



NASA Call for Proposals FY09

Introduction

NASA will soon be releasing the Cooperative Agreement Notice (CAN) for the 2009 EPSCoR Competition. Each jurisdiction will be allowed to submit up to two proposals with the possibility of having two awards. Proposals may be submitted for a maximum award of \$750,000 for a three-year period of performance. NASA expects to be able to release the CAN early January.

NASA Research Areas of Interest

Proposals should be aligned with NASA's specific needs/interests within the Mission Directorates. NASA EPSCoR research priorities are defined by the Mission Directorates—Aeronautics Research, Exploration Systems, Science, and Space Operations. Each Mission Directorate covers a major area of the Agency's research and technology development efforts.

Information about current NASA research solicitations can be found on NSPIRES at <http://nspires.nasaprs.com> (select "Solicitations" and then "Open Solicitations") and Grants.gov at <http://www07.grants.gov/search/agency.do> (click on "National Aeronautics and Space Administration"). Research priorities for each of the Mission Directorates can be found at the following locations:

Aeronautics Research Mission Directorate (ARMD)

Researchers responding to the ARMD should propose research that is aligned with one or more of the ARMD programs. Researchers are directed to the following:

ARMD Programs: <http://www.aeronautics.nasa.gov/programs.htm>

Research Opportunities in Aeronautics (ROA) <http://nspires.nasaprs.com> (select "Solicitations" and then "Open Solicitations")

Exploration Systems Mission Directorate (ESMD)

General priorities of ESMD can be found at <http://www.nasa.gov/directorates/esmd>.

The major divisions of ESMD are the Constellation Systems and Advanced Capabilities Divisions. From the ESMD home page, click on the links for Constellation and Advanced Capabilities to learn more about those divisions' research needs.

Within the Advanced Capabilities Division, research priorities relevant to the Human Research Program are available at the following URLs:

2007 Ground-Based Studies in Space Radiation NASA Research Announcement
<http://nspires.nasaprs.com> (select "Solicitations" and then "Past Solicitations and Selections")

and

<http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=71615/NJ07ZSA001N.pdf>

as well as

2008 Research and Technology Development to Support Crew Health and Performance in Space Exploration Missions NASA Research Announcement <http://nspires.nasaprs.com> (select “Solicitations” and then “Open Solicitations”)

and

<http://www.grants.gov/search/search.do?oppId=14851&flag2006=true&mode=VIEW>

Research priorities relevant to the Exploration Technology Development program are available at the following URL:

http://www.nasa.gov/directorates/esmd/aboutesmd/acd/technology_dev.html

Science Mission Directorate (SMD)

Detailed information on SMD research priorities is available at the following URLs:

NASA Science Plan 2007: <http://science.hq.nasa.gov/strategy/> and http://nasascience.nasa.gov/about-us/science-strategy/Science_Plan_07.pdf.

Research Opportunities in Space and Earth Science (ROSES):

<http://nspires.nasaprs.com/external/>

Select “Solicitations”, “Open Solicitations”, and then “Research Opportunities in Space and Earth Sciences (ROSES) – 2008”.

Space Operations Mission Directorate (SOMD)

The primary research and technology development areas in SOMD support launch vehicles, space communications, and the International Space Station. Examples of research and technology development areas with great potential include:

- Space Communications and Navigation
 - Coding, Modulation, and Compression (GSFC)
 - Precision Spacecraft and Lunar/Planetary Surface Navigation and Tracking (GSFC)
 - Communication for Space-Based Range (GSFC)
 - Antenna Technology (GRC)
 - Reconfigurable/Reprogrammable Communication Systems (GRC)
 - Miniaturized Digital EVA Radio (JSC)
 - Transformational Communications Technology (GRC)
 - Long Range Optical Telecommunications (JPL)
 - Long Range Space RF Telecommunications (JPL)
 - Surface Networks and Orbit Access Links (GRC)
 - Software for Space Communications Infrastructure Operations (JPL)

- TDRS transponders for launch vehicle applications that support space communication and launch services
- Space Transportation
 - Optical Tracking and Image Analysis (KSC)
 - Space Transportation Propulsion System and Test Facility Requirements and Instrumentation (SSC)
 - Automated Collection and Transfer of Launch Range Surveillance/Intrusion Data (KSC)
 - Technology tools to assess secondary payload capability with launch vehicles (KSC)
- Processing and Operations
 - Crew Health and Safety Including Medical Operations (JSC)
 - In-helmet Speech Audio Systems and Technologies (GRC)
 - Vehicle Integration and Ground Processing (KSC)
 - Mission Operations (ARC)

Match

Although not certain absent the official CAN, it is very likely that NASA EPSCoR will require a 1:1 state cost match, as has been the case for previous competitions. This means there must be \$1.00 of match for every \$1.00 of NASA funds. The Oklahoma State Regents for Higher Education Matching Fund will provide \$50,000 per year in match for each funded project. The remaining matching funds will be the responsibility of the participating institutions.

PIs should work with their campus research administration offices in preparing a preliminary budget for their preproposals and indicate how the campus portion of the match would be funded (i.e., from department, college, and/or central funds). PIs may also seek cost matching from other sources. Possible sources for campus cost match include the 1) unrecovered F&A (indirect costs) on the State Regents' match, 2) direct dollar match from the campuses and 3) indirect costs on the campus match. **Please direct all questions regarding matching funds to your campus Office of Research Administration rather than to the EPSCoR Office.**

PROJECT SELECTION

The Oklahoma EPSCoR Committee review panel will select the two projects to be submitted to NASA. Project selection will be based on review of preproposals using the following criteria:

1. The scientific merit of the proposal.
2. The relevance of the proposal to NASA mission.
3. The relevance of the proposal to Oklahoma EPSCoR goals (see okepscor.org).
4. The likelihood of continuing support beyond the NASA funding.

PREPROPOSALS

The preproposals must include:

1. PI name(s), full contact information including email address, and affiliation(s).
2. Project Title.
3. Project Description (5 page maximum). Literature references may be provided if necessary and they do not count toward this page limitation.
4. Preliminary Budget (1 page) Include both NASA and matching funds in the budget request and include F&A on the NASA funds. Please note that 15% of the direct cost budget must be allocated for administrative costs incurred by the NASA EPSCoR Office. The NASA EPSCoR office carries out longitudinal tracking of the students involved in research projects and is the liaison between the researchers and NASA for the annual reports, budgets, and on-going alignment with NASA Mission Directorates.
5. Name of the NASA Directorate and program the proposal is directed towards.
6. List of past, current and pending NASA research support.
7. Brief Vitae for PI (up to 2 pages).
8. Description (up to 2 pages) of how well the proposal addresses current NASA research needs and the prospects for future non-EPSCoR NASA research funding.

TIMETABLE for FY 09

- First – Carefully, read the NASA CAN, when it is released. We will update the OK EPSCoR website with a link to the CAN, when available.
- **Friday, January 30, 2009, 5:00 p.m.** - Preproposals (**20 hard copies**) are due in the OU NASA EPSCoR office (College of Atmospheric and Geographic Sciences, 1623 Cross Center Drive, Norman, OK 73069. Phone: 405-325-6559).
- **Friday, February 20, 2009** (or earlier, if possible) - PI's will be notified as to which preproposals were selected, and given final instructions.
- **Thursday, March 12, 2009, 5:00 p.m.** - Completed proposals (original and 15 copies), with all relevant signatures and certifications etc. are due to the NASA EPSCoR office at OU Norman. They must be mailed to NASA on March 18 to arrive by the anticipated March 19 deadline.

For more information or discussion of specific project ideas, please contact NASA EPSCoR Director, Dr. Victoria Snowden at (405) 325-6559 or vduca@ou.edu.
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