



Delaware NASA/EPSCoR RID Seed Grant Program

Open to Delaware Researchers

Proposal Deadline: December 2, 2009

Introduction

The NASA/EPSCoR program has awarded a 3-year Research Infrastructure Development (RID) grant to the State of Delaware. A principal goal of the program is to build the core strength needed to develop competitive research and technology development methods and activities for the solution of scientific and technical problems in areas of strategic importance to NASA's mission: *to pioneer the future in space exploration, scientific discovery, and aeronautics research*. The areas which are considered important by NASA are defined by one or more of the four Mission Directorates and/or by one or more of the ten NASA Field Centers (including JPL). NASA's 2006 Strategic Plan can be found at <http://www.nasa.gov>. A second goal of the Delaware program is to contribute to the overall research structure, science and technology capabilities, higher education, and/or economic development of Delaware.

NASA/EPSCoR provides seed funding for the development of academic research enterprises directed towards long-term, nationally-competitive capabilities in aerospace and aerospace-related research. These capabilities are meant to contribute to Delaware's economic viability. A goal of NASA/EPSCoR is to develop partnerships between NASA's research assets, academic institutions, and industry.

In support of faculty and research personnel, EPSCoR aims to provide research opportunities for faculty, researchers, and post-doctoral fellows. The goal of the seed funding program is to improve the ability of institutions in Delaware to compete for NASA research and development work, by aggressively pursuing additional funding opportunities offered by NASA, industry, other federal agencies, and other sources.

The Delaware NASA/EPSCoR Seed Grant Program is aimed at promoting research and development in NASA-related areas among Delaware scientists and engineers. The goal is to stimulate scholarly initiatives by supporting junior faculty, researchers, and post-docs who have not yet received significant government funding. Some consideration will also be given to more senior faculty who are embarking on a new research direction, but who have not yet received funding for that new research. The seed grant program is intended to support proposal development, pilot research, and other activities that advance a NASA-related research project to the point at which it can attract competitive extramural funding. The relation between the proposed research and NASA's mission can best be demonstrated by identifying a committed

collaborator in the proposed study from a NASA center, or a collaborator who has already demonstrated success in obtaining NASA research/development funding.

Awards will have monetary value up to \$20,000 for direct costs, plus 40% overhead: the overhead will go to the PI's college. It is expected that at least 3 seed grants will be awarded, depending on the size of each grant. Funding requests can include any one or combination of the following categories: graduate student stipend, up to one year with possible renewal for a second (use the graduate student stipend rate for your college); research supplies (excluding large equipment items); domestic travel; summer support, for junior faculty only, maximum of one month; and a summer undergraduate intern. A formal call for grants will be made once per year. However, to the extent that finances permit, the committee will entertain smaller requests, up to \$5,000, at other times. The length of the project period is usually one calendar year with a possible renewal for a second year.

PROPOSALS

Seed grant proposals should include the following elements. Note page specifications for the narrative and other sections; text in these sections should be single-spaced, minimum 11-pt Times New Roman font.

1. **Cover page.** Include the title of the project as well as the department, mail and email address, and phone number for each investigator.
2. **Abstract.** Include a 150-word abstract, suitable for use in public reports, that crisply describes the research to be done, why the research is important to NASA, and why the research is of interest to the State of Delaware.
3. **Narrative.** Articulate the research question, theoretical grounding, existing literature, plan for empirical research (if relevant), names of collaborators with whom you will be working, and the significance of the larger project that the seed grant will help you develop. Maximum length: two pages excluding references, with a minimum 11-point font size.
4. **Plan for Seeking External Funding.** Describe your plans for seeking external funding, including: what government agencies or foundations you might approach, and why; what contacts if any (e.g. prior application, conversations with program officer) you have had with those agencies; what contacts if any you have had with staff at NASA Centers, or with Principal Investigators (PI's) on already-funded NASA grants, or with NASA-related contractors; when you expect to apply for funds; the expected scale of the larger project; and how the seed grant activities will allow you to seek external funding for the larger project. Maximum length: half page.
5. **Relevance of Proposed Activities to NASA/EPSCOR/RID mission and relation to Existing Research (if applicable).** The proposer(s) should especially address how the proposed research fits into the NASA's Strategic Plan, as well as into the EPSCOR theme of "contributing to the overall research infrastructure, science and technology capabilities, higher education, and/or economic development of Delaware". Also describe

what types of linkages will take place with other institutions, NASA-related contractors, NASA Centers, NASA PI's, and/or state agencies. The intention of these seed grants is to stimulate *new* collaborative research initiatives within the NASA/EPSCoR theme. However, if the seed grant proposal is related to on-going, funded research in any way, include a short narrative describing how it is related, and how the seed grant activities will extend the existing project *over and above* what is currently supported. Maximum length: half page.

6. **Budget and budget justification.** These should include any one or combinations of the categories mentioned above. The total budget should include all direct and indirect (40%) costs.
7. **Short two-page curriculum vitae for all investigators.** List academic credentials, appointments, and relevant publications. Maximum of two pages.

ELIGIBILITY

Faculty and research personnel working in areas of interest to the NASA Mission in the State of Delaware are eligible to apply.

LEVEL OF FUNDING

Seed grants will be funded in amounts up to a maximum of \$20,000 direct costs. Include indirect costs (40%) and fringe benefits (where applicable) in the total budget.

ELIGIBLE EXPENSES

The review committee is unsympathetic to proposals that request funding for senior faculty summer salary. NASA/EPSCoR funds may not be used for equipment purposes. All other expenses directly related to seed grant activities may be included in the budget.

REPORTING REQUIREMENTS

Seed grant recipients will be asked for a brief semi-annual report describing activities funded by the seed grant as well as their progress toward obtaining external support. They also must present a report to the Delaware EPSCoR community at the annual EPSCoR meeting. The reporting schedule will be one year following the receipt of the award.

DEADLINES

Seed grant proposal deadline for 2010 will be December 2, 2009

REVIEW PROCESS

Seed grant applications will be reviewed by a panel composed of at least four members selected from the following groups: (i) the Director and Associate Directors of NASA's Delaware Space Grant (DESGC) program; (ii) members of the DESGC Advisory Board; (iii) the Technical Advisory Committee of the Delaware NASA/EPSCoR program; (iv) outside faculty members. The review panel members will be chosen so as to avoid conflicts of interest.

CRITERIA FOR EVALUATION

The most important evaluation criteria for seed grant proposals are intellectual merit, potential for generating interdisciplinary innovation, development of new collaborations, consistency with NASA's mission, and potential for future fundability. Specifically, the proposer must demonstrate how the proposal is aligned with one or more of the Strategic Goals which are listed in NASA's 2006 Strategic Plan. Proposals that request funding for a stand-alone project only, do not describe plans for seeking external funding, fail to demonstrate specific links with NASA's Strategic Goals, or poorly justify their budget, will be considered non-responsive to this Call for Proposals. Proposals submitted by junior faculty and/or junior researchers will receive a majority of the funds.

SUBMISSION PROCEDURES

Submit all proposal materials as a single PDF file to Dermott Mullan (mullan@udel.edu), the Director of DESGC, in the Department of Physics and Astronomy, UD. Only electronic submissions will be accepted. Questions regarding the seed grant programs should also be directed to mullan@udel.edu.

10/09/09