

Funding Opportunities Bulletin

February 2005

Compiled by KUCR Proposal Services as a Resource
for Kansas University Researchers

Click on the links below to go directly to the named section

[BUSINESS](#)

[EDUCATION](#)

[ENGINEERING & COMPUTER SCIENCE](#)

[FINE ARTS](#)

[HUMANITIES](#)

[INTERNATIONAL AREA STUDIES](#)

[MEDICINE & LIFE SCIENCES](#)

[PHYSICAL SCIENCES & MATHEMATICS](#)

[SOCIAL SCIENCES](#)

[MULTIPLE DISCIPLINES](#)

BUSINESS

See also opportunities under ENGINEERING & COMPUTER SCIENCE and MULTIPLE DISCIPLINES

National Technical Assistance

Economic Development Administration

U.S. Department of Commerce

Deadline: **May 31, 2005**

EDA is soliciting proposals to provide technical assistance: (1) Transitioning Regions and Workers in a Post-Industrialized Economy and (2) Information Dissemination to Practitioners Serving Distressed Areas. EDA invites proposers to submit projects in these two areas individually or collectively. Each of these programs has specific goals and deliverables outlined in the complete solicitation. Funds in the amount of \$1,122,000 are available for the NTA Program for FY 2005.

For more information:

http://www.eda.gov/ImageCache/EDAPublic/documents/pdfdocs/ffo_5frnta_5f05_5f12_5f10_2e.pdf/v1/ffo_5frnta_5f05_5f12_5f10.pdf (PDF file).

EDUCATION

Ethics Education in Science and Engineering (EASE)

National Science Foundation

Deadlines: Internal competition: **January 24, 2005**

Full Proposal to NSF: March 10, 2005

This program considers proposals for research and educational projects to improve ethics education in all of the fields of science and engineering that NSF supports. For this year, proposals must focus on improving ethics education for graduate students in those fields, and on ethical issues that arise in research or graduate research education in those fields, particularly in

interdisciplinary or inter-institutional contexts. EESE will consider proposals for research projects, education projects, or combinations of the two. The maximum award amount is expected to be \$300,000 over a period of three years. An institution may submit only one proposal as the lead organization. There is no limit on the number of proposals under which an organization may be included as a non-lead collaborator or sub-awardee. Interested proposers should submit a three-page pre-proposal, describing the proposed research, including key personnel and a generalized yearly budget. Please specify which initiative interests you, i.e. research project, education project, or combinations of the two. Please submit this material electronically to Barbara Earl, manager of Proposal Services at KUCR, by 5:00 p.m. on January 24, 2005 (bearl@ku.edu, 864-7781).

For more information: <http://www.nsf.gov/pubs/2005/nsf05532/nsf05532.htm>.

Informal Science Education

National Science Foundation

Deadlines: Internal Competition: **February 4, 2005**

Preliminary Proposal to NSF (required): March 18, 2005

Full Proposal: June 13, 2005

The ISE program invests in projects that develop and implement informal learning experiences designed to increase interest, engagement, and understanding of science, technology, engineering, and mathematics (STEM) by individuals of all ages and backgrounds, as well as projects that advance the theory and practice of informal science education. Projects may target either public audiences or professionals whose work directly affects informal STEM learning. ISE projects are expected to demonstrate strategic impact, collaboration, and innovation. Project duration may be from one to five years, with total award ranging from \$100,000 to a maximum of \$3 million. An organization may serve as lead on up to three preliminary proposals and on three full proposals in each round of competition for Project Grants (this does not include planning grants, conference grants or grant supplements). Interested proposers should submit a three-page pre-proposal, including key personnel and a generalized yearly budget. Please submit this material electronically to Barbara Earl, manager of Proposal Services at KUCR, by 5:00 p.m. on February 4, 2005 (bearl@ku.edu, 864-7781).

For more information: <http://www.nsf.gov/pubs/2005/nsf05544/nsf05544.htm>.

ENGINEERING & COMPUTER SCIENCE

See also opportunities under MULTIPLE DISCIPLINES

Grants for the Department-Level Reform of Undergraduate Engineering Education (DLR)

National Science Foundation

Deadlines: Internal Competition: **January 26, 2005**

Full Proposal to NSF: March 11, 2005

This is an opportunity to compete for grants to enable departmental and larger units to reformulate, streamline, and update engineering degree programs, develop new curricula for

emerging engineering disciplines, and meet the emerging workforce and educational needs of U.S. industry. These efforts should increase both the relevance of undergraduate engineering curricula to modern engineering practice and induce an increased proportion of students who enroll to complete engineering degree programs. This can be accomplished by introducing modern learning strategies, expanding both the disciplinary breadth and the range of problems and problem-solving techniques to which engineering students are exposed, incorporating new laboratories and research experiences, and effectively integrating the powerful software tools used in engineering practice. Institutions can submit a maximum of one planning grant proposal and one implementation grant proposal. Interested proposers should submit a three-page pre-proposal, describing the proposed research, including key personnel and a generalized yearly budget. Please specify which initiative interests you, i.e. Planning grant or Implementation grant. Please submit this material electronically to Barbara Earl, manager of Proposal Services at KUOCR, by 5:00 p.m. on January 26, 2005 (bearl@ku.edu, 864-7781).

For more information: <http://www.nsf.gov/pubs/2005/nsf05531/nsf05531.htm>.

Waveform Optimization For Multi-Sensor Multi-Mode Applications

U.S. Air Force

Deadline: **February 15, 2005**

The objective of this task is to develop radar transmit waveform strategies, and their associated receive processing methods, for single and multi-mode operations for monostatic and multi-static radar applications. The waveforms should exploit the potential degrees of freedom (DOF) on the platform(s) and consider the electromagnetic environment with which they interact. The goal is to improve air and ground moving target indication (AMTI, GMTI) and imaging by adjusting the transmit waveform using spatial, temporal, frequency and polarization diversity in the radar transmitter and across available distributed sensors. Feedback from the receive platform(s) should also be considered to adjust the waveform(s) for the next pulse repetition interval. A waveform optimization process must be developed to determine what waveform is transmitted so that it exploits its expected electromagnetic interaction with the surrounding clutter, i.e. multi-path scattering. Illumination from one to multiple sensors, either cooperatively or non-cooperatively, should be considered. The sensors would be potentially distributed therefore yielding a geometrically diverse aspect, however spatial diversity on a single platform should also be exploited. Also to be considered are the use of multiple receive platforms that can operate either passively or actively. Coherent processing is essential and techniques of coherently combining multiple receive sensors signals for improved mission performance must be developed. Multi-mode operation from a distributed collection of sensors (multi-statics) is also of interest for simultaneous combinations of AMTI, GMTI, and synthetic aperture radar (SAR) modes. Only White Papers are being solicited at this time.

For more information:

<http://www.fedgrants.gov/Applicants/USAF/IFKC/AMB/BAA-05-01-IFKA/Grant.html>.

FreedomCAR and Vehicle Technologies Program Solicitation for University Research and Graduate Automotive Technology Education (GATE) Centers of Excellence

U.S. Department of Energy

Deadline: **March 10, 2005**

The objective of this Program Announcement is to provide financial support to U.S. Colleges and Universities and University-Affiliated Research Institutions for R&D and curriculum development (GATE only) in support of the following areas of interest: low temperature combustion; emission control devices; technologies to enhance energy efficiency; advanced fuel formulations; and Graduate Automotive Technology Education (GATE) Centers of Excellence.

For more information:

<https://e-center.doe.gov/iips/faopor.nsf/UNID/B524B394D15C035785256F890073B93B?OpenDocument>.

Component Development for Distributed Wind Technologies (DWT)

U.S. Department of Energy

Deadline: **March 14, 2005**

DOE intends to provide financial support for the development of small wind turbine technology, under the provisions of the Energy Policy Act (EPAct) of 1992. The low wind speed, small wind turbine development activities are planned as grants to industry, and guided by several principles: 1) supporting industry in the innovation of small wind technology; 2) aligning DOE's Wind Program research and testing activities to support small turbine research; 3) continuous coordination of the resulting projects and related supporting research to guide program portfolio planning and technology transfer; and 4) use of regular project reviews and analytical metrics for assessing performance, continued applicability of the research, and funding.

For more information:

<http://www.fedgrants.gov/Applicants/DOE/PAM/HQ/DE-PS36-05GO95013/Grant.html>.

Micro Cryogenic Coolers (MCC)

Defense Advanced Research Projects Agency (DARPA)

Deadline: **April 8, 2005**

DARPA is soliciting research proposals in the area of Micro Cryogenic Coolers (MCC). The proposed research should investigate innovative approaches that enable revolutionary advances in science, devices, or systems. Specifically excluded is research that primarily results in evolutionary improvement to the existing state-of-practice. DARPA seeks innovative proposals in the area of microelectromechanical systems (MEMS) implementations of MCC, with the ultimate objective being the realization of micro-scale devices and sub-systems with unprecedented performance, attained via micro-scale targeted cryogenic cooling of only the needed volume/device to reduce both the size and power consumption required for cooling. Proposers are strongly encouraged to submit a proposal abstract in advance of a full proposal.

DARPA will respond to proposal abstracts with a recommendation to propose or not propose and the time and date for submission of a full proposal.

For more information:

<http://www.fedgrants.gov/Applicants/DOD/DARPA/CMO/BAA05-15/Grant.html>.

Partnership for Advancing Technologies in Housing (PATH)

National Science Foundation

Deadline: **April 19, 2005**

The NSF Directorate for Engineering announces a program solicitation in support of HUD's Partnership for Advancing Technologies in Housing. This year's solicitation focuses on groundbreaking proposals in the five interdisciplinary areas designated to be the forefront of housing technology through the NSF-PATH Housing Research Agenda Workshop held in February 2004. These five interdisciplinary areas are: Construction Management and Production; Structural Design and Materials; Building Enclosures, Energy, and Indoor Air Quality; Community and Economic Impacts of Housing Technology; Systems Interactions and Whole House Approaches. PATH's mission is to advance technology innovation in the homebuilding industry in order to improve housing value and performance. A principal investigator may submit only one proposal, but may serve as a Co-I on others.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05547>.

Cyber Defensive & Offensive Operations Technology (CDOT)

Air Force Research Lab, Information Directorate

U.S. Air Force

Deadline: continuous, through December 31, 2008

The objective of this BAA is to address highly innovative R&D areas in Cyber Operations. Proposed work should address the innovation and strategic thought of the 21st century adversary, and develop new concepts to counter with innovative information-based capabilities. Further, proposed work should address new concepts for continuously analyzing the information battlespace to identify US vulnerabilities and adversary weaknesses, and develop new defensive and offensive strategies and capabilities accordingly. This BAA solicits proposals in the following research areas: Covert Cyber Operations; Threat Evaluation, Attack Recognition and Diagnosis; Assured Infostructure Support; Wireless Information Assurance; and Complex Systems. White papers are required, and may be submitted anytime until December 31, 2008.

For more information:

<http://www.fedgrants.gov/Applicants/USAF/IFKC/AMB/BAA-03-18-IFKA/listing.html>.

FINE ARTS

See also listings under INTERNATIONAL AREA STUDIES

Arts Exchanges on International Issues Program

U.S. Department of State

Deadline: **February 15, 2005**

The U.S. Department of State announces an open competition for grants that support exchanges and build relationships between U.S. non-profit arts, educational and cultural organizations and their counterparts overseas with the specific goal of promoting mutual understanding and partnerships between key professionals in the arts and arts management and their organizations in the United States and in other countries through multi-phased exchange projects taking place over one to three years. To the fullest extent possible programs should be two-way exchanges supporting roughly equal numbers of participants from the U.S. and foreign countries.

Participants may be professional artists, arts educators, arts administrators or other arts and cultural experts. For this competition, eligible regions are Africa, East Asia, Eurasia, Central and Southeastern Europe, the Near East/North Africa, South Asia, and the Western Hemisphere.

For more information: <http://exchanges.state.gov/education/rfgps/feb15rfgp.htm>.

Grants for Arts Projects/Access to Artistic Excellence

National Endowment for the Arts

Deadline: **March 14** and August 15, 2005

Grants for Arts Projects supports exemplary projects in dance, design, folk and traditional arts, literature, local arts agencies, media arts, museums, music, musical theater, opera, presenting, theater, visual arts, and multidisciplinary art forms. Access to Artistic Excellence encourages and supports artistic creativity, preserves our diverse cultural heritage, and makes the arts more widely available in communities throughout the country. Typical projects include the commissioning and development of new work, the presentation of performances or exhibitions at home or on tour, the documentation and preservation of significant art works or cultural traditions, the publication and dissemination of work important to the field, and the professional training of artists. The Arts Endowment is particularly interested in projects that reach and involve new audiences. *An organization may submit only one application under Grants for Arts Projects.* This application may be submitted under Access to Artistic Excellence OR Learning in the Arts for Children and Youth OR Challenge America: Reaching Every Community Fast-Track Review Grants.

For more information: <http://www.arts.gov/grants/apply/index.html>.

HUMANITIES

Faculty Humanities Workshops

National Endowment for the Humanities

Deadline: **April 7, 2005**

Grants for Faculty Humanities Workshops support local and regional professional development programs for K-12 teachers and faculty at post-secondary institutions. Workshops should: extend and deepen knowledge of the humanities by fostering collaborative study of significant topics, texts, and issues; provide faculty with the opportunity to engage in rigorous intellectual inquiry, including reading, reflection, and discussion; involve scholars from outside the institution(s) who are experts in the topic of the workshop; use creative formats and programs to engage faculty members; and advance the study and teaching of the humanities at the participating institution(s). Proposals to provide workshops for teachers with limited access to professional development in the humanities are encouraged.

For more information: <http://www.neh.gov/grants/guidelines/facworkshops.html>.

INTERNATIONAL AREA STUDIES

See also listing under FINE ARTS

Short-Term US Embassy Policy Specialist Program (EPS)

International Research and Exchanges Board (IREX)

Deadline: **March 1, 2005**

The Short-Term US Embassy Policy Specialist Program (EPS) offers US senior scholars an opportunity to conduct research abroad while serving as experts to a US embassy or consulate. This year, IREX anticipates awarding four grants. Successful applicants will demonstrate how their experience, skills, and knowledge will benefit US Embassy personnel, as well as the academic merit and feasibility of their proposed research. Grant length and dates will be decided upon in consultation with the specific embassy or consulate. Examples of embassy service can include attending meetings, giving lectures, writing policy papers, assisting with grant panels, and consulting with embassy policy staff. This year, EPS is accepting applications in the following fields and countries: *Baku, Azerbaijan*: economic diversity, religious pluralism, or civic education (specifically as it relates to anti-corruption and election issues); *Tashkent, Uzbekistan*: media; *Bishkek, Kyrgyzstan*: ethics/anti-corruption or academic honesty; *Vladivostok, Russia*: crime and corruption.

For more information: <http://www.irex.org/programs/eps/index.asp>.

Fulbright Visiting Specialists Program: Direct Access to the Muslim World

Council for the International Exchange of Scholars

Deadline: **April 1, 2005**

The Bureau of Educational and Cultural Affairs is pleased to announce a new competition of the Fulbright Visiting Specialists Program: Direct Access to the Muslim World. This program is designed to promote understanding of the Muslim World and civilization by providing opportunities for U.S. higher educational institutions to host specialists from the Muslim World for short-term programs.

For more information: http://www.cies.org/Visiting_Specialists/.

Policy-Connect Collaborative Research Grants Program

International Research and Exchanges Board (IREX)

Deadline: **April 1, 2005**

The Policy-Connect Collaborative Research Grants Program supports cutting-edge collaborative research on specific topics and regions each year. IREX expects to award four grants this year for projects up to 12 months in length. One grant will be awarded for research on Southeast Europe, two grants for research on Eurasia, and one grant for research with a cross-regional focus. Collaborative teams may be comprised of no more than three US scholars. Upon completion of the project, scholars will be requested to present their research findings at a Policy Forum at the US Department of State and to write a short policy paper. This year applications will be accepted for research only on the following topics and regions: *Eurasia*: HIV/AIDS, organized crime, anti-terrorism; *Southeast Europe*: Economic development, human trafficking, women's political participation; *Cross-regional*: Post-Soviet relations between Eurasia and the Middle East/North Africa and South Asia.

For more information: <http://www.irex.org/programs/policy-connect/index.asp>.

MEDICINE & LIFE SCIENCES

See also opportunities under MULTIPLE DISCIPLINES

Breast Cancer Research Program (BCRP) Era of Hope Scholar Award

Congressionally Directed Medical Research Programs (CDMRP)

US Army Medical Research and Materiel Command (USAMRMC)

Deadline: **February 10, 2005**

Candidates for Breast Cancer Research Program (BCRP) Era of Hope Scholar Award should be exceptionally talented, early-career scientists who have demonstrated that they are the best and brightest in their field(s) through extraordinary creativity, vision, and productivity, and who have shown a strong potential for leadership in the breast cancer research community that supports a vision for the eradication of breast cancer. The awards will provide sufficient funding to allow emerging innovators to implement their vision and assume leadership roles in the breast cancer

research community. Award recipients will be expected to successfully challenge the status quo through creative, high-risk research that may ultimately lead to the eradication of breast cancer. Funding for the Era of Hope Scholar Award can be requested for a maximum of \$2.5 million (M) in direct costs for up to a 5-year performance period, plus indirect costs as appropriate.

For more information: <http://cdmrp.army.mil/funding/04bcrp.htm>.

Leukemia Research Foundation Grants

Leukemia Research Foundation

Deadline: **February 10, 2005**

The Leukemia Research Foundation supports research on leukemia and related subjects. The Foundation intends to support new, unfunded leukemia research and not to provide continuing funding to ongoing projects. The Foundation provides two types of research grants: One year of funding for *New Investigators* (\$75,000 award maximum); Two years of funding for *Postdoctoral Fellowships* - support for postdoctoral trainees who wish to work in a research area related to leukemia and related disorders. (\$30,000 award maximum each year; total of \$60,000) Applicants are not required to be U.S. citizens.

For more information:

<http://www.leukemia-research.org/phd/application.asp?CFID=284625&CFTOKEN=35787418>.

Research Network in Idiopathic Pulmonary Arterial Hypertension (IPAH)

Cardiovascular Medical Research and Education Fund (CMREF)

Deadline: Letter of Intent: **February 15, 2005**; Full Proposal: June 10, 2005

The Cardiovascular Medical Research and Education Fund (CMREF) goal is the support of research to uncover the etiology and pathogenesis of idiopathic pulmonary arterial hypertension (IPAH) or primary pulmonary hypertension (PPH), in pursuit of the ultimate goal of its prevention and cure. The immediate objectives are a) to define the cellular basis of IPAH through the study of affected lung tissue, b) to describe the molecular pathways involved in the disease, and c) to identify genetic associations with the IPAH clinical phenotype. In order to pursue this mission, CMREF is organizing an IPAH Research Network that it will fund through the awards program described in this request for applications.

For more information: <http://www.heart.org/presenter.jhtml?identifier=3026278>.

Exploratory Centers for Cheminformatics Research

National Institutes of Health

Deadlines: Letter of Intent: **February 17, 2005**; Full Proposal: March 10, 2005

Exploratory Centers for Cheminformatics Research will allow teams of investigators to identify areas of research within the broad areas of computational and theoretical chemistry and to

establish and develop collaborative arrangements for the subsequent application for Cheminformatics Research Center grants. This initial funding will provide for identification of critical cheminformatics needs of the biomedical research community and the formulation of collaborative strategies to address those needs, culminating in the generation of preliminary data to support the P50 proposal. This initial funding will also allow awardees to become familiar with the operation and interactions among the various components of the NIH Molecular Libraries Initiative, and how Cheminformatics Research Centers could contribute to this effort. Only applications for P20 planning grants will be accepted for this Request for Applications (RFA). An RFA for follow-on NIH Cheminformatics Research Centers (P50) is anticipated in approximately two years. The NIH intends to commit \$4 million dollars in FY 2005 to fund approximately 10 new grants in response to this RFA.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-05-012.html>.

Neurobiology of Behavioral Treatment: Recovery of Brain Structure and Function

National Institutes of Health

Deadlines: Letter of Intent: **February 21, 2005**; Full Proposal: March 21, 2005

This RFA requests exploratory research into the neurobiological effects of treatments for drug addiction. In FY 2005, it is anticipated that 4-6 awards may be funded at a total cost of \$1.5 million with an anticipated start date of September 2005. This RFA is a one-time solicitation and will use the NIH Research Project Grant (R01) mechanism as well as Competitive Supplements.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DA-05-006.html>.

Secondary Analysis of the NESARC and NSPY Datasets

National Institutes of Health

Deadlines: Letter of Intent: **February 21, 2005**; Full Proposal: March 21, 2005

The National Institute on Drug Abuse (NIDA) and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) request applications to support the secondary analysis of data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) or the National Survey of Parents and Youth (NSPY) to study the epidemiology and etiology of alcohol and drug abuse, as well as the utilization of alcohol and drug abuse services and the prevention of these behaviors. The purpose of this RFA is to take advantage of these rich data sets and to provide support for innovative research using state of the art analytical strategies. Findings from these studies are expected to provide context for the development of prevention and treatment interventions that are likely to have a direct impact on public health outcomes.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DA-05-005.html>.

FY05 Technologies for Metabolic Monitoring (TMM) Research Program BAA Supplement
US Army Medical Research and Materiel Command (MRMC)
Deadline: **February 25, 2005**

The US Army Medical Research and Materiel Command (MRMC) in support of the TMM Program (which also includes the Juvenile Diabetes Research Foundation, NASA and NIH/NIDDK) is soliciting novel and innovative research proposals in the area of metabolic monitoring and diabetes measurement and control. It is anticipated that approximately \$3 million dollars will be awarded for funding of novel and innovative basic research proposals associated with metabolic monitoring. The maximum requested amount for each proposal should not exceed \$300,000 (inclusive of direct and indirect costs).

For more information:

http://www.usamraa.army.mil/pages/Baa_Paa/BAA_TMM05.pdf (PDF file)

Pest Management Alternatives Research: Addressing Food Quality Protection Act Issues (PMAP)
U.S. Department of Agriculture
Deadline: **February 28, 2005**

CSREES requests applications for the Special Research Grants Program - Pest Management Alternatives Research: Addressing Food Quality Protection Act Issues (PMAP) for fiscal year (FY) 2005 to address needs in integrated pest management (IPM) for food, feed, fiber, forest, livestock, and ornamental commodities resulting from the implementation of the Food Quality Protection Act of 1996 (FQPA) (Pub. L. No. 104-170) and related regulatory actions. In FY 2005, CSREES anticipates that approximately \$1.4 million will be available to support successful PMAP applicants from the four regions (North Central, Northeastern, Southern, and Western) of the United States.

For more information: <http://www.csrees.usda.gov/funding/rfas/pmap.html>.

The Impact of Climate Change & Variability on Human Health
U.S. Environmental Protection Agency
Deadline: **March 24, 2005**

The Environmental Protection Agency announces an extramural funding competition supporting research on the consequences for human health of global change - including climate, climate variability, land-use, economic development, and technology. Under the Global Change Research Act of 1990, the United States Climate Change Science Program (USCCSP) is required to undertake scientific assessments of the potential consequences of global change for the United States (e.g. Patz et al., 2000). EPA is interested in the analysis of health outcomes that may be affected by future global changes and a better understanding of the consequences of global change for human health. The two priority research areas for this solicitation are: 1) heat- and cold-related illnesses and 2) waterborne diseases.

For more information: http://es.epa.gov/ncer/rfa/2005/2005_hsa_impacts_research.html.

Molecular Screening Assay Development for SCD

National Institutes of Health

Deadlines: Letter of Intent: **March 25, 2005**; Full Proposal: April 26, 2005

The purpose of this RFA is to fund the development and adaptation of biological assays for automated, high throughput screening of compounds that can potentially be used to improve the understanding of the biology of Sickle Cell Disease (SCD) and provide inroads toward new agents for SCD treatments. The assays should be suitable to be candidates for screening in the NIH supported high throughput screening (HTS) centers that will be funded under the NIH Molecular Libraries and Imaging Roadmap Initiative. This is a two year grant. The maximum amount of an award will be \$100,000 total cost for the first year of the award and \$200,000 for the second year of the award.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HG-05-001.html>.

PHYSICAL SCIENCES & MATHEMATICS

See also opportunities under MULTIPLE DISCIPLINES

Scientific Computing Research Environments for the Mathematical Sciences (SCREMS)

National Science Foundation

Deadline: **April 4, 2005**

SCREMS proposals are for computing environments dedicated to research in the mathematical sciences. Proposals may request support for the purchase of computing equipment and limited support for professional systems administrators or programmer personnel for research computing needs. These grants are intended to support research projects of high quality that require access to advanced computing resources. Requests for routine upgrades of standard desk-environment workstations or laptop computers are not appropriate for this program. Awards are made to provide support for specific research projects rather than to provide general computing capacity. Proposers are encouraged to include projects involving symbolic and algebraic computations, numerical computations and simulations, and graphical representations (visualization) in aid of the research. Identical proposals may not be submitted to both the SCREMS and MRI solicitations.

For more information: <http://www.nsf.gov/pubs/2005/nsf05538/nsf05538.htm>.

SOCIAL SCIENCES

See also opportunities under MULTIPLE DISCIPLINES

Panel Study of Income Dynamics (PSID) Competition

National Science Foundation

Deadlines: Letter of Intent (required): **February 15, 2005**; Full Proposal: April 5, 2005

The Panel Study of Income Dynamics and its two wave Child-Development Supplement (CDS) is a longitudinal survey of a nationally representative sample of US families begun in 1968. The

PSID has collected 34 waves of data on the same families and their descendents as of 2005. Data have been posted on a web-based Data Center for the user community within 12 months of its collection. Programs in the Directorate of Social, Behavioral and Economic Sciences may make one award for the next five-year funding cycle, 2007-2011, to renew support for the PSID. We anticipate an NSF award of at least \$12 million and at most \$20 million to cover these activities, including three waves of data collection, over a five-year period. The annual amount of the award is expected to be at least \$2.4 million and no more than \$4 million. The duration of the award will be five years. The expected start date is January 1, 2006.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05541>.

Research on Trafficking in Human Beings

National Institute of Justice
U.S. Department of Justice
Deadline: **March 24, 2005**

NIJ seeks proposals for research on trafficking in human beings that will inform policy and practice on a local, state, and national basis. Through this solicitation, individuals are encouraged to submit research and evaluation proposals that will improve the criminal justice knowledge base about the incidence, prevention, detection, investigation, and prosecution of human trafficking. Applicants may wish to direct their proposed research to the topics articulated in the following sections or to develop research that builds on them. Nonetheless, all proposals should be for research with direct, immediate, and obvious implications for U.S. policy and practice.

For more information: <http://www.ojp.usdoj.gov/fundopps.htm> (scroll down to “Research on Trafficking in Human Beings”)

American National Election Studies (ANES) Competition

National Science Foundation
Deadline: **May 6, 2005**

The Political Science Program invites proposals from Ph.D.-holding scholar-investigators who possess the theoretical, methodological, measurement, and administrative skills, as well as the necessary resources, to undertake an important, large-scale, data-collection project on election campaigns, electoral choice, election outcomes, and citizen engagement in the United States. The ANES recompetition will include three areas of emphasis: a Panel Component; a Core-Continuity Component; and an Experimental-Innovation Component.

For more information: <http://www.nsf.gov/pubs/2005/nsf05537/nsf05537.htm>.

MULTIPLE DISCIPLINES

Undergraduate Research Centers (URC)

National Science Foundation

Deadlines: Internal Competition: **January 28, 2005**

Letter of Intent to NSF (required): March 7, 2005

Full Proposal to NSF: April 4, 2005

The URC program seeks new models and partnerships with the potential (1) to expand the reach of undergraduate research to include first- and second-year college students; and (2) to enhance the research capacity, infrastructure, and culture of participating institutions, thereby strengthening the nation's research enterprise. The URC should provide exposure to research of contemporary scientific interest using modern research tools and methods in the chemical sciences or in interdisciplinary areas supported by the chemical sciences. Students participating in URC projects should experience the excitement of creating new knowledge in the course of conducting research that is potentially publishable. Awards will be made for 5 years at up to \$500,000/yr plus up to an additional \$200,000 in the first year for equipment. No institution may submit more than one proposal as a lead institution; therefore, interested proposers should submit a three-page pre-proposal, including key personnel and a generalized yearly budget. Please submit this material electronically to Barbara Earl, manager of Proposal Services at KUCR, by 5:00 p.m. on January 28, 2005 (bearl@ku.edu, 864-7781).

For more information: <http://www.nsf.gov/pubs/2005/nsf05539/nsf05539.htm>.

Summer Undergraduate Research Fellowship (SURF)

National Institute of Standards and Technology

Deadline: **February 15, 2005**

The Summer Undergraduate Research Fellowship (SURF) Gaithersburg program will provide an opportunity for the NIST laboratories and the National Science Foundation (NSF) to join in a partnership to encourage outstanding undergraduate students to pursue careers in science and engineering. The program will provide research opportunities for students to work with internationally known NIST scientists, to expose them to cutting-edge research and promote the pursuit of graduate degrees in science and engineering. The SURF program is seeking applications in the areas of Electronics and Electrical Engineering, Manufacturing Engineering, Chemical Science and Technology, Physics, Materials Science and Engineering, Building and Fire Research, and Information Technology. SURF Gaithersburg programs are anticipated to run from May 23, 2005 through August 12, 2005; adjustments may be made to accommodate specific academic schedules (e.g., a limited number of 9-week cooperative agreements).

For more information: <http://www.surf.nist.gov/surf2.htm>.

Biomass Research and Development Initiative

U.S. Department of Agriculture and U.S. Department of Energy

Deadlines: Letter of Intent: **February 17, 2005**; Full Proposal: April 15, 2005

USDA and DOE seek applications to address four specific Technical Topic Areas as set out below related to research, development, and demonstration of biomass based products, bioenergy, biofuels, biopower, and related processes.. Each individual application must respond to only one of the four Technical Topic Areas. However, an applicant may submit multiple, unique applications and thus respond to multiple topics. The Technical Topic Areas are: Topic-1: Feedstock Development and Production; Topic-2: Biobased Products Development and Environmental and Economic Performance; Topic-3: Integrated Resource Management and Biomass Use; Topic-4: Incentive Analysis for Commercialization.

For more information:

<http://www.fedgrants.gov/Applicants/USDA/NRCS/2890/67-3A75-5-22/Attachments.html#upload4169>.

Center for the Study of High Consequence Event Preparedness and Response

Department of Homeland Security (DHS)

Deadlines: Letter of Intent (optional): **February 18, 2005**; Full Proposal: April 22, 2005

The Department of Homeland Security (DHS) Science and Technology (S&T) Directorate's University Programs is soliciting to establish and operate a Center for the Study of High Consequence Event Preparedness and Response. The Center will perform research into preparation for disasters—high consequence events—with special emphasis on acts of terrorism. Its research will address the technical, systemic, behavioral, and organizational challenges such events pose. This Broad Agency Announcement (BAA) invites eligible institutions and groups of investigators to form consortia capable of creating and sustaining innovative research and education in emergency preparedness, principally against attacks using weapons of mass destruction (WMD). The Center will engage in mission-oriented research to significantly enhance the capabilities of first responders and others. DHS anticipates making one three-year award of up to five million dollars, annually.

For more information: <http://www.orau.gov/dhsuce5/>.

Scientific Discovery through Advanced Computing - Fusion Simulation Prototype Centers

U.S. Department of Energy

Deadlines: Letter of Intent (required): **February 23, 2005**; Full Proposal: March 23, 2005

The Department of Energy announces its interest in receiving cooperative agreement applications for the development of specific scientific simulation codes that can become components of an integrated fusion plasma simulation. These integrated fusion plasma simulation prototype codes should focus on the development of new capabilities that couple

together a wider range of physical phenomena in an integrated package of simulation codes (or code suite) than is currently being done.

For more information:

<https://e-center.doe.gov/iips/faopor.nsf/UNID/84AA86F9CA118D9985256F890052A44C?OpenDocument>.

Predoctoral Clinical Research Training Programs

National Institutes of Health

Deadlines: Letter of Intent: **February 25, 2005**; Full Proposal: March 25, 2005

This RFA invites applications for developing and implementing novel, flexible institutional Predoctoral Clinical Research Training Programs that will promote clinical research training among predoctoral medical, dental, nursing, and other allied health students and provide efficient entry of interested students into clinical research careers. Training Programs are given the flexibility to provide interested students access to a level of clinical research training that is appropriate to their career stage and level of interest, and to accommodate their changing training needs as they progress through their predoctoral training. The programs are expected to provide a range of experiences, including core didactic components, summer or short research experiences, and an intensive clinical research training program. The intensive training core will support the equivalent of 10-12 full-time trainees enrolled in a year-long non-degree program, a MS program (with a concurrent doctoral degree), or a PhD program.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-05-015.html>.

Biologically-Inspired Cognitive Architectures (BICA)

Defense Advanced Research Projects Agency (DARPA)

Deadline: **March 1, 2005**

The DARPA Information Processing Technology Office (DARPA/IPTO) is soliciting proposals under this BAA to perform research and development to support the Biologically-Inspired Cognitive Architectures (BICA) program. The main goal of the program is to develop and evaluate psychologically-based and neurobiologically-based theories, design principles, and architectures of human cognition. In a subsequent phase, the program has the ultimate goal of implementing and evaluating computational models of human cognition that could eventually be used to simulate human behavior and approach human cognitive performance in a wide range of situations.

For more information:

<http://www.fedgrants.gov/Applicants/DOD/DARPA/CMO/BAA05-18/listing.html>.

Geriatric Education Centers (GECs)

Health Resources and Services Administration
U.S. Department of Health and Human Services
Deadline: **March 1, 2005**

Grants are available to support the development of Geriatric Education Centers (GECs) collaborative arrangements involving several health professions schools and health care facilities to train health professional faculty, students, and practitioners in the diagnosis, treatment, prevention of disease, disability, and other health problems of the elderly. Applicants must propose to carry out all of the following statutory purposes: (1) improve the training of health professionals in geriatrics, including geriatric residencies, traineeships or fellowships; (2) develop and disseminate curricula relating to the treatment of the health problems of elderly individuals; (3) support the training and retraining of faculty to provide instruction in geriatrics; (4) support continuing education of health professionals who provide geriatric care; and (5) provide students with clinical training in geriatrics in nursing homes, chronic and acute disease hospitals, ambulatory care centers, and senior centers. This training must involve four or more health profession disciplines, one of which must be allopathic or osteopathic medicine.

For more information:

<http://www.fedgrants.gov/Applicants/HHS/HRSA/GAC/HRSA-05-077/Grant.html>.

National Science, Technology, Engineering, & Mathematics Education Digital Library (NSDL)

National Science Foundation

Deadlines: Letter of Intent (optional): **March 9, 2005**; Full Proposal: April 11, 2005

Building on work supported under the multi-agency Digital Libraries Initiative, this program aims to establish a national digital library that will constitute an online network of learning environments and resources for science, technology, engineering, and mathematics (STEM) education at all levels. In FY2005, the program will accept proposals in three tracks: (1) Pathways projects are expected to provide stewardship for the content and services needed by major communities of learners. (2) Services projects are expected to develop services that support users, resource collection providers, and the Core Integration effort and that enhance the impact, efficiency, and value of the library. (3) Targeted Research projects are expected to explore specific topics that have immediate applicability to collections, services, and other aspects of the development of the digital library.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05545>.

Scientific Cooperation Research Program

Foreign Agriculture Service
U.S. Department of Agriculture
Deadline: **March 12, 2005**

The Scientific Cooperation Research Program supports long-term and short-term international collaborative research and exchange activities that promote both domestic and global food

security, sustainable agriculture and resource management, and trade. Joint projects worldwide make practical use of science to help solve mutual agricultural problems and enhance the technical and scientific capabilities of both foreign and U.S. scientists. Funding provided to U.S. scientists is leveraged with resources from other federal programs, universities, the private sector, international organizations, and the collaborating foreign institutions.

For more information: <http://www.fas.usda.gov/icd/grants/scrp.htm>.

National Integrated Water Quality Program (NIWQP)

U.S. Department of Agriculture

Deadline: **March 15, 2005**

The National Integrated Water Quality Program (NIWQP) for fiscal year (FY) 2005 seeks proposals to develop research, education, and extension projects aimed at improving the quality of water resources in agricultural watersheds across the Nation. In FY 2005, CSREES anticipates that approximately \$11,933,320 will be available for support of this program. Projects **MUST** address water quality issues at the watershed scale in agricultural and rural watersheds, including those watersheds where pressure from urban/suburban development is impacting water quality. Eight topical themes have been identified for the NIWQP: 1. Animal Waste Management; 2. Drinking Water and Human Health; 3. Environmental Restoration; 4. Nutrient and Pesticide Management; 5. Pollution Assessment and Prevention; 6. Watershed Management; 7. Water Conservation and Agricultural Water Management; and 8. Water Policy and Economics.

For more information: http://www.csrees.usda.gov/funding/rfas/water_quality.html.

Multidisciplinary Career Development in Cancer Nanotechnology Research

National Cancer Institute

National Institutes of Health

Deadlines: **March 25, 2005**

This RFA supports the career development of individuals from the basic, biomedical, clinical, and information sciences and engineering who are pursuing research that applies nanotechnology development and application for the prevention, detection, diagnosis, or treatment of cancer. This funding opportunity will use Ruth L. Kirschstein National Research Service Awards (Kirschstein-NRSA) to support individual postdoctoral fellowships (F32) and senior fellowships (F33). The NCI intends to commit approximately \$15.5M dollars over three years to fund a total of 36 new grants in response to this RFA (approximately 18 for each mechanism). An applicant may request a project period of up to 3 years for F32 (stipend levels depend on full years of post-degree experience at the time of award, and include an Institutional allowance; both amounts are determined yearly by Congress) and 2 years for F33 awards (stipend not to exceed the level of NRSA stipend support for individuals with more than 7 years experience). An applicant may request a project period of up to 3 years for F32 and 2 years for F33 awards. The anticipated start date for awards is September 2005, and funding will terminate no later than September 2008.

For more information: <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-05-025.html>.

Conservation Innovation Grants (CIG)

Natural Resources Conservation Service

U.S. Department of Agriculture

Deadline: **March 28, 2005**

Conservation Innovation Grants (CIG) is a voluntary program intended to stimulate the development and adoption of innovative conservation approaches and technologies while leveraging Federal investment in environmental enhancement and protection, in conjunction with agricultural production. CIG enables the Natural Resources Conservation Service to work with other public and private entities to accelerate technology transfer and adoption of promising technologies and approaches to address some of the Nation's most pressing natural resource concerns. CIG will benefit agricultural producers by providing more options for environmental enhancement and compliance with Federal, State, and local regulations.

For more information: <http://www.nrcs.usda.gov/programs/cig/>.

Decision Support Systems Involving Climate Change and Public Health

U.S. Environmental Protection Agency

Deadline: **March 29, 2005**

The Environmental Protection Agency (EPA) announces an extramural funding competition supporting assessment of the consequences for human health of global change - including climate, climate variability, land-use, economic development, and technology. Under the Global Change Research Act of 1990, the United States Climate Change Science Program (USCCSP) is required to undertake scientific assessments of the potential consequences of global change for the United States (e.g. Patz et al., 2000). EPA is interested in research leading to the development of decision support systems that can incorporate information about the consequences of global change on human health in order to aid state and local public health agency efforts to ameliorate these impacts.

For more information: http://es.epa.gov/ncer/rfa/2005/2005_decision_support_sys.html.

Mathematical Social and Behavioral Sciences (MSBS)

National Science Foundation

Deadline: **April 5, 2005**

This solicitation invites submission of research proposals for projects that advance the mathematical or statistical foundations of research in the social, behavioral, or economic sciences. The resulting research is expected both to further understanding of social and/or behavioral science phenomena and to address a topic of interest to the mathematical sciences. Proposals for workshops or symposia that foster the interaction of social, behavioral, and/or economic scientists with mathematicians and/or statisticians also are welcome.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05542>.

Nanoscale Science and Engineering Education (NSEE)

National Science Foundation

Deadlines: Nanoscale Informal Science Education (NISE)

Letter of Intent: February 6, 2005

Full Proposal: April 6, 2005

Nanotechnology Undergraduate Education (NUE)

Letter of Intent: not required

Full Proposal: **April 6, 2005**

This solicitation continues a comprehensive effort on the part of the National Science Foundation (NSF) to enhance formal and informal education in nanoscale science, engineering, and technology. Its goals are to develop strong partnerships linking science educators with nanoscale science and engineering researchers, and to increase knowledge of advances in nanoscale research and technology and their impact on society. To attain the overarching program goals, NSEE encompasses two independent components: [A] Nanoscale Informal Science Education (NISE): This effort is intended to foster public awareness, engagement, and understanding of nanoscale science, engineering, and technology through establishment of a Network, a national infrastructure that links science museums and other informal science education organizations with nanoscale science and engineering research organizations. [B] Nanotechnology Undergraduate Education (NUE): This component aims at introducing nanoscale science, engineering, and technology through a variety of interdisciplinary approaches into undergraduate education, particularly in the first two collegiate years. Special eligibility limits apply to each of the above components.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05543>.

Research on Science and Technology Surveys and Statistics—S&T Workforce, Funding, Impacts, Outputs, and International Studies

National Science Foundation

Deadlines: **April 12, 2005**; thereafter, January 15, annually

The Division of Science Resources Statistics (SRS) of the National Science Foundation (NSF) is responsible for the design, development, implementation, and continuous quality improvement of data collections, generally in the form of surveys on the science and engineering enterprise. SRS uses these data collections to prepare a number of statistical data reports as well as analytical reports including the National Science Board's biennial report, Science and Engineering (S&E) Indicators, and Women, Minorities and Persons with Disabilities in Science and Engineering. As part of the Division's efforts to maintain ongoing quality in its surveys and data products, SRS supports efforts by the research community to develop improved survey methodologies, create and improve indicators of S&T activities and resources, and strengthen methodologies to analyze and disseminate S&T statistical data. To that end, SRS invites proposals for survey research, workshops, and analytical studies under its program for Research on Science and Technology Surveys and Statistics.

For more information: <http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf05546>.

Environmental Behavior and Decisionmaking: Determining the Effectiveness of Environmental Information Disclosure and Provision

U.S. Environmental Protection Agency (EPA)

Deadline: **April 13, 2005**

The EPA seeks proposals from researchers in economics, business administration, law, decision sciences, and other social sciences to address issues associated with environmental information disclosure. Researchers are invited to identify how environmental information obtained through information disclosure rules and voluntary programs is used and by whom, the consequences such use has on behavior, and the resulting changes in environmental performance (e.g., discharges, emissions or exposure). Primarily, EPA wants to better understand how required disclosure of environmental information about contaminants in drinking water, toxic releases or residues, chemical or oil spills, emissions, discharges, waste storage and disposal, potential liabilities, toxicity, or recycling and reuse of chemicals influences environmental behavior, practices and performance at the level of facilities, firms, markets, communities or state regulatory and enforcement agencies. Secondly, EPA is interested in the effects of voluntary information provision on firm or facility environmental performance, profitability, reduced transaction costs, increased market share, and enforcement costs.

For more information: http://es.epa.gov/ncer/rfa/2005/2005_ebd_rfa.html.

Community Participation in Research

National Institutes of Health

Deadlines: Letter of Intent: **April 17**, annually through 2007

Full Proposal: May 17, annually through 2007

The goal of this PAR is to support research on health promotion, disease prevention, and health disparities that is jointly conducted by communities and researchers. This PAR invites NIH research project grant (R01) and exploratory/developmental grant (R21) award mechanisms. Community-partnered approaches to research promise to deepen our scientific base of knowledge in the areas of health promotion, disease prevention, and health disparities. Community-partnered research processes offer the potential to generate better-informed hypotheses, develop more effective interventions, and enhance the translation of the research results into practice.

For more information: <http://grants2.nih.gov/grants/guide/pa-files/PAR-05-026.html>.

Integrated Organic Program

U.S. Department of Agriculture

Deadline: **May 2, 2005**

The purpose of the Integrated Organic Program is to solve critical agriculture issues, priorities, or problems through the integration of research, education, and extension activities in two program areas: (1) Organic Transitions Program (ORG); and (2) Organic Agriculture Research and

Extension Initiative (OREI). ORG funds the development and implementation of research, extension, and higher education programs to improve the competitiveness of organic producers. OREI funds research and extension programs that enhance the ability of producers and processors who have already adopted organic standards to grow and market high quality organic food, feed, and fiber. These two funding opportunities are included in the same Request for Applications.

For more information: <http://www.csrees.usda.gov/funding/rfas/organic.html>.

AFOSR Research Interest Brochure and Broad Agency Announcement 2005-1

Air Force Office of Scientific Research (AFSOR)

Deadline: Proposals Accepted Anytime

AFOSR invites proposals for basic research in support of the Air Force Defense Research Sciences Program. This program is described in the document entitled Research Interests and Broad Agency Announcement 2005-1 (see link below). The general areas of interest are: 1) Aerospace and Materials Sciences; e.g., structural mechanics; mechanics of materials and devices; unsteady aerodynamics and hypersonics; turbulence and rotating flows; combustion and diagnostics; space power and propulsion; metallic materials; ceramics and nonmetallic materials; organic matrix composites. (2) Physics and Electronics; e.g., electroenergetic physics; space electronics; atomic and molecular physics; remote sensing and imaging; optoelectronics: components and information processing; laser and optical physics; quantum electronic solids; semiconductor materials; sensors in the space environment; high density optical memory. (3) Chemistry and Life Sciences; e.g., polymer chemistry; surface and interfacial science; theoretical chemistry; molecular dynamics; chronobiology; biomimetics, biomaterials, and biointerfacial sciences; cognition and decision; sensory systems; biological response profiling and assessment. (4) Mathematics and Space Sciences; e.g., dynamics and control; physical mathematics and applied analysis; computational mathematics; optimization and discrete mathematics; signals communication and surveillance; software and systems; artificial intelligence; electromagnetics; space sciences. (5) Education and Outreach Programs; e.g., United States Air Force Resident Research Associateship Program; National Defense Science and Engineering Graduate Fellowship Program; United States Air Force-Summer Faculty Fellowship Program; Engineer and Scientist Exchange Program; Window on Science Program; Window on Europe, Window on Asia, and Window on the Americas Program. AFOSR's overriding purpose in supporting this research is to advance the state-of-the-art in areas related to the technical problems in developing and maintaining a superior Air Force; in lowering the cost and improving the performance, maintainability, and supportability of Air Force weapon systems; and in creating and preventing technological surprise.

For more information: (PDF file) <http://www.afosr.af.mil/pdfs/BAA2005-1.pdf>.

Advanced Technologies Broad Agency Announcement—BAA05-13

Advanced Technology Office (ATO)

Defense Advanced Research Projects Agency (DARPA)

Deadline: Proposals accepted anytime until BAA closing date of December 31, 2006

The Defense Advanced Research Projects Agency's (DARPA) Advanced Technology Office (ATO) is soliciting proposals under this BAA for the performance of research, development, design, and testing that directly supports the Advanced Technology Office (ATO). This includes Robust Networking and Communications, Intelligence Preparation of the Battlesphere (IPB), Information Operations (IO), Information Assurance (IA), Computer Network Operations, Maritime, Special Operations and technologies that provide unconventional advantages over adversaries or potential adversaries. Research supporting any of the general ATO technical objectives identified above are acceptable for submission under BAA05-13; however, this BAA contains a list of specific topic areas of specific interest which potential applicants should consult.

For more information: (PDF file)

http://www.fedgrants.gov/EPSTData/DOD/Synopses/2181/BAA05-13/1_BAA05-13%28PIP%29.pdf.