rather than the two proposals per state that were allowed in past competitions. In any event, the proposal(s) from Louisiana will be submitted by the Board of Regents (BOR). This solicitation seeks pre-proposals which will be reviewed by an external panel. The panel will recommend the one (possibly two) most meritorious pre-proposal, which will then be further developed and submitted to NASA.

It is expected that NASA will issue the FY2013 CAN in, or before, January 2013, with proposals due 60 days after issuance. Therefore, this RFP has been issued with a timeline for proposal submission that, while compressed, will allow as much time as possible for proposers to prepare applications and for the BOR's subsequent review process. Proposers should be aware that NASA's issuance of the CAN is not guaranteed. The BOR reserves the right to make adjustments to the timeline and other changes to the requirements contained in this RFP as needed to accommodate the instructions contained in the FY2013 CAN.

For the FY11 competition, NASA received a total of 51 proposals, of which 27 were recommended for funding. This list of recommended proposals is available at <http://nspires.nasaprs.com>. For FY12, over 50 proposals were received, and NASA expects to fund 17 projects. The winners have not yet been announced by NASA. For FY13 (this competition) the availability of funds is unknown since the federal government is operating under a Continuing Resolution until the end of March 2013. Depending upon the budget scenario adopted, NASA could award as few as 5 or as many as 17 research projects.

### **I.B OBJECTIVES**

NASA EPSCoR proposals are expected to establish research programs that will make significant contributions to the strategic research and technology priorities of one or more of the four NASA Mission Directorates and/or one or more of the ten NASA field centers, and contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the State.

### **I.C ELIGIBILITY**

Individuals holding a tenured, tenure-track, or research faculty position at any of Louisiana's public institutions of higher education, as well as accredited independent institutions of higher education that are members of the Louisiana Association of Independent Colleges and Universities, are eligible to submit pre-proposals under this solicitation. Individuals who are not employed by these institutions may serve as consultants; however, they may not be listed as investigators and must not be cited on the cover sheet of the pre-proposal. A faculty member

may submit only one pre-proposal in response to this solicitation as Principal Investigator (PI), but may be a co-investigator on additional pre-proposals.

Science PIs/Institutional PIs who have been successful in the national competition (i.e. were selected by NASA) over the past 5 years (i.e. the FY08, FY09, FY10, FY11 or FY12 competitions) may not propose as leads to this RFP.

Science PIs/Institutional PIs who were selected to proceed to the national competition but were unsuccessful may re-propose to this RFP. However, in such a case the application must include a copy of, or summary of, the NASA reviewer's criticisms plus a discussion of how the re-submission has been re-structured to meet the reviewer's criticisms. This is over and above the page limits specified below.

#### **I.D FINANCIAL CONSIDERATIONS**

Based on the funding levels stipulated in the previous CAN, each proposal may request NASA funding of up to \$750,000 for a three-year project. The BOR will provide cost sharing at a 1:1 ratio to support the research project. Of the \$750,000 in NASA funds, \$30,000 per year (\$90,000 total) will be reserved for management of the project; therefore, for each proposed research project, the Science PI may request a maximum of \$660,000 in NASA funds and \$750,000 in BOR Support Funds (i.e., a maximum annual request of \$220,000 for NASA funds and \$250,000 for BOR Support Funds). Furthermore, the annual budgets for each research project should be held constant for all three years of the proposed project (i.e., budget requests for year one should equal the amounts requested in years two and three).

Institutional cost sharing is also expected. Applicants are encouraged to consider methods of cost sharing which would add value to the State's existing research capabilities.

#### **I.E. ASSESSMENT OF PRE-PROPOSALS AND PREPARATION OF FULL PROPOSALS**

All NASA-EPSCoR pre-proposals will be reviewed by a panel of experts from outside Louisiana. The PIs of the pre-proposals selected for development into full proposals will be notified on or about **February 6, 2013** and will be provided feedback from the panel. After this date, the PIs of successful pre-proposals are expected to be available to work closely with the NASA EPSCoR Project Directors (John P. Wefel/T. Gregory Guzik, LSU Department of Physics and Astronomy) and BOR staff to prepare the proposals for submission to NASA. Full proposals (with budgets approved by the PI's office of sponsored programs) will be due at the BOR on a date to be determined based on the due date for proposal submission to NASA. **If changes to this timetable become necessary, the BOR will notify all proposers.**

#### **I.F. TIMETABLE** (*DATES MAY CHANGE, SUBJECT TO REQUIREMENTS OF FY2013 CAN*)

December 12, 2012	Notice of Intent due at BOR
January 14, 2013	Last day to answer questions about this solicitation
January 23, 2013	Pre-proposals due
February 6, 2012	On or about this date, successful proposers notified
to be determined	Full proposals due at BOR (for the selected projects)
to be determined	Proposals due at NASA (submitted by BOR)

#### **I.G. QUESTIONS ABOUT THIS SOLICITATION**

Specific questions concerning this solicitation and the requirements set forth herein should be directed **in writing** to Mr. Jim Gershey, Executive Director of Special Programs, by email to

[jim.gershey@la.gov](mailto:jim.gershey@la.gov). Questions will be accepted and answered through **Monday, January 14, 2013**. A running compilation of all questions asked about this RFP and all answers provided in response to those questions will be periodically posted on the BOR website at <http://laregents.org>.

#### **I.H. RFP DOWNLOADS**

Files associated with this RFP can be found on the Louisiana Board of Regents' Office of Sponsored Programs website (<http://web.laregents.org/>). These guidelines, the notice of intent, the pre-proposal template, and the budget form will all be available to download.

## **II. PRE-PROPOSAL SUBMISSION AND FORMAT REQUIREMENTS**

### **II.A. NOTICE OF INTENT (Required)**

Before a pre-proposal will be accepted, a notice of intent (NOI) in portable document format (pdf) must be submitted by the PI to Mr. Jim Gershey at [jim.gershey@la.gov](mailto:jim.gershey@la.gov), with a copy to the PI's office of sponsored programs, no later than the close of business (4:30 p.m.) on **Wednesday, December 12, 2012**. Use the form attached to this document. An email acknowledging receipt of the NOI will be sent to the PI and the PI's respective office of sponsored programs. Failure to receive an acknowledgement by noon on **Friday, December 14, 2012** indicates that the NOI has not been received by the BOR. In that event, contact Mr. Gershey immediately at 225-342-4253.

### **II.B. TYPE SIZE AND FORMATTING**

The project description must be formatted to a standard 8-1/2" x 11" page and have 1-inch top, bottom and side margins. The project description must be clear, readily legible, and conform to the following requirements:

- Must be formatted to a standard 8-1/2" x 11" page
- All pages are to be numbered consecutively
- Margins, in all directions, must be at least an inch
- No more than 6 lines of text within a vertical space of 1 inch

One of the following typefaces identified below must be used:

- Arial, Courier New, Helvetica, or Palatino Linotype at a font size of 10 points or larger
- Times New Roman at a font size of 11 points or larger
- Computer Modern family of fonts at a font size of 11 points or larger

A font size of less than 10 points may be used for mathematical formulas or equations, figure, table, or diagram captions and when using a Symbol font to insert Greek letters or special characters. PIs are cautioned, however, that the text must still be readable. These format requirements refer only to the project description, not to the required forms attached to this RFP.

### **II.C. PRE-PROPOSAL ELEMENTS**

The pre-proposal must contain the following elements, in the order presented here. A proposal template (keyed to the NASA EPSCoR FY12 CAN) with further details about the pre-proposal elements is provided in Appendix B. We suggest you use this template to ensure all requirements are met and to allow for greater uniformity of submissions.

<p><b>Cover Page</b></p> <p>Cover Sheet Form is provided in the template.</p>	<p>1 page</p>
<p><b>Table of Contents</b></p>	<p>1-2 pages</p>
<p><b>Proposal Body</b></p> <p><b>Research Description</b> Include a brief summary of the overall project, a description of the relevance of this project to NASA and the State of Louisiana, and a bulleted list of the major project goals and objectives.</p> <p><b>Project Content</b> Provide a description of the proposed effort, how the goals and objectives will be achieved, and the expected project results.</p> <p><b>Project Impact</b> Describe the partnerships and interactions fostered by this project, how the project will enhance diversity, plans for sustaining the research effort beyond the termination of NASA EPSCoR funding, and how project results will be evaluated and disseminated to the wider community.</p> <p><b>Management Plan and Schedule</b> Describe the project management plan, including roles and responsibilities of team members. Provide a timeline for achieving the project objectives, including significant milestones.</p> <p><b>Prior NASA EPSCoR Research Support</b> Demonstrate the effectiveness of prior NASA EPSCoR research support.</p>	<p>16 Pages Maximum</p>
<p><b>References and Citations</b></p>	<p>As needed</p>
<p><b>Budget</b></p> <p><b>Budget Narrative/Details</b> Please refer to Section 7 (budget) of the pre-proposal template in Appendix B, which includes some examples of acceptable descriptions for the various categories. All budget line items require detailed explanations without exception. NASA requires significantly more budget justification data than many other agencies, thus we created the template.</p> <p><b>Budget Form</b> Use Louisiana NASA EPSCoR Pre-proposal Budget Form included in the pre-proposal template (this form is also provided in MS Excel as a separate attachment). You should have a total of 4 completed budget forms per institution. Prepare a separate budget page for each of the 3 years, plus a cumulative budget page. F&amp;A (indirect) recovery is limited to 25% of total salaries, wages, and fringe benefits.</p> <p><b>Additional Notes</b> See section 1.D of these guidelines for the limitations and requirements on the yearly and total NASA and BOR funding levels. Further, the pre-proposal template provides additional budget details (Appendix B).</p>	<p>As needed</p>

<p>Dollar amounts proposed with no detailed explanation (e.g., Equipment: \$12,000, or Labor: \$35,000) may reduce proposal acceptability, or cause delays in funding should the proposal be selected. Each item should be explained in reasonable detail.</p> <p>Foreign travel is allowable up to \$3,000/trip and a total of two trips (maximum \$6,000) for the entire jurisdiction's EPSCoR proposal (NASA and BOR funds). Requested foreign travel should include justification, purpose, the number of trips and expected location, duration of each trip, airfare, and per diem.</p> <p>All costs to be incurred by NASA Centers on behalf of NASA EPSCoR for the use of facilities and contracted technical work should be identified in the research proposal funding request. In advance of proposal submission, proposers should contact NASA installations from which services will be requested in order to ascertain the availability and anticipated costs of such services. Salaries and travel of NASA civil servants is not allowed.</p> <p>Proposers are reminded that NASA projects cannot include collaboration with institutions in the People's Republic of China.</p>	
<p><b>Biographical Sketches</b></p> <p>Submit sketches for key personnel using the following guidelines:  <b>PI, Co-I/Science-PI:</b> maximum 2 pages  <b>Co-I, Co-I/Institutional-PI :</b> 1 page  <b>Other Key Personnel:</b> 1 page</p>	As needed
<p><b>Current and Pending Support</b></p> <p>Use BOR Form 1001CP included in the template. Current and Pending Support for PI and Co-Is must be provided. The NASA current and pending support form may be substituted.</p>	As needed
<p><b>Letters of Support</b></p> <p>May be appended to the pre-proposal. No other appendices are allowed.</p>	As needed

#### II.D. PRE-PROPOSAL EVALUATION

All NASA-EPSCoR pre-proposals will be reviewed by a panel of experts from outside Louisiana. The reviewers will evaluate the proposals based on the evaluation criteria established in the FY2013 CAN issued by NASA. The evaluation criteria set forth in the 2012 NASA-EPSCoR CAN is reproduced here in Appendix A. Proposers are advised to consider Appendix A as they prepare their proposals.

## II.E. SUBMISSION OF PRE-PROPOSAL

The pre-proposal must be submitted to the Board of Regents by the submitting institution's authorized representative no later than the close of business (4:30 p.m.) **Wednesday, January 23, 2013. Pre-proposals directly submitted to the Board of Regents by individual PIs will NOT be accepted.** All online submissions must be uploaded as a single PDF document through the LOGAN system.

Instructions for PIs:

1. Go to URL: <https://laregents.org/cgi-bin/logan/home>.
2. Login using your LOGAN credentials.
  - a. If you are new user and do not have a LOGAN login, please click on "New user registration" to register.
  - b. If you have logged into LOGAN before and have forgotten your credentials please send an email to [karthik@la.gov](mailto:karthik@la.gov).
3. After logging in, click on "NASA EPSCoR Pre-proposals" and use the provided online form to select and upload the PDF document. **Note:** the entire pre-proposal must be contained in a **single PDF document**. The LOGAN system will NOT accept multiple PDF document uploads for a single submission.
4. If upload is successful, send the pre-proposal to your sponsored programs office by clicking the "Send Proposal to OSP/OSR". A proposal number will be assigned after the pre-proposal is successfully sent to the PI's Office of Sponsored Programs/Research.
5. An email confirmation will be sent to the PI with the proposal number.
6. The OSP/OSR will review the pre-proposal, and, if approved, send the pre-proposal to the Board of Regents.

Instructions for the OSP/OSR:

1. Go to URL: <https://laregents.org/cgi-bin/logan/home>.
2. Login using your Institutional credentials.
3. Select "NASA EPSCoR Pre-proposals".
4. Follow simple onscreen instructions to submit the pre-proposal to the Board of Regents, EPSCoR office.
5. An email will be sent to both the PI and the OSP/OSR to confirm successful submission of the pre-proposal.

If **both** the PI and the OSP/OSR do not receive confirmation emails within 12 hours, the pre-proposal was not received. In that event, please email [support@laregents.org](mailto:support@laregents.org).

## NOTICE OF INTENT: FY2013 NASA EPSCoR Pre-proposal

NAME OF PRINCIPAL INVESTIGATOR (PI):	NAME OF LEAD ORGANIZATION:
PI DEPARTMENT	PI PHONE NUMBER and EMAIL ADDRESS
TITLE OF PROPOSED PROJECT:	
LIST PARTICIPATING INSTITUTIONS/CAMPUSES:	
LIST PROJECT DISCIPLINES:	
THE PROPOSED WORK WILL SUPPORT THE RESEARCH PRIORITIES OF THE FOLLOWING NASA DIRECTORATES AND/OR NASA FIELD CENTERS:	
PROJECT SYNOPSIS (maximum 250 words):	
NAMES of OTHER INVESTIGATORS	INSTITUTION/DEPARTMENT
CO-I	
CO-I	
CO-I	
CO-I	



## Appendix A

### Proposal Evaluation Criteria from NASA

## **NASA-EPSCoR FY2012 Can Evaluation Criteria**

The proposal evaluation criteria included in the FY2012 NASA-EPSCoR CAN is provided here as an example of how proposals might be evaluated for FY 2013. Please consider these criteria as you develop your project proposal.

### **8.0 Proposal Evaluation Criteria and Selection Process**

*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 explicitly expressed in current NASA documents and communications, as well as contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the jurisdiction. They will also include pragmatic plans for generation of sustained non-EPSCoR support.*

*Evaluation criteria for EPSCoR are based on NASA's Education Operating Principles as described in the NASA Education Strategic Coordination Framework. All NASA education projects are evaluated according to these principles:*

- Relevance*
- Content*
- Diversity*
- Evaluation*
- Continuity*
- Partnership/Sustainability*

*Jurisdictions responding to this CAN may submit up to two proposals per paragraph C above. Proposals will be evaluated based on the following criteria: Intrinsic Merit, NASA Alignment and Partnerships, Management and Evaluation, and Budget Justification: Narrative and Details. The bulleted lists after each criterion should not be construed as any indication of priority or relative weighting. The bullets are provided for clarity and facilitation of proposal development. Note: Each proposal must contain a section entitled "Relevance to NASA and Jurisdiction." Proposers should provide specific information on how they determined the relevance of the proposed effort to NASA. The relevance to NASA and the jurisdiction must be balanced.*

### **8.1 Intrinsic Merit (35% of score)**

- Proposed Research. Proposals should provide a detailed narrative of the proposed research activity, including the scientific and/or technical merit of the proposed research, unique and innovative methods, approaches, concepts, or advanced technologies, and the potential impact of the proposed research on its field.*
- Existing Research. Proposals should provide baseline information about current research activities within the jurisdiction in the proposed research area, including projects currently funded under NASA EPSCoR. If relevant, the narrative should include a brief history of NASA EPSCoR Research projects in the jurisdiction and should include a discussion of how these previous NASA EPSCoR research projects and Core or RID activities have helped prepare the institution and jurisdiction for and contributed to the proposed research activities. If the proposed research represents a new direction for the jurisdiction, the ability of the technical team to carry out the research should be explained. Other relevant research and technology development programs within the jurisdiction should be included.*

## **8.2 NASA Alignment and Partnerships (35% of score)**

- *Relevance to NASA and Jurisdiction.* Proposals should discuss the value of the proposed research to NASA's research priorities. Proposals should articulate clearly how the proposed research activities build capacity and develop national competitiveness in the jurisdiction. In particular, proposers should explain how the current proposed research fits into the strategic plan for NASA EPSCoR-related research in the jurisdiction.
- *Partnerships/Sustainability.* Proposals should delineate mechanisms for building partnerships with NASA Mission Directorates, the OCT, and/or Centers as well as universities, industry, and/or other government agencies to enhance the ability of the jurisdiction to achieve its objectives, to obtain and leverage sources of additional funding, and/or to obtain essential services not otherwise available. A plan for achieving national research competitiveness should also be presented.
- *NASA Interactions.* Proposals should describe the use of NASA content, people, or facilities in the execution of the research activities. They should describe current and/or previous interactions, partnerships, and meetings with NASA researchers, engineers, and scientists in the area of the proposed research, and discuss how future partnerships between the institution's researchers and personnel at the Mission Directorates, the OCT, and/or Centers will be fostered. The name(s) and title(s) of NASA researchers with whom the proposers will partner should be included. The utilization of NASA venues to publish accomplishments should be also considered.
- *Diversity.* Proposals should contain plans to effectively reach underrepresented and underserved students and researchers. Jurisdictions are encouraged to seek ongoing opportunities to develop relationships between minority-serving institutions and majority research universities within the jurisdiction, NASA Mission Directorates, the OCT, and Centers, and industry, as appropriate.

## **8.3 Management and Evaluation (15% of score)**

*This section should describe the management structure for the proposed research, and coordination with the jurisdiction's NASA EPSCoR project management. The following elements should be included:*

- *Results of Prior NASA EPSCoR Research Support:* If the current EPSCoR Director has administered NASA EPSCoR research awards (excluding Core & Research Infrastructure Development (RID)) that were completed in the past five years, he or she must demonstrate accomplishments commensurate with the managerial and administrative expectations of the award. The EPSCoR Director will not be assessed on his/her expertise in the specific proposed research area. The following information must be provided: the NASA EPSCoR award number(s), amount(s) the title of the projects(s); and period(s) of support; primary outcomes resulting from the NASA EPSCoR award, including a summary discussion of accomplishments compared to the proposed outcomes from the original proposal; coordination with the research and technical development priorities of NASA, and contribution(s) to the overall research capacity of the jurisdiction.
- *Personnel:* A list of the personnel participating in this research program, including Principal Investigator and all Co-Investigators, Research Associates, Post-Doctoral Fellows, Students (projected numbers of both graduate and undergraduates), and other research participants should be included. The credentials of the researchers are important; however EPSCoR includes the concept of encouraging and helping new researchers.

- *Research Project Management: A description of the management structure of the proposed research project, and the extent to which the project's management and research team will lead to a well-coordinated, efficiently-managed, and productive effort should be included.*

- *Project Evaluation: Proposals should document the intended outcomes and offer metrics to demonstrate progress toward and achievements of these outcomes. They should discuss metrics to be used for tracking and evaluating project progress. Milestones and timetables for achievement of specific objectives during the award period should be presented. The proposal should describe an appropriate evaluation plan/process to document outcomes and demonstrate progress toward achieving objectives of proposed project elements. Evaluation methodology should be based upon reputable models and techniques appropriate to the content and scale of the project. Projects should implement improvements throughout the entire period of performance based on ongoing evaluation evidence.*

*Of particular importance to NASA EPSCoR is a reliable method for longitudinal tracking of student progress. If the proposal includes a plan for student support, the proposal should provide for gathering student performance data for evaluating the effectiveness of NASA EPSCoR. Projects will be required to utilize the NASA Office of Education Performance Management (OEPM) system for longitudinal tracking of student participants.*

- *Tracking of Program Progress: To the extent reasonable, proposals should discuss how the following will be assessed:*

- *the progress and potential towards achieving self-sufficiency beyond the award period of the research capabilities developed under this grant; and*

- *the potential for the proposed research area to continue to grow in importance in NASA-related fields in the future.*

- *Continuity: If applicable, proposals should describe the role of EPSCoR in connecting to other NASA education or research projects. They should include methods for effecting the transition of participants to succeeding levels of involvement or facilitating career opportunities. This principle also refers to continuity in research capability. The proposal may contain project efforts directed particularly at involving young researchers in new fields of research that have promise to provide NASA with long-term quality research and development.*

#### **8.4 Budget Justification: Narrative and Details (15%)**

*A detailed budget, including NASA and cost-share funds, is required for the three years of performance. All sources of cost-sharing shall be described and documented. The budget will be evaluated based upon the clarity and reasonableness of the funding request. A budget narrative should be included that discusses other budgetary issues such as the extent and level of jurisdiction, industrial, and institutional commitment and financial support, including resources (staff, facilities, laboratories, indirect support, waiver of indirect costs, etc.).*

*The proposed budget should be adequate, appropriate, reasonable, and realistic, and demonstrate the effective use of funds in alignment with the proposed project. This section should include detailed budgets for each of the three years of the funding and a summary budget for all three years. The proposed budget should reflect clear alignment with the content and text of the proposal. The budget should contain sufficient cost detail and supporting information to facilitate evaluation.*

## Appendix B

Pre-Proposal Template for NASA / LA BOR EPSCoR FY2013

## Cover Sheet: FY2013 NASA EPSCoR Pre-proposal

FOR CONSIDERATION BY BOR ORGANIZATION UNITS(S)			
<b>Sponsored Programs</b>			
PROGRAM ANNOUNCEMENT <b>NASA EPSCoR</b>			
NAME OF LEAD ORGANIZATION:	ADDRESS OF LEAD ORGANIZATION, INCLUDING ZIP CODE:		
PI DEPARTMENT	PI POSTAL ADDRESS		
TITLE OF PROPOSED PROJECT:			
REQUESTED AMOUNT, YR 1: \$	REQUESTED AMOUNT, YR 2: \$	REQUESTED AMOUNT, YR 3: \$	TOTAL REQUESTED: \$
LIST PARTICIPATING INSTITUTIONS/CAMPUSES:			
LIST PROJECT DISCIPLINES:			
NAMES (TYPED)	Highest Degree/ year attained	Telephone Number	Email Address
PRINCIPAL INVESTIGATOR (PI)			
CO-I			
CO-I			
CO-I			
CO-I			

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# 1. RESEARCH DESCRIPTION

[Sections 1 through 5 not exceed 16 pages, including all illustrations, tables, and figures]

## 1.1 ABSTRACT OR SUMMARY

Include one or two paragraphs summarizing the research project.

## 1.2 RELEVANCE TO NASA AND THE STATE OF LOUISIANA

Describe how the proposed research activities will make significant contributions to the strategic research and technology development priorities of one or more of the NASA Mission Directorates or the OCT and contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of Louisiana.

## 1.3 GOALS AND OBJECTIVES

Clearly state goals and objectives for the proposed effort and provide a rationale for the approach that will be used to achieve them. Your objectives should be specific, measurable, achievable, relevant, and traceable.

# 2. PROJECT CONTENT

Clearly describe the proposed effort, how the goals and objectives will be achieved, and the project's anticipated results. (Please note, when preparing a proposal that involves the use of human subjects, animals, hazardous materials, select agents, and/or recombinant DNA, the proposers will need to address applicable compliance issues, for the pre-proposal.)

# 3. PROJECT IMPACT

## 3.1 PARTNERSHIPS, INTERACTIONS, AND DIVERSITY

Describe any partnerships or cooperative arrangements among academia, government agencies, business and industry, private research foundations, jurisdiction agencies, and local agencies as well as partnerships with minority-serving institutions and the inclusion of faculty and students from underrepresented/underserved groups.

## 3.2 SUSTAINABILITY

Describe how the research capability will be sustained beyond the funding period. There should be a clear plan for sustaining the research beyond NASA EPSCoR funding and for seeking non-EPSCoR funding. Identify potential CAN's, NRA's, RFP's, etc., specifically as examples.



### **3.3 EVALUATION**

Describe the evaluation plan for measuring project success. The evaluation plan should be appropriate for the scope of the proposed activity and include a discussion of data collection and analysis procedures. Note the evaluation plan may need to be modified at the time of the award to ensure it includes contributions to NASA's Program Performance Measures.

### **3.4 DISSEMINATION**

Outline the plan for disseminating the results to NASA and the broader community.

## **4. MANAGEMENT PLAN AND SCHEDULE**

### **4.1 MANAGEMENT**

Identify the roles and responsibilities of team members involved in the development and execution of proposed activities and describe the management plan.

### **4.2 TIMELINE**

Include a timeline for achieving the stated goals and objectives, including significant milestones.

## **5. PRIOR NASA EPSCoR RESEARCH SUPPORT**

Demonstrate the effectiveness of prior NASA EPSCoR research support. If any PI or Co-I identified on the project has received NASA EPSCoR research funding in the past five years, information on the award(s) is required.

## **6. REFERENCES AND CITATIONS**

Include references and citations made in the body of the proposal here.

## 7. BUDGET JUSTIFICATION

### 7.1 BUDGET NARRATIVE

*[Budget Narrative/Details:* All budget line items require detailed explanations without exception. We have created the following budget narrative template with some examples of acceptable descriptions for the various categories. This section must be duplicated for all sub-awardees.]

Include a brief (1-3 paragraph) narrative description of the funding structure and participating institutions, including NASA-EPSCoR, Louisiana BOR, the lead institution, and any sub-award institutions. Include a high-level table identifying contributions of the three funding sources (NASA, LA BOR, Institutions) for each of the years of the research project. In developing the project budget note the limitations and requirements as specified in section 1.D, Financial Considerations of the LA BOR / NASA EPSCoR Request for Pre-Proposal guidelines.

#### A. TABLE OF PROPOSED WORK EFFORT

Include a table of anticipated work effort in (person-months) for each year of the research project. Example Table below.

Name	Role	Person-Months Year 1	Person-Months Year 2	Person-Months Year 3
<b>Lead Institution Name</b>				
Jane C. Smith	CO-I, Science PI, Institution-PI	1.0	1.0	2.0
John B. Doe	Co-I	1.0	1.0	1.0
To be named	Post-doctoral Associate	12	12	12
Graduate Students (3 per year)	Student	18	18	18
Undergraduate students (up to 5 per year)	Student	15	15	15
<b>Sub-Award Institution Name</b>				
James Smith	Co-I, Institution-PI	1.0	1.0	1.0
Graduate Student (1)	Student	6	6	6
Undergraduate Student (3)	Student	6	6	6

## B. FACILITIES AND EQUIPMENT

### *Existing Facilities and Equipment*

Provide a 1-paragraph description of each facility (faculty labs, departmental labs, general department facilities). Follow each paragraph description with a list of all major equipment available to support this project, as needed.

### *Additional Facilities and Equipment to be Acquired using Project Funds*

Identify any additional space or general equipment that will be acquired for this project in a brief narrative description (1 to 3 paragraphs). [Detailed descriptions of all proposed equipment / facility costs must be included in the detailed budget section.]

## C. COST METHODOLOGY

Provide a brief (1-3 sentences) description of the method used to estimate the following cost categories.

- *Salaries and Wages*
- *Equipment*
- *Materials and Supplies*
- *Travel*
- *Other Applicable Costs (Operating Services)*

## 7.2 BUDGET DETAILS – LEAD INSTITUTION

[Dollar amounts proposed with no detailed explanation (e.g., Equipment: \$12,000, or Labor: \$35,000) may reduce proposal acceptability, or cause delays in funding should the proposal be selected. Each item should be explained in reasonable detail.]

Provide a summary table of the lead institution’s budget by major cost category as indicated below.

***“Project Title,” Lead Institution Name: Budget Summary by Major Category***

Category	Year 1		Year 2		Year 3	
	NASA+BOR	Institution	NASA+BOR	Institution	NASA+BOR	Institution
Direct Labor						
Other Direct Costs:						
Supplies & Materials						
Equipment						
Travel Costs						
Sub-Award Costs						
Other Applicable Costs						
<i>Total Direct Costs</i>						
<i>F&amp;A (Indirect) Costs</i>						
<i>Total Project Costs</i>						

## Project Title

### ***Direct Labor Detail***

Direct labor costs should be separated by titles or disciplines (e.g., Principal Investigator, graduate research assistant, clerical support, etc.) with estimated hours, hourly rates, and total amounts of each. Identify all faculty, staff, and students to be supported. List amounts for each year for each one you list. Also provide brief summaries of the primary responsibilities for each of the categories. Specifically, mention what each Investigator will be responsible for, what research any post-docs or graduate students will perform, and what kind of work undergraduate students might complete. Document fringe benefits (rates & totals) and lastly, summarize the yearly totals for wages, salaries, and benefits.

### ***Supplies & Materials Detail***

Organized by year, identify amounts followed by a brief description (with concrete examples) of typical supplies required to conduct your research project.

### ***Equipment Detail***

Organized by year, identify all equipment to be purchased for this project. For each piece of equipment, included the name of the equipment, model number & brand, cost, and 1-2 sentences describing what the equipment does and how it will be used in the project.

### ***Travel Detail***

Separate domestic and foreign travel, and then identify fund amounts and funding sources by year. Include visits to NASA Centers and relevant technical conferences. For each trip list: purpose, destination, number of travelers, airfare, per diem, registration, local transportation, and miscellaneous. If exact location of travel is not known, select a probable destination for the estimate.

Requested domestic travel should include purpose, the number of trips and expected location, duration of each trip, airfare, rental vehicle (if needed), and per diem. There is no limit placed on domestic travel. Domestic travel should be appropriate and reasonable to conduct the proposed research.

Foreign travel is allowable up to \$3,000/trip and a total of two trips (maximum \$6,000) for the entire jurisdiction's EPSCoR proposal (NASA and BOR). Requested foreign travel should include justification, purpose, the number of trips and expected location, duration of each trip, airfare, rental vehicle (if needed), and per diem.

### ***Sub-Award Detail***

This section should describe all sub-awards anticipated to be funded by the lead institution. Include the institution name, project role, yearly funding level, and total funding level for each collaborating institution receiving an award.

In addition, starting at section 7.4 each sub-award proposed must include a cover sheet, a statement of work for the sub-award institution, and a complete budget section (four total budget forms and the same budget details specified here). Sub-award packages should be approved and signed by the receiving institution prior to submission of the pre-proposal.

**Project Title**

***Other Applicable Costs Detail***

List any additional allowable costs to be covered by NASA, BOR, and/or your institution, such as subawards, preparing manuscripts, and F&A (indirect) costs. Organize by year and identify amounts with funding agencies.

***F&A (Indirect) Costs***

Include rates and the base, plus total cost. Note that for this proposal, F&A (indirect) is limited to 25% of total salaries, wages, and fringe.

***Institutional Contribution***

All institutional contributions need to be listed and described here. Unrecovered F&A used as an institutional contribution must be explained, including a calculation as to how the amount is obtained. All institutional contributions should be sufficiently explained such that evaluators can understand the basis of the proposed costs.

### 7.3 BUDGET FORMS – LEAD INSTITUTION

*[Budget Form:* Use the Louisiana NASA EPSCoR Pre-proposal Budget Forms that follow this page (this form is also provided in MS Excel as a separate attachment). You should have a total of 4 completed budget forms per institution. Prepare a separate budget page for each of the 3 years, plus a cumulative budget page. A budget justification must be included. F&A (indirect) recovery is limited to 25% of total salaries, wages, and fringe benefits. This section must be duplicated for all sub-awardees.]

## Louisiana NASA EPSCoR Pre-proposal Budget Form Year 1

PROJECT TITLE:		PROJECT YEAR: (circle one)		
		<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">1</span>	2	3
		combined		
PRINCIPAL INVESTIGATOR:		ORGANIZATION:		
1 SALARY COSTS		NASA Funds Requested	Non-Federal Match BOR      Institutional	
1				
2				
3				
4				
5 Graduate Student Support				
6 Undergraduate Student Support				
TOTAL PERSONNEL				
2 FRINGE BENEFITS				
(if charged as direct costs) Specify Rate:				
3 TOTAL WAGES, SALARIES, BENEFITS				
( 1 + 2 )				
4 SUPPLIES & MATERIALS				
5 EQUIPMENT				
(List item & dollar amount for items exceeding \$1,000)				
Total Permanent Equipment				
6 TRAVEL COSTS				
Domestic (Incl. Canada & U. S. possessions.)				
Foreign				
7 PUBLICATION & REPORT COSTS				
8 SUBAWARD COSTS				
9 CONSULTANT COSTS				
10 COMMUNICATION COSTS				
11 OTHER DIRECT COSTS				
12 TOTAL DIRECT COSTS				
13 INDIRECT COSTS (Specify rates.)				
1. Federal: 25% of line 3				
2. BOR: 25% of line 3				
3. Institutional: (specify rate)				
Total Indirect Costs				
14 TOTAL PROJECT COSTS (12 + 13)				

## Louisiana NASA EPSCoR Pre-proposal Budget Form Year 2

PROJECT TITLE:		PROJECT YEAR: (circle one)		
		1	<b>2</b>	3
		combined		
PRINCIPAL INVESTIGATOR:		ORGANIZATION:		
1 SALARY COSTS		NASA Funds Requested	Non-Federal Match BOR      Institutional	
1				
2				
3				
4				
5 Graduate Student Support				
6 Undergraduate Student Support				
TOTAL PERSONNEL				
2 FRINGE BENEFITS				
(if charged as direct costs) Specify Rate:				
3 TOTAL WAGES, SALARIES, BENEFITS				
( 1 + 2 )				
4 SUPPLIES & MATERIALS				
5 EQUIPMENT				
(List item & dollar amount for items exceeding \$1,000)				
Total Permanent Equipment				
6 TRAVEL COSTS				
Domestic (Incl. Canada & U. S. possessions.)				
Foreign				
7 PUBLICATION & REPORT COSTS				
8 SUBAWARD COSTS				
9 CONSULTANT COSTS				
10 COMMUNICATION COSTS				
11 OTHER DIRECT COSTS				
12 TOTAL DIRECT COSTS				
13 INDIRECT COSTS (Specify rates.)				
1. Federal: 25% of line 3				
2. BOR: 25% of line 3				
3. Institutional: (specify rate)				
Total Indirect Costs				
14 TOTAL PROJECT COSTS (12 + 13)				



## Louisiana NASA EPSCoR Pre-proposal Budget Form Year 3

PROJECT TITLE:		PROJECT YEAR: (circle one)			
		1	2	<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">3</span>	combined
PRINCIPAL INVESTIGATOR:		ORGANIZATION:			
1 SALARY COSTS		NASA Funds Requested	Non-Federal Match		
			BOR	Institutional	
1					
2					
3					
4					
5 Graduate Student Support					
6 Undergraduate Student Support					
TOTAL PERSONNEL					
2 FRINGE BENEFITS					
(if charged as direct costs) Specify Rate:					
3 TOTAL WAGES, SALARIES, BENEFITS					
( 1 + 2 )					
4 SUPPLIES & MATERIALS					
5 EQUIPMENT					
(List item & dollar amount for items exceeding \$1,000)					
Total Permanent Equipment					
6 TRAVEL COSTS					
Domestic (Incl. Canada & U. S. possessions.)					
Foreign					
7 PUBLICATION & REPORT COSTS					
8 SUBAWARD COSTS					
9 CONSULTANT COSTS					
10 COMMUNICATION COSTS					
11 OTHER DIRECT COSTS					
12 TOTAL DIRECT COSTS					
13 INDIRECT COSTS (Specify rates.)					
1. Federal: 25% of line 3					
2. BOR: 25% of line 3					
3. Institutional: (specify rate)					
Total Indirect Costs					
14 TOTAL PROJECT COSTS (12 + 13)					

## Louisiana NASA EPSCoR Pre-proposal Budget Form Combined 3 Years

PROJECT TITLE:		PROJECT YEAR: (circle one)		
		1	2	3
		<span style="border: 1px solid red; border-radius: 50%; padding: 2px;">combined</span>		
PRINCIPAL INVESTIGATOR:		ORGANIZATION:		
1 SALARY COSTS		NASA Funds Requested	Non-Federal Match	
			BOR	Institutional
1				
2				
3				
4				
5 Graduate Student Support				
6 Undergraduate Student Support				
TOTAL PERSONNEL				
2 FRINGE BENEFITS				
(if charged as direct costs) Specify Rate:				
3 TOTAL WAGES, SALARIES, BENEFITS				
( 1 + 2 )				
4 SUPPLIES & MATERIALS				
5 EQUIPMENT				
(List item & dollar amount for items exceeding \$1,000)				
Total Permanent Equipment				
6 TRAVEL COSTS				
Domestic (Incl. Canada & U. S. possessions.)				
Foreign				
7 PUBLICATION & REPORT COSTS				
8 SUBAWARD COSTS				
9 CONSULTANT COSTS				
10 COMMUNICATION COSTS				
11 OTHER DIRECT COSTS				
12 TOTAL DIRECT COSTS				
13 INDIRECT COSTS (Specify rates.)				
1. Federal: 25% of line 3				
2. BOR: 25% of line 3				
3. Institutional: (specify rate)				
Total Indirect Costs				
14 TOTAL PROJECT COSTS (12 + 13)				

#### **7.4 SUB-AWARD TO COLLABORATING INSTITUTIONS**

For all anticipated Sub-Award Institutions, the items listed below are to be included on the following pages.

***Cover Sheet***

With authorized institutional signature.

***Statement of Work***

Summary of the work to be completed by the collaborating institution.

***Budget Details***

Budget Details for Sub-Awards must be included just as described in the previous section for the lead institution.

***Budget Forms***

Budget Forms for Sub-Awards must be included just as described in the previous section for the lead institution.

## 8. BIOGRAPHICAL SKETCHES

[Submit sketches for key personnel using the following guidelines: **PI, Co-I/Science-PI:** maximum 2 pages; **Co-I, Co-I/Institutional-PI :** 1 page; **Other Key Personnel:** 1 page]

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Provide the following information for the senior personnel on the project. Begin with the Principal Investigator.  
**DO NOT EXCEED 2 PAGES PER PERSON.**

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- A. Vitae, listing professional and academic essentials and mailing address.
- B. List up to 5 publications most closely related to the proposed project and up to 5 other significant publications, including those being printing. Patents, copyrights, or software systems developed may be substituted for publications. Do not include additional lists of publications, invited lectures, etc. Only the list of up to 10 will be used in merit review.
- C. List of persons, other than those cited in the publication list, who have collaborated on a project or a book, article, report or paper within the last 48 months, including collaborators on this proposal. If there are no other collaborators, please indicate that fact.
- D. Names of graduate and post-graduate advisors and advisees.

The information in C. and D. is used to help identify potential conflicts or bias in the selection of reviewers.

## 9. CURRENT AND PENDING SUPPORT

The following information **MUST** be provided for each investigator and other senior personnel. Use additional sheets as necessary. Complete Form 1001CP, provided on the following page. List support from ALL sources, including BOR Support Fund.

**NAME OF INVESTIGATOR:**

<p>Status of Support: <input type="checkbox"/> Current    <input type="checkbox"/> Pending    <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project:    <input type="checkbox"/> Cal Yr    <input type="checkbox"/> Acad    <input type="checkbox"/> Summ</p>
<p>Status of Support: <input type="checkbox"/> Current    <input type="checkbox"/> Pending    <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project:    <input type="checkbox"/> Cal Yr    <input type="checkbox"/> Acad    <input type="checkbox"/> Summ</p>
<p>Status of Support: <input type="checkbox"/> Current    <input type="checkbox"/> Pending    <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project:    <input type="checkbox"/> Cal Yr    <input type="checkbox"/> Acad    <input type="checkbox"/> Summ</p>
<p>Status of Support: <input type="checkbox"/> Current    <input type="checkbox"/> Pending    <input type="checkbox"/> Submission Planned in Near Future</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Award Amount (or Annual Rate): \$ _____ Period Covered: _____</p> <p>Location of Activity:</p> <p>Person-Months or % of Effort Committed to the Project:    <input type="checkbox"/> Cal Yr    <input type="checkbox"/> Acad    <input type="checkbox"/> Summ</p>

## 10. LETTERS OF SUPPORT

Letters of support may be appended to the pre-proposal. No other appendices are allowed.