



**MAINE SPACE GRANT**  
**C O N S O R T I U M**  
An affiliate of the National Space Grant College and Fellowship Program

**Request For Pre-Proposals**

**2012 Maine NASA EPSCoR Research Program**

**Announcement Date**                      **October 25, 2011**

**Pre-Proposal Due Date**                **November 30, 2011 (due by 5 p.m.)**

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### 1. Introduction

We anticipate that NASA will soon be issuing a Cooperative Agreement Notice (CAN) for the fiscal year 2012 EPSCoR program. It is expected that there will be an opportunity for Maine to submit two **Research Group proposals** for potential funding under this CAN. Awards will be for three years. NASA funding for a selected Research Group proposal is expected to be \$ 750,000 (approximately \$250,000 per year, but funds need not be spent evenly over the life of the grant). At this time, the level of cost share funds has not been determined. The current discussion indicates a cost share requirement between 1:2 (50%) and 1:1 (100%). Therefore, group funding will be on the order of \$1M - \$1.5M total (over three years, including indirect costs, and some management expenses). Awards will be administered through the Maine NASA EPSCoR office.

All interested faculty groups at Maine institutions of higher education and not-for-profit research institutions are invited to submit a short pre-proposal (*see Appendix A for format and instructions*) that will be used to determine which Research Groups will be invited to submit a full proposal to NASA for the 2012 competition. US citizenship is not required. For the purpose of the pre-proposals all NASA EPSCoR monies must be matched 100% with non-federal monies. In-kind matches are allowable.

A researcher who has received NASA EPSCoR research funding (not NASA EPSCoR Research Infrastructure Development awards) within the past five years may submit a pre-proposal as long as the project is new and incorporates mentoring of junior faculty. Pre-proposals that take previously funded NASA EPSCoR research projects to the next level will be considered but will require justification as to why NASA funding is required. A researcher may submit more than one pre-proposal as the Principal Investigator (PI) and/or may be listed as a participant PI more than one pre-proposal. Only one pre-proposal from a PI who submits more than one pre-proposal, may be selected.

There remains substantial uncertainty about when NASA will issue the CAN, but we anticipate that once issued, there will be a 60-day window for preparation of the full proposal for submission. Groups whose pre-proposals are selected for incorporation in the state NASA EPSCoR proposal will be asked to expand their pre-proposals to appropriate length and detail. Campus proposal clearance is not necessary at this time.

### 2. NASA EPSCoR Background

The legislative purpose of NASA EPSCoR is to strengthen the research capability of jurisdictions that have not in the past participated equably in competitive aerospace research activities. 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, 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. Since its inception, NASA EPSCoR has been closely linked to the National Space Grant College and Fellowship Program (Space Grant). Based on the availability of funding, NASA will continue to help states achieve these goals through NASA EPSCoR. Funded jurisdictions will be selected through a merit-based, peer-review competition. The following are the specific objectives of NASA EPSCoR:

- Contribute to and promote the development of research capability 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 between NASA research assets, academic institutions, and industry;
- Contribute to the overall research infrastructure, science and technology capabilities, higher education, and economic development of the jurisdiction; and

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- Work in close coordination with the Space Grant consortium in the jurisdiction to improve the environment for science, technology, engineering and mathematics (STEM) education.

### 3. NASA Education Portfolio

Because NASA EPSCoR is managed by the Office of Education, NASA EPSCoR follows the requirements of the Agency's Education portfolio. This portfolio is guided by three Outcomes:

- Outcome 1: Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goal through a portfolio of investments.
- Outcome 2: Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty.
- Outcome 3: Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.

All NASA Higher Education projects, including EPSCoR, directly support Outcome 1. Outcome 1 comprises five Objectives. NASA EPSCoR directly contributes to Objectives 1.1 and 1.5 and may also contribute to Objectives 1.2, 1.3, and 1.4.

- **Objective 1.1 – Faculty and Research Support:** Provide NASA competency-building education and research opportunities for faculty, researchers, and post-doctoral fellows.
- **Objective 1.2 – Student Support:** Provide NASA competency-building education and research opportunities to individuals to develop qualified undergraduate and graduate students who are prepared for employment in STEM disciplines at NASA, industry, and higher education.
- **Objective 1.3 – Student Involvement, Higher Education:** Provide opportunities for groups of post-secondary students to engage in authentic NASA-related mission-based research and development activities.
- **Objective 1.4 – Course Development:** Develop NASA-related course resources for integration into STEM disciplines.
- **Objective 1.5 – Targeted Institution Research and Academic Infrastructure:** Improve the ability of targeted institutions to compete for NASA research and development work.

### 4. Keys to Success

The focus of the EPSCoR 2012 competition will be to identify and fund research *that NASA wants performed*. Excellent science or engineering is not enough. Hence, all Research Group pre-proposals should include the strongest possible evidence that the group is *developing or has active, well established* ties to researchers at NASA Mission Directorates (Aeronautics Research, Science, Human Exploration and Operations), the Office of Chief Technologist, NASA Centers, the Jet Propulsion Laboratory or Headquarter (*see Appendices C and D for description of mission directorates and NASA contacts*). Each Mission Directorate covers a major area of the Agency's research and development efforts. NASA critical research opportunities can be viewed at <http://nspires.nasaprs.com/external/solicitations/solicitations.do?method=past&stack=push>. There are also direct links to the Centers from <http://www.nasa.gov/home/index.html?skipIntro=1>. If you have not previously collaborated with NASA personnel you should contact the University Affairs Officer (UAO) at your NASA Center(s) of interest. NASA University Affairs Officers are listed in Appendix D of this document. The UAO at your Center of interest can direct you to specific NASA researchers in your field. Involved NASA collaborators/colleagues will be expected to be knowledgeable about the proposed research program and should be willing to act as advocates for funding of the proposal. There must be a clear and strong indication that the proposed research will fulfill a presently identified mission need at NASA.

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Successful NASA EPSCoR proposals:

- Emphasize infrastructure building
- Involve and nurture junior faculty and students (a mix of undergraduates, graduate students and postdocs, to the extent possible). NASA is concerned about the STEM pipeline (Its own as well as the nation's)
- Are unique. The project must not be an extension of existing work but may take an existing project to a much higher level with infrastructure building and the STEM pipeline as critical outcomes.
- Not be made up of ONLY established faculty – Nurture the STEM pipeline from a higher education perspective.
- Align with NASA's research and technology priorities – be as specific as possible.
- Include collaborations with one or more NASA scientists at one or more of the NASA research centers. NASA scientists are considered collaborators in the project and must not receive NASA EPSCoR funds.
- Include collaborations with other non-NASA institutions, to the extent possible. Although NASA EPSCoR encourages such collaborations only if it benefits your project and institution, DO NOT force collaborations for the sake of collaborations.
- Do not include outreach to K-12.
- Diversity is a critical factor with NASA. Make every effort to include members of the underrepresented community and women in your proposal. NASA encourages collaboration with predominately minority institutions or institutions with large minority student populations. Again, do not force the collaboration if it does not make sense

### 5. Important Information on Unallowable Costs

In addition to the funding restrictions and requirements given in the *NASA Guidebook for Proposers* and the *Grant and Cooperative Agreement Handbook*, the following restrictions exist on the use of the federally-provided NASA EPSCoR funds and proposed cost-share funds under this CAN:

- Funds may not be used to fund research carried out by non-U.S. institutions.
- Foreign travel to meetings and conferences in support of the jurisdiction's NASA EPSCoR research project is an acceptable use of NASA EPSCoR funds, with an upper limit of \$3,000 per trip for up to two separate years of a jurisdiction's proposal (i.e., the maximum amount the jurisdiction can request for foreign travel is \$3,000 total in any one year and a limit of \$6,000 total for each research proposal).
- The construction of facilities is not an allowable cost for any of the programs solicited in this CAN. For further information on allowable costs, refer to the cost principles cited in the *Grant and Cooperative Agreement Handbook*, 14 Code of Federal Regulations (CFR), Section 1260.127.
- NASA EPSCoR funding cannot be used to purchase general purpose equipment, e.g. desktop workstations, office furnishings, reproduction and printing equipment, etc. as a direct charge. Special purpose equipment purchases (i.e. equipment that is used only for research, scientific, and technical activities directly related to the proposed research activities) are allowed and can be reflected as a direct charge.

### 6. Pre-Proposals Review and Selection Criteria

The Maine NASA EPSCoR Technical Advisory Committee (TAC), using the NASA EPSCoR Review Criteria that is outlined in Appendix A, will review all pre-proposals. Members of the TAC include Dr. Charles Liarakos, Senior Advisor, NSF Biological Sciences; Dr. Jerry Grey, Research and Engineering

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Consultant; Dr. Al Teich, Senior Policy Advisor, AAAS; Dr. David A. Watson, Associate Director (Interim) and Chief Scientist for Integration, National Space Biomedical Research Institute, Associate Professor of Medicine, Baylor College of Medicine, and Professor of Microbiology and Immunology University of Texas Medical Branch; Dr. Graham Shimmield, Director, Bigelow Laboratory for Ocean Sciences; Dr. Dale Syphers, Professor of Physics, Department of Physics and Astronomy, Bowdoin College; Steve Von Vogt, Executive Director, Maine Composite Alliance; Dr. Samantha Langley-Turnbaugh, Associate Vice President for Academic Affairs for Research, Scholarship and Creative Activity, and Professor of Environmental Science at USM; Karl Hoose, President and CEO, Applied Thermal Sciences; Vicki Nemeth, Director of Research Administration & Maine EPSCoR, UMaine; and the Director of the Maine EPSCoR Program.

Pre-proposals that score a minimum of 90 points will be invited to submit full proposals to the 2012 NASA EPSCoR Research Program competition. Notification of selection of pre-proposals will be made by December 15, 2011.

### 7. **Deadline and Important Date**

Pre-proposals due – November 30, 2011  
Notification of Selection – December 15, 2011

### 8. **Pre-Proposal Submission Instructions**

Submissions via e-mail are required as a **single PDF** attachment. Faxed or postal mail notices of intent and pre-proposals will **not** be accepted. Send all materials to:

Jana Hall, Director of Education Programs  
Maine Space Grant Consortium  
87 Winthrop Street, Suite 200  
Augusta, ME 04330  
Phone: (207) 622-4688  
[jana.hall@msgc.org](mailto:jana.hall@msgc.org)

*If you have questions about this announcement, e-mail [jana.hall@msgc.org](mailto:jana.hall@msgc.org) or [terry.shehata@msgc.org](mailto:terry.shehata@msgc.org), or call toll-free at 1-877-397-7223. For more information about Maine Space Grant Consortium and NASA please visit [www.msgc.org](http://www.msgc.org).*

## Appendix A. Pre-Proposal Format and Instructions

### A. Cover Page (one page, limit responses to one or two lines)

1. Tentative title of research:
2. PI or Co-PIs (name, title, institution, contact information):
3. Other in-state or out-of-state collaborators (names, titles, institutions) and their role in project (note: Maine NASA EPSCoR funds may not be used for direct support of out-of-state collaborators): *(Though not required, collaborations among individuals and institutions are strongly encouraged; the goal of EPSCoR is not to fund individual investigators, but rather to develop research teams and programs that will improve the capability of the state to compete for NASA and other funds.)*
4. NASA research contact or technical monitor, if known (name, title, organization) and their role in project. Identify the level of existing collaboration, as well as planned. Be as specific as possible. *(It is the responsibility of the proposer to identify a NASA contact. Colleagues who are familiar with your research may be able to suggest a researcher at a NASA Center, or you may contact the University Affairs Officers at NASA's ten Research Centers. These are listed in Appendix D of this announcement.)*
5. Total amount requested and major equipment purchases (with cost), if any.

### B. Project Description (limit five pages, single space, Time New Roman, size 12 font)

Describe the science or engineering problem that would be addressed, the plan of attack, any special research methods, and the capability of the research team to accomplish the goals of the project. The following outline must be used. *(References Cited may be included and will not count toward the 5-page limit.)*

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

**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.

**Project Content:** Describe the proposed effort and how the goals and objectives will be achieved. 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.

**Anticipated Results:** Describe the anticipated results of the proposed effort.

**Partnerships and Interactions:** 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.

**Timeline:** Include a timeline for achieving stated goals and objectives, including significant milestones. For the purpose of the pre-proposal assume a start date of July 1, 2012.

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**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.

**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.

**Management:** Identify the roles and responsibilities of team members involved in the development and execution of proposed activity.

### C. Required Supplementary Information (limit responses to a few lines)

1. Are any of the investigators currently funded by NASA (exclusive of NASA EPSCoR) or NASA subcontractors and, if so, what is the relationship of that work to the proposed NASA EPSCoR project?
2. Are any aspects of the proposed research currently funded through other grants or contracts and, if so, what is the relationship of that work to the proposed NASA EPSCoR project? (*Specify the source of current funding [e.g., NSF, NSF EPSCoR, DoD, etc.], the nature of the currently funded research, and how additional funding from NASA EPSCoR would be used to modify the focus of the current work. Make sure the current project is properly cited in Section D, Current and Pending Support.*)
3. If any PI or co-PI identified on the project has received NASA EPSCoR research in the past five years and the proposed research activity is an extension of or takes the previously funded NASA EPSCoR research project to the next level, the applicant must provide clear justification why NASA support is needed. If any PI or co-PI identified on the project has received NASA EPSCoR Research Infrastructure Development funding in the past five years and is proposing a research activity that is related to the previously funded RID project(s), the applicant must explain the relationship and justify NASA funding.
4. What is the relevance of the proposed work to NASA? What area(s) of NASA's present mission and needs will your research program address? In which Mission Directorate at NASA does your research activity fall?
5. Identify any potential economic development or commercialization that might result from this work.
6. What lasting contributions would be made to improve research infrastructure in Maine (training, collaborations, new equipment, new programs, etc.)?
7. Explain how funding your group will build new connections for STEM research in Maine, impact faculty and student numbers working in areas related to NASA's mission, and develop competitiveness for follow-on NASA funding, etc.
8. Explain how this project will further education in STEM in the state?
9. What demonstrable achievements would be produced by this project during the award period?
10. How will this project's research activity continue beyond the EPSCoR award period? List any specific plans for obtaining further research funding or commercialization.
11. Provide a tentative plan for securing non-federal matching funds.

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### **D. Current and Pending Support for Research** (no page limit)

Insert or attach an up-to-date list of **all** NASA sources or research support, whether as PI, Co-I, or other funded participant. If applicant has no current support, indicate this below. Pre-proposals without this information may be declined. Proposers may use NSF Form 1239 for this purpose.

1. Title of project
2. PI/PD
3. Organization providing support (NSF, NSF EPSCoR, etc.)
4. Amount of award (if subaward or multi-investigator award, explain amount of support that you receive)
5. Period of support
6. Approximate effort committed to project (months/year)
7. Status (current/pending)

### **E. Biographical Information** (no page limit)

Insert or attach an up-to-date curriculum vitae, including recent publications.

### **F. Support Letters** (no page limit)

*NASA Contact* - Insert or attach a letter or e-mail from a NASA contact that demonstrates what the proposed project is aligned with

*Institution* – Insert or attach a signed letter of support from your Department Head or equivalent.

### **G. Budget and Narrative**

Include a three-year cumulative budget breakdown. The budget should include itemized expenses within major budget categories (Salaries/benefits, subcontracts, consultants, equipment, travel, supplies, other, indirect costs, etc.). The budget narrative should include enough detail to clearly understand the connection to the proposed project. Budget information should include cost share. *The maximum funding request per proposal is \$750,000. This amount is to be expended over a three-year period. For the purpose of the pre-proposals All NASA EPSCoR monies must be matched 100% with non-federal monies. In-kind matches are allowable.*

## Appendix B. Evaluation Criteria

Pre-Proposals will be evaluated based on the following criteria: Intrinsic Merit, NASA Alignment and Partnerships, Management and Evaluation, and Budget. The numbered lists after each criterion should not be construed as any indication of priority or relative weighting. The numbering is provided for clarity and facilitation of pre-proposal development.

### A. Intrinsic Merit (35%)

**Proposed Research.** Pre-proposals should provide a reasonable and clear summary 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. If relevant, the narrative should include a discussion of how previous NASA EPSCoR research projects have helped prepare the institution for and contributed to the proposed research activities. If the proposed research represents a new direction, the ability of the technical team to carry out the research should be explained.

### B. NASA Alignment and Partnerships (35%)

(1) **Relevance to NASA and Maine.** Pre-proposals should discuss the value of the proposed research to NASA's research priorities. Pre-proposals should articulate clearly how the proposed research activities build capacity and develop national competitiveness at the institution and in Maine. In particular, proposers should explain how the current proposed research fits into the strategic plan for NASA EPSCoR-related research in Maine. The relevance to NASA and to Maine must be balanced.

(2) **Partnerships/Sustainability.** Pre-proposals should describe 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 institution to achieve its objectives, to obtain and leverage sources of additional funding, and/or to obtain essential services not otherwise available. A brief plan for achieving national research competitiveness should also be presented.

(3) **NASA Interactions.** Pre-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.

(4) **Diversity.** Pre-proposals should contain summary plans to effectively reach underrepresented and underserved students and researchers. Proposers are encouraged to seek ongoing opportunities to develop relationships between minority-serving institutions and majority research universities within Maine, NASA Mission Directorates, the OCT, and Centers, and industry, as appropriate.

### C. Management and Evaluation (15%)

This section should briefly describe the management structure for the proposed research. The following elements should be included:

(1) **Results of Prior NASA EPSCoR Research Support:** 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.

(2) **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.

(3) **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.

(4) **Project Evaluation:** Pre-proposals should describe 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 are not necessary for pre-proposals, however, proposers should briefly describe an appropriate evaluation plan/process to document outcomes and demonstrate progress toward achieving objectives of proposed project elements. 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.

(5) **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.

### D. Budget (15%)

A brief budget, including NASA and cost-share funds, is required for the three years of performance. The proposed budget should be adequate, appropriate, reasonable, and realistic, and demonstrate the effective use of funds in alignment with the proposed project. The proposed budget should reflect clear alignment with the content and text of the proposal.

## Appendix C. NASA Missions

NASA's Mission *to pioneer the future in space exploration, scientific discovery, and aeronautics research*, draws support from four Mission Directorates and the Office of the Chief Technologist, each with a specific responsibility.

**Aeronautics Research Mission Directorate (ARMD)** conducts vital research to make air travel more efficient, safe, green, and to uncover leading-edge solutions for the Next Generation Air Transportation System (NextGen) in the United States. ARMD's fundamental research in traditional aeronautical disciplines and emerging disciplines helps address substantial noise, emissions, efficiency, performance and safety challenges that must be met in order to design vehicles that can operate in the NextGen. (<http://www.aeronautics.nasa.gov>)

**Human Exploration and Operations Mission Directorate (HEO)** is responsible for NASA's human spaceflight activities. In addition to space station operations, space communication and launch services, HEO is responsible for developing new capabilities that will pave the way for the next generation of human explorers. HEO is dedicated to informing and educating the public about NASA's plans for a new era in space exploration: using the International Space Station for research and exploration activities in low Earth orbit, fostering a commercial industry and focusing our energy and resources on sending astronauts to an asteroid and eventually to Mars. (<http://www.nasa.gov/directorates/heo/home/index.html>)

**Science Mission Directorate (SMD)** leads the Agency in four areas of research: Earth Science, Heliophysics, Planetary Science, and Astrophysics. SMD works closely with the broader scientific community, considers national initiatives, and uses the results of National Research Council studies to define a set of "Big Questions" in each of these four research areas. These questions, in turn, fuel mission priorities and the SMD research agenda. The SMD also sponsors research that both enables, and is enabled by, NASA's exploration activities. SMD has a portfolio of Education and Public Outreach projects that are connected to its research efforts. (<http://nasascience.nasa.gov>)

**Office of the Chief Technologist (OCT)** serves as the NASA Administrator's principal advisor and advocate on matters concerning agency-wide technology policy and programs. OCT is responsible for direct management of NASA's Space Technology programs and for coordination and tracking of all technology investments across the agency. The office also serves as the NASA technology point of entry and contact with other government agencies, academia and the commercial aerospace community. The office is responsible for developing and executing innovative technology partnerships, technology transfer and commercial activities and the development of collaboration models for NASA. (<http://www.nasa.gov/offices/oct/home/index.html>)

## Appendix D. NASA Research Contacts

Technical and scientific questions about research opportunities in this announcement may be directed to the appropriate contact below. Discussions of research with appropriate NASA Center or JPL personnel are strongly encouraged.

### NASA Office of the Chief Technologist

Claudia Meyer  
 Space Technology Research Grants Program Executive  
 NASA Headquarters  
[Claudia.M.Meyer@nasa.gov](mailto:Claudia.M.Meyer@nasa.gov)

### NASA Center Contacts

Ames Research Center Maria Lopez University Affairs Officer Phone: (650) 604-0896 <a href="mailto:Maria.C.Lopez@nasa.gov">Maria.C.Lopez@nasa.gov</a>	Kennedy Space Center Rose Austin Education Projects Specialist Phone: (321) 867-6481 <a href="mailto:Rose.M.Austin@nasa.gov">Rose.M.Austin@nasa.gov</a>
Dryden Flight Research Center Dr. Lance Richards Education Lead Phone: (661) 276-3562 <a href="mailto:Lance.Richards-1@nasa.gov">Lance.Richards-1@nasa.gov</a>	Langley Research Center Thomas Pinelli University Affairs Officer Phone: (757) 864-2491 <a href="mailto:Thomas.E.Pinelli@nasa.gov">Thomas.E.Pinelli@nasa.gov</a>
Goddard Space Flight Center Lucy McFadden Chief of University Affairs Phone: (301) 614-6941 <a href="mailto:Lucyann.A.McFadden@nasa.gov">Lucyann.A.McFadden@nasa.gov</a>	Glenn Research Center David Kankam University Affairs Officer Phone: (216) 433-6143 <a href="mailto:Mark.D.Kankam@nasa.gov">Mark.D.Kankam@nasa.gov</a>
Jet Propulsion Laboratory Linda Rodgers University Programs Administrator Phone: (818) 354-3274 <a href="mailto:linda.rodgers@jpl.nasa.gov">linda.rodgers@jpl.nasa.gov</a>	Marshall Space Flight Center Frank Six University Affairs Officer Phone: (256) 961-7701 <a href="mailto:Norman.F.Six@nasa.gov">Norman.F.Six@nasa.gov</a>
Johnson Space Center Kamlesh Lulla Deputy University Research Officer Phone: (281) 483-3065 <a href="mailto:Kamlesh.P.Lulla@nasa.gov">Kamlesh.P.Lulla@nasa.gov</a>	Stennis Space Center Nathan Sovik University Affairs Officer Phone: (228) 688-7355 <a href="mailto:Nathan.A.Sovik@nasa.gov">Nathan.A.Sovik@nasa.gov</a>

## Appendix E. Useful Resources

NASA <http://www.nasa.gov>

NASA Office of Education: <http://education.nasa.gov>

NASA Education Strategic Coordination Framework <http://education.nasa.gov/about/strategy>  
[http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Strategic\\_Coordination\\_Framework.html](http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Strategic_Coordination_Framework.html)

Vision for Space Exploration [http://www.nasa.gov/missions/solarsystem/explore\\_main.html](http://www.nasa.gov/missions/solarsystem/explore_main.html)

NASA Grant and Cooperative Agreement Handbook  
[http://prod.nais.nasa.gov/pub/pub\\_library/grcover.htm](http://prod.nais.nasa.gov/pub/pub_library/grcover.htm)

NASA Centers & Facilities: <http://www.nasa.gov/offices/education/centers/index.html>

Guidebook for Proposers Responding to a NASA Research Announcement  
<http://www.hq.nasa.gov/office/procurement/nraguidebook>

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

Office of the Chief Technologist Overview  
[http://www.nasa.gov/pdf/485335main\\_OCT\\_Overview\\_slides\\_TAGGED.pdf](http://www.nasa.gov/pdf/485335main_OCT_Overview_slides_TAGGED.pdf)

The Maine Space Grant Consortium: [www.msgc.org](http://www.msgc.org)