



Environmental Frontier Grants Program Delaware Environmental Institute

Deadline: 5:00 PM, Friday, December 13, 2013

1) Overview

The Delaware Environmental Institute (DENIN) invites applications from UD faculty for the Environmental Frontier Grants Program (EFGP). The purpose of the EFGP is to help build research teams who will be competitive for larger, follow-on competitions for federal, state, foundation or industry funding of environmentally focused research.

DENIN was established in October 2009, to conduct research and coordinate partnerships that integrate environmental science, engineering, and policy in order to provide strategies that address environmental challenges. The institute's goals are to initiate interdisciplinary research projects; support interdisciplinary academic programs; forge partnerships among government agencies, nonprofits, industry, policymakers, and the public to address environmental concerns; and coordinate and sponsor signature events and programs that provide opportunities for interdisciplinary interaction.

Toward this mission and goals, DENIN is investing a portion of its internal funds to build interdisciplinary environmental research, through the EFGP.

EFGP grants will be awarded to teams of interdisciplinary environmental researchers to collect preliminary data, to formulate and confirm hypotheses, and to develop and validate methodology, as precursors to submitting multi-investigator, environmentally focused funding applications.

EFGP grants may focus on interdisciplinary environmental science and engineering, integrated natural and social science projects with an environmental focus, and/or projects including environmental humanities linked to a project's science/engineering research focus.

Environmental research areas of particular interest in this solicitation include: climate, sea level rise, water quality, land use, soil contamination/remediation, sensing/monitoring, economics, ethics, environmental justice, history or policy.

Proposals should make a clear and convincing argument for the future fundability and significance of the topic. Within the proposal, applicants should identify funding targets as part of a project timeline.

EFGP grants allow interdisciplinary teams to address gaps in knowledge that constitute a barrier to competitive funding applications. It is expected that teams will identify a crucial research focus that will strengthen a key area and will position the team well for the future. It is also expected that a team collaboration be sufficiently mature such that an EFGP grant is likely to be effective.

EFGP applicants may include collaborators from academia, government, non-profits or industry.

Applicants may request up to \$50,000 in direct costs. An Environmental Frontier Grant can support students or postdoctoral fellows, supplies, or travel directly related to the project. Faculty salary and F&A

(indirect costs) are ineligible costs. Investigators may elect to spend grant funds over a one-year or two-year period. Applications from individual investigators who are not part of an interdisciplinary team will not be competitive. DENIN anticipates selecting up to five projects for funding this year.

We ask that each proposal be signed by the PI and the department chair or administrator. Applicants do not need to submit proposals via the UD Research Office.

PIs of funded projects will be asked to provide brief reports at six-month intervals during the grant period, and annually for three years after the grant ends.

Applicants should plan for a start date of February 1, 2014. We expect to announce awardees on or about January 20, 2013.

2) Proposal Structure

To be administratively complete, each proposal should include the following components, in the following order:

- a. **Cover Sheet:** Complete attached form.
- b. **Lay Summary** (1 page): In non-technical language, describe the research thrust of the proposed project and its relevance to the larger environmental research focus of the team. List the PI, other team members, and each person's area of expertise.
- c. **Project Description** (Maximum of 5 pages): Describe the work to be undertaken. Suggested sections of the project description include:
 - Background and Significance
 - Research Question or Specific Aims
 - Methods
 - Project Timeline – Include major tasks and at least one target grant program and application date.
- d. **Budget and Budget Justification:** (no page limit) Provide a detailed budget and budget justification for each year proposed.
- e. **Biosketches:** Include two-page NSF-format biosketches for the PI and team members.
- f. **Protection of Human Subjects or Use of Vertebrate Animals in Research** (no page limit): If applicable in your project, describe plans to involve human participants or vertebrate animals.

3) Submit Your Proposal via UD Drop Box.

- a. Save your proposal as a single pdf file. Name your file using this convention: Lastname_Firstname_EFGP_2013.pdf (e.g., Smith_Jane_EFGP_2013)
- b. Go to the UD Drop Box page, at <https://pandora.nss.udel.edu/dropoff.php>
- c. Complete the information required in box 1. Be sure to check the box that says, "Send an email to me when the recipient picks up the file."

- d. In Box 2, information about the recipient, use this email address: jeanette@udel.edu
- e. In Box 3, choose your file for upload. Use your Last Name, First Name as the description.

4) Target Grant

This application requires at least one grant target. Examples of federal grant programs that could support environmentally focused, multi-investigator research are listed below. We recommend that you contact the relevant program officer ahead of time to discuss the appropriateness of your project idea within a given program. Though no examples are provided below, applicants may also propose SBIR/STTR applications if relevant to the proposed research.

National Science Foundation:

NSF Environmental Chemical Sciences (ECS)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503416&org=NSF&sel_org=NSF&from=fund

NSF Sensors and Sensing Systems

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13349&org=NSF&sel_org=NSF&from=fund

NSF Infrastructure Management and Extreme Events

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13353&org=NSF&sel_org=NSF&from=fund

NSF Hydrologic Sciences

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13684

NSF Dynamics of Coupled Natural and Human Systems

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13681&org=NSF&sel_org=NSF&from=fund

NSF Cyber-Enabled Sustainability Science and Engineering (Cyber-SEES)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504829&org=NSF&sel_org=NSF&from=fund

NSF Interdisciplinary Behavioral and Social Science Research

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504832&org=NSF&sel_org=NSF&from=fund

NSF Long-term Research in Environmental Biology

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13544&org=NSF&sel_org=NSF&from=fund

NSF Materials Research Science and Engineering Center (MRSEC)

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5295&org=NSF&sel_org=NSF&from=fund

NSF Division of Environmental Biology

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503634&org=NSF&sel_org=NSF&from=fund

NSF Geobiology and Low-Temperature Geochemistry

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13689&org=NSF&sel_org=NSF&from=fund

NSF Decision, Risk and Management Sciences

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5423&org=NSF&sel_org=NSF&from=fund

NSF Environmental Engineering

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501029&org=NSF&sel_org=NSF&from=fund

NSF Science, Technology and Society

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5324&org=NSF&sel_org=NSF&from=fund

US Department of Energy:

US Department of Energy: (DoE's broad, annual solicitation)

http://www.science.doe.gov/grants/pdf/SC_FOA_0000768.pdf

US Environmental Protection Agency:

Sign up here to be notified when EPA RFAs are published: <http://www.epa.gov/ncer/listserv/>

National Institutes of Health, National Institute of Environmental Health Sciences (NIEHS):

Go to this link to see current RFAs: <http://www.niehs.nih.gov/funding/grants/announcements/request/index.cfm>

NIEHS examples:

The Role of Environmental Exposures in the Development of Autoimmune Disease (R21)

<http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-13-011.html>

Biogeochemical Interactions Affecting Bioavailability for *in situ* Remediation of Hazardous Substances (R01)

<http://grants2.nih.gov/grants/guide/rfa-files/RFA-ES-13-010.html>

Research Linking Environmental Exposure to Alzheimer's Disease (R01)

<http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-13-006.html>

US Department of Agriculture:

National Institute of Food and Agriculture (NIFA): Review an online listing of grant opportunities at

<http://www.nifa.usda.gov/fo/funding.cfm#>

National Aeronautics and Space Administration (NASA):

Research Opportunities in Space and Earth Sciences (ROSES)

<http://nspires.nasaprs.com/external/viewrepositorydocument/cmdocumentid=350691/solicitationId=%7B2EBEDEA0-817D-D318-55C3-BC5086A4AB70%7D/viewSolicitationDocument=1/FULL%20ROSES%202013%20Amend%2020.pdf>

ROSES-2013 is an omnibus NASA Research Announcement. It contains over 50 different proposal opportunities.

5) Questions and more information:

Potential applicants may address questions to Jeanette Miller, Associate Director, Delaware Environmental Institute, at (302) 831-4167; Jeanette@udel.edu.

Cover Page DENIN Environmental Frontier Grants Program

Title of Project:				
Principal Investigator Information:				
PI Name: (Last, first, M.I.)			Degree(s):	
Position Title:			Mailing address: (street, city, state, zip)	
Department:				
Telephone:				
Email:				
Collaborators:				
Name: (Last, first, M.I.)	Position Title	Department	Institution	Email
Note: If there are more than four collaborators, continue on an additional page.				
Research:				
Provide three keywords/terms to describe this research project:				
Human Subjects Research: No Yes			Vertebrate Animals: No Yes	
Funding Requested:			Note: Indirect costs (F&A) and faculty salary are ineligible costs.	
Dates of Proposed Period of Support: 1/1/2014 -				
Direct Costs Year One:			\$	
Direct Costs Year Two: (if applicable)			\$	
Total Direct Costs:			\$	
Principal Investigator Assurance: I certify that the statements herein are true, complete and accurate to the best of my knowledge. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. I agree to accept responsibility for the scientific conduct of the DENIN Environmental Frontier Grant and to provide the required project and career progress reports if a grant is awarded as a result of this application.			Signature of PI: (Insert written signature here.) Date:	
Departmental Chair or Administrator Signature:				
Date:				