

Campus STEM Curriculum, Equipment & Infrastructure Funding Sources

Foundations

Current Calls

Deadlines: 3/31/2008, 8/31/2008. Program Number: 71818, Christensen Fund, Grants Program, 650-323-8700, x730, info@christensenfund.org, <http://www.christensenfund.org/page.asp?id=43>, Deadlines for submission of pre-proposals. Full proposals will be accepted only by invitation.

SYNOPSIS: The sponsor provides funding for bio-cultural grants that support its long-standing interest in arts, biological conservation science and education.

Deadline: 3/31/2008, Capital Challenge Grant Program, Kresge Foundation, 3215 West Big Beaver Road, Troy, MI, 48084, 248-643-9630, info@kresge.org, <http://www.kresge.org/content/displaycontent.aspx?CID=98>, Beginning April 1, 2008, only letters of intent will be accepted.

SYNOPSIS: This sponsor funds nonprofit organizations that are engaged in comprehensive campaigns designed to support institutional growth through the construction of new facilities as well as the acquisition or renovation of existing facilities, the purchase of real property, and the purchase of major integrated equipment systems. Objectives: The program supports nonprofit organizations that are working to address societal issues in the following areas: health, the environment, arts and culture, education, human services, and community development. Eligibility: Eligible applicants are: 501 (c)(3) organizations that are not classified as private foundations; government entities; religious organizations that are operated by or within religious institutions and serve secular needs, have space formally dedicated to their programs, and have financial and governing autonomy from the parent religious organization; colleges and universities that are fully accredited associate, baccalaureate and/or graduate degree-granting institutions; elementary and secondary schools that serve predominately students with physical and/or developmental disabilities; hospitals that are accredited by the Joint Commission on Accreditation of Healthcare Organizations; and international organizations that would qualify as charitable organizations under United States law and have an independent audit prepared in accordance with their recognized local standards. (cas)

Deadline: 04/07/2008, Sponsor: LI-COR Biosciences, Program Number: 82047, Title: Genomics Education Matching Fund (GEMF) Program, E-mail: jackie.potts@licor.com, Program URL: <http://www.licor.com/gemf>

SYNOPSIS: The sponsor offers support for a matching funds program to help undergraduate colleges and high schools establish or enhance their programs in genomics studies. Link to full program description:

http://www.infoed.org/new_spin/spin_prog.asp?82047

Deadline: 05/01/2008, 11/01/2008, Bullitt Foundation, Program Number: 59468, Grants Program, info@bullitt.org, <http://www.bullitt.org/grants/grantseeking>

SYNOPSIS: The sponsor provides support for the protection, restoration and maintenance of the natural physical environment of the Pacific Northwest. Eligible applicants are nonprofit, tax-exempt organizations. DEADLINE NOTE: Applicants are encouraged to contact the appropriate program officer prior to submittal. Proposals are reviewed two times a year and must be received by May 1 and November 1. Emergency grant requests, while discouraged, may be submitted at any time. Link to full program description: http://www.infoed.org/new_spin/spin_prog.asp?59468

Deadline: 6/15/2008. Dreyfus (Camille and Henry) Foundation, Inc., Program Number: 03727, Special Grant Program in the Chemical Sciences, admin@dreyfus.org,

http://www.dreyfus.org/awards/special_grant_program_chemical.shtml

SYNOPSIS: The sponsor offers support to eligible institutions projects that propose to advance the science of chemistry in innovative ways. Proposals are invited in any area consistent with the sponsor's broad objective of advancing the chemical sciences. DEADLINE NOTE. A letter of inquiry should be submitted to the sponsor for an initial assessment no later than June 15, 2008. Applicants who are invited to submit complete proposals must do so by November 13, 2008.

Deadline: Open. Equipment Donations Program, National Association for the Exchange of Industrial Resources, Headquarters, 560 McClure Street, PO Box 8076, Galesburg, IL, 61402-8076, 800-562-0955,

<http://www.naeir.org>, <http://www.naeir.org/memberhow.cfm>

SYNOPSIS: The sponsor locates and channels donations of equipment and materials to educational and other nonprofit service organizations. Products are distributed annually to recipient groups, each of which receives an average gift of \$18,000 per year in new, free merchandise, including items for clients, and items for building maintenance/remodeling, client education/training, and general organization use. Objectives: The sponsor collects and distributes donations of inventory from manufacturers, wholesalers, and retailers to schools and nonprofit organizations. Organizations which become members must agree to use the merchandise received through the sponsor in accordance with IRC section 170(e)(3), which states that the merchandise must be used for the care of the ill, needy or minors and cannot be bartered, traded or sold. The merchandise can be given directly to the qualifying individuals an organization serves or used in the administration of the organization. Eligibility: Eligible applicants include schools and 501(c)3 nonprofit organizations. Funding: Members pay only for shipping and handling costs and are guaranteed to receive material valued at a minimum of double the cost of membership. The annual membership fee is \$595 (Five 200 plus page catalogs). Additional memberships per organization are \$250.

Deadline: Open. Intel Foundation Grants Program, 2200 Mission College Blvd., Santa Clara, CA, 95052, 408-765-8080, grants@intel.com, <http://www.intel.com/community/grant.htm>

SYNOPSIS: The sponsor provides support to maintain and enhance the quality of life in the communities where the company has a major presence. **Objectives:** The sponsor's primary giving focus is education; the sponsor has strong interest in supporting K-12/higher education and community programs that deliver the kind of educational opportunities that all students will need to prepare themselves to succeed in the 21st century. The sponsor vigorously supports education through grants for programs that advance science, math and technology education, particularly for women and underserved populations. In addition, the sponsor is committed to the responsible use of natural resources, and funding for environmental programs will be considered. Priority is given to programs with educational and technological components. The sponsor will support additional programs that improve the quality of life in its site communities. **Eligibility:** Grants are only considered for non-profit organizations which have tax exemption status under IRS Code Section 501(c)(3). Exceptions include publicly funded academic institutions. Typically, the sponsor will not fund programs outside its site communities in Arizona, California, Colorado, Massachusetts, New Jersey, New Mexico, Oregon, Texas, Utah, and Washington. (cmb)

Deadline: Open. Adaptec, Contact: Mary Camarata, Corporate Contributions Committee, 408-957-1630, mary_camarata@adaptec.com, http://www.adaptec.com/en-US/company/about/_corporate/adaptec_corpcontributions.htm

SYNOPSIS: The sponsor makes grants to non-profit organizations that benefit the communities where the Company operates. Support by the Company may be given as financial grants, donation of product and equipment, educational scholarship assistance, and matching employee gifts. **Objectives:** Funding priorities include: Education and Research--Programs which lower the drop-out rate of youth in accredited schools and colleges; address career development and preparation; job training and placement; educational scholarship assistance; and investment in higher education, primarily in engineering-related university programs. Health and Human Services--Providing assistance to research cures for devastating diseases, emergency shelter and subsistence for the homeless, treatment and assistance for abused spouses and children, drug and alcohol rehabilitation, and supporting organizations that strengthen youths and families. Culture and the Arts--Helping people enjoy life more fully through music, dance, art museums, opera, theater and performing arts groups.

Deadline: Open. Coca-Cola Foundation, Grants Administration, 404-676-2568, http://www2.coca-cola.com/citizenship/foundation_guidelines.html

SYNOPSIS: The sponsor supports educational programs primarily within three main areas: higher education, classroom teaching and learning, and international education. Programs support scholarships for aspiring students; encourage and motivate young people to stay in school; and foster cultural understanding. **Objectives:** The sponsor devotes much of its efforts to partnership in three main areas: Higher Education--pipeline programs connecting various levels of education that encourage students to stay in school and to proceed with confidence to college and perhaps graduate school; scholarship programs in support of graduate and undergraduate students; and minority advancement in the form of scholarships, urban programs and cultural diversity

programs. Classroom Teaching and Learning--innovative K-12 public school programs; teacher development programs; and smaller projects dealing with specific activities in the elementary and secondary classroom. Global Education--global exchange programs which encourage international studies, global understanding, or student faculty exchange; and programs outside the United States promoting education. Eligibility: Applicants must have tax-exempt status under Section 501(c)(3) of the Internal Revenue Code, or the equivalent. Eligible applicants are colleges and universities, elementary and secondary school teachers, teacher-training programs, educational programs for minority students, and global educational programs.

Deadline: Open. Lockheed Martin Corporation Grants Program, 6801 Rockledge Drive, MP-178, Bethesda, MD, 20817, <http://www.lockheedmartin.com/wms/findPage.do?dsp=fec&ci=13036&rsbci=12908&fti=0&ti=0&sc=400>

SYNOPSIS: Philanthropic contributions are made primarily to programs of nationwide interest and programs in geographic areas of the corporation's operations. Areas of funding interest include: K-16 math, science and engineering education; culture; civic and public interest; environment; and health and human services. Objectives: Areas of funding interest include: K-16 math, science and engineering education; culture; civic and public interest; environment; and health and human services. Eligibility: Eligible applicants must: have a non-profit tax exempt classification under Section 501(c)(3) of the Internal Revenue Code, or be a public elementary/secondary school, or be a qualifying US-based institute of higher education; align with one or more of the sponsor's focus areas: Education, Customer & Constituent Relations and Community Outreach; and be located or operate in a community in which the sponsor has employees. (bjv)

Deadline: Open. Motorola Foundation Grants Program, 847-576-6200, Giving@motorola.com, <http://www.motorola.com/content.jsp?globalObjectId=8145>

SYNOPSIS: The sponsor focuses its funding on education, especially programs that support math and science teacher-training programs and charitable organizations that excite young people about these subjects. Objectives: Through the foundation, the sponsor nurtures relationships with local, national and international non-profit organizations — to extend resources to communities in need and to help expand the scope of their missions. They support important causes in three ways: 1) Through cash donations; 2) Through product donations; and, 3) By enabling employees to participate in volunteer and charitable-giving programs. The sponsor's strategic focus emphasizes the following: Education: With programs that encourage an interest in science, technology, engineering and math — particularly among girls and the underserved minorities. Connecting the unconnected: To help bring the transformative power of wireless communication to communities that might otherwise be overlooked. Critical community needs: To support a wide variety of programs that have a direct impact in the communities where we do business. Employee involvement: With their time, energy and pocketbooks, Motorola employees play a crucial role in nearly all of our philanthropic efforts.

Deadline: Open. AT&T Foundation, Laura Sanford, President, 175 E. Houston Street, PO Box 2933, San Antonio, TX, 78299-2933, <http://www.att.com/gen/corporate-citizenship?pid=7763>

SYNOPSIS: The sponsor supports K-12 and higher education. Accredited public and private elementary and secondary schools, accredited public and private two- and four-year institutions of higher education, and educational nonprofit organizations are eligible for consideration. **Objectives:** The sponsor supports initiatives that help students (especially nontraditional and underserved students) successfully complete high school and/or prepare for and gain access to college and successfully complete college; integrate technology into K-16 instruction and administration; develop community and civic leadership capacity; and encourage higher education technology-workforce development in areas such as computer science, information technology, math, science and engineering. **Funding priorities are:** educational programs that develop community and civic leadership capacity; programs that help students successfully complete high school and/or prepare for and gain access to college (especially nontraditional and underserved students); programs that help students successfully complete college (especially nontraditional and underserved students); technology integration into K-16 instruction and administration; and higher education technology workforce development (e.g. Computer Science, Information Technology, Math, Science & Engineering). **Eligibility:** The sponsor prefers to work with 501(c)(3) public charity or government instrumentalities that have clearly stated objectives, long-range planning, active participation of the governing board and strategies that incorporate diversified sources of support. The sponsor also considers grants to organizations that qualify as government instrumentalities, including public libraries, police and fire departments and publicly funded social services agencies.

Deadline: Open. Anderson-Rogers Foundation, Program Number: 95926, Title: Grants Program, <http://foundationcenter.org/grantmaker/arfdn/procedure.html>

SYNOPSIS: The sponsor makes grants to organizations that address a variety of social and environmental needs. **DEADLINE NOTE:** Inquiry letters may be submitted at any time during the year. Applicants will be notified if the sponsor wishes them to submit a full proposal. Link to full program description: http://www.infoed.org/new_spin/spin_prog.asp?95926

Deadline: Open. Kresge Foundation, Bricks and Mortar, Sandra Ambrozy, smambrozy@kresge.org, http://www.kresge.org/programs/bricks_mort.htm, **Deadline Note: Applications may be submitted at any time, but only one per institution in any twelve-month period.**

The sponsor awards challenge grants to organizations operating in the areas of higher education (awarding baccalaureate and/or graduate degrees), health care/long-term care, human services, science and the environment, arts and humanities, and public affairs for construction/renovation of facilities and the purchase of major capital equipment and real estate.

Deadline: Open. SBC Foundation Grants Program, SBCFDN@txmail.sbc.com

http://www.sbc.com/Common/files/doc/SBC_Foundation_Guidelines_and_Applications.doc

Support is provided to nonprofit organizations for programs that increase access to technology, broaden technology training and professional skills development, integrate technology to enhance education and economic development, and reach disadvantaged populations.

Deadline: Open. Abbott Laboratories Fund, Program Number: 15009, Grants Program, http://abbottfund.org/PDFs/Fund_Guidelines.pdf

SYNOPSIS: The sponsor invests in creative ideas that promote science and medical innovation, expand access to health care, and strengthen communities worldwide. Link to full program description: http://www.infoed.org/new_spin/spin_prog.asp?15009

Past Calls

Past Deadline: 6/1/2007. United Engineering Foundation, Grants Program, 973-244-2328, engfnd@aol.com, <http://www.uefoundation.org/grants.html>, Program Number: 52548, The sponsor will invited selected applicants to submit a formal grant proposals. Grant proposals are due August 1, 2007.

SYNOPSIS: The sponsor provides support to advance engineering arts and sciences for the welfare of humanity.

Past Deadline: 11/4/2005. American Association for the Advancement of Science Merck/AAAS Undergraduate Science Research Program, 202-326-6400, webmaster@aaas.org, <http://nt1-ehrweb.aaas.org/merck/>

The sponsor offers support to public and private primarily undergraduate colleges and universities to enhance undergraduate science education in the areas of biology and chemistry and, in particular, to encourage programs that foster understanding of the interrelationship of these sciences. Awards of up to \$60,000 over three years will be made to encourage students to pursue graduate education in biology and chemistry.

Past Deadline: 1/15/2008. American Association of University Women Educational Foundation Community Action Grants, Dept. 60, 301 ACT Drive, Iowa City, IA, 52243-4030, 319-337-1716 x60, aauw@act.org, http://www.aauw.org/fga/fellowships_grants/community_action.cfm

SYNOPSIS: The sponsor provides seed money to individual women, AAUW branches, AAUW state organizations, and community-based nonprofit organizations. Grants ranging from \$2,000 to \$10,000 are available for one or two years. Objectives: One-year grants provide seed money for new projects. Topic areas are unrestricted, but should include a clearly defined activity that promotes education and equity for women and girls. Two-year grants provide start-up funds for longer-term programs that address the particular needs of the community and develop girls' sense of efficacy through leadership or advocacy opportunities. Topic areas are unrestricted, but should include a clearly defined activity that promotes education and equity for women and girls. Eligibility: Applicants must be women who are U.S. citizens or permanent residents. Grant projects

must have direct public impact, be nonpartisan, and take place within the United States or its territories. Funding: The sponsor awards two-year grants ranging from \$5,000 to \$10,000 and one-year grants of \$2,000 to \$7,000. (edl)

Past Deadline: 2/6/2008. Program Number: 86379, Johnson (Robert Wood) Foundation, Healthy Eating Research: Building Evidence to Prevent Childhood Obesity--Round 3, Contact: Kathy Kosiak, Research Coordinator, 800-578-8636, [healthyeating.umn.edu](http://www.rwjf.org),

http://www.rwjf.org/files/applications/cfp/cfp_HER32007.pdf

SYNOPSIS: The sponsor offers support for research on environmental and policy strategies to promote healthy eating among children to prevent childhood obesity, especially among low-income and racial/ethnic populations at highest risk for obesity. Special emphasis will be given to research projects that will benefit the children at greatest risk for obesity: African-American, Hispanic, Native American and Asian/Pacific Islander children, and children living in low-income communities.

Past Deadline: 03/10/2008, Sponsor: Entergy Corporation, Program Number: 72589, Title: Environmental Stewardship Program, E-mail: cminor@entergy.com, http://www.entergy.com/our_community/environmental_grants.aspx

SYNOPSIS: The sponsor provides funding for environmental stewardship -- activities, programs or projects that go beyond compliance with environmental laws and regulations. Program description: http://www.infoed.org/new_spin/spin_prog.asp?72589

Past Deadline: 03/16/2007 Genentech Foundation for Biomedical Sciences, Program Number: 85292, Grants Program,

<http://www.gene.com/gene/about/community/gfbs/guidelines.jsp>

SYNOPSIS: Foundation funds are to be used only for direct support of education and research in the biomedical sciences, specifically including programs and organizations fostering the participation in biomedical science of under-represented minorities and underprivileged groups. Link to full program description: http://www.infoed.org/new_spin/spin_prog.asp?85292

Campus STEM Curriculum, Equipment & Infrastructure Funding Sources

Governmental Agencies

Programmatic Funding Opportunities.

Current Calls

Deadline: 4/15/2008. National Institute of Environmental Health Sciences/NIH/DHHS, RFA-ES-07-006--Superfund Basic Research and Training Program (P42), Contact: Claudia Thompson, Ph.D., 919-541-4638, thomps14@niehs.nih.gov, Program Number: 94871,

<http://grants1.nih.gov/grants/guide/rfa-files/RFA-ES-07-006.html>,

SYNOPSIS: The sponsor provides support for Superfund Basic Research and Training Program [referred to as the Superfund Basic Research Program (SBRP)]. SBRP grants will support coordinated, multi-project, multi- and interdisciplinary research programs to address the mandates legislated under the Superfund Amendments and Reauthorization Act of 1986. These mandates include the development of 1) methods and technologies to detect hazardous substances in the environment; (2) advanced techniques for the detection, assessment, and evaluation of the effect on human health of hazardous substances; (3) methods to assess the risks to human health presented by hazardous substances; and (4) basic biological, chemical, and physical methods to reduce the amount and toxicity of hazardous substances. The objective for the SBRP is to develop a holistic research agenda for the protection of human health. This is accomplished by the establishment of interdisciplinary programs that link and integrate biomedical research with related engineering, hydrogeologic, and ecologic components within the context of unique scientific themes developed by the applicant. This RFA will use the P42 multi-project grant mechanism.

Deadline: 4/30/2008, Directorate for Engineering/NSF, Innovations in Engineering Education, Curriculum, and Infrastructure (IEECI), Program Number: 95732, Contact: Susan C. Kemnitzer, 703-292-5347,

<http://www.grants.gov/search/search.do?oppId=16682&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor's program supports research which addresses three basic issues related to engineering education: (1) how students best learn the ideas, principles, and practices to become creative and innovative engineers, and how this learning is measured; and (2) research that helps the community understand how to better attract a more talented and diverse student body, in particular U.S. citizens and permanent residents, to all levels of engineering study. This would also include research to understand how to increase student interest in engineering by leveraging partnerships among engineering schools, school districts and exemplary non-profit organizations to recruit and retain engineering students. Finally (3), this program will support projects to

investigate potential models for the evaluation of and assessment of how successful teaching, advising, and mentoring leads to improved retention and graduation, and ultimately, to a sound business model for engineering education.

Deadline: 5/20/2008. Course, Curriculum, and Laboratory Improvement (CCLI), Directorate for Education and Human Resources/NSF, Contact: Myles Boylan, Program Director, Division of Undergraduate Education, 703-292-4617, mboylan@nsf.gov,

<http://www.grants.gov/search/search.do?mode=VIEW&oppId=12313>

SYNOPSIS: The program seeks to improve the quality of science, technology, engineering, and mathematics (STEM) education for all undergraduate students. The program supports efforts to create new learning materials and teaching strategies, develop faculty expertise, implement educational innovations, assess learning and evaluate innovations, and conduct research on STEM teaching and learning. The program supports three types of projects representing three different phases of development, ranging from small, exploratory investigations to large, comprehensive projects. Approximately \$34 million is available to fund seventy to ninety awards. All proposals must contribute to the development of exemplary undergraduate STEM education. Proposals may focus on one or more of the components of this cycle. Creating Learning Materials and Teaching Strategies: Guided by research on teaching and learning, by evaluations of previous efforts, and by advances within the disciplines, projects should develop new learning materials and tools, or create new and innovative teaching methods and strategies. Projects may also revise or enhance existing educational materials and teaching strategies, based on prior results. All projects should lead to exemplary models that address the varied needs of the Nation's diverse undergraduate student population.

Deadline(s): 6/6/2008, 8/18/2008. Research Experiences for Undergraduates--Sites, Directorate for Education and Human Resources/NSF, Contact: R. Corby Hovis, 703-292-4625, chovis@nsf.gov,

<http://www.nsf.gov/pubs/2007/nsf07569/nsf07569.htm>,

<http://www.grants.gov/search/search.do?oppId=14439&mode=VIEW>, Deadline Note: Chemistry REU Site proposals are due August 18, 2008.

SYNOPSIS: The program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation. The REU program aims to provide appropriate and valuable educational experiences for undergraduate students through participation in research. REU projects involve students in meaningful ways in ongoing research programs or in research projects designed for the REU program. REU Sites are based on independent proposals, submitted at an annual deadline date, to initiate and conduct projects that engage a number of undergraduate 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. The sponsor is particularly interested in increasing the numbers of women, underrepresented minorities, and persons with disabilities in research. REU Site awards have durations of one to five years, with a three-year duration being typical in most NSF directorates.

Deadline: 6/15/2008. Workforce Program in the Mathematical Sciences, Directorate for Mathematics and Physical Sciences/NSF, Bruce Palka, Division of Mathematical Sciences, 703-292-4856, bpalka@nsf.gov,

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503233, Deadline Note: The window for full proposals is between May 15, 2008 and June 15, 2008.

SYNOPSIS: The program is interested in activities centered on education through research involvement for trainees at the undergraduate through postdoctoral educational levels. Activities that broaden participation in the mathematical sciences are of significant interest to the Division of Mathematical Sciences. Objectives: The long-range goal of the DMS Workforce Program is to increase the number of well-prepared U.S. citizens, nationals, and permanent residents who successfully pursue careers in the mathematical sciences and in other NSF-supported disciplines. Among intermediate goals to this end are improvements in recruitment, retention, education, and placement of trainees in the mathematical sciences. The program is particularly interested in activities that improve: recruitment and retention: increasing the number and diversity of U.S. students who successfully pursue undergraduate and graduate degrees in mathematics and statistics; educational breadth: broadening graduate education and undergraduate education content in the mathematical sciences to prepare students for a wider range of career opportunities; and professional development: enhancing the professional skills of mathematical sciences postdoctoral associates, graduate students, and undergraduate students to better prepare them for both academic and nonacademic employment. The program welcomes unsolicited proposals for activities that address the program goals in innovative and creative ways. Proposals must clearly identify: the goals to be achieved; the specific new activities to be conducted, the way in which these address the goals, and the way in which the activities significantly differ from or enhance common practice; measurable proposed outcomes for the project; specific methods for evaluation of the success of the activity and for assessment of progress toward the goals to be achieved, and a budget commensurate with the proposed activity. The program particularly seeks unsolicited proposals for activities that are: novel and potentially transformative, in that they promise extraordinary outcomes; portable, in the sense that they potentially can be duplicated at other institutions; sustainable, meaning that the activity can be continued in the absence of external funding; likely to have large impact in terms of the numbers of trainees affected; and exemplary, in that they can serve as national models for education through research involvement.

Deadlines: 7/12/2008. Directorate for Biological Sciences/NSF, Cellular Systems Cluster, Contact: Eve Barak, Program Director, 703-292-7113, ebarak@nsf.gov, Program Number: 93830,

<http://www.grants.gov/search/search.do?mode=VIEW&oppId=10440>,

SYNOPSIS: The sponsor provides funding for research focusing on the structure, function, and regulation of plant, animal and microbial cells and their interactions with the environment and with one another.

Deadline: Open. EAR Education and Human Resources, Directorate for Geosciences/NSF, Contact: Lina Patino, Division of Earth Sciences, 703-292-5047,

lpatino@nsf.gov,

<http://www.grants.gov/search/search.do?oppId=14050&mode=VIEW>

SYNOPSIS: The sponsor provides funding to facilitate highly innovative educational activities in the earth sciences, including efforts to increase the diversity of participants and involve leading researchers in education. Approximately \$4 million is available to fund thirty awards. **Objectives:** Activities at all levels are supported, including: graduate and postdoctoral education outside the framework of normal NSF research grants; undergraduate education, including the NSF-wide Research Experiences for Undergraduates Program; and education activities at the K-12 level both inside and outside the classroom. **Eligibility:** Eligible applicants include colleges and universities, nonprofit, non-academic organizations, for-profit organizations, state and local governments, and unaffiliated individuals.

Research in Undergraduate Institutions (RUI)--Shared Research Instrumentation and Tools, Directorate for Biological Sciences/NSF, Contact: Henry N. Blount, Program Director, Office of Integrative Activities, 4201 Wilson Boulevard, Room 1112S, Arlington, VA, 22230, 703-292-8683, hblount@nsf.gov,

<http://www07.grants.gov/search/search.do;jsessionid=HqvTbTFvGj9fbjkB7GsKfVt5ZBTb0shJQHkqW9cLnk6qhS2C2Q0!1892210659?oppId=2326&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor provides funding for proposals that are for purchasing or upgrading instrumentation, and for developing new instrumentation to extend current capabilities. Proposals are accepted in all fields of science and engineering supported by the sponsor, including research on learning and education. **Objectives:** The specific objectives of RUI are to support high-quality research by faculty members of predominantly undergraduate institutions; strengthen the research environment in academic departments that are oriented primarily toward undergraduate instruction; and promote the integration of research and education. The involvement of undergraduate students is an important feature of RUI, providing them with research-rich learning environments. However, the overriding purpose of RUI is the support of faculty research, which maintains faculty members' intellectual vibrancy in the classroom and research community. Proposals may be submitted under RUI to all NSF research directorates for purchasing or upgrading instrumentation or equipment needed for the research of several faculty members and/or developing new instrumentation that will extend current capability in terms of sensitivity or resolution, or that will provide new or alternative techniques for detection and observation. Instrumentation/equipment requests may be for single items or multiple-component systems. For fields in which research depends heavily on the availability of information from expensive databases, multi-investigator RUI proposals requesting funding for access to such databases will be considered.

Past Calls

Past Deadlines: 4/20/2007, Directorate for Education and Human Resources/NSF, Cooperative Activity with Department of Energy Programs for Education and

Human Resource Development, Program Number: 78277, Contact: Marilyn Suiter, 703-292-5121, msuiter@nsf.gov, http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5632&org=NSF&sel_org=NSF&from=fund

SYNOPSIS: The sponsors are implementing collaboration between the agencies' programs for the development of human resources in Science, Technology, Engineering and Mathematics (STEM). During FY 2007, NSF will support students and faculty from participating NSF projects who are accepted as participants in one of four DoE initiatives that provide hands-on research opportunities in DoE national laboratories during the summer.

Past Deadline: 4/20/2007. Cooperative Activity with Department of Energy Programs for Education and Human Resource Development, Directorate for Education and Human Resources/NSF, Contact: Marilyn Suiter, 703-292-5121, msuiter@nsf.gov,

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5632&org=NSF&sel_org=NSF&from=fund

SYNOPSIS: The sponsors are implementing collaboration between the agencies' programs for the development of human resources in Science, Technology, Engineering and Mathematics (STEM). During FY 2007, NSF will support students and faculty from participating NSF projects who are accepted as participants in one of four DoE initiatives that provide hands-on research opportunities in DoE national laboratories during the summer. Objectives: The Principal Investigators (PIs) of National Science Foundation (NSF) awards managed by one of the NSF programs serving STEM education that often has participation by faculty, undergraduate students and/or pre-service teachers (see list below) are invited to consider participating in a cooperative effort between NSF and the Department of Energy (DoE) Office of Science: Advanced Technological Education (ATE); Centers for Learning and Teaching (CLT); Centers of Research Excellence in Science and Technology (CREST); Computational Science Training for Undergraduates in the Mathematical Sciences (CSUMS); Computer Science, Engineering, and Mathematics Scholarships (CSEMS); Federal Cyber Service: Scholarship for Service (SFS); Historically Black Colleges and Universities Undergraduate Program (HBCU-UP); Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences (UBM); Louis Stokes Alliances for Minority Participation (LSAMP); Nanotechnology Undergraduate Education (NUE); NSF Collaboratives for Excellence in Teacher Preparation (CETP); NSF Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM); Research on Disabilities Education (RDE); Research on Gender in Science and Engineering (RGSE); Robert Noyce Scholarship Program; Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP); Teacher Professional Continuum (TPC) Program; and Tribal Colleges and Universities Program (TCUP). During FY 2007, NSF will support students and faculty from participating NSF projects (see list above) who are accepted as participants in one of four DoE initiatives that provide hands-on research opportunities in DoE national laboratories during the summer: Science Undergraduate Laboratory Internships (SULI), Faculty and Student Teams (FaST), Community College Institutes (CCI), and Pre-Service Teacher (PST) Internships.

Eligibility: In FY 2007, undergraduate students (two-year and four-year schools) may apply to DoE to participate in SULI or PST internships. Students enrolled in community colleges may participate in CCI or SULI, and, if they are pre-service teachers, PST.

Past Deadline: 4/30/2005. EPA Environmental Education Training Program, Kathleen MacKinnon, mackinnon.kathleen@epa.gov, <http://www.epa.gov/enviroed/educate.html>,

The sponsor provides support to deliver environmental education training and long-term support to education professionals across the U.S. to enable them to effectively teach about environmental issues. Only one award will be made under this program to an eligible institution or consortium of such institutions. The award will be made as a one year cooperative agreement.

Past Deadline: 5/18/2006. Directorate for Biological Sciences/NSF, Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences, Samuel M. Scheiner, Program Director, scheine@nsf.gov, <http://www.nsf.gov/pubs/2006/nsf06541/nsf06541.htm>,

The sponsor provides support for projects designed to enhance undergraduate education and training at the intersection of the biological and mathematical sciences and to better prepare undergraduate biology or mathematics students to pursue graduate study and careers in fields that integrate the mathematical and biological sciences. It is anticipated that \$3.2 million will be available to fund six to nine projects.

Past Deadline(s): 5/24/2007, 9/6/2007. Mathematics and Science Education Research Grants, Institute of Education Sciences/Department of Education, Dr. Christina Chhin, 202-219-2280, Christina.Chhin@ed.gov, http://ies.ed.gov/funding/doc/2008305.doc#PII_MS2

SYNOPSIS: The Institute intends for the Mathematics and Science Education research program to develop and evaluate mathematics and science interventions (e.g., curricula, instructional approaches) and assessments. The long-term outcome of this program will be an array of tools and strategies (e.g., curricula, programs) that have been demonstrated to be effective for improving mathematics and science learning and achievement.

Objectives: The Institute intends for the research program on Mathematics and Science Education (Math/Science) to fulfill five goals: (1) identifying curriculum and instructional practices that are associated with better mathematics or science outcomes, as well as mediators and moderators of the relations between these practices and student outcomes; (2) developing new curricula and instructional approaches to mathematics and science education that will eventually result in improving mathematics and science achievement; (3) establishing the efficacy of fully developed curricula and instructional approaches to mathematics and science education with small efficacy or replication trials; (4) providing evidence on the effectiveness of mathematics and science curricula and instructional approaches that are implemented at scale; and (5) developing and validating assessments for diagnosing sources of mathematics difficulties. The long-term outcome of this program will be an array of tools and strategies (e.g., curricula, programs) that have been demonstrated to be effective for improving mathematics and science learning and achievement.

Past Deadline: 6/13/2007. Fund for the Improvement of Postsecondary Education-- Comprehensive Program, Office of Postsecondary Education/Department of Education, Contact: Levenia Ishmell, 202-502-7668, Levenia.Ishmell@ed.gov, <http://a257.g.akamaitech.net/7/257/2422/01jan20071800/edocket.access.gpo.gov/2007/07-2341.htm>

SYNOPSIS: The sponsor provides support for grants and cooperative agreements to improve postsecondary education opportunities. It supports reforms, innovations, and improvements of postsecondary education that respond to problems of national significance serve as national models. The sponsor estimates that sixteen to twenty awards will be made. The sponsor is particularly interested in applications that meet one or more of the following priorities: Projects encouraging higher levels of access, persistence, and completion of graduation requirements for higher education. Projects aligning curriculum on a state or multi-state level between high schools and colleges, and between two-year and four-year postsecondary programs, to ensure continuing academic progress and transferability of credits. Projects improving the mathematics and science proficiency of postsecondary students including preservice math and science teachers. Projects to enable postsecondary students, including preservice teachers, to achieve proficiency or advanced proficiency or postsecondary institutions to develop programs in one or more of the less commonly taught languages: Arabic, Chinese, Korean, Japanese, Russian, and languages in the Indic, Iranian, and Turkic language families.

Past Deadline: June 13, 2007. Environmental Protection Agency's National Center for Environmental Research, <http://es.epa.gov/ncer/>

Subject: FIPSE Grant application announcement for FY 2007. The Education Department has published a late notice inviting application for awards from the Fund for the Improvement of Post-Secondary Education (FIPSE) for the fiscal year that will begin October 1 (FY 2007). Individual award size and total award pool are quite modest. Invitational priorities are in areas including access, K-12/IHE curriculum alignment, STEM fields, and proficiency in less common languages. James M. Gelb, Assistant Vice Chancellor for Federal Relations, The California State University, 202.434.8060 (phone), 202.434.8066 (fax), 202.365.5668 (cell), jpgelb@calstate.edu

Past Deadlines: 6/29/2007, Cooperative State Research, Education, & Extension Service/Department of Agriculture, Higher Education Multicultural Scholars Programs--Special Experiential Learning Grants, Program Number: 73209, Contact: Dr. Audrey A. Trotman, 720-1973, MSP@csrees.usda.gov, http://www.csrees.usda.gov/funding/rfas/pdfs/07_multicultural_selg.doc

SYNOPSIS: The sponsor announces the availability of grant funds and requests applications for the Higher Education Multicultural Scholars Program (MSP) – Special Experiential Learning Grants (SEL) for fiscal year (FY) 2007 to meet national and international needs for training food and agricultural scientists and professionals. The amount available for support of this program in FY 2007 is approximately \$990,000.

Past Deadlines: 7/12/2007, 1/12/2008. Directorate for Biological Sciences/NSF, Physiological and Structural Systems, Contact: Dona Boggs, 703-292-8413,

dboggs@nsf.gov, Program Number: 91741,

<http://www.grants.gov/search/search.do?oppId=12548&mode=VIEW>

SYNOPSIS: The sponsor supports research aimed at furthering the understanding of organisms as integrated units of biological organization.

Past Deadline: 8/21/2007, Defense University Research Instrumentation Program (DURIP), Air Force Office of Scientific Research, Contact: Ms. Susan Mason, ATTN: PIE/DURIP, 703-696-5944, susan.mason@afosr.af.mil,

<http://www.grants.gov/search/search.do?oppId=14271&mode=VIEW>

SYNOPSIS: The Air Force Office of Scientific Research provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists and engineers in areas important to national defense by providing funds for the acquisition of research equipment between \$50,000 and \$1,000,000. Eligible applicants are U.S. institutions of higher education with degree granting programs in science, math, and/or engineering. Objectives: The Air Force Office of Scientific Research, in conjunction with the Office of Naval Research (ONR), and the Army Research Office (ARO), provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists and engineers in areas important to national defense by providing funds for the acquisition of research equipment. (See SPIN program #'s 34160 for ONR information, and 34158 for ARO information). A central purpose of the program is to provide equipment to enhance research-related education. Proposals must address the impact of the equipment on the institution's ability to educate, through research, students in the disciplines important to Department of Defense missions.

Past Deadline: 8/21/2007, Defense University Research Instrumentation Program (DURIP) (ARO), Department of the Army, Contact: Dr. Kurt Preston, U.S. Army Research Office, ATTN: AMSRL-RO-RI DURIP, 919-549-4234, kurt.preston@us.army.mil,

http://www.afosr.af.mil/Documents/funding_DURIPAFOSRBAA2006-4.pdf

SYNOPSIS: The Army Research Office provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists and engineers in areas important to national defense by providing funds for the acquisition of research equipment between \$50,000 and \$1,000,000. Eligible applicants are U.S. institutions of higher education with degree granting programs in science, math, and/or engineering. Objectives: The sponsor, in conjunction with the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR) provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists and engineers in areas important to national defense by providing funds for the acquisition of research equipment. (See SPIN program #'s 34144 for AFOSR information, and 34160 for ONR information). A central purpose of the program is to provide equipment to enhance research-related education. Therefore proposals must address the impact of the equipment on the institution's ability to educate, through research, students in disciplines important to Department of Defense (DOD) missions. Eligibility: This competition is open only to U.S. institutions of higher education, other than federal government, with degree granting programs in science, math, and/or engineering.

Past Deadlines: 9/15/2005, 2/15/2006. Directorate for Social, Behavioral and Economic Sciences/NSF, Developing Global Scientists and Engineers, <http://www.nsf.gov/pubs/2004/nsf04036/nsf04036.htm>,

The sponsor provides support for international research and education for early career stages of scientists and engineers, i.e., as undergraduates and graduate students. It is anticipated that \$900,000 will be available to fund twenty awards.

Past Deadline: 9/18/2007. Science, Technology, Engineering and Mathematics Talent Expansion Program (STEP), Directorate for Education and Human Resources/NSF, Susan Hixson, Lead Program Director, Division of Undergraduate Education, 703-292-4623, shixson@nsf.gov,

<http://www.grants.gov/search/search.do?oppId=14447&mode=VIEW>,

SYNOPSIS: The sponsor provides funding for projects that increase the number of students (U.S. citizens or permanent residents) pursuing and receiving associates or baccalaureate degrees in established or emerging fields within science, technology, engineering, and mathematics (STEM). Objectives: Funding is provided in two areas: Type I: Program activities under the Type I competition should be efforts aimed at implementing strategies that will lead to an increase in the number of students (United States citizens or permanent residents) pursuing and obtaining STEM degrees at institutions with baccalaureate degree programs; or completing associate degrees in STEM fields or completing credits toward transfer to a baccalaureate degree program in STEM fields at community colleges. The goal of the project must be to increase the total graduation numbers of such students at the institution(s), and all STEP proposals must include specific numerical targets for these increases. Projects may focus on the retention and/or recruitment of undergraduate students into STEM fields.

Past Deadline: 9/30/2006. National Institute of Standards & Technology/Technology Administration/DOC, Small Grants Programs--Building Research and Cooperative Agreements Program, Karen Perry, 301-975-5910,

<http://www.surf.nist.gov/pdf/2003freg.pdf>

The sponsor will provide grants and cooperative agreements in the following fields of research: Structures, Construction Metrology and Automation, Inorganic Materials, Polymeric Materials, HVAC & R Equipment Performance, Mechanical Systems and Controls, Heat Transfer and Alternative Energy Systems, Computer Integrated Building Processes, and Indoor Air Quality and Ventilation.

Past Deadline: 10/17/2007. Computational Science Training for Undergraduates in the Mathematical Sciences (CSUMS), Directorate for Mathematics and Physical Sciences/NSF, Leland Jameson, Program Director, Division of Mathematical Sciences, 703-292-4883, ljameson@nsf.gov,

<http://www.nsf.gov/pubs/2006/nsf06559/nsf06559.htm>

SYNOPSIS: The sponsor provides funding to enhance computational aspects of the education and training of undergraduate students in the mathematical sciences--mathematics and statistics--and to better prepare these students to pursue careers and graduate study in fields that require integrated strengths in computation and the mathematical sciences. Objectives: The goal of Computational Science Training for

Undergraduates in the Mathematical Sciences (CSUMS) is to enhance computational aspects of the education and training of undergraduate students in the mathematical sciences--mathematics and statistics--and to better prepare these students to pursue careers and graduate study in fields that require integrated strengths in computation and the mathematical sciences. The core of the activity is long-term research experiences for cohorts of at least six undergraduates. Projects must focus on research topics that require interplay between computation and mathematics or statistics. They should expose students to contemporary mathematics, statistics, and computation, addressed with modern research tools and methods. That is, projects must be genuine research experiences rather than rehearsals of research methods. Interdisciplinary projects are encouraged, and appropriate mentorship from the disciplines involved is welcomed. In addition, the sponsor expects that projects will strengthen the research and education capacity, infrastructure, and culture of the participating institutions. To this end, the sponsor welcomes projects that create models for education in the mathematical sciences and influence the direction of academic programs for a broad range of students.

Past Deadline: 10/21/2005. NASA Initiative to Develop Education Through Astronomy and Space Science (IDEAS) Grant Program, 410-338-4968, ideas@stsci.edu, http://ideas.stsci.edu/ID05_CFP.shtml

The sponsor provides start-up funding for education and public outreach projects in science education that feature active collaboration between astronomers/space scientists and formal education/informal education professionals. Funding ranges between \$20,000 to \$50,000.

Past Deadlines: 11/2/2005. Directorate for Education and Human Resources/NSF, Information Technology Experiences for Students and Teachers (ITEST)--Comprehensive Projects for Students and Teachers (EHR--ESIE), Michael Haney, mhaney@nsf.gov, <http://www.nsf.gov/pubs/2005/nsf05621/nsf05621.htm>

The sponsor provides funding for projects designed to increase the opportunities for students and teachers to learn about, experience, and use information technologies within the context of science, technology, engineering, and mathematics (STEM), including Information Technology (IT) courses.

Past Deadline: 11/15/2007. Geoscience Education (GeoEd), Directorate for Geosciences/NSF, Contact: Jill L. Karsten, Program Director for Diversity and Education, 703-292-7718, jkarsten@nsf.gov, <http://www.grants.gov/search/search.do?oppId=1679&mode=VIEW>

SYNOPSIS: The sponsor provides funding to improve the quality of geoscience education through one of two tracks: Pilot Projects and Integrative Collaborations. Objectives: The goals of the program are to: improve the quality of geoscience education at all educational levels; increase the number and competency of Earth and Space Science teachers at K-12 levels; demonstrate the relevance of the geosciences by identifying and promoting traditional and non-traditional career opportunities in the field; increase the number of students enrolling in geoscience courses and degree programs at all educational levels; increase the number of students drawn from groups underrepresented in science, technology, engineering and mathematics (STEM) fields in geoscience

courses and degree programs; and increase the public's understanding of geoscience-related issues.

Track 1 Pilot Projects: Proposals should describe a plan to initiate or pilot innovative geoscience education activities. Track 1 projects should integrate research and education. Proposals for projects that will make use of current geoscience research results and/or methods are sought, as are proposals that will promote the geosciences and geoscience careers as highly relevant to modern society. Projects that are informed by the results of current education-related research or will conduct new educational research within a geoscience education venue will be considered under this solicitation. Awards are intended to provide start-up or proof-of-concept funding to enable projects to reach a level of maturity that will allow them to compete for longer-term funding from other sources or become self-sustaining.

Past Deadlines: 12/12/2005. Directorate for Mathematics and Physical Sciences/NSF Partnerships for Research and Education in Materials, Thomas P. Rieker, Program Director, trieker@nsf.gov, <http://www.nsf.gov/pubs/2005/nsf05615/nsf05615.htm>

The sponsor provides support for projects designed to enhance diversity in materials research and education by stimulating the development of formal, long-term, collaborative research and education partnerships between minority-serving institutions and the National Science Foundation (NSF) Division of Materials Research (DMR)-supported centers and facilities. It is anticipated that three to five awards ranging from \$300,000 to \$600,000 per year for up to five years will be available.

Past Deadline: 1/8/2008. Program Number: 94647, Directorate for Biological Sciences/NSF, Cyber-Enabled Discovery and Innovation, Contact: Sirin Tekinay, 703-292-8910, cdi@nsf.gov, <http://www07.grants.gov/search/search.do?oppId=15606&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor provides funding to create revolutionary science and engineering research outcomes made possible by innovations and advances in computational thinking. Computational thinking is defined comprehensively to encompass computational concepts, methods, models, algorithms, and tools. Applied in challenging science and engineering research and education contexts, computational thinking promises a profound impact on the Nation's ability to generate and apply new knowledge. Collectively, CDI research outcomes are expected to produce paradigm shifts in our understanding of a wide range of science and engineering phenomena and socio-technical innovations that create new wealth and enhance the national quality of life.

Past Deadlines: 1/26/2006. Directorate for Mathematics and Physical Sciences/NSF, Scientific Computing Research Environments for the Mathematical Sciences (SCREMS), Alvin I. Thaler, Program Director, athaler@nsf.gov, <http://www.nsf.gov/pubs/2005/nsf05627/nsf05627.htm>,

Support is provided to U.S. educational institutions with ongoing research programs in mathematics, applied mathematics, or statistics for the support of computing

environments for research in the mathematical sciences. Approximately \$1,000,000 is available to fund eight to twelve awards.

Past Deadline: 2/1/2008, Higher Education Challenge Grants Program, Cooperative State Research, Education, & Extension Service/Department of Agriculture, Contact: P. Gregory Smith, Higher Education Programs, 202-720-1973, Fax: 202-720-2030, HEC@csrees.usda.gov, <http://www07.grants.gov/search/search.do?oppId=15669&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor provides support to stimulate and enable colleges and universities to provide the quality of education necessary to produce baccalaureate or higher degree level graduates capable of strengthening the Nation's food and agricultural scientific and professional work force. Approximately \$5.2 million will be available. Duration may be for a period of twenty-four to thirty-six months. Objectives: Through improved teaching, the Higher Education Challenge (HEC) Grants Program seeks to attain the following two Program Goals: to increase the number of graduates with a baccalaureate (or higher) degree in the food and agricultural sciences, and; to help students achieve their career goals and to help meet workplace needs by increasing the quality of undergraduate instruction (e.g., through modernizing instructional technologies and methodologies; updating disciplinary content; and developing students' analytical, interpersonal, leadership, communications, problem-solving, computational, and decision-making skills and abilities). All applications must also support activities related to the delivery of for-credit, academic coursework that prepares graduates in one of the following critical HEC Program Priority Need Areas: globalizing agricultural business, markets and trade; developing new, bio-based products and technologies; protecting agroecosystem animal or plant health, including improved biosecurity or genomics; promoting human sciences that address rural youth, individual, and family well-being in a community context; increasing food safety and food defense; protecting America's food supply; supporting healthy food choices and lifestyles, and obesity prevention; sustaining forest and rangeland health and protection including improved soil, air, and water quality.

Past Deadlines: 2/7/2007. Directorate for Engineering/NSF, Materials Use: Science, Engineering, and Society (MUSES), Program Number: 86246, Contact: Richard J. Fragasz, Program Director, 703-292-7011, rfragasz@nsf.gov, <http://www.nsf.gov/pubs/2006/nsf06518/nsf06518.htm>,

SYNOPSIS: The sponsor is soliciting new multidisciplinary activities that encourage researchers in engineering, physical and life sciences, social and behavioral sciences, economics, mathematics, and education to reach beyond their disciplinary boundaries in order to address complex issues related to materials use in the environment. There are two challenges: to propose exploratory research issues that are viable and to create new teams of researchers with the necessary expertise who can work together. Quantitative approaches and education activities must be incorporated in all projects.

Past Deadline: 2/13/2008. Earth Sciences: Instrumentation and Facilities (EAR/IF), Directorate for Geosciences/NSF, Contact: David Lambert, Program Director, Division of Earth Sciences, 4201 Wilson Boulevard, Room 785S, Arlington, VA,

22230, 703-292-8558, dlambert@nsf.gov,

<http://www.grants.gov/search/search.do?mode=VIEW&oppId=12956>

SYNOPSIS: The sponsor supports meritorious proposals for research focused on improving the understanding of the structure, composition, and evolution of the Earth and the processes that govern the formation and behavior of the Earth's materials. Objectives: The Instrumentation and Facilities Program (EAR/IF) considers proposals for: Acquisition or Upgrade of Research Equipment that will advance laboratory and field investigations, and student training opportunities in the Earth sciences; Development of New Instrumentation, Analytical Techniques or Software that will extend current research and research training capabilities in the Earth sciences; Support of National or Regional Multi-User Facilities that will make complex and expensive instruments or systems of instruments broadly available to the Earth sciences research and student communities; the Support of Research Technicians who will provide for optimal and efficient operation of advanced instrumentation, analytical protocol development, and user training for Earth science research instrumentation; and the Development of Cyberinfrastructure for the Earth Sciences (Geoinformatics) that will enable transformative advances in Earth science research and education through novel application, development, or adaptation of information technologies. Eligibility: Eligible applicants include non-profit, non-academic organizations, for-profit organizations, state and local governments, research laboratories, and unaffiliated individuals. Funding: The sponsor anticipates approximately \$7 million in funding for thirty-five to forty-five awards. In order to encourage laboratories to gradually develop alternative sources of support for technicians, investigators seeking support for research technicians may request a maximum of five years of support for salary, fringe benefits and related indirect costs with a declining schedule of maximum annual funding as follows: Year One-\$80,000, Year Two-\$70,000, Year Three-\$60,000, Year Four-\$50,000 and Year Five-\$40,000.

Past Deadline: 2/21/2008. Interdisciplinary Training for Undergraduates in Biological and Mathematical Sciences (UBM), Directorate for Biological Sciences/NSF, Contact: Samuel M. Scheiner, Program Director, Division of Environmental Biology, 703-292-7175, scheine@nsf.gov,

[http://www07.grants.gov/search/search.do;jsessionid=HBqJl1h74Qpxrn1BsQmQ2ZGHFQkxGTplGGVYmPYXCn7mllL96ZzQ!-](http://www07.grants.gov/search/search.do;jsessionid=HBqJl1h74Qpxrn1BsQmQ2ZGHFQkxGTplGGVYmPYXCn7mllL96ZzQ!-62825325?oppId=16000&flag2006=true&mode=VIEW)

[62825325?oppId=16000&flag2006=true&mode=VIEW](http://www07.grants.gov/search/search.do;jsessionid=HBqJl1h74Qpxrn1BsQmQ2ZGHFQkxGTplGGVYmPYXCn7mllL96ZzQ!-62825325?oppId=16000&flag2006=true&mode=VIEW),

SYNOPSIS: The sponsor provides support for projects designed to enhance undergraduate education and training at the intersection of the biological and mathematical sciences and to better prepare undergraduate biology or mathematics students to pursue graduate study and careers in fields that integrate the mathematical and biological sciences. It is anticipated that \$3.3 million will be available to fund six to nine projects. Objectives: The sponsor provides opportunities for funding of undergraduate education and training efforts that integrate the biological sciences and mathematical sciences. Such efforts are expected to: be grounded in research activities involving both mathematical and biological sciences; connect to regular academic studies, influencing the direction of academic programs for a broad range of students; involve students from both areas in significant research experiences that connect to research at the intersection

of the disciplines; and show commitment to joint mentorship by faculty in both fields. Projects should contribute substantially to an enhanced and sustainable undergraduate educational enterprise that strengthens mathematical training or education for those students studying biology and interdisciplinary training for those studying mathematics.

Past Deadline(s): March 4, 2008. Undergraduate Research and Mentoring in the Biological Sciences (URM), Directorate for Biological Sciences/NSF, Contact: Sally O'Connor, Program Director, Division of Biological Infrastructure, 703-292-8470, biourm@nsf.gov,

<http://www.grants.gov/search/search.do?mode=VIEW&oppId=10450>

SYNOPSIS: Funds are provided to increase the number and diversity of individuals pursuing graduate studies in all areas of biological research supported by the sponsor. An anticipated \$4.0 million will be available to fund eight awards. Objectives: The Undergraduate Research and Mentoring in the Biological Sciences (URM) program will fund projects that provide year-round support for undergraduate students to engage in exciting and contemporary research activities that are potentially publishable. Research can be in any area of biology supported by the NSF Directorate for Biological Sciences or in interdisciplinary areas supported by BIO. Research conducted by URM students should not have medical or veterinary goals and should involve modern biological tools and methods. Students participating in URM projects should experience the excitement of creating new knowledge in the course of conducting research. Projects must include a strong mentoring component and emphasize strategies that encourage and enable members of underrepresented groups to enter, and remain in, graduate programs in biology. URM projects must address building the skills needed for full participation in graduate research.

Eligibility: Undergraduate student participants supported must be citizens or permanent residents of the United States or its possessions. An undergraduate student is one who is enrolled in a degree program (part-time or full-time) leading to a baccalaureate or associates degree. High school graduates who have not yet enrolled and students who have received their bachelor's degrees and are no longer enrolled as undergraduates generally are not eligible. Proposals may only be submitted by academic institutions located in the United States. Collaborative proposals from two or more institutions are allowed. **Funding:** Approximately \$4,000,000 will be available for this solicitation for new awards in FY 2007, subject to the availability of funds. Under this solicitation, requests may be submitted for funding amounts up to a total of \$1,000,000 for up to five years. Indirect costs are limited to a maximum of twenty-five percent of the Participant Support stipend amount only.

Past Deadline: 3/11/2008. CISE Pathways to Revitalized Undergraduate Computing Education (CPATH), Directorate for Computer and Information Sciences and Engineering/NSF, Contact: Harriet Taylor, Division of Computer and Network Systems, , 703-292-8950, htaylor@nsf.gov,

<http://www07.grants.gov/search/search.do;jsessionid=HpgddfyNy0JLqqYlkmKkBh2X7hJGDn3nNr73yhT3J5RBfj2K8F4H!-357385275?oppId=16289&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor provides funding to transform undergraduate computing education on a national scale to meet the challenges and opportunities of a world where computing is essential to U.S. leadership and economic competitiveness across all sectors of society. **Objectives:** The CPATH vision is of a U.S. workforce with the computing competencies and skills imperative to the Nation's health, security and prosperity in the 21st century. The workforce includes a cadre of computing professionals prepared to contribute to sustained U.S. leadership in computing in a wide range of application domains and career fields, and a broader professional workforce with knowledge and understanding of critical computing concepts, methodologies and techniques. To achieve this vision, NSF's Directorate for Computer and Information Science and Engineering (CISE) is challenging colleges and universities to work together and with others with a stake in undergraduate computing education, including industry, professional societies and other types of organizations, to formulate and implement plans to transform undergraduate computing education to meet the challenges and opportunities of our 21st century world.

Past Deadlines: 3/14/2008. Directorate for Biological Sciences/NSF, Assembling the Tree of Life, 703-292-8480, BIO-atol@nsf.gov, Program Number: 65156, <http://www07.grants.gov/search/search.do;jsessionid=HXXKXxDzp4SpMx2BPL6vCt75z7NRYvy922pL7nslgLY2BYh22WL!-981871751?oppId=16135&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor invites research proposals from multidisciplinary teams to conduct creative and innovative research that will resolve phylogenetic relationships for large groups of organisms on the Tree of Life. Teams of investigators also will be supported for projects in data acquisition, analysis, algorithm development and dissemination in computational phylogenetics and phyloinformatics. Each award may range up to \$3 million, for a duration of up to five years.

Past Deadlines: 3/21/2006, Directorate for Mathematics and Physical Sciences/NSF, Undergraduate Research Collaboratives (URC), Richard Foust, Program Director, rfoust@nsf.gov, <http://www.nsf.gov/pubs/2006/nsf06521/nsf06521.htm>

This program seeks new models and partnerships with the potential to expand the reach of undergraduate research to include first- and second-year college students; to broaden participation and increase diversity in the student talent pool from which the nation's future technical workforce will be drawn; and to enhance the research capacity, infrastructure, and culture of participating institutions. For this program, research should be in the chemical sciences or in interdisciplinary areas supported by the chemical sciences. Projects should provide exposure to research of contemporary scientific interest that is addressed with modern research tools and methods.

Past Deadlines: 3/28/2006. Directorate for Education and Human Resources/NSF, Research and Evaluation on Education in Science and Engineering (REESE), Elizabeth VanderPutten, Program Director, evanderp@nsf.gov, <http://www.nsf.gov/pubs/2006/nsf06537/nsf06537.htm>

The program supports basic and applied research and evaluation that enhances science, technology, engineering and mathematics (STEM) learning and teaching. The sponsor

seeks proposals that synthesize research and evaluation with the aims of accumulating knowledge generated by past studies and identifying new research and evaluation opportunities in STEM education and learning. A total of \$10 million in funding is available.

Facilities and Instrumentation Funding Opportunities.

Current Calls

Deadline: 5/20/2008. Course, Curriculum, and Laboratory Improvement (CCLI), Directorate for Education and Human Resources/NSF, Contact: Myles Boylan, Program Director, Division of Undergraduate Education, 703-292-4617, mboylan@nsf.gov,

<http://www.grants.gov/search/search.do?mode=VIEW&oppId=12313>

SYNOPSIS: The program seeks to improve the quality of science, technology, engineering, and mathematics (STEM) education for all undergraduate students. The program supports efforts to create new learning materials and teaching strategies, develop faculty expertise, implement educational innovations, assess learning and evaluate innovations, and conduct research on STEM teaching and learning. The program supports three types of projects representing three different phases of development, ranging from small, exploratory investigations to large, comprehensive projects.

Approximately \$34 million is available to fund seventy to ninety awards. All proposals must contribute to the development of exemplary undergraduate STEM education.

Proposals may focus on one or more of the components of this cycle. Creating Learning Materials and Teaching Strategies: Guided by research on teaching and learning, by evaluations of previous efforts, and by advances within the disciplines, projects should develop new learning materials and tools, or create new and innovative teaching methods and strategies. Projects may also revise or enhance existing educational materials and teaching strategies, based on prior results. All projects should lead to exemplary models that address the varied needs of the Nation's diverse undergraduate student population.

Past Deadlines: 6/1/2005. National Institute of Mental Health/NIH/DHHS, NIMH Minority Research Infrastructure Support Program (R24), Robert A. Mays, Jr., Ph.D., rmays@mail.nih.gov, <http://grants.nih.gov/grants/guide/pa-files/PAR-01-029.html>

The sponsor provides support for the Minority Research Infrastructure Support Program (M-RISP) to build infrastructure in predominantly minority academic institutions to increase the capacity of these institutions and their faculty to conduct rigorous mental health-relevant research. Eligible applicants are domestic for-profit and non-profit organizations, public and private, such as universities, colleges, hospitals, laboratories,

units of state and local governments, and eligible agencies of state and local government. The R24 award mechanism will be used.

Deadline: 6/23/2008. Chemistry Research Instrumentation and Facilities: Departmental Multi-User Instrumentation (CRIF: MU), Directorate for Mathematics and Physical Sciences/NSF, Contact: Wade Sisk, Program Officer, Division of Chemistry, 703-292-4454, wsisk@nsf.gov, <http://www.grants.gov/search/search.do?oppId=16622&flag2006=true&mode=VIE> W.

SYNOPSIS: The sponsor provides funding to universities, colleges, and consortia thereof for the purchase of multi-user instruments. The maximum request is \$500,000 for instrumentation. Additional funds may be requested for personnel who are needed to support cyber-enhanced projects. Objectives: Funding is provided to groups of chemical scientists for the purchase of multi-user instruments. Eligibility: Only academic institutions in the U.S. and U.S. territories may submit proposals. The principal investigator must be the chemistry department chairperson or equivalent. Other investigators may be affiliated with U.S. academic institutions, non-profit research organizations, industry, government laboratories, or international institutions. The sponsor will accept a maximum of two proposals per institution. Funding: Approximately \$6 million per fiscal year will fund approximately twenty awards as standard or continuing grants depending upon the quality of proposals and the availability of funds. Awards will have a three-year duration and are non-renewable. Award size is limited to \$500,000 plus personnel costs for cyber-enabled projects.

Deadline: Open. Energy-Related Laboratory Equipment (ERLE) Grants, Office of Science/Department of Energy, Contact: Sue Ellen Walbridge, Program Manager, ERLE Program, 202-586-7231, sue-ellen.walbridge@science.doe.gov, <http://erle.osti.gov/erle/guidelines.asp>, Deadline Note: Application reviews and grant awards will be performed on a first-received, first-qualified basis.

SYNOPSIS: The sponsor provides used energy-related laboratory equipment to universities and colleges and other nonprofit institutions of higher learning in the U.S. for use in energy-oriented educational programs in the life, physical, and environmental sciences and engineering. Objectives: The sponsor awards grants of used energy-related laboratory equipment for use in energy-oriented educational programs in the life, physical, and environmental sciences, and engineering. Information on the equipment available at each site is available from the sponsor's web site. Typical examples of equipment that may be requested include: amp meters, voltmeters, electrometers; amplifiers; catalyst test units; distillation columns; dosimeters, survey meters, radiometers, and spectrometers; gas and liquid chromatographs; gas tracers and analyzers - solar collectors and heliometers; ion control gauges; linear and pulse-height analyzers; mass spectrometers, infrared spectrometers, and ultraviolet spectrometers; oscilloscopes; power supplies; radiation detectors, monitors, scalers, and counters; radiation shields and reactor associated components; recorders; signal generators; and temperature and pressure recorders. Eligibility: Eligible applicants are nonprofit, educational institutions of higher learning, including universities, colleges, junior colleges, technical institutes, hospitals, and museums, which are located in the U.S.

Funding: The cost of care and handling incident to the grant must be borne by the institution. Such costs normally consist of packing, crating, shipping, and insurance, and are limited to actual costs. Arrangements for shipment and the reimbursement of any of the aforementioned actual costs should be coordinated between the institution and each of the DOE facilities responsible for the equipment. These arrangements should be initiated by the requesting institution within one week after receipt and acceptance of the grant by the institution. The cost of any repairs and/or modifications to any equipment will be borne by the recipient institution.

Past Calls

Past Deadline(s): 7/2/2007, 8/7/2007, CISE Computing Research Infrastructure (CRI), Directorate for Computer and Information Sciences and Engineering/NSF, Contact: Rita Rodriguez, Program Director, Division of Computer and Network Systems, 703-292-8950, rrodrigu@nsf.gov,

<http://www.nsf.gov/pubs/2006/nsf06597/nsf06597.htm>, <http://www.grants.gov/search/search.do?mode=VIEW&oppId=10637>

SYNOPSIS: Support is provided for the acquisition, development, enhancement, and operation of research infrastructure that enables discovery, learning, and innovation in all computing fields supported by the sponsor. Objectives: The Computer and Information Science and Engineering (CISE) Computing Research Infrastructure program supports the acquisition, development, enhancement, and operation of research infrastructure that enables discovery, learning, and innovation in all computing fields supported by CISE. Supported infrastructure includes instrumentation needed by research or research and education projects, major experimental facilities for an entire department or for multi-institutional projects, and testbeds or data archives for an entire subfield of CISE researchers. The CRI program aims at providing infrastructure that enables high-quality computing research and education and extending the set of individuals and departments that are able to conduct such activities. The program is committed to maintaining a broad portfolio that supports research and education across a diverse population and lessens the digital divide. The program encourages proposals that are from or that include minority-serving institutions. The CRI program will support a variety of infrastructure needs, such as general or specialized research equipment, technical support, and/or software. CRI will also support the development of infrastructure that can be used by others, such as data archives or libraries of software tools. The infrastructure must facilitate high-quality research and related education, and that it cannot be acquired or developed without funding resources beyond those available from individual research and education grants and the host institution.

Past Deadline: 7/27/2007, Biological Research Collections, Directorate for Biological Sciences/NSF, Contact: Richard McCourt, BRC Program Director, Division of Biological Infrastructure, 703-292-8470, dbibrc@nsf.gov,

<http://www.nsf.gov/pubs/2006/nsf06569/nsf06569.pdf>

SYNOPSIS: This program provides support for biological collection enhancement, computerization of specimen-related data, research to develop better methods for

specimen curation and collection management, and activities such as symposia and workshops to investigate support and management of biological collections. Biological collections supported include those housing natural history specimens and jointly curated collections such as frozen tissues and other physical samples, e.g. DNA libraries and digital images. Such collections provide the materials necessary for research in a broad area of biological sciences. The maximum request is \$500,000. Objectives: The sponsor provides support for biological collection enhancement, computerization of specimen-related data, research to develop better methods for specimen curation and collection management, and activities such as symposia and workshops to discuss management of biological collections and other subjects designed to improve service to the research community. Biological collections supported include those housing natural history specimens and jointly curated collections such as, frozen tissues, other physical samples (e.g. digital images) and DNA samples (e.g., BAC libraries). Such collections provide the materials necessary for a substantial amount of research on biodiversity, including that on evolutionary relationships, comparative genomics, ecosystem functioning, and biological conservation. BRC supported projects include those that deal directly with specimens of organisms, parts of organisms, or direct artifacts of organisms (e.g., recorded sounds, fossilized footprints). Also eligible are organism-based collections that maintain associated specimens and data documenting the environmental context of the primary organism (e.g. soil and water samples, temperature and precipitation records, specimen-based geographic information) or the genomic context of the organism (e.g. frozen tissue, DNA).

Past Deadlines: 8/15/2005, 9/20/2005. National Center for Research Resources/NIH/DHHS, High-End Instrumentation Grant Program, Marjorie A. Tingle, Ph.D., HEI@mail.nih.gov , <http://grants1.nih.gov/grants/guide/pa-files/PAR-05-124.html>

The sponsor seeks applications from groups of NIH-supported investigators to purchase a single major item of equipment to be used for biomedical research that costs at least \$750,000. Instruments in this category include, but are not limited to, structural and functional imaging systems, macromolecular NMR spectrometers, high-resolution mass spectrometers, cryoelectron microscopes and supercomputers. This PAR will use the NIH S10 (HEI) award mechanism.

Past Deadline: 8/21/2007, Defense University Research Instrumentation Program (DURIP), Office of Naval Research, Contact: Ms Paula Barden, ATTN: DURIP/ONR 03R, 703-696-4111, bardenp@onr.navy.mil, <http://www.grants.gov/search/search.do?oppId=14425&mode=VIEW>

SYNOPSIS: The Office of Naval Research provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists and engineers in areas important to national defense by providing funds for the acquisition of research equipment between \$50,000 and \$1,000,000. Eligible applicants are U.S. institutions of higher education with degree granting programs in science, math, and/or engineering. Objectives: The Office of Naval Research, in conjunction with the Air Force Office of Scientific Research (AFOSR), and the Army Research Office (ARO), provides support to improve the capabilities of U.S. universities to conduct research and to educate scientists

and engineers in areas important to national defense by providing funds for the acquisition of research equipment. (See SPIN program #'s 34144 for AFOSR information, and 34158 for ARO information). A central purpose of the program is to provide equipment to enhance research-related education. Proposals must address the impact of equipment on the institution's ability to educate, through research, students in the disciplines important to Department of Defense missions.

Past Deadline: 11/1/2007, Advanced Technologies and Instrumentation (ATI) (MPS-AST), Directorate for Mathematics and Physical Sciences/NSF, Contact: Andrew Clegg, Program Director, Division of Astronomical Sciences, 703-292-4892, aclegg@nsf.gov, http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5660&org=NSF&sel_org=NSF&from=fund

SYNOPSIS: Support is provided for the development and construction of state-of-the-art detectors and instruments for the visible, infrared, and radio regions of the spectrum, including interferometric imaging instrumentation and adaptive optics, and the application of new hardware and software technology and innovative techniques in astronomical research. Objectives: The sponsor supports the development and construction of state-of-the-art detectors and instruments for the visible, infrared, and radio regions of the spectrum; interferometric imaging instrumentation; adaptive optics; and the application of new hardware and software technology and innovative techniques in astronomical research. Instrumentation projects should be driven by scientific considerations and clearly articulated scientific goals.

Past Deadline: 1/10/2008. Instrumentation for Materials Research (IMR), Directorate for Mathematics and Physical Sciences/NSF, Contact: Charles Bouldin, Program Director, Division of Materials Research, 703-292-4920, cbouldin@nsf.gov, <http://www07.grants.gov/search/search.do?oppId=15598&flag2006=true&mode=VIEW>

SYNOPSIS: Support is provided for the acquisition and development of research instruments that will provide new capability and/or advance current capability to: discover fundamental phenomena in materials; synthesize, process, and/or characterize the composition, structure, properties and performance of materials; and improve the quality, expand the scope, and foster and enable the integration of research and education in research-intensive environments. Proposals are accepted for single instruments or a system. It is anticipated that \$4 million will be available to fund twenty to twenty-five new awards. Typical award duration is one to three years. Objectives: The sponsor supports the acquisition and/or development of research instruments that will provide new capability and/or advance current capability to: discover fundamental phenomena in materials; synthesize, process, and/or characterize the composition, structure, properties and performance of materials; and improve the quality, expand the scope, and foster and enable the integration of research and education in research-intensive environments.

Past Deadlines: 1/20/2006, Directorate for Mathematics and Physical Sciences/NSF, Program for Research and Education with Small Telescopes (PREST), Craig B. Foltz, Program Manager, cfoltz@nsf.gov, <http://www.nsf.gov/pubs/2004/nsf04557/nsf04557.htm>

The sponsor provides funding and modest operational support for modern, instrumented telescopes in the range of 0.5 to 2.5 meters aperture to organizations or consortia presenting an integrated program of research, student training, and educational programming. It is anticipated that \$1.2 million (four to eight awards) will be available.

Past Deadline: 1/22/2008. Chemistry Research Instrumentation and Facilities: Instrument Development (CRIF:ID), Directorate for Mathematics and Physical Sciences/NSF, Contact: Robert L. Kuczkowski, Division of Chemistry, 703-292-4953, rkuczkow@nsf.gov, <http://www.nsf.gov/pubs/2004/nsf04534/nsf04534.htm>

SYNOPSIS: The sponsor provides funds for the design and construction of instruments that will enable new chemical measurements or will significantly broaden the use of chemical instrumentation. It is anticipated that \$1 million will be available to fund five to six awards with durations of up to three years. **Objectives:** The sponsor encourages proposals for the design and construction of instruments of importance to the chemistry community. Specifically, the program supports the development of two categories of instrumentation: (a) innovative, state-of-the-art instrumentation that permits new kinds of measurements; and (b) new versions of instrumentation that substantially broaden access to measurement capabilities. Examples of instrument development in the first category might include ultrafast diffraction or spectroscopic measurements. In the second category the instrumentation might advance capabilities in real-time reaction monitoring, use of cyberinfrastructure, or chemistry education, as through the development of miniaturized and/or networked spectrometers. In all cases, the major effort must focus on instrument development; simply combining off-the-shelf instrumentation does not constitute a significant development project. Although the focus should be on development or construction, research projects that utilize the finished product may be described in the final year of the proposal as a means of demonstrating wide potential impact.

Past Deadline: 1/24/2008, Major Research Instrumentation Program (MRI)-- Instrument Development and Acquisition, Directorate for Biological Sciences/NSF, Contact: Joan Frye, Staff Associate, Office of Integrative Activities, 703-292-8040, jfrye@nsf.gov, <http://www.nsf.gov/pubs/2008/nsf08503/nsf08503.htm>, <http://www07.grants.gov/search/search.do?oppId=15759&flag2006=true&mode=VIEW>

SYNOPSIS: The sponsor provides awards to increase access to scientific and engineering equipment for research and research training in the Nation's institutions of higher education, research museums and nonprofit research institutions. The program seeks to improve the quality and expand the scope of research and research training in science and engineering, and to foster the integration of research and education by providing instrumentation for research-intensive learning environments. It is anticipated that \$110 million (225 awards) will be available. **Objectives:** The goals of the program are to: support the acquisition or development of major state-of-the-art instrumentation for research, research training, and integrated research/education activities at organizations; improve access to and increase use of modern research and research training instrumentation by scientists, engineers, and graduate and undergraduate students; enable academic departments or cross-departmental units to create well-

equipped learning environments that integrate research with education; foster the development of the next generation of instrumentation for research and research training; and promote partnerships between academic researchers and private sector instrument developers. The program assists in the acquisition or development of major research instrumentation by U.S. institutions that is, in general, too costly for support through other NSF programs. Proposals may be for a single instrument, a large system of instruments, or multiple instruments that share a common or specific research focus.

Past Deadline: 3/2/2007, Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML), Directorate for Biological Sciences/NSF, Contact: Dr. Gerald Selzer, Directorate for Biological Sciences, Division of Biological Infrastructure, 703-292-8470, biosml@nsf.gov, <http://www.nsf.gov/pubs/2005/nsf05550/nsf05550.htm>

SYNOPSIS: This program seeks to assist Biological Field Stations and Marine Laboratories (FSMLs) in offering modern laboratories and educational spaces, up-to-date equipment, appropriate personal accommodations for visiting scientists and students, and modern communications and data management systems for a broad array of users. It is anticipated that \$2.3 million will be available to fund fifteen to twenty awards.

Objectives: Proposals under this program should focus on well-defined projects of physical plant improvement, major equipment acquisition, data management and communication systems modernization, or institutional planning for such needs.

Proposals may include one or more of the following elements, except that requests for support of planning efforts may not be combined with requests for other types of improvements:

Improvements in the Physical Plant of a Field Station or Marine Laboratory: Funds may be requested for renovation of existing structures or for construction of new structures to be used for research, for associated training and education responsibilities, or for personal accommodations intended for visiting scientists and students. Requests for improvement of facilities or equipment used for research or educational activities to be carried out on board a UNOLS (University-National Oceanographic Laboratory System) research ship or similar vessel are inappropriate.

Equipment Purchase: Such requests should focus on major, multi-user or general use items (including special purpose vehicles and boats) that are essential to the facility's research agenda and associated training and education programs. Requests for extensive sets of small items are discouraged.

Improvements in Data Management and Communication Systems: Such requests should be directed at deployment of appropriate, up-to-date technology and should be directed toward broad community use of such systems for research and education collaboration on the Internet. Requests for ongoing costs of operations, including staffing and fees for telecommunications services, are inappropriate.

Institutional Planning: Such requests should address the need for comprehensive planning at the level of the whole station or laboratory in support of its research and training mission. The effort should produce plans useful throughout at least a five-year time frame. Planning proposals may address, but are not limited to, facility needs appraisal and design activities, and research/training program development. Proposed activities will normally be cast in the format of workshops, conferences, and visits designed to involve broad participation of the scientific community outside the proposing institution.

Past Deadlines: 3/22/2006. National Center for Research Resources/NIH/DHHS, Shared Instrumentation Grant (SIG) Program, Marjorie A. Tingle, Ph.D..

SIG@mail.nih.gov, <http://grants1.nih.gov/grants/guide/pa-files/PAR-06-093.html>

The sponsor provides support to purchase or upgrade commercially available instruments that cost at least \$100,000. The maximum award is \$500,000. This PA will use the S10 (SIG) award mechanism.

USDA Cooperative State Research, Education, and Extension Service's National Research Initiative, <http://www.csrees.usda.gov/>

This program supports research and education grants that address key problems in the biological, environmental, physical, and social sciences relevant to agriculture, food, and the environment. Awards are made for Research projects, Integrated (collaborative) projects and for Equipment grants. Areas of interest include: Nanotechnology; Genetic Processes and Mechanisms of Agricultural Plants; Managed Ecosystems; Bioactive Food Components for Optimal Health; Organismal and Population Biology; Agricultural Plants and Environmental Adaptation; Water and Watersheds; and Nanoscale Science; Air Quality; and Human Nutrition and Obesity.

GOALI--Industry Engineers/Scientists in Academe, Directorate for Biological Sciences/NSF, Donald Senich, 4201 Wilson Boulevard, Room 550S, Arlington, VA, 22230, 703-292-7082,

dsenich@nsf.gov, <http://www.grants.gov/search/search.do?oppId=11487&mode=VIEW>

SYNOPSIS: The Industry Engineers and Scientists in Academe component of the GOALI initiative provides opportunities for industry personnel to interact with the academic community. Support is provided for industrial engineers and scientists to visit academe; and for part-time engineering students with permanent positions in industry to continue their graduate studies. Objectives: The Grant Opportunities for Academic Liaison with Industry (GOALI) initiative aims to synergize industry-university partnerships by making investment funds available to support a broad mix of industry-university linkages. This solicitation targets high-risk/high-gain research with a focus on fundamental topics, new approaches to solving generic problems, development of innovative collaborative industry-university educational programs, and direct transfer of new knowledge between academe and industry. The Industry Engineers and Scientists in Academe component of the GOALI program provides opportunities for industry personnel to interact with the academic community. The following opportunities are options to be considered: Industry Presence on Campus - for industrial engineers and scientists to visit academe in order to catalyze collaborative research and/or provide innovations in teaching and engineering curricula, or both; and Industry-Based Graduate Assistantship - for part-time science and engineering students, with permanent positions in industry to continue their graduate studies, particularly toward the Ph.D. The stipend will partially support the time necessary for course work and interaction with a faculty

research adviser. Eligibility: Only U.S. citizens, nationals, or permanent residents are eligible to apply for fellowships and assistantships. U.S. institutions of higher education that confer degrees in research areas normally supported by the ENG Directorate may submit proposals. Proposals may only be submitted on behalf of faculty members with full-time appointments.