

OPEN ANNOUNCEMENTS:

February 25, 2008

Professors, Researchers and Managers,

It is that time of year again! Time to start getting the word out about the Graduate Research Fellowship Program to students. The National Estuarine Research Reserve System's Graduate Research Fellowship provides master's degree students and Ph.D. candidates with an opportunity to conduct research of local and national significance that focuses on enhancing coastal zone management. Fellows conduct their research within a National Estuarine Research Reserve and gain hands-on experience by participating in their host reserve's research and monitoring programs.

Graduate Research Fellowship projects are based on the reserves' local needs, the reserve system's national priorities and the students' interest.

All fellowship projects address issues important to coastal zone management and enhance our understanding of estuarine ecosystems. National Estuarine Research Reserve Fellows are the leaders for the next generation of estuarine scientists; they are influencing the decisions made today for a better coast tomorrow.

Attached is this year's flier for you to print, post, and forward along to your contacts, listservs, etc. I am taking the lead on coordinating the Graduate Research Fellowship program so inquiries can be sent to me.

This point of contact information is listed in the funding announcement and on our website. Thanks in advance for your help in getting the word out about this great program. For more information please see:

<http://www.nerrs.noaa.gov/welcome.html>

Have a great day,
Alison JG Krepp

--

Alison JG Krepp
Program Specialist
Estuarine Reserves Division
OCRM/NOS/NOAA
1305 East West Highway
Silver Spring MD 20910

Phone: 301.563.7105
Email: Alison.Krepp@noaa.gov

This distribution list (NYSGRFP-L@lists.sunysb.edu) is New York Sea Grant's way of notifying potentially interested researchers of funding opportunities from New York Sea Grant and the National Sea Grant College Program Office. As a public service we occasionally also send along other coastal, marine, or Great Lakes related RFPs. If you do not wish to be on this distribution list, please contact me at lane.smith@stonybrook.edu.

AGENCY: NSF
TITLE: ROSES 2007: Ocean Biology and Biogeochemistry
DEADLINE: February 29, 2008
LINK: <http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={E529A93E-C05F-7B1E-680D-D5C7488C2F6C}&path=open>

NNH07ZDA001N, entitled "Research Opportunities in Space and Earth Sciences - 2007 (ROSES-2007)," will be available on or about February 16, 2007, by opening the NASA Research Opportunities homepage at <http://nspires.nasaprs.com/> and then linking through the menu listings "Solicitations" to "Open Solicitations." This NASA Research Announcement (NRA) solicits proposals for supporting basic and applied research and technology across a broad range of Earth and space science program elements relevant to one or more of the following NASA Research Programs: Earth Science, Heliophysics, Planetary Science, and Astrophysics. Proposal due dates are scheduled starting on May 1, 2007, and continue through April 11, 2008.

Electronically submitted Notices of Intent to propose are requested for all program elements, with the first such due date being March 15, 2007. Electronic submission of proposals is required by the respective due dates for each program element, and must be submitted by an authorized official of the proposing organization. Participation is open to all categories of organizations, foreign and domestic, including educational institutions, industry, nonprofit organizations, NASA centers, the Jet Propulsion Laboratory, and other Government agencies' Electronic proposals may be submitted via the NASA proposal data system NSPIRES or via Grants.gov. Every organization that intends to submit a proposal in response to this NRA must be registered with NSPIRES, and organizations that intend to submit proposals via Grants.gov must be registered with Grants.gov. Such registration must identify the authorized organizational representative(s) who will submit the electronic proposal. All principal investigators and other participants (e.g. co-investigators) must be registered in NSPIRES. Potential proposers and proposing organizations are urged to access the system(s) well in advance of the proposal due date(s) of interest to familiarize themselves with its structure and enter the requested information. Further information about specific program elements may be obtained from the individual Program Officers listed in the Summary of Key Information for each program element in this NRA, while questions concerning general NRA policies and procedures may be directed to Dr. Paul Hertz, Science Policy, Process, and Ethics Chief, Science Mission Directorate, NASA Headquarters, Washington, DC 20546-0001; E-mail: paul.hertz@nasa.gov; Telephone: 202-358-0986. This is a broad agency announcement as specified in FAR 6.102 (d) (2). Notwithstanding the posting of this opportunity at FedBizOpps.gov, Grants.gov, or at both sites, NASA reserves the right to determine the appropriate award instrument for each proposal selected pursuant to this announcement.

AGENCY: NSF
TITLE: Environmental Engineering
DEADLINE: March 1, 2008
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501029

In broadest terms, the field of Environmental Engineering is concerned with understanding the impacts of human activities on the natural environment and developing the scientific basis for solving, mitigating, or managing environmental problems caused by human activities. The field emerged as a separate engineering discipline during the middle third of the 20th century, in response to widespread public concern about water and air pollution and increasingly extensive environmental degradation. However, its roots extend back to early efforts in public health engineering in the late 19th century and to ancient times with regard to urban drinking water systems. The Environmental Engineering program supports fundamental research and educational activities across the broad field it serves, with the goal of applying engineering principles to understand and reduce adverse effects of solid, liquid, and gaseous discharges into land, inland and coastal waters, and air that result from human activity and that impair the ecological and economic value of those resources. It fosters cutting-edge research based on fundamental science and four types of engineering tools - - measurement, analysis, synthesis, and design. Proposals emphasizing enhancement of American Competitiveness are encouraged. Major areas of interest and activity in the program include: * Developing innovative biological, chemical, and physical treatment processes to remove and degrade pollutants from water and air * Measuring, modeling, and predicting the movement and fate of pollutants in the environment * Developing and evaluating techniques to clean up polluted sites, such as landfills and contaminated aquifers, restore the quality of polluted water, air, and land resources and rehabilitate degraded ecosystems Along with its sibling environmental programs (Environmental Technology, Environmental Sustainability, and Energy for Sustainability), the program fosters environmental sustainability through the development of techniques to minimize or avoid generating pollution. Research may be directed toward improving the cost-effectiveness of pollution avoidance, as well as developing new principles for pollution avoidance technologies. Research for new and improved sensors of environmental conditions and innovative waste reduction and recycling processes also are important components of this program. The duration of unsolicited awards is generally one to three years. The average annual award size for the program is \$90,000. Please check the NSF Chemical, Bioengineering, Environmental and Transport

Systems Division (CBET) Home Page for the two annual submission windows for unsolicited proposals. Small equipment proposals up to \$100,000 will also be considered and may be submitted during these windows. Any proposal received outside the announced dates will be returned without review. The duration of CAREER awards is five years. The submission deadline for Engineering CAREER proposals is in July every year. Please see the following URL for more information:
<http://www.nsf.gov/pubs/2005/nsf05027/nsf05027.jsp> Proposals for Small Grants for Exploratory Research (SGER), Conferences, Workshops, and Supplements may be submitted at any time, but must be discussed with the program director before submission. Please refer to the Grant Proposal Guide (GPG), January 2008, (NSF 08-1) when you prepare your proposal. Chapter II, especially, will assist you. The GPG is available for download at: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg

AGENCY: NSF
TITLE: Centers for Ocean Sciences Education Excellence
DEADLINE: March 3, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf08509

The COSEE Network, which consists of eleven coordinated COSEE Centers, fosters the integration of ocean research into high-quality educational materials, enables ocean researchers to gain a better understanding of educational organizations and pedagogy, provides educators with an enhanced capacity to understand and deliver high-quality educational programs in the ocean sciences, and provides material to the public that promotes a deeper understanding of the ocean and its influence on each person's quality of life and our national prosperity. The Division of Ocean Sciences solicits proposals to operate a Central Coordinating Office for the COSEE Network. The Central Coordinating Office organizes national oversight of the COSEE effort, enhances communication and collaboration among the Centers, and documents COSEE activities and outcomes. The Division of Ocean Sciences also solicits proposals for conducting a comprehensive evaluation of the impact of the COSEE National Network. The Division of Ocean Sciences also solicits proposals for innovative new collaborations with existing COSEE centers.

AGENCY: NSF
TITLE: Undergraduate Research and Mentoring in the Biological Sciences
DEADLINE: March 4, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06591

The goal of the Undergraduate Research and Mentoring in the Biological Sciences (URM) program is to increase the number and diversity of individuals pursuing graduate studies in all areas of biological research supported by the NSF Directorate for Biological Sciences. Support will be provided to academic institutions to establish innovative programs to engage undergraduates in a year-round research and mentoring activity. Particular emphasis will be placed on broadening participation of members of groups historically underrepresented in science and engineering: African Americans, Alaska Natives, American Indians, Hispanic Americans, Native Pacific Islanders, and persons with disabilities.

AGENCY: NASA
TITLE: ROSES 2007: NASA Energy and Water Cycle Study
DEADLINE: March 12, 2008
LINK: <http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={E529A93E-C05F-7B1E-680D-D5C7488C2F6C}&path=open>

NNH07ZDA001N, entitled "Research Opportunities in Space and Earth Sciences - 2007 (ROSES-2007)," will be available on or about February 16, 2007, by opening the NASA Research Opportunities homepage at <http://nspires.nasaprs.com/> and then linking through the menu listings "Solicitations" to "Open Solicitations." This NASA Research Announcement (NRA) solicits proposals for supporting basic and applied research and technology across a broad range of Earth and space science program elements relevant to one or more of the following NASA Research Programs: Earth Science, Heliophysics, Planetary Science, and Astrophysics. Proposal due dates are scheduled starting on May 1, 2007, and continue through April 11, 2008. Electronically submitted Notices of Intent to propose are requested for all program elements, with the first such due date being March 15, 2007. Electronic submission of proposals is required by the respective due dates for each program element, and must be submitted by an authorized official of the proposing organization. Participation is open to all categories of organizations, foreign and domestic, including educational institutions, industry, nonprofit organizations, NASA centers, the Jet Propulsion Laboratory, and other Government agencies' Electronic proposals may be submitted via the NASA proposal data system NSPIRES or via Grants.gov. Every organization that intends to submit a proposal in response to this NRA must be registered with NSPIRES, and organizations that intend to submit proposals via Grants.gov must be registered with Grants.gov. Such registration must identify the authorized organizational representative(s) who will submit the electronic proposal. All principal investigators and other participants (e.g. co-investigators) must be registered in

NSPIRES. Potential proposers and proposing organizations are urged to access the system(s) well in advance of the proposal due date(s) of interest to familiarize themselves with its structure and enter the requested information. Further information about specific program elements may be obtained from the individual Program Officers listed in the Summary of Key Information for each program element in this NRA, while questions concerning general NRA policies and procedures may be directed to Dr. Paul Hertz, Science Policy, Process, and Ethics Chief, Science Mission Directorate, NASA Headquarters, Washington, DC 20546-0001; E-mail: paul.hertz@nasa.gov; Telephone: 202-358-0986. This is a broad agency announcement as specified in FAR 6.102 (d) (2). Notwithstanding the posting of this opportunity at FedBizOpps.gov, Grants.gov, or at both sites, NASA reserves the right to determine the appropriate

AGENCY: NSF
TITLE: Science of Science and Innovation Policy
DEADLINE: March 18, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf08520

The Directorate for Social, Behavioral and Economic Sciences (SBE) at the National Science Foundation (NSF) aims to foster the development of the knowledge, theories, data, tools, and human capital needed to cultivate a new Science of Science and Innovation Policy (SciSIP). The SciSIP program underwrites fundamental research that creates new explanatory models, analytic tools and datasets designed to inform the nation's public and private sectors about the processes through which investments in science and engineering (S&E) research are transformed into social and economic outcomes. SciSIP's goals are to understand the contexts, structures and processes of S&E research, to evaluate reliably the tangible and intangible returns from investments in research and development (R&D), and to predict the likely returns from future R&D investments within tolerable margins of error and with attention to the full spectrum of potential consequences. Specifically, the research, data collection and community development components of SciSIP's activities will: (1) develop usable knowledge and theories of creative processes and their transformation into social and economic outcomes; (2) develop, improve and expand models and analytical tools that can be applied in the science policy decision making process; (3) improve and expand science metrics, datasets and analytical tools; and (4) develop a community of experts across academic institutions and disciplines focused on SciSIP. For purposes of this solicitation, the term "science metrics" refers to quantitative measures or indicators that provide summary information on the size, scope, quality, and impact of science and engineering activities, with particular focus on inputs and outputs of the science, technology and innovation system. Characterizing the dynamics of discovery and innovation is important for developing valid metrics, for predicting future returns on investments, for constructing fruitful policies, and for developing new forms of workforce education and training. The FY 2008 competition includes three emphasis areas: Analytical Tools, Model Building, and Data Development and Augmentation. The emergent body of research will develop and utilize techniques for retrospective and prospective analyses. In addition, research will provide insight into factors that propagate new ideas at levels from the molecular functioning of the human brain to the organizational, state, national and international levels. This solicitation also calls for research that improves and expands science metrics and datasets. The utilization of virtual organizations or collaboratories by social and behavioral scientists in the discovery process is included in this call for research proposals.

AGENCY: NSF
TITLE: George E. Brown, Jr. Network for Earthquake Engineering Simulation Research
DEADLINE: March 18, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf08519

The Division of Civil, Mechanical, and Manufacturing Innovation (CMMI) in the Directorate for Engineering (ENG) of the National Science Foundation (NSF) invites proposals for research that uses the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES) to advance knowledge discovery and innovation for (1) earthquake and tsunami loss reduction of our nation's civil infrastructure, and (2) new experimental simulation techniques and instrumentation for NEES. NEES comprises a network of 15 earthquake engineering experimental equipment sites available for experimentation on-site or in the field and through telepresence. NEES equipment sites include shake tables, geotechnical centrifuges, a tsunami wave basin, unique large-scale testing laboratory facilities, and mobile and permanently installed field equipment. The NEES networking cyberinfrastructure connects, via Internet2, the equipment sites as well as provides telepresence, a curated central data repository, simulation tools, and collaborative tools for facilitating on-line planning, execution, and post-processing of experiments. Projects proposed and funded under this solicitation must use one or more of the 15 NEES equipment sites and their related cyberinfrastructure. Proposals may be submitted in five categories: Individual Investigator, Small Group, Grand Challenge, Simulation Development, and Payload.

AGENCY: NSF award instrument for each proposal selected pursuant to this announcement.
TITLE: Industry/University Cooperative Research Centers Program
DEADLINE: March 28, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07537

The Industry/University Cooperative Research Centers (I/UCRCs) program develops long-term partnerships among industry, academe, and government. The centers are catalyzed by a small investment from the National Science Foundation (NSF) and are primarily supported by industry center members, with NSF taking a supporting role in their development and evolution. Each center is established to conduct research that is of interest to both the industry and the center. An I/UCRC contributes to the Nation's research infrastructure base and enhances the intellectual capacity of the engineering and science workforce through the integration of research and education.

AGENCY: NSF
TITLE: Joint Domestic Nuclear Detection Office/National Science Foundation: Academic Research Initiative
DEADLINE: April 2, 2008
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13414

In FY 2007, the Domestic Nuclear Detection Office (DNDO) within the Department of Homeland Security (DHS) will invest, in partnership with the National Science Foundation (NSF), in leading edge, frontier research at academic institutions. This transformational research effort will be focused on detection systems, individual sensors or other research that is potentially relevant to the detection of nuclear weapons, special nuclear material, radiation dispersal devices and related threats.??Research that would benefit from incorporation of social and behavioral science components is appropriate for consideration. The joint DNDO/NSF effort, in coordination with the efforts of other agencies, seeks to advance fundamental knowledge in new technologies for the detection of nuclear threats and to develop intellectual capacity in fields relevant to long-term advances in nuclear detection capability. This research, and the research community that will be built under the ARI, is seen as critical to our nation's ability to deploy effective nuclear detection measures to counter the serious threat of a nuclear terrorist attack. Proposals outside of the scope described in this solicitation will be returned without review. Research proposals on detection of biological, chemical, and conventional weapons are specifically excluded from the scope of this solicitation.

AGENCY: NSF
TITLE: Center for Research at the Interface of the Mathematical and Biological Sciences
DEADLINE: April 2, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07597

This solicitation requests proposals to establish a Center to stimulate research and education at the interface of the mathematical and biological sciences. The Center will serve the biological and mathematical communities by providing mechanisms to foster synthetic, collaborative, cross-disciplinary studies. It will play a pivotal role by improving understanding and modeling of biological problems that can be gained only by using approaches of mathematical, statistical and computational biology. The Center also will play a critical role in addressing national needs, including the area of plant and animal infectious disease modeling, and provide knowledge that will be useful to policy makers, government agencies, and society.

AGENCY: NSF
TITLE: Advanced Learning Technologies (ALT)
DEADLINE: April 25, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06535

Through the Advanced Learning Technologies (ALT) program, the CISE and EHR Directorates of NSF support research that (1) enables radical improvements in learning through innovative computer and information technologies, and (2) advances research in computer science, information technology, learning, and cognitive science through the unique challenges posed by learning environments and learning technology platforms. Integrative research approaches that build across disciplines and establish tight linkages among theory, experiment, and design are strongly encouraged. Technology goals may include systems for tutoring or assessment, modeling and sensing of cognitive or emotional states, context awareness, natural language interfaces, collaboration, knowledge management, and non-traditional goals that redefine the roles of technology in learning. Educational foci for ALT projects must include an area of science, technology, engineering, or mathematics (STEM), or general cross-cutting skills directly relevant to STEM.

AGENCY: NSF
TITLE: Emerging Frontiers in Research and Innovation
DEADLINE: April 30, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07579

The Directorate for Engineering at the National Science Foundation has established the Office of Emerging Frontiers in Research and Innovation (EFRI) to serve a critical role in focusing on important emerging areas in a timely manner. The EFRI Office is launching a new funding opportunity for interdisciplinary teams of researchers to embark on rapidly advancing frontiers of fundamental engineering research. For this solicitation, we will consider proposals that aim to investigate emerging frontiers in the following two specific research areas: (1) Cognitive Optimization and Prediction: From Neural Systems to Neurotechnology (COPN), and (2) Resilient and Sustainable Infrastructures (RESIN). EFRI seeks proposals with transformative ideas that represent an opportunity for a significant shift in fundamental engineering knowledge with a strong potential for long term impact on national needs or a grand challenge. The proposals must also meet the detailed requirements delineated in this solicitation. INFORMATION WEBCAST: The EFRI Office plans to hold an information workshop on September 5, 2008, to answer any questions about the EFRI Office and this solicitation. Details will be posted on the EFRI website (www.nsf.gov/eng/efri) as they become available.

AGENCY: NASA
TITLE: Research Opportunities in Space and Earth Sciences 2008
DEADLINE: May 9, 2008
LINK: <http://nspires.nasaprs.com/>

NNH08ZDA001N, entitled "Research Opportunities in Space and Earth Sciences - 2008 (ROSES-2008)," will be available on or about February 15, 2008, by opening the NASA Research Opportunities homepage at <http://nspires.nasaprs.com/> and then linking through the menu listings "Solicitations" to "Open Solicitations." This NASA Research Announcement (NRA) solicits proposals for supporting basic and applied research and technology across a broad range of Earth and space science program elements relevant to one or more of the following NASA Research Programs: Earth Science, Heliophysics, Planetary Science, and Astrophysics. This ROSES NRA covers all aspects of basic and applied supporting research and technology in space and Earth sciences, including, but not limited to: theory, modeling, and analysis of SMD science data; aircraft, stratospheric balloon, and suborbital rocket investigations; development of experiment techniques suitable for future SMD space missions; development of concepts for future SMD space missions; development of advanced technologies relevant to SMD missions; development of techniques for and the laboratory analysis of both extraterrestrial samples returned by spacecraft, as well as terrestrial samples that support or otherwise help verify observations from SMD Earth system science missions; determination of atomic and composition parameters needed to analyze space data, as well as returned samples from the Earth or space; Earth surface observations and field campaigns that support SMD science missions; development of integrated Earth system models; development of systems for applying Earth science research data to societal needs; and development of applied information systems applicable to SMD objectives and data. Awards range from under \$100K per year for focused, limited efforts (e.g., data analysis) to more than \$1M per year for extensive activities (e.g., development of science experiment hardware). The funds available for awards in each program element offered in this NRA range from less than one to several million dollars, which allow selection from a few to as many as several dozen proposals depending on the program objectives and the submission of proposals of merit. Awards will be made as grants, cooperative agreements, contracts, and inter- or intra-agency transfers depending on the nature of the proposing organization and/or program requirements. The typical period of performance for an award is four years, although a few programs may specify shorter or longer periods. Participation is open to all categories of organizations, foreign and domestic, including educational institutions, industry, nonprofit organizations, NASA centers, the Jet Propulsion Laboratory, and other Government agencies, without restriction on number or teaming arrangements. Note that it is NASA policy that all investigations involving non-U.S. organizations will be conducted on the basis of no exchange of funds. Proposal due dates are scheduled starting on May 9, 2008, and continue through March 27, 2009. Electronically submitted Notices of Intent to propose are requested for most program elements, with the first such due date being March 14, 2008. Electronic submission of proposals is required by the respective due dates for each program element and must be submitted by an authorized official of the proposing organization. Electronic proposals may be submitted via the NASA proposal data system NSPIRES or via Grants.gov. Every organization that intends to submit a proposal in response to this NRA must be registered with NSPIRES; organizations that intend to submit proposals via Grants.gov must also be registered with Grants.gov. Such registration must identify the authorized organizational representative(s) who will submit the electronic proposal. All principal investigators and other participants (e.g. co-investigators) must be registered in NSPIRES. Potential proposers and proposing organizations are urged to access the system(s) well in advance of the proposal due date(s) of interest to familiarize themselves with its structure and enter the requested information. Further information

about specific program elements may be obtained from the individual Program Officers listed in the Summary of Key Information for each program element in this NRA, while questions concerning general NRA policies and procedures may be directed to Dr. Yvonne Pendleton, Senior Advisor for Research and Analysis, Science Mission Directorate, NASA Headquarters, Washington, DC 20546-0001; E-mail: sara@nasa.gov; Telephone: 202-358-1182.

AGENCY: NSF
TITLE: Research Experience for Undergraduates
DEADLINE: June 6, 2008
LINK: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf07569

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. This solicitation features two mechanisms for support of student research: (1) REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research. REU Sites may be based in a single discipline or academic department, or on interdisciplinary or multi-department research opportunities with a coherent intellectual theme. Proposals with an international dimension are welcome. A partnership with the Department of Defense supports REU Sites in DoD-relevant research areas. (2) REU Supplements may be requested for ongoing NSF-funded research projects or may be included as a component of proposals for new or renewal NSF grants or cooperative agreements. Undergraduate student participants in either Sites or Supplements must be citizens or permanent residents of the United States or its possessions. Students may not apply to NSF to participate in REU activities. Students apply directly to REU Sites and should consult the directory of active REU Sites on the Web at http://www.nsf.gov/crssprgm/reu/reu_search.cfm.

AGENCY: NSF
TITLE: EAR Education and Human Resources
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13414

The Division of Earth Sciences' Education and Human Resources Program (EH) facilitates highly innovative educational activities in the earth sciences, including efforts to increase the diversity of participants and involve leading researchers in education. Activities at all levels are supported, including: 1) graduate and postdoctoral education outside the framework of normal NSF research grants; 2) undergraduate education, including the NSF-wide Research Experiences for Undergraduates Program; and 3) education activities at the K-12 level both inside and outside the classroom.

AGENCY: NSF
TITLE: Aeronomy
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11686

The Aeronomy program supports research on upper and middle atmosphere phenomena of ionization, recombination, chemical reaction, photo emission, and transport; the transport of energy, and momentum. This program also supports research into mass in the mesosphere-thermosphere-ionosphere system including the processes involved and the coupling of this global system to the stratosphere below and magnetosphere above and the plasma physics of phenomena manifested in the coupled ionosphere-magnetosphere system, including the effects of high-power radio wave modification. About the Coupling, Energetics, and Dynamics of Atmospheric Regions (CEDAR) Program The CEDAR concept originated in the mideighties and was developed over several years through workshops, symposia, and committee deliberations by nearly 100 scientists involved in aeronomical studies. These activities led to a comprehensive report that provided a framework for developing upper atmospheric research in the United States through an evolutionary strategy of instrument development and deployment coordinated with campaign activities related to the global scale, coupled, near earth environment. The program has attracted a large number of graduate students and many international collaborators. Guidance is provided by a science steering committee appointed by the NSF Aeronomy and Upper Atmospheric Facilities program directors; scientific feedback to the community is provided by newsletters and an annual summer workshop. Three broad categories embrace the scientific goals of the CEDAR program: (1) dynamics and energetics of the upper atmosphere, with particular emphasis on the hard to observe region between 80 and 150 km; (2) coupling between the mesosphere, ionosphere, thermosphere, exosphere, and magnetosphere; and (3) horizontal coupling between adjacent geographic regions. CEDAR has provided the community with improved spectrometers, interferometers, and imagers; allowed upgrades of existing facilities; and supported the development of lidars and small radars. Several facilities have been established containing a broad array of state of the art tools to provide a solid infrastructure with which to attack outstanding aeronomy problems well into the future. A report has recently been prepared that summarizes the results from the first five years of CEDAR funding.

AGENCY: NSF
TITLE: Climate and Large-Scale Dynamics (CLD)
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11699

The goals of the Program are to: (i) advance knowledge about the processes that force and regulate the atmosphere's synoptic and planetary circulation, weather and climate, and (ii) sustain the pool of human resources required for excellence in synoptic and global atmospheric dynamics and climate research. Research topics include theoretical, observational and modeling studies of the general circulation of the stratosphere and troposphere; synoptic scale weather phenomena; processes that govern climate; the causes of climate variability and change; methods to predict climate variations; extended weather and climate predictability; development and testing of parameterization of physical processes; numerical methods for use in large-scale weather and climate models; the assembly and analysis of instrumental and/or modeled weather and climate data; data assimilation studies; development and use of climate models to diagnose and simulate climate and its variations and change.

AGENCY: NSF
TITLE: Lower Atmospheric Observing Facilities
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12807

The National Science Foundation (NSF), Division of Atmospheric Sciences (ATM), Lower Atmospheric Observing Facilities (LAOF) Program consists of planning, budgeting, coordination, and oversight of multi-user national facilities that are sponsored by NSF for the geosciences research community. Program Management resides within ATM in the UCAR and Lower Atmospheric Facilities Oversight Section (ULAFOS) which provides a single point for coordination. Geosciences research often requires specialized facilities, instrumentation and field support services to carry out scientific field work that is needed to understand the complex, interdependent geophysical processes, often covering remote areas of the globe. Making platforms and instrumentation available to support scientific experiments depends upon adequate acquisition, operation, maintenance, upgrading and replacement of these facilities. Also these platforms and instruments may collect large and sometimes unique data sets that must be validated, archived and made available to the research community. Likewise both pre- and post-planning for scientific field programs (e.g., experimental design, operational plans, logistical support) in which NSF sponsored facilities are deployed is an important element of the overall program.

AGENCY: NSF
TITLE: Paleoclimate
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12727

Supports research on the natural evolution of Earth's climate with the goal of providing a baseline for present variability and future trends through improved understanding of the physical, chemical, and biological processes that influence climate over the long-term. The annual Earth System History (ESH) competition in global change research provides support for research in several focussed areas of paleoclimate science. Proposals involving research topics within ESH are not eligible for support in the Paleoclimate Program. Researchers are strongly advised to contact the Director of the Paleoclimate Program for guidance as to the suitability of their proposed research for the Paleoclimate Program or the ESH competition.

AGENCY: NSF
TITLE: Physical Oceanography
DEADLINE: No specified closing date
LINK: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=10665>

The Physical Oceanography Program supports research on a wide range of topics associated with the structure and movement of the ocean, with the way in which it transports various quantities, with the way the ocean's physical structure interacts with the biological and chemical processes within it, and with interactions between the ocean and the atmosphere, solid earth and ice that surround it.

AGENCY: NSF
TITLE: Oceanographic Centers and Facilities
DEADLINE: No specified closing date
LINK: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=10652>

NSF supports construction, conversion, acquisition, and operation of major shared-use oceanographic facilities. The University-National Oceanographic Laboratory System (UNOLS) schedules these facilities and expeditionary programs. This program supports expensive facilities that are necessary for NSF-funded research and training of

oceanographers. Examples of these facilities are ships, submersibles, large shipboard equipment, and shared-use instruments to collect and analyze data. NSF encourages local contributions from nonfederal funds; however, there is no fixed requirement for institutional contributions.

AGENCY: NSF
TITLE: Ocean Technology and Interdisciplinary Coordination
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=12724

The Oceanographic Technology and Interdisciplinary Coordination (OTIC) Program supports a broad range of research and technology development activities. Unsolicited proposals are accepted for instrumentation development that has broad applicability to ocean science research projects and that enhance observational, experimental or analytical capabilities of the ocean science research community. Specific announcements for funding opportunities are made for additional projects involving Coastal Ocean Processes, FSML: Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories and the National Ocean Partnership Program.

AGENCY: NSF
TITLE: Atmospheric Chemistry
DEADLINE: No specified closing date
LINK: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11692

Supports research to measure and model the concentration and distribution of gases and aerosols in the lower and middle atmosphere. Also supports research on the chemical reactions among atmospheric species; the sources and sinks of important trace gases and aerosols; the aqueous-phase atmospheric chemistry; the transport of gases and aerosols throughout the atmosphere; and the improved methods for measuring the concentrations of trace species and their fluxes into and out of the atmosphere.

AGENCY: U. S. Department of Energy
TITLE: Research Interest (BAA 2006-1)
DEADLINE: Anytime
LINK: <http://www.afosr.af.mil/oppts/afprop.htm>

The Air Force Office of Scientific Research (AFOSR) manages the entire basic research investment of the US Air Force (USAF). As a part of the Air Force Research Laboratory (AFRL), AFOSR's technical experts foster support and fund research within the Air Force Research Laboratory, universities, and industry laboratories to ensure the transition of research results to support USAF needs.

AFOSR's focus is on research areas that offer significant and comprehensive benefits to our national warfighting and peacekeeping capabilities. These areas are organized and managed as summarized below:

Aerospace and Materials Sciences (Structural Mechanics; Mechanics of Materials and Devices; Unsteady Aerodynamics and Hypersonics; Turbulence and Rotating Flows; Combustion and Diagnostics; Space Power and Propulsion, Metallic Materials; Ceramic and Nonmetallic Materials; Organic Matrix Composites)

Physics and Electronics (ElectroEnergetic Physics; Electromagnetic Disruption / Detection Physics; Space Electronics, University NanoSatellites; Atomic and Molecular Physics; Remote Sensing and Imaging; Optoelectronics; Components and Information Processing; Laser and Optical Physics; Quantum Electronic Solids; Semiconductor Materials; Sensors in the Space Environment; High Density Optical Memory; Space Sciences)

Chemistry and Life Sciences (Polymer Chemistry; Surface and Interfacial Science; Biophysical Mechanisms; Theoretical Chemistry; Molecular Dynamics; Chronobiology; Biomimetics, Biomaterials, and Biointerfacial Sciences, Cognition and Decision; Sensory Systems; Biological Response Profiling and Assessment)

Mathematics and Information Sciences (Dynamics and Control; Physical Mathematics and Applied Analysis; Computational Mathematics; Information Forensics and Process Integration for Networked Operations; Optimization and Discrete Mathematics; Signals Communication and Surveillance; Software and Systems; Information Fusion and Artificial Intelligence; Electromagnetics)

AFOSR primary contacts' names, telephone numbers, mailing addresses, and e-mail addresses are provided at the end of each research interest, external program description, and special program description. Anyone qualified to perform research is encouraged to contact AFOSR in accordance with the appropriate BAA point of contact and the guidelines given in this document.

Program: Mechanics & Energy Conversion Science & Technology Research

Agency: Office of Naval Research

Deadline: Anytime

URL:

http://www.onr.navy.mil/sci_tech/engineering/333_mechanics/

The Mechanics and Energy Conversion Sciences and Technology Division plans, fosters, and encourages scientific research and technology development in the areas of Energy Conversion, Hydromechanics, and Undersea Weaponry. Program Officers in the Mechanics and Energy Conversion Sciences and Technology Division have diverse backgrounds in fields of chemistry, physics, materials science, and naval weaponry to bring a unique perspective to each programmatic area.

The current programmatic areas focus basic and exploratory development on areas which will have broad impact on future Naval Forces.

Individuals seeking support are encouraged to provide a strong S&T proposal that clearly outlines a vision for a future technology of benefit to the Navy and Marine Corps while putting forward strong scientific concepts that will form the basis of this technology.

ONR is, generally speaking, looking for high risk, high pay-off approaches that could potentially offer order of magnitude increases in a specific capability/metric

AGENCY: NOAA/NOS/NCCOS/CSOR
TITLE: Great Lakes and Mid-Atlantic Programs

DEADLINE: Anytime

LINK: <http://www.grants.gov/search/search.do?oppId=14667&mode=VIEW>

NOAA/NOS/NCCOS/CSOR is soliciting proposals for three separate regional ecosystem prediction projects on (1) Invasive Species in the Great Lakes, (2) Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic, and (3) Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida.

For the Great Lakes and Mid-Atlantic programs, projects will be of up to 5 years in duration. In the Great Lakes, proposals are requested for a regional-scale ecosystem research study investigating recent and future changes in water quality, habitats and populations of living resources in the context of invasive species. For the Mid-Atlantic region, proposals are requested for a regional-scale ecosystem research study investigating the cumulative impacts of multiple stressors at the land-water interface of estuaries and bays on recreationally, economically or ecologically important living resource populations and communities. Proposals for these two programs should be regional in scale, interdisciplinary, comprehensive, integrated, and multiple investigator to develop capabilities for innovative forecasts and predictions for improved management and control capabilities. For the South Florida program, proposals will be 2-3 years in duration.

In the South Florida program, proposals are solicited to develop, undertake and conclude a consensus-building process that results in scientifically-based quantifiable goals for aquatic resources and habitats of the Florida Bay and Keys. Proposals should include a diverse and comprehensive team of managers, scientists and NGOs and be regional in scope.

Funds for the Invasive Species in the Great Lakes--A Regional Scale Approach and for the Cumulative Impacts of Stressors at the Land-Water Interface in the Mid-Atlantic programs typically will not exceed \$500,000-\$1,000,000 per project per year, exclusive of ship costs. It is anticipated that 1-3 projects will be awarded for each of these two programs with project duration of 3 to 5 years. The Ecosystem Goal-Setting in Coastal Waters and Reefs of South Florida program is expected to have a project duration of 2 to 3 years with funds not to exceed \$500,000 per project per year. It is anticipated that 1 project will be awarded for this program. Support in out years after FY 2008 is contingent upon the availability of funds.

A National Aeronautics and Space Administration (NASA) Research Announcement (NRA), entitled, "Research and Technology Development to Support Crew Health and Performance in Space Exploration Missions" (NASANNJ07ZSA002N), has been released and is available through the NASA Research Opportunities homepage at

<http://nspires.nasaprs.com/> and then linking through the menu listings "Solicitations" to "Open Solicitations."

This NRA jointly solicits ground-based, bed rest definition and flight definition proposals for the NASA Human Research Program (HRP) and the National Space Biomedical Research Institute (NSBRI). Proposals are solicited by the HRP in the areas of Bone, Cardiovascular, Muscle, Nutrition, and Lunar Analog Bed Rest Investigations. Proposals are solicited by the NSBRI in the areas of Bone Loss; Cardiovascular Alterations; Human Performance Factors, Sleep and Chronobiology; Muscle Alterations and Atrophy; Neurobehavioral and Psychosocial Factors; Nutrition, Physical Fitness and Rehabilitation; Sensorimotor Adaptation; Smart Medical Systems; and Technology Development. Proposals responding to the HRP emphases and NSBRI emphases must be submitted separately, and will result in separate evaluations and awards. Step-1 proposals are due on September 14, 2007, and invited Step-2 proposals are due on December 14, 2007. Participation is open to all categories of organizations, including educational institutions, industry, nonprofit organizations, NASA centers, and other Government agencies.

Participation is open to all categories of organizations, including educational institutions, industry, nonprofit organizations, NASA centers, and other Government agencies. Electronic proposals to HRP may be submitted via the NASA Proposal data system NSPIRES or via Grants.gov. (www.grants.gov) Electronic proposals to NSBRI must be submitted via NSPIRES.

Proposals solicited through this NRA will use a two-step proposal process. Only Step-1 proposers determined to be relevant with respect to the solicited research of this NRA will be invited to submit full Step-2 proposals. Proposals must be submitted electronically.

This email is being sent on behalf of and is intended as an information announcement to researchers associated with the NASA Exploration Systems Mission Directorate (ESMD) Human Research Program (HRP).

Thank you for your continued interest in NASA and NSBRI. Replies to this email will go unanswered, please reference the above solicitation for contact information.

NASA's Office of Education, in cooperation with the NASA Johnson Space Center is requesting proposals for a NASA Cooperative Agreement Notice, Undergraduate Student Research Program (USRP). It has been released and is available through the NASA Research Opportunities homepage at <http://nspires.nasaprs.com/> and then linking through the menu listings "Solicitations" to "Open Solicitations."

Organizations eligible to respond to this CAN are limited to higher education institutions and non-profit organizations serving higher education students. Partnerships among these institutions and/or organizations are encouraged to apply.

The NASA USRP is one of NASA's workforce development projects for undergraduate students. It will incorporate science, technology, engineering, and mathematics (STEM) activities of each of NASA's field centers and the Jet Propulsion Laboratory (JPL). Undergraduate students selected for this program will undertake research internships at NASA field centers under the tutelage of NASA scientists and engineers.

=====
Lane Smith
Research Program Coordinator
New York Sea Grant
121 Discovery Hall
Stony Brook University
Stony Brook, NY 11794-5001
631-632-9780
lsmith@notes.cc.sunysb.edu

c.