Table of Contents

[Table of Contents 1](#_Toc363129543)

[1. Research Description 2](#_Toc363129544)

[1.1 Abstract or Summary 2](#_Toc363129545)

[1.2 Relevance to NASA 2](#_Toc363129546)

[1.3 Relevance to the Jurisdiction 2](#_Toc363129547)

[1.4 Goals and Objectives 2](#_Toc363129548)

[2. Project Content 2](#_Toc363129549)

[3. Project Impact 2](#_Toc363129550)

[3.1 Partnerships, Interactions, and Diversity 2](#_Toc363129551)

[3.2 Sustainability 3](#_Toc363129552)

[3.3 Evaluation 3](#_Toc363129553)

[3.4 Dissemination 3](#_Toc363129554)

[4. Management Plan and Schedule 3](#_Toc363129555)

[4.1 Management 3](#_Toc363129556)

[4.2 Timeline 3](#_Toc363129557)

[5. Prior NASA EPSCoR Research Support 3](#_Toc363129558)

[6. References and Citations 3](#_Toc363129559)

[7. Budget Justification 4](#_Toc363129560)

[7.1 Budget Narrative 4](#_Toc363129561)

[7.2 Budget Details – Lead Institution 5](#_Toc363129562)

[7.3 Budget Forms – Lead Institution 8](#_Toc363129563)

[7.4 Sub-Award to Collaborating Institutions 9](#_Toc363129564)

[8. Biographical Sketches 10](#_Toc363129565)

[9. Current and Pending Support 11](#_Toc363129566)

[10. Letters of Support 12](#_Toc363129567)

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

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.

1.3 Relevance to the Jurisdiction

Describe how the proposed research activities will make significant contributions to the overall research infrastructure, science and technology capabilities, higher education, and economic development of Louisiana.

1.4 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.

1. 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.)

1. 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.

1. 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.

1. Prior NASA EPSCoR Research Support

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

1. References and Citations

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

1. 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.

1. 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** |
| ***Lead Institution Name*** |
| 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 |
| ***Sub-Award Institution Name***  |
| James Smith | Co-I, Instution-PI | 1.0 | 1.0 | 1.0 |
| Graduate Student (1) | Student | 6 | 6 | 6 |
| Undergraduate Student (3) | Student | 6 | 6 | 6 |

***Note: You must describe exactly how person-months/years are calculated for students***

1. 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.]

1. 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 |  |  |  |  |  |  |
| *Total Direct Costs* |  |  |  |  |  |  |
| *F&A (Indirect) Costs* |  |  |  |  |  |  |
| Total Project Costs  |  |  |  |  |  |  |

***Direct Labor Detail***

Direct labor costs should be separated by titles or disciplines (e.g., Principal Investigator, Co-Investigator, Collaborator, Research Associate, graduate or undergraduate research assistant, etc.) with estimated hours, hourly rates, or monthly 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. Pay special attention to high-cost materials and supplies (e.g. Platinum substrates or the like). Cite sources for cost estimates (vendor quote, website price listing, previous orders, etc).

***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. The source of the cost estimate **must** be included.

***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 funds). 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.

***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) |
|  1 2 3 combined |
| PRINCIPAL INVESTIGATOR: | ORGANIZATION: |
| 1 | SALARY COSTS |   | NASA Funds | Non-Federal Match |
|   |   |  | Requested | 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 2 3 combined |
| PRINCIPAL INVESTIGATOR: | ORGANIZATION: |
| 1 | SALARY COSTS |   | NASA Funds | Non-Federal Match |
|   |   |  | Requested | 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 3 combined |
| PRINCIPAL INVESTIGATOR: | ORGANIZATION: |
| 1 | SALARY COSTS |   | NASA Funds | Non-Federal Match |
|   |   |  | Requested | 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 combined |
| PRINCIPAL INVESTIGATOR: | ORGANIZATION: |
| 1 | SALARY COSTS |   | NASA Funds | Non-Federal Match |
|   |   |  | Requested | 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.

1. 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]

Provide the following information for the senior personnel on the project. Begin with the Principal Investigator.

**DO NOT EXCEED 2 PAGES PER PERSON.**

 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.

1. 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:**

|  |
| --- |
| Status of Support: \_\_\_Current \_\_\_Pending \_\_\_Submission Planned in Near FutureProject/Proposal Title:Source of Support:Award Amount (or Annual Rate): $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period Covered:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Location of Activity:Person-Months or % of Effort Committed to the Project: \_\_\_\_\_Cal Yr \_\_\_\_\_Acad \_\_\_\_\_Summ |
| Status of Support: \_\_\_Current \_\_\_Pending \_\_\_Submission Planned in Near FutureProject/Proposal Title:Source of Support:Award Amount (or Annual Rate): $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period Covered:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Location of Activity:Person-Months or % of Effort Committed to the Project: \_\_\_\_\_Cal Yr \_\_\_\_\_Acad \_\_\_\_\_Summ |
| Status of Support: \_\_\_Current \_\_\_Pending \_\_\_Submission Planned in Near FutureProject/Proposal Title:Source of Support:Award Amount (or Annual Rate): $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period Covered:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Location of Activity:Person-Months or % of Effort Committed to the Project: \_\_\_\_\_Cal Yr \_\_\_\_\_Acad \_\_\_\_\_Summ |
| Status of Support: \_\_\_Current \_\_\_Pending \_\_\_Submission Planned in Near FutureProject/Proposal Title:Source of Support:Award Amount (or Annual Rate): $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period Covered:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Location of Activity:Person-Months or % of Effort Committed to the Project: \_\_\_\_\_Cal Yr \_\_\_\_\_Acad \_\_\_\_\_Summ |

1. Letters of Support

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