Funding Opportunities Bulletin
July 2012

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BUSINESS
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Research Stipends
Center for the Business of Government
Due date: Oct 01, 2012 (anticipated)

The IBM Center for the Business of Government is solicit proposals to prepare reports with insightful findings and actionable recommendations for government executives and managers. It has chosen to focus on the following six topics that align with the administration's strategies to boost government performance:
1. Performance improvement and analysis
2. Workforce transformation
3. Collaboration and management across boundaries
4. Reforming federal contracting and acquisition
5. Transparency and participatory democracy, using Web 2.0 technology

The aim of the IBM Center for The Business of Government is to tap into the best minds in academe and the nonprofit sector who can use rigorous public management research and analytic techniques to help public sector executives and managers improve the effectiveness of government. The center is looking for very practical findings and actionable recommendations - not just theory or concepts - in order to assist executives and managers to more effectively respond to mission and management challenges.

James E. Webb Internship for Minority Graduate Students in Business and Public Administration
Smithsonian Institution (SI) Office of Fellowships
Due date: Oct 01, 2012

This program was established in honor of the late James. E. Webb, Regent Emeritus and former Administrator of the National Aeronautics and Space Administration (NASA), to promote excellence in the management of nonprofit organizations. These opportunities are intended to increase participation of minority groups who are underrepresented in the management of nonprofit scientific and cultural organizations. Interns are placed in offices, museums, and research institutes throughout the Smithsonian Institution.

http://www.si.edu/ofg/intern.htm#iofg

Grants
Walker Foundation, Alex C.
Due date: Oct 01, 2012

The foundation funds market approaches for addressing economic imbalances and promoting a sustainable economy. Applicants should clearly describe how their project meets one or more of the first four purposes of the foundation and all projects should also have a plan to meet the last purpose - disseminate information on the results and findings.

The foundation awards grants to (1) investigate the causes of economic imbalances, particularly in relation to ecosystem services, climate change, energy security, food production, and other environmental matters; (2) investigate the effects of the global financial system and monetary policy in fostering a sustainable economy; (3) investigate causes tending to destroy or impair the free-enterprise system; (4) explore and develop market-based solutions; and (5) disseminate information on the results and findings. The foundation funds local, national, and international projects as pilot studies or demonstrations for solving economic imbalances that may affect the United States or challenge the global free-enterprise system. The foundation funds two categories of projects: traditional economics and ecological economics with a free-market orientation. The foundation seeks market-based approaches for addressing economic imbalances and protecting our environment. The trustees seek projects that promote greater knowledge of economic, scientific, and environmental issues and their possible relationship to economic imbalances and the free enterprise system. They also support investigations on the effect of legislation and international agreement on the foregoing subjects.

http://walker-foundation.org/net/content/page.aspx?s=5534.0.69.5316
Research Grants  
Society for Human Resource Management (SHRM) SHRM Foundation  
**Due date: Oct 01, 2012**

The foundation funds original, rigorous empirical research projects that advance the HR profession.

The foundation funds high impact HR research, aimed at an academic audience while also having direct actionable implications for HR practice, whether the focus is on addressing current challenges or understanding emerging trends. Any topic will be considered, however the grant must be for original rigorous empirical academic research that advances the HR profession. While aimed at an academic audience, funded research should also have clear applicability for HR practice and help contribute to evidence-based HR. As such, projects submitted for funding should have a high likelihood of both adding value to the HR academic literature (i.e., be suitable for leading academic journals) and yielding practical implications for HR managers (i.e., applied outlets should be interested in the research results). The SHRM Foundation is open to funding research using any type of research methodology as long as the proposed methodology is sound and appropriate for the proposed research question(s). Those research questions typically (but not solely) take the form of theoretically derived hypotheses.

[http://www.shrm.org/about/foundation/research/Pages/default.aspx](http://www.shrm.org/about/foundation/research/Pages/default.aspx)

**Economics of Retirement (R01)**  
United States Department of Health and Human Services (HHS)  
**Due date: Oct 05, 2012**

This FOA encourages research on the economic and health-related factors that influence older persons' choices on labor force participation as they near typical retirement age and throughout the later stages of life.


**EDUCATION**  
See also opportunities listed under MULTIPLE DISCIPLINES

**Relation Between Education and Social Opportunity**  
Spencer Foundation Research Programs  
**Due date: Oct 03, 2012 (anticipated)**

The Spencer Foundation provides funding for research projects that study education in the United States and abroad. The foundation seeks to shed light on the role education plays in reducing economic and social inequalities - as well as, sometimes, reinforcing them - and to find ways to more fully realize education's potential to promote more equal opportunity. Expanded opportunity is important not only to a society's economic well being but to the character of its
civic, cultural, and social life as well.

Education enriches and expands people's lives in many ways, including through their employment opportunities, their civic and political involvements, and the quality of their personal lives. The foundation's interests therefore extend to studies that examine the ways in which differences in educational experiences (including quality and character of schooling as well as number of years in school) translate into differences in employment, earnings, and civic and social outcomes. Such work can help identify ways to change schooling investments and outcomes in the interests of a more just and prosperous society.

http://www.spencer.org/content.cfm/education-and-social-opportunity

National Academy of Education/Spencer Dissertation Fellowship Program
National Academy of Education
**Due date: Oct 03, 2012 (anticipated)**

The program seeks to encourage a new generation of scholars from a wide range of disciplines and professional fields to undertake research relevant to the improvement of education. These fellowships support individuals whose dissertations show potential for bringing fresh and constructive perspectives to the history, theory, or practice of formal or informal education anywhere in the world. This highly competitive program aims to identify the most talented researchers conducting dissertation research related to education. Fellows will be included in professional development retreats with members of the National Academy of Education and other senior scholars.

Fellowships are not intended to finance data collection or the completion of doctoral coursework, but rather to support the final analysis of the research topic and the writing of the dissertation. For this reason, all applicants must document that they will have completed all pre-dissertation requirements by June 1, 2012, and must provide a clear and specific plan for completing the dissertation within a one or two-year time frame. The proposed project must be an education research project. NAEd/Spencer funds studies that examine the efficacy of curriculum and teaching methods, however, we do not fund the initial development of curriculum or instructional programs. Applications will be judged on the applicant's past research record, career trajectory in education research, and the quality of the project described in the application. Fellows may not accept employment other than as described in the application, nor may they accept other awards without prior approval (including awards from NAEd or Spencer) that would provide duplicate benefits. Applications will be based on importance of the research question to education, quality of the research approach and feasibility of the work plan, and the applicant's future potential as a researcher and interest in educational research.

http://naeducation.org/NAEd_Spencer_Dissertation_Fellowship.html
Supporting Effective Educator Development Grant Program
United States Department of Education (ED)
Due date: (anticipated) Letter of Intent Oct 11, 2012; Full application Nov 07, 2012

The program provides funding for grants to national non-profit organizations to support projects that are supported by at least moderate evidence, as defined in this notice, to recruit, select, and prepare or provide professional enhancement activities for teachers or for teachers and principals.

The 2011 program contains three absolute priorities:
1. Teacher and principal recruitment, selection, and preparation - Under this priority, the Secretary provides funding to support the creation or reform of practices, strategies, or programs that are designed to increase the number or percentage of teachers (or teachers and principals) who are highly effective (as defined in this notice), especially for teachers (or teachers and principals) who serve concentrations of high-need students (as defined in this notice), by identifying, recruiting, and preparing highly effective teachers (or teachers and principals). To meet this priority, applicants must propose a plan demonstrating that teacher or principal participation in the applicant's proposed activities will be determined through a rigorous, competitive selection process.

2. Professional development/enhancement of teachers of English language arts with a specific focus on writing - Under this priority, the Secretary provides funding to support projects that will increase the quality of student literacy and writing by creating or reforming practices, strategies, or programs that improve teachers' knowledge, understanding, and teaching of English language arts with a specific focus on writing through high-quality professional development or professional enhancement programs.

3. Advanced certification and advanced credentialing - Under this priority, the Secretary provides funding to support projects that encourage and support teachers (or teachers and principals) seeking advanced certification or advanced credentialing through high-quality professional enhancement programs designed to improve teaching and learning for teachers or for teachers and principals. To meet this priority, applicants must demonstrate or propose a plan to demonstrate that the award of the advanced certification or advanced credential will be determined on the basis of a rigorous evaluation with multiple measures that include measures of student academic growth.

http://www.grants.gov/search/search.do?mode=VIEW&oppId=121173

ENGINEERING & COMPUTER SCIENCE
See also opportunities listed under MULTIPLE DISCIPLINES

Research Experiences for Teachers (RET) in Engineering and Computer Science
National Science Foundation (NSF)
Due date: Oct 01, 2012
The Directorate for Engineering (ENG) and the Directorate for Computer and Information Science and Engineering (CISE), Research Experiences for Teachers (RET) in Engineering and Computer Science program supports the active involvement of K-12 science, technology, engineering, computer and information science, and mathematics (STEM) teachers and community college faculty in engineering and computer science research in order to bring knowledge of engineering, computer science, and technological innovation into their classrooms. The goal is to help build long-term collaborative partnerships between K-12 STEM teachers, community college faculty, and the NSF university research community by involving the teachers and community college faculty in engineering and computer science research and helping them translate their research experiences and new knowledge into classroom activities. Partnerships with inner city schools or other high needs schools are especially encouraged, as is participation by underrepresented minorities, women, and persons with disabilities.

This announcement features two mechanisms for support of in-service and pre-service K-12 STEM teachers and community college faculty: RET supplements to ongoing ENG or CISE awards and new RET Site awards. RET supplements may be included in proposals for new or renewed NSF Directorate for Engineering (ENG) or CISE grants or as supplements to ongoing NSF ENG or CISE funded projects. RET in Engineering and Computer Science Sites are based on independent proposals from engineering or computer and information science departments, schools or colleges to initiate and conduct research participation projects for a number of K-12 STEM teachers and/or community college faculty.

It is encouraged, but not required, that at least two teachers or community college faculty be recruited for the program from the same K-12 school/community college in order to help ensure that outcomes of the program are more effectively disseminated to the participating institutions.


**Materials Processing and Manufacturing (MPM)**
National Science Foundation (NSF)

**Due date: Oct 01, 2012**

The MPM program supports fundamental, hypothesis-driven research on the interrelationship of materials processing, structure, properties, performance and process control. Analytical, experimental, and numerical studies are supported covering novel processing methods for any materials system (metals, polymers, ceramics, hybrids, composites, etc.). Studies should include the consideration of cost, performance and feasibility of scale-up, as appropriate. Studies that address multi-scale and/or multi-functional materials systems are encouraged as are studies that support environmentally-benign manufacturing. Collaborative proposals with industry (the GOALI program) are encouraged. Micro-scale (and larger) processes are covered by the MPM program; processing at the submicron or nano scale is likely covered by the Nanomanufacturing (NM) program. Solid freeform fabrication process proposals are considered in the Manufacturing Machines and Equipment (MME) program, as are material removal process proposals such as cutting or grinding. Proposals that primarily focus on fundamental material composition-
structure-property studies (i.e., neither processing nor manufacturing plays a significant role in
the proposed work) should be submitted to the Materials and Surface Engineering (MSE)
program or to the appropriate program in the DMR division.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13344

**Manufacturing Machines and Equipment (MME)**
National Science Foundation (NSF)
**Due date: Oct 1, 2012**

The MME program supports fundamental research leading to improved manufacturing machines
and equipment, and their application in manufacturing processes. Key goals of the program are
to advance the transition of manufacturing from skill-based to knowledge-based activities, and to
advance technologies that will enable the manufacturing sector to reduce its environmental and
societal impacts. A focus is on the advancement of manufacturing machines and related systems
engineering that will enable energy manufacturing on a large scale. The program also supports
research on additive manufacturing machines and processes encompassing feature scales from
microns to meters (nanometer scale additive manufacturing is supported under the
Nanomanufacturing program).

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13346

**Geotechnical Engineering (GTE)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The GTE program supports fundamental research on geotechnical engineering aspects of civil
infrastructure, such as site characterization, foundations, earth retaining systems, underground
construction, excavations, tunneling, and drilling. Also included in the program scope is research
on geoenvironmental engineering; geotechnical engineering aspects of geothermal energy; life-
cycle analysis of geostuctures; geotechnical earthquake engineering that does not involve the
use of George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES) facilities;
scour and erosion; and geohazards such as tsunamis, landslides, mudslides and debris flows. The
program does not support research related to natural resource exploration or recovery. Emphasis
is on issues of sustainability and resilience of civil infrastructure. Cross-disciplinary and
international collaborations are encouraged.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13351
Civil Infrastructure Systems (CIS)
National Science Foundation (NSF)
Due date: Oct 01, 2012

The CIS program supports research leading to the intelligent engineering of distributed infrastructure systems. Areas of interest include intra- and inter-dependencies in infrastructure design and operation for resilience and sustainability, infrastructure protection, and advanced information technologies for health monitoring, condition assessment, deterioration, and asset management. Special emphasis is on risk analysis, life-cycle frameworks, cyber-enabled simulation, and technologies for design, construction and operation of resilient and sustainable infrastructure networks.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13352

Engineering Design and Innovation (EDI)
National Science Foundation (NSF)
Due date: Oct 01, 2012

The EDI program supports research leading to design theory and to tools and methods that enable implementation of the principles of design theory in the practice of design across the full spectrum of engineered products. The program focus is on gaining an understanding of the basic processes and phenomena underlying a holistic, life-cycle view of design where the total system life-cycle context recognizes the need for advanced understanding of the identification and definition of preferences, analysis of alternatives, effective accommodation of uncertainty in decision-making, and the relationship between data and knowledge in a digitally-supported process. The program funds advances in basic design theory, tools, and software to implement design theory and new design methods that span multiple domains, such as design for the environment and for manufacturability.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13340

Geomechanics & Geomaterials (GGS)
National Science Foundation (NSF)
Due date: Oct 01, 2012

The program supports fundamental research on the mechanical and engineering properties of geologic materials including natural, mechanically stabilized, and biologically or chemically modified soil and rock. The program also addresses hydraulic, biological, chemical and thermal processes that affect the behavior of geologic materials. Research at the micro-scale on soil-structure interaction and liquefaction are included in the scope of this program. Support is provided for theoretical studies, constitutive and numerical modeling, laboratory, centrifuge, and field testing.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13350
Sensors and Sensing Systems (SSS)
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The SSS program supports research on methods to acquire and use sensor data on civil, mechanical, and manufacturing systems. The program supports fundamental research on advanced actuators, sensors, wireless sensor networks, new materials and concepts for sensing applications, power generation and energy supply for sensors and sensing systems. Also of interest is research on the strategic incorporation of sensors into both natural and engineered systems to achieve effective data acquisition and on processing and transmission of sensor data.


Materials and Surface Engineering (MSE)
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The MSE program supports fundamental research leading to a better understanding of the effect of microstructure, surfaces, and coatings on the properties and performance of engineering materials; and the ultimate control of these properties through material design. Of particular interest is materials service under conditions such as impact, temperature extremes, corrosion, oxidation, and friction. The program also supports research leading to biomedical applications of materials. Funded research includes both experimental and theoretical approaches.


National Robotics Initiative (NRI)
National Science Foundation (NSF)
**Due date: Oct 01, 2012 (letter of Intent); Nov 03, 2012**

The goal of the National Robotics Initiative is to accelerate the development and use of robots in the United States that work beside, or cooperatively with, people. Innovative robotics research and applications emphasizing the realization of such co-robots acting in direct support of and in a symbiotic relationship with human partners is supported by multiple agencies of the federal government including the National Science Foundation (NSF), the National Aeronautics and Space Administration (NASA), the National Institutes of Health (NIH), and the U.S. Department of Agriculture (USDA). The purpose of this program is the development of this next generation of robotics, to advance the capability and usability of such systems and artifacts, and to encourage existing and new communities to focus on innovative application areas. It will address the entire life cycle from fundamental research and development to industry manufacturing and deployment. Methods for the establishment and infusion of robotics in educational curricula and research to gain a better understanding of the long term social, behavioral and economic implications of co-robots across all areas of human activity are important parts of this initiative.
Collaboration between academic, industry, non-profit and other organizations is strongly encouraged to establish better linkages between fundamental science and technology development, deployment and use.

Two classes of proposals will be considered in response to this solicitation:
1. Small projects: One or more investigators spanning 1 to 5 years.
2. Large projects: Multi-disciplinary teams spanning 1 to 5 years.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503641

**Hazard Mitigation and Structural Engineering (HMSE)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The HMSE program supports fundamental research on the design and performance of structural systems and on new technologies for improving the behavior, safety, and reliability of structural systems and their resistance to natural hazards such as earthquakes and technological hazards (such as bombs). Also supported by the program are innovations in analysis and model-based simulation of structural behavior and response, design concepts that improve structural performance, reliability, resilience and sustainability, structural health monitoring, and applications of new control techniques for structural systems.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13358

**Mechanics of Materials (MoM)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The MoM program supports fundamental research on solid mechanics including theoretical, experimental, and computational approaches, model-based simulation, and the development of constitutive models. Emphasis is placed on the fundamental understanding of existing and emerging material and structural systems behavior across time and length scales, including experimental and analytical research on deformation, fatigue, and fracture. There is significant interest in techniques that address the fundamentals and theoretical basis of multiscale methods.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13355
Communications, Circuits, and Sensing-Systems (CCSS)
National Science Foundation (NSF)
Due date: Oct 07, 2012

The CCSS program is intended to spur visionary systems-oriented activities in collaborative, multidisciplinary, and integrative research. CCSS supports systems research in hardware, signal processing techniques, and architectures to enable the next generation of cyber systems (CPS) that leverage computation, communication, and algorithms integrated with physical domains. CCSS offers new challenges at all levels of systems integration to address future societal needs. CCSS supports innovative research and integrated educational activities in micro- and nano-systems, communications systems, and cyber systems. The goal is to design, develop, and implement new complex and hybrid systems at all scales, including nano, micro, and macro, that lead to innovative engineering principles and solutions for a variety of application domains including, but not limited to, healthcare, medicine, environmental monitoring, communications, disaster mitigation, homeland security, transportation, manufacturing, energy, and smart buildings. CCSS also supports integration technologies at both intra- and inter-chip levels, new and advanced radio frequency (RF), millimeter wave and optical wireless and hybrid communications systems architectures, and sensing and imaging at terahertz (THz) frequencies.

Proposals for the CCSS program may involve collaborative research to capture the breadth of expertise needed for such multidisciplinary integrative activities. ECCS will consider supporting a limited number of small team proposals of three or more Investigators from different disciplines and/or universities.

Areas of interest include the following:
1. RF-Wireless, Optical, and Hybrid Communications Systems
2. Broadband and Low Power Communications
3. RF/Microwave and Millimeter-Wave Components and Circuits
4. Inter- and Intra-Chip Communications and Networking
5. Submillimeter-Wave/Terahertz (THz) Imaging and Sensing
6. Mixed Signal Circuits and Systems
7. Enabling Technologies for Intelligent Communications Systems
8. Interconnects and Packaging Technologies
9. Cyber-Physical Systems (CPS)
10. Embedded Systems
11. Wireless Communications Algorithms and Networking
12. Integrated Sensing, Communication, and Computational Systems
13. Signal Processing and Coding
14. Cyber Security
15. Cognitive Radio
16. Sensors, Actuators, and Electronic Interfaces
17. Chemical, Biological, and Physical Diagnostic Systems
18. Implantable and Wearable Systems
19. Environmental Sensing and Monitoring
Discovery Research K-12 (DRK-12)
National Science Foundation (NSF)
Due date: Oct 04, 2012 (letter of intent); Dec 06, 2012 (full proposal)

The DRK-12 program seeks to significantly enhance the learning and teaching of Science, Technology, Engineering and Mathematics (STEM) by preK-12 students, teachers, administrators and parents. All DRK-12 projects should be framed around a research question or hypothesis that addresses an important need or topic in preK-12 STEM education. The emphasis in DRK-12 is on research projects that study the development, testing, deployment, effectiveness, and/or scale-up of innovative resources, models and tools. DRK-12 invites proposals that address immediate challenges that are facing preK-12 STEM education as well as those that anticipate a radically different structure and function of preK-12 teaching and learning. DRK-12 especially encourages proposals that challenge existing assumptions about learning and teaching within or across STEM fields, envision the future needs of learners, and consider new and innovative ways to support student and teacher learning. DRK-12 is particularly interested in projects that hold promise for identifying and developing the next generation of STEM innovators (NSB, 2010). There are four strands described in detail in the solicitation:

1. The Assessment Strand: projects that develop and study valid and reliable assessments of student and teacher knowledge, skills, and practices.
2. The Learning Strand: projects that develop and study resources, models and tools to support all students' STEM learning, enhance their knowledge and abilities, and build their interest in STEM fields.
3. The Teaching Strand: projects that develop and study resources, models and tools to help pre- and in-service teachers provide high quality STEM education for all students.
4. The Scale-up and Sustainability Strand: projects that develop and study the factors that contribute to successful implementation, scale-up, and sustainability of proven, high-quality innovations in schools and districts in a cost effective manner.

DRK-12 projects are based on theories of learning, prior research and development. Projects reflect the needs of an increasingly diverse population as well as national, state, or discipline priorities. Outcomes include usable and scalable resources, models, tools, and contributions to the knowledge about STEM teaching and learning. In addition, teachers and students who participate in DRK-12 studies are expected to enhance their understanding and use of STEM content, practices and skills.

The DRK-12 program is primarily concerned with the goals and effectiveness of formal education, but recognizes that learning is not limited to formal school environments and times. The program encourages projects to draw from knowledge and practice of learning in out-of-school and informal settings.
Most young people and STEM professionals today use powerful technologies in the activities of their everyday lives. New knowledge, new ways of thinking, and new ways of finding and processing information drive our society and economy. Many of the resources, models and tools researched and developed by DRK-12 will provide innovative ways to use current and emerging technologies to transform STEM education.

DRK-12 recognizes that outstanding teaching is a critical and integral component of this improvement process. While Strand 3 has a specific focus on resources, models and tools for teacher education and the impact of those models on student learning, projects submitted to the other strands may also include teacher support materials or professional development components in support of student learning. Projects submitted to the Learning strand might also include the development of assessments related to the specific goals of the project.

Some DRK-12 projects focus on a specific STEM discipline or concept, while others have cross-disciplinary, cross-grade level content, but all projects must demonstrate that the content is important from both a disciplinary and learning perspective.

The DRK-12 program invites proposals for three types of projects: Exploratory projects, Full Research and Development projects and Conferences and Workshops.

Exploratory projects allow researchers and developers an opportunity to undertake preliminary work needed to clarify constructs, assemble theoretical or conceptual foundations, or perform early investigations of an idea for an innovative resource, model, or tool. Exploratory projects can also focus on the innovative repurposing or adaptation of existing resources, models, or tools. These short duration projects might develop prototype educational materials or practices and conduct research in small-scale pilot tests to provide proof of concept and preliminary estimates of impact. These projects should produce empirical evidence forming the basis of anticipated further research and development work. Exploratory projects may also be synthesis projects that bring together findings on current technology-enhanced resources and models to identify new directions for research and development. DRK-12 particularly encourages synthesis projects that provide research findings and recommendations that are useful to STEM education practitioners and decision makers.

Full Research and Development projects are expected to lead to successful dissemination and adoption of findings or products in the preK-12 enterprise at a scale beyond that directly supported by the grant. Full Research and Development projects are built on the most promising Exploratory projects or other (non-NSF funded) projects. These projects have already demonstrated effectiveness in small sets of classrooms, schools, or other learning settings. Greater funding levels and longer timelines allow researchers and developers an opportunity to undertake more in-depth product development, more targeted research, and to reach a broader, more diverse, audience. Resources, models, or tools developed in full research and development projects should result in completed products, ready for implementation by others who request them.

Conferences and Workshops related to the mission of the DRK-12 program are also supported under this solicitation. Conferences or workshops should be well focused, related to the goals of
the program, and generate a product usable by researchers or practitioners. All conference proposals should provide for an evaluation of the impact of the conference to be conducted at least 12 months after the conference is completed.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=500047

FINE ARTS

Research Grants
National Art Education Association (NAEA)
Due date: Oct 01, 2012 (anticipated)

The Research Grants endorse NAEA's efforts to initiate and encourage research in art education. This program provides major grants to support research in art education specifically relating to one of the recommendations in Creating a Visual Arts Research Agenda Toward the 21st Century identified by NAEA's Commission on Research in Art Education.

http://www.arteducators.org/grants/naea-research-grants

Spring Internships
Museum of Modern Art (MoMA)
Due date: Oct 07, 2012 (anticipated)

Internships are offered during the school year, coinciding with the spring semester, as well as during the summer. Internship projects are based on MoMA's needs and requirements, and are assigned to interns with the appropriate skills and interests. The museum's internships are ideal for registered students who require internship or practicum credits.

http://www.moma.org/learn/courses/internships

Opera and Vocal Studies Program
Boston Symphony Orchestra (BSO)
Due date: Oct 14, 2012 (anticipated)

Fellows in the Opera and Vocal Studies program participate in a wide range of art song and several performances of small-scale theatrical works. Vocal Fellows will comprise the soloists in a performance of Stravinsky's "Les Noces" and for a concert version of Oliver Knussen's "Higglety Pigglety Pop!". Study projects will include an evening of art song on the poetry of Emily Dickinson, led by Stephanie Blythe and Alan Smith, and a workshop on stage movement with Mark Morris and Howard Watkins.

All fellows take part in weekly Master Classes with legendary teacher and performer Phyllis Curtin, and in a series of master-classes with resident faculty and visiting artists, which in 2012
include Ms. Blythe, Håkan Hagegård, Dawn Upshaw, and Martin Katz. Howard Watkins and Linda Hall of the Metropolitan Opera will coach fellows in opera repertoire.

http://www.bso.org/bso/mods/toc_01_gen_images.jsp?id=bc5240104

**Senior Fellowships and Associate Appointments**
National Gallery of Art (NGA)
**Due date: Oct 15, 2012 (anticipated)**

The Center for Advanced Study in the Visual Arts announces its program for senior fellowships. Fellowships are for full-time research, and scholars are expected to reside in Washington and to participate in the activities of the Center throughout the fellowship period. Lectures, colloquia, and informal discussions complement the fellowship program.

The Paul Mellon and Ailsa Mellon Bruce Senior Fellowships are intended to support research in the history, theory, and criticism of the visual arts (painting, sculpture, architecture, landscape architecture, urbanism, prints and drawings, film, photography, decorative arts, industrial design, and other arts) of any geographical area and of any period. The Samuel H. Kress Senior Fellowships are intended to support research on European art before the early nineteenth century. The William C. Seitz Senior Fellowship is primarily intended to support research on modern and contemporary art. Senior fellowship applications are also solicited from scholars in other disciplines whose work examines artifacts or has implications for the analysis and criticism of form.

The center will consider appointment of associates who have obtained awards for full-time research from granting institutions other than their home institutions and would like to be affiliated with the center.

http://www.nga.gov/resources/casvasen.htm

**HUMANITIES**
See also opportunities listed under MULTIPLE DISCIPLINES

**National Endowment for Humanities (NEH) Fellowships**
American Schools of Oriental Research (ASOR)
**Due date: Oct 01, 2012 (anticipated)**

The AIAR, also known as the Albright, annually provides these research fellowships to postdoctoral scholars in Near Eastern studies from prehistory through the early Islamic period, including the fields of archaeology, anthropology, art history, Bible, epigraphy, historical geography, history, language, literature, philology, and religion and related disciplines. The research period should be continuous, without frequent trips outside the country. Residence at the Albright, located in Jerusalem, Israel, is required.
Preservation Fund
National Trust for Historic Preservation
Due date: Oct 01, 2012

Grants from National Trust Preservation Funds (NTPF) are intended to encourage preservation at the local level by providing seed money for preservation projects. These grants help stimulate public discussion, enable local groups to gain the technical expertise needed for particular projects, introduce the public to preservation concepts and techniques, and encourage financial participation by the private sector. The National Trust is particularly interested in projects that relate to the preservation priorities listed below:

1. Building sustainable communities: projects that demonstrate that historic preservation supports economic, environmental and cultural sustainability in communities
2. Reimagining historic sites: projects that use innovative, replicable strategies that create new models for historic site interpretation and stewardship
3. Promoting diversity and place: projects that broaden the cultural diversity of historic preservation
4. Protecting historic places on public lands

NTPF grants are awarded for planning activities and education efforts focused on preservation.

- Planning: support for obtaining professional expertise in areas such as architecture, archaeology, engineering, preservation planning, land-use planning, and law. Eligible planning activities include, but are not limited to: (1) hiring a preservation architect or landscape architect to produce a historic structure report or historic landscape master plan; (2) hiring a preservation planner to produce design guidelines for a historic district; (3) hiring a real estate development consultant to produce an economic feasibility study for the reuse of a threatened structure; and (4) sponsoring a community forum to develop a shared vision for the future of a historic neighborhood.

- Education and Outreach: support for preservation education activities aimed at the public. The National Trust is particularly interested in programs aimed at reaching new audiences. Funding will be provided to projects that: (1) employ innovative techniques and formats aimed at introducing new audiences to the preservation movement; and (2) feature educational programs or conference sessions that focus on the preservation priorities listed above.

http://www.preservationnation.org/resources/find-funding/
Grants
National Center for Preservation Technology and Training
Due date: Oct 01, 2012 (anticipated)

The National Center for Preservation Technology and Training (NCPTT) seeks innovative projects that advance science and technology for historic preservation. The PTT Grants program funds projects that develop new technologies or adapt existing technologies to preserve cultural resources.

Projects may include, but are not limited to:
- laboratory or field research that explores or assesses novel or adaptive methods;
- training activities, including workshops, and course or curriculum development that promote the use of new or adaptive technologies;
- documentation using new methods;
- manuscript or website development that disseminates innovative preservation technologies; and
- meetings that convene experts to discuss the use of technologies to address preservation problems.

NCPTT funds projects within several overlapping disciplinary areas. These include archaeology, architecture, collections management, engineering, historic landscapes, and materials conservation.

Although any proposal will be considered that advances NCPTT's mission, NCPTT will give preference to proposals that advance technologies or methods to conserve cultural resources of the "recent past," monitor and evaluate preservation treatments, investigate minimally invasive techniques to inventory and assess cultural resources, protect cultural resources against natural and human threats, preserve cemeteries and places of worship, and safeguard resources from effects of pollution and climate.

The successful proposed project should address an identifiable national need in preservation technology, present innovative technologies, demonstrate a technically sound methodology, have a principal investigator well qualified to conduct the proposed work, disseminate project results effectively, and be cost effective given the scope of work and the audience. Projects that result in tangible grant products that disseminate information beyond traditional ways (e.g. online web based training, webinars, podcasts, videos, DVDs, electronic publishing, etc.) will be reviewed favorably.

http://ncptt.nps.gov/grants/call-for-proposals/

APS/British Academy Fellowship for Research in London
American Philosophical Society (APS)
Due date: Oct 03, 2012 (anticipated)

In collaboration with the British Academy, the APS offers an exchange postdoctoral fellowship for research in the archives and libraries of London.
American citizens and residents of the United States may apply. Applicants are expected to have a doctorate or to have published work of doctoral character and quality. Ph.D. candidates are not eligible to apply, but the APS is particularly interested in supporting the work of young scholars who have recently received the doctorate.

http://www.amphilsoc.org/grants/franklin

**Conservation Project Support (CPS) Program**  
Institute of Museum and Library Services (IMLS)  
**Due date: Oct 03, 2012**

A parent organization that controls multiple museums that are not autonomous but that are otherwise eligible may submit only one application per grant program; the application may be submitted by the parent organization on behalf of one or more of the eligible museums.

The Conservation Project Support program awards grants to help museums identify conservation needs and priorities, and perform activities to ensure the safekeeping of their collections.

Conservation Project Support grants help museums develop and implement a logical, institution-wide approach to caring for their living and material collections. Applicants should apply for the project that meets one of the institution's highest conservation needs. All applications must demonstrate that the primary goal of the project is conservation care, and not collection management or maintenance.

Grants are available for many types of conservation activities, including surveys (general, detailed condition, or environmental); training; treatment; and environmental improvements.

Museums are encouraged to share the impact of conservation activities with their communities through outreach and programs.


**Documenting Democracy: Access to Historical Records Projects**  
National Archives and Records Administration (NARA)  
**Due date: Oct 04, 2012**

The National Historical Publications and Records Commission seeks proposals that promote the preservation and use of the nation's most valuable archival resources. Projects should expand understanding of the American past by facilitating and enhancing access to primary source materials. The Commission will support such activities as establishing archives programs, processing archival collections at the basic or detailed levels, surveying and accessioning archival records, and converting existing archival collection finding aids to new online formats. Applicants may submit proposals for one or any combination of the following four project categories:
1. Basic Processing - Proposals may be submitted for establishing archives and undertaking basic processing activities that promote the preservation and use of America's documentary heritage. Proposals must demonstrate how the applicant employs the best and most cost-effective archival methods.

2. Detailed Processing - For collections with proven high research demand or substantial preservation concerns, applicants may propose to conduct detailed processing and preservation reformatting of collections of national significance.

3. Documentary Heritage - Documentary heritage projects create more comprehensive documentation of United States history and culture by supporting projects that identify, survey, collect, and make available nationally significant records relating to groups and topics traditionally underrepresented in the historical record.

4. Retrospective Conversion of Descriptive Information - Proposals may be submitted for converting legacy finding aids and other sources of descriptive information into formats that provide improved online access to collections.

   http://www.grants.gov/search/search.do?mode=VIEW&oppId=173473

   **Solmsen Postdoctoral Fellowships**
   University of Wisconsin, Madison
   **Due date: Oct 14, 2012 (anticipated)**

   Through a generous bequest from Friedrich and Lieselotte Solmsen, the IRH offers these postdoctoral fellowships to scholars from other universities working on literary and historical studies of the European Classical, Medieval, and Renaissance periods up to about 1700.

   Solmsen Fellows are also expected to participate in the intellectual life of the Institute by attending the weekly Monday afternoon seminars (3:00 to 5:00pm) and presenting their work at a seminar. Fellows are also encouraged to join the informal daily lunches at the institute, as well as to attend other institute events, as time and interest permits.

   http://irh.wisc.edu/fellowships.php?menu=4

   **Visiting Scholars Program (VSP)**
   American Academy of Arts and Sciences
   **Due date: Oct 15, 2012 (anticipated)**

   The VSP is an interdisciplinary research fellowship housed at the headquarters of the academy in Cambridge, Massachusetts. Its purpose is to stimulate and support scholarly work by promising scholars and practitioners in the early stages of their careers and to foster exchange between an emerging generation of scholars and Academy members with shared interests.
To accomplish this goal, the academy offers scholars the opportunity to combine independent research and writing with active involvement in its programs and activities. Visiting scholars are invited to participate in academy-sponsored conferences, seminars, and informal gatherings. They also benefit from institutional partnerships with local universities, libraries, and research institutes in the Boston area.

The academy conducts the VSP in association with the Harvard Humanities Center, which provides access to the university's research facilities and works with the academy to plan joint lectures, seminars, and informal discussions.

The Academy seeks proposals that relate to its primary research areas: humanities and culture; science, technology, and global security; social policy and American institutions; and education. Projects that address American cultural, social, or political issues from the founding period to the present are welcome, as are studies on the history of science.

http://www.amacad.org/visiting.aspx

**INTERNATIONAL AREA STUDIES**  
See also opportunities listed under HUMANITIES and MULTIPLE DISCIPLINES

**Michael J. Hogan Foreign Language Fellowship**  
Society for Historians of American Foreign Relations (SHAFR)  
**Due date: Oct 01, 2012**

The Hogan Fellowship was established to honor Michael J. Hogan, long-time editor of *Diplomatic History*. The Hogan Fellowship is intended to promote research in foreign language sources by graduate students. The fellowship is intended to defray the costs of studying foreign languages needed for research.

Applicants must be graduate students researching some aspect of U.S. foreign relations history. Membership in SHAFR is required. Self-nominations are expected.

http://www.shafr.org/members/fellowships-grants/#hogan

**Research Travel Within the USA**  
Association for Asian Studies, Inc. (AAS)  
**Due date: Oct 01, 2012**

The Northeast Asia Council (NEAC) of the Association for Asian Studies, in conjunction with the Japan-US Friendship Commission, supports a variety of grant programs in Japanese studies designed to facilitate the research of individual scholars, to improve the quality of teaching about Japan on both the college and precollege levels, and to integrate the study of Japan into the major academic disciplines. In the category, financial assistance is available to American citizens and
permanent U.S. residents who are engaged in scholarly research on Japan and wish to use museum, library, or other archival materials located in the USA.

http://www.asian-studies.org/grants/main.htm#NEAC-JAPAN

**International Affairs Fellowship in Japan (IAF-J), Sponsored by Hitachi, Ltd.**
Council on Foreign Relations (CFR)

**Due date: Oct 01, 2012**

Founded in 1997, the International Affairs Fellowship in Japan (IAF-J), sponsored by Hitachi, Ltd., seeks to strengthen mutual understanding and cooperation between the rising generations of leaders in the United States and Japan. The program provides a selected group of mid-career U.S. citizens the opportunity to expand their professional horizons by spending a period of research or other professional activity in Japan. Fellows are drawn from academia, business, government, media, NGOs, and think tanks. Fellows are selected on the basis of academic and professional accomplishments and promise, the merits and feasibility of their specific research or action proposals, character and personal qualities conducive to promoting cross-cultural communication and cooperation, and the contribution that the proposed research or professional activity will make to the applicant's individual career development. The selection process is highly competitive.

http://www.cfr.org/thinktank/fellowships/iaf_japan.html

**Research Grants**
Chiang Ching-Kuo Foundation for International Scholarly Exchange (CCKF)

**Due date: Oct 15, 2012 (anticipated)**

The Foundation's grants provide support for research on Chinese Studies in the humanities and social sciences. Researchers focusing on the social, cultural, economic or political development of Taiwan over the past few decades are especially encouraged to apply. Priority will be given to collaborative projects with scholars in Taiwan.

http://www.cckf.org.tw/e-americaRG.htm

**Study of the United States Institute on U.S. National Security Policymaking**
United States Department of State (DOS)

**Due date: Oct 11, 2012 (anticipated)**

The Branch for the Study of the U.S., Office of Academic Exchange Programs, Bureau of Educational and Cultural Affairs (ECA/A/E/USS), invites proposal submissions for the design and implementation of the Study of the United States Institute on U.S. National Security Policymaking. This institute will provide a multinational group of up to 18 experienced foreign university educators and other professionals with a deeper understanding of U.S. approaches to
national security policymaking, past and present, in order to strengthen curricula and to improve the quality of teaching about the United States at universities and other institutions abroad. The institute should be an intensive, academically rigorous program for scholars and other professionals from outside the United States, and should have a central theme and a strong contemporary component.

Study of the U.S. Institutes for scholars are intended to offer foreign scholars and other professionals, whose professional work focuses in whole or in substantial part on the United States, the opportunity to deepen their understanding of American society, culture, and institutions. The ultimate goal is to strengthen curricula, to improve the quality of teaching, and to broaden understanding of U.S. national security policymaking in universities and other institutions of influence abroad.

http://exchanges.state.gov/grants/open2.html

**MEDICINE & LIFE SCIENCES**
See also opportunities listed under MULTIPLE DISCIPLINES

**Directed Medical Research Programs (CDMRP)**
Department of Defense (DOD)
**Due date:** (see individual programs)

Recently released funding opportunities from the Duchenne Muscular Dystrophy Research Program (DMDRP) and the Lung Cancer Research Program (LCRP).

Detailed descriptions of each of the funding opportunities, including submission requirements and evaluation criteria, can be found in the respective Program Announcements. Program Announcements will also be available on the CDMRP website (http://cdmrp.army.mil/funding/prgdefault.shtml) and the CDMRP eReceipt System (https://cdmrp.org) within the next 48 hours.

**Endocannabinoid Signaling in Alcohol Consumption, Intoxication and Use Disorders (R01)**
United States Department of Health and Human Services (HHS)
**Due date:** Oct 05, 2012 (anticipated)

This FOA encourages Research Project Grants (R01) applications from institutions/organizations that propose to study the roles and underlying mechanisms of endocannabinoid signaling in alcohol preference, consumption, intoxication and alcohol use disorders, and to explore endocannabinoid signaling system as potential targets for alcohol pharmacotherapy. With increasing knowledge of the function of eCBs in the developing and adult brain and recent behavioral and pharmacological evidence linking alcohol and eCB signaling system, there is now
great potential to explore the role of eCB signaling system in alcohol-related behaviors and alcohol use disorders. Studies supported with this FOA will help to gain knowledge about the role and underlying mechanisms of eCB signaling in alcohol preference and consumption; the interactions of acute and chronic alcohol exposure with eCBs at synapses; the effects of such interactions on short- and long-term synaptic plasticity; the role of eCB signaling in the development and maturation of the central nervous system; and the eCB signaling system in fetal alcohol spectrum disorders.


Effects of Adolescent Binge Drinking on Brain Development (R01)
United States Department of Health and Human Services (HHS)
Due date: Oct 05, 2012

This FOA encourages Research Project Grant (R01) applications proposing to conduct mechanistic studies on the effects of adolescent binge alcohol consumption on synaptic maturation and myelin formation in the developing brain.

http://grants.nih.gov/grants/guide/pa-files/PA-12-027.html

Research Project Grant (Parent R01)
United States Department of Health and Human Services (HHS)
Due date: Oct 5, 2012

The Research Project Grant (R01) is an award made to an institution/organization to support a discrete, specified, circumscribed project to be performed by the named investigator(s) in areas representing the specific interests and competencies of the investigator(s). The R01 research plan proposed by the applicant institution/organization must be related to the stated program interests of one or more of the NIH Institutes and Centers (ICs) based on descriptions of their programs.


Independent Scientist Award (K02)
United States Department of Health and Human Services (HHS)
Due date: Oct 12, 2012

The purpose of the NIH Independent Scientist Award (K02) is to foster the development of outstanding scientists and enable them to expand their potential to make significant contributions to their field of research. The K02 award provides three, four, or five years of salary support and "protected time" for newly independent scientists who can demonstrate the need for a period of intensive research focus as a means of enhancing their research careers. Each independent scientist career award program must be tailored to meet the individual needs of the candidate
Understanding and Promoting Health Literacy (R03)
United States Department of Health and Human Services (HHS)
Due date: Oct 16, 2012

The ultimate goal of this program announcement is to encourage empirical research on health literacy concepts, theory and interventions as these relate to the U.S. Department of Health and Human Services' public health priorities that are outlined in its HealthierUS and Healthy People initiative. Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.

NIH Small Research Grant Program (Parent R03)
United States Department of Health and Human Services (HHS)
Due date: Oct 16, 2012 (anticipated)

The FOA supports small research projects that can be carried out in a short period of time with limited resources. Investigator-initiated research, also known as unsolicited research, is research funded as a result of an investigator submitting a research grant application to NIH in an investigator's area of interest and competency. The R03 grant mechanism supports different types of projects including pilot and feasibility studies; secondary analysis of existing data; small, self-contained research projects; development of research methodology; and development of new research technology.

Improving Translational and Basic Research to Control Itch in Humans (ITCH) (R21)
United States Department of Health and Human Services (HHS)
Due date: Oct 16, 2012

This FOA will support basic and translational studies aimed at understanding the mechanisms of itch sensation and developing methods to modulate and control itch sensation in disease and rehabilitation. The purpose is to accelerate discovery in this nascent field and to apply new knowledge to improve human conditions relevant to the NIAMS mission. This FOA intends to support a broad range of investigations using animal and human models, with an emphasis on multidisciplinary collaboration for rapid bench-to-bedside exchange of information and therapy development. This FOA is not intended to support applications proposing clinical trials.
**Pancreatic Cancer Action Network-AACR Career Development Awards**
American Association for Cancer Research (AACR)

**Due date: Oct 31, 2012**

These awards represent a joint effort to encourage and support junior faculty who are in the first four years of a faculty appointment (at the start of the grant term) to conduct pancreatic cancer research and establish successful career paths in this field. The research proposed for funding may be basic, translational, clinical or epidemiological in nature and must have direct applicability and relevance to pancreatic cancer.

Research projects must have direct applicability and relevance to pancreatic cancer. They may be in any discipline of basic, clinical, translational or epidemiological research, and fall within at least one of the categories of the Common Scientific Outline (Biology; Etiology; Prevention; Early Detection, Diagnosis, and Prognosis; Treatment; Cancer Control, Survivorship, and Outcomes Research; or Scientific Model Systems).

[http://www.aacr.org/home/scientists/aacr-research-funding/current-funding-opportunities-for-junior-faculty.aspx](http://www.aacr.org/home/scientists/aacr-research-funding/current-funding-opportunities-for-junior-faculty.aspx)

**2012 Emerging Research Grants**
Deafness Research Foundation (DRF)

**Due date: Oct 31, 2012 (Letter of Intent)**

Hearing Health Foundation, formerly Deafness Research Foundation, requests applications from both new applicants and current awardees applying for second year funding, who are dedicated to exploring new avenues of hearing and balance science.

All research proposals in hearing and balance science, including those for basic, translational and applied clinical research, will be considered for funding. Hearing Health Foundation wishes to stimulate research that leads to a continuing and independently fundable line of research.


**PHYSICAL SCIENCES & MATHEMATICS**
See also opportunities listed under MULTIPLE DISCIPLINES

**Geospace Environment Modeling (GEM)**
National Science Foundation (NSF)

**Due date: Oct 15, 2012**

GEM is a broad-based, community-initiated research program on the physics of the Earth's magnetosphere and the coupling of the magnetosphere to the atmosphere and to the solar wind. The purpose of the GEM program is to support basic research into the dynamical and structural
properties of geospace, leading to the construction of a global Geospace General Circulation Model (GGCM) with predictive capability. The exact structure of a GGCM may be modular or may consist of a "spine" such as a global MDH model with links to special modules. The strategy for achieving GEM goals is to create a series of Focus Groups, each of which addresses a specific problem in understanding and modeling the magnetosphere.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5506

**Education and Interdisciplinary Research (EIR)**

*National Science Foundation (NSF)*

**Due date: Oct 31, 2012**

This program supports activities in conjunction with NSF-wide programs such as Faculty Early Career Development (CAREER), Research Experiences for Undergraduates (REU), and programs aimed at women, minorities, and persons with disabilities. The program also supports activities that seek to improve the education and training of physics students (both undergraduate and graduate), such as curriculum development or physics education research directed towards upper-level or graduate physics courses, and activities that are not included in specific programs elsewhere within NSF. The program supports research at the interface between physics and other disciplines and extending to emerging areas. Broadening activities related to research at the interface with other fields, possibly not normally associated with physics, may also be considered.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5610

**Solid State and Materials Chemistry (SSMC)**

*National Science Foundation (NSF)*

**Due date: Oct 31, 2012**

This multidisciplinary program supports basic research in solid state and materials chemistry comprising the elucidation of the atomic and molecular basis for material development and properties in the solid state from the nanoscale to the bulk. General areas of interest include but are not limited to innovative approaches to design, synthesis, bulk crystal and/or film growth, and characterization of novel organic, inorganic, and hybrid materials, as well as liquid crystal materials and multi-component material systems exhibiting new phenomena and/or providing new scientific insights into structure/composition/property relationships in the solid state. Relevant topics include original material design principles, new approaches to assembly or crystalline material growth, characterization of new material phenomena or superior behavior, investigations of surface and interfacial effects on material system structures and properties, and unraveling the relationships between structure/composition (e.g. self- or program-assembled materials, crystalline material growth, and nanostructured material systems) and properties (e.g. charge, ionic, thermal or spin transport, exciton diffusion, chemical reactivity and selectivity, etc.). Development of new organic solid state materials, environmentally-safe and sustainable materials, and fundamental studies of novel material and material systems for efficient energy
harvesting, conversion and storage are encouraged. The SSMC program works closely with other programs within the Division of Materials Research (DMR) and in the Mathematical and Physical Sciences (MPS) and Engineering (ENG) directorates to accommodate the multidisciplinary nature of proposal submissions.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5356

**Metallic Materials and Nanostructures (MMN)**
National Science Foundation (NSF)
**Due date: Oct 31, 2012**

This program supports fundamental research on the relationship between the structure and properties of metals and alloys. "Structure" is used in the broadest sense, encompassing length scales from the atomic to the macroscopic, including the nano, micro and mesoscales. Primary objectives are to foster the design of metallic materials with optimized and/or superior mechanical, functional and environmental behavior and prediction of their properties. The role of imperfections on properties is emphasized. Investigations will generally exploit the combined tools of experiment, advanced characterization methods, theory, computer simulation and modeling. Synthesis and processing can be a vital component of the nano and microstructure-property relationships, and in such cases are welcome additions to the research effort. The program aims to advance the materials science of metals and alloys through innovative research on a diverse array of topics, including phase transformations, equilibrium, non-equilibrium and far-from equilibrium crystal structures, thermodynamics, kinetics, diffusion, interfaces, oxidation, magnetic behavior, thermal transport and other phenomena influenced by imperfections. Yield strength, flow stress, creep, fatigue and fracture are structural-materials examples. Magnetic energy density, shape-memory strain and thermoelectric efficiency are examples in the realm of functional materials. The submission of proposals that combine or integrate these phenomena is encouraged.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5351

**Ceramics (CER)**
National Science Foundation (NSF)
**Due date: Oct 31, 2012**

This program supports fundamental research including combined experiment and theory projects in ceramics (e.g., oxides, carbides, nitrides, and borides), glasses, ceramic-based composites and inorganic carbon-based materials. The objective of the program is to increase fundamental understanding and to develop predictive capabilities for relating synthesis, processing, and microstructure of these materials to their properties and ultimate performance in various environments and applications. Development of new experimental techniques or novel approaches to carry out projects is encouraged. Topics supported include basic processes and mechanisms associated with nucleation and growth of thin films; bulk crystal growth; phase transformations and equilibria; morphology; surface modification; corrosion, interfaces and grain boundary structure; and defects. The microstructures investigated range from crystalline,
polycrystalline, and amorphous to composite and nanostructured materials. PIs are encouraged to include all anticipated broader impact activities in their initial proposals, rather than planning on supplemental requests. Most projects include (1) anticipated significance on science, engineering and/or technology including possible benefits to society, (2) plans for the dissemination of results, and (3) broadening participation of underrepresented groups and/or excellence in one or more of these areas: training, mentoring, and teaching. Many successful proposals will include one additional broader impact activity.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5352

**Electronic and Photonic Materials (EPM)**  
National Science Foundation (NSF)  
**Due date: Oct 31, 2012**

The goal of this program is to advance the field of electronics and photonics through basic, potentially transformative materials science research. The scope of the program encompasses the discovery and understanding of materials and material combinations with potential for major technological advantages. Program focus is on identification and understanding of fundamental atomic and molecular level mechanisms and phenomena associated with synthesis and processing of electronic and photonic materials. High risk, high payoff research is encouraged. For example, novel materials are sought that may offer new paradigms in critical computing and communications components, or enable low cost, highly efficient, and stable photovoltaics, solid state lighting, and displays. Research topics include, but are not limited to, nucleation and growth of thin films and nanostructures; self-assembly; nanostructure definition and etching processes; interface bonding and structure; crystal and interface defects; doping; bulk crystal growth; and interrelationships between synthesis/processing, structure, and properties.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5353

**Condensed Matter and Materials Theory (CMMT)**  
National Science Foundation (NSF)  
**Due date: Oct 31, 2012**

This program supports theoretical and computational materials research and education in the topical areas represented in DMR programs, including condensed matter physics, polymers, solid-state and materials chemistry, metals and nanostructures, electronic and photonic materials, ceramics, and biomaterials. The program supports fundamental research that advances conceptual, analytical, and computational techniques for materials research. A broad spectrum of research is supported using electronic structure methods, many-body theory, statistical mechanics, and Monte Carlo and molecular dynamics simulations, along with other techniques, many involving advanced scientific computing. Emphasis is on approaches that begin at the smallest appropriate length scale, such as electronic, atomic, molecular, nano-, micro-, and mesoscale, required to yield fundamental insight into material properties, processes, and behavior and to reveal new materials phenomena. Areas of recent interest include, but are not
limited to, strongly correlated electron systems; low-dimensional systems; nonequilibrium phenomena, including pattern formation, microstructural evolution, and fracture; high-temperature superconductivity; nanostructured materials and mesoscale phenomena; quantum coherence and its control; and soft condensed matter, including systems of biological interest.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13623

**Gravitational Physics**  
National Science Foundation (NSF)  
**Due date: Oct 31, 2012**

This program emphasizes the theory of strong gravitational fields and their application to astrophysics and cosmology, computer simulations of strong and gravitational fields, and gravitational radiation; and construction of a quantum theory of gravity. The program oversees the management of the construction, commissioning, and operation of the Laser Interferometer Gravity Wave Observatory (LIGO), and provides support for LIGO users and other experimental investigations in gravitational physics and related areas.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5628

**SOCIAL SCIENCES**  
See also opportunities listed under HUMANITIES; INTERNATIONAL AREA STUDIES; and MULTIPLE DISCIPLINES

**NASP Graduate Student Research Grants (GSRG)**  
National Association of School Psychologists (NASP)  
**Due date: Oct 01, 2012 (anticipated)**

The GSRG were created to support graduate student research and to facilitate high quality student-initiated research that supports the mission and goals of NASP and has the potential to impact the field positively. Notably, these grants address the following areas of the NASP Strategic Plan:

1. Professional Competency: NASP will ensure that current and future school psychologists have competencies and skills to support the diverse strengths and needs of children, families, and schools.
2. Advocacy: NASP will advocate for appropriate research-based education and mental health services for all children and families.

The proposed research may be required for completion of the student's program (e.g., thesis or dissertation) or it may be additional research the student is conducting.

Consistent with the Future of School Psychology priority goals, which are supported by NASP, research projects focused in the following areas will be given priority:
1. Improving academic performance for all children
2. Improving social-emotional functioning for all children
3. Enhancing family-school partnerships and parent involvement in schools
4. More effective education and instruction for all learners
5. Increasing child and family services in schools that promote health and mental health and are integrated with community services

http://www.nasponline.org/about_nasp/gsra.aspx

**Research on Teen Dating Violence (R01)**  
United States Department of Health and Human Services (HHS)  
**Due date: Oct 05, 2012 (anticipated)**

This FOA encourages investigator-initiated research grant applications from institutions and organizations that propose to conduct behavioral or biomedical research aimed at better understanding the etiologies and precursors for, reducing risk for, and incidence of, teen dating violence (TDV). Research is also sought that examines the linkages and gaps among perceptions of appropriate responses to teen dating violence from service providers, the criminal justice system, teens themselves, victims, perpetrators, and bystanders.  


**Systems Science and Health in the Behavioral and Social Sciences (R01)**  
United States Department of Health and Human Services (HHS)  
**Due date: Oct 05, 2012**

This FOA encourages Research Project Grant (R01) applications from institutions/organizations that propose to develop basic and applied projects utilizing systems science methodologies relevant to human behavioral and social sciences and health. This FOA is intended to encourage a broader scope of topics to be addressed with systems science methodologies, beyond those encouraged by existing open FOAs. Research projects applicable to this FOA are those that are either applied or basic in nature (including methodological development), have a human behavioral and/or social science focus, and feature systems science methodologies.  


**Request for White Papers Titled 'Best Practices for Military Design Teams**  
United States Department of Defense (DOD)  
**Due date: Oct 10, 2012**

The USACE Geospatial Center has issued a request for White Papers titled "Best Practices for Military Design Teams". The requested research is a focus area related to BAA (W5J9CQ-11-R-0002) topic 2.1 (Leadership as an Influence Process) and topic 2.2 (Developing Leadership
Situational Awareness).

The purpose of this research is to investigate and provide guidance to commanders and design teams on the components, social processes, and potential outputs of design teams. Based on the military and scientific literatures, as well as data collected from military, governmental, and other civilian sources, researchers will (a) identify the necessary components of a design team, (b) develop best practices for improving the social processes by which a design team functions, and (c) identify ways in which the design team's shared understanding is captured and shared with others so that it can be acted upon. The development of best practices for commanders and design teams would advance the Army's understanding of the factors associated with the selection of design team members and the utilization of SMEs in the ADM and would further the application of the ADM into Army operations.

This research has several objectives:
1. Identifying the necessary components of a design team. This includes investigating topics such as the proper size of a design team, determining what stakeholders/SMEs to consult and when, what factors to consider in selecting members of the design team, and how to manage membership turnover.
2. Developing best practices for improving the social processes by which a design team functions. This includes investigating topics such as how to facilitate a sense of collaborative trust among design team members and non-military SMEs, how to integrate stakeholders/SMEs into the discourse, how to regulate emotions and biases of design team members, how to encourage perspective taking, and how to manage intergroup dynamics to promote true collaborative discourse.
3. Identifying the ways in which a design team produces the Design Concept. This includes investigating topics such as capturing collective understanding gained from discourse, turning shared understanding into a strategic action plan, and how to convey shared understanding to others.
4. Developing a written and/or visual guide for commanders and design team members to consult to ensure the team-based, collaborative approach inherent in the ADM is operating (and continues to operate) properly.

https://www.fbo.gov/?s=opportunity&mode=form&tab=core&id=987e0001e7efac31eb1957c86b42b54&cvview=1

Systems Science and Health in the Behavioral and Social Sciences (R21)
United States Department of Health and Human Services (HHS)
Due date: Oct 16, 2012

This FOA encourages Research Project Grant (R21) applications from institutions/organizations that propose to develop basic and applied projects utilizing systems science methodologies relevant to human behavioral and social sciences and health. This FOA is intended to encourage a broader scope of topics to be addressed with systems science methodologies, beyond those encouraged by existing open FOAs. Research projects applicable to this FOA are those that are
either applied or basic in nature (including methodological development), have a human behavioral and/or social science focus, and feature systems science methodologies.


SBE Minority Postdoctoral Research Fellowships and Follow-up Research Starter Grants
National Science Foundation (NSF)
**Due date: Oct 17, 2012 (anticipated)**

SBE offers Minority Postdoctoral Research Fellowships and Research Starter Grants in an effort to increase the diversity of researchers who participate in NSF programs in the social, behavioral, and economic sciences and thereby increase the participation of scientists from underrepresented groups in selected areas of science in the United States. These activities (postdoctoral fellowships and follow-up research starter grants) support training and research in the areas of social, behavioral and economic sciences within the purview of NSF. The SBE supports research in this program in a broad range of disciplines and in interdisciplinary areas primarily through its Behavior and Cognitive Sciences (BCS) Division and the Social and Economic Sciences (SES) Division. The BCS Division funds research to develop and advance scientific knowledge on human cognition, language, social behavior and culture, as well as on the interactions between human societies and the physical environment including the implications of nanotechnology on environment and society. SES supports research to enhance our understanding of human, social and organizational behavior by building social science infrastructure, by advancing social science methods, and by supporting disciplinary and interdisciplinary research projects that advance knowledge in the social and economic sciences.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503424

**MULTIPLE DISCIPLINES**

**Water Research Foundation**
Standardization For Drinking Water Systems
**Due Date: July 13, 2012**

The project will provide an overview of current automatic meter reading/infrastructure systems in use and available for deployment in North America from both water utilities and technology vendors, identify requirements or specification of standards by water utilities, and provide recommendation for the development and implementation of practical standards that map to the utility stated requirements.

"AMR/AMI Standardization for Drinking Water Systems."
**Biomechanics and Mechanobiology (BMMB)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The BMMB Program supports fundamental research in biomechanics and mechanobiology. An emphasis is placed on multiscale solid and fluid mechanics approaches in the study of organisms that integrate across molecular, cell, tissue, and organ domains. The relationships between mechanical behavior and extracellular matrix composition and organization are of interest. In addition, the influence of *in vivo* mechanical forces on cell and matrix biology in the histomorphogenesis, maintenance, regeneration, and aging of tissues is a primary concern. Funded projects may include theoretical, computational, and experimental approaches. The program encourages the consideration of diverse living tissues as smart materials that are self-designing.


**Operations Research (OR)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The OR program supports fundamental research leading to the creation of innovative mathematical models, analysis, and algorithms for optimal or near optimal decision-making, applicable to the design and operation of manufacturing, service and other complex systems. In addition to the traditional areas of Operations Research which includes discrete and continuous optimization as well as stochastic modeling and analysis, new research thrusts include simulation optimization and self-optimizing systems that can observe, learn, and adapt to changing environments.


**Service Enterprise Systems (SES)**
National Science Foundation (NSF)
**Due date: Oct 01, 2012**

The SES program supports research on strategic decision making, design, planning, and operation of commercial, nonprofit, and institutional service enterprises with the goal of improving their overall effectiveness and cost reduction. The program has a particular focus on health care and other similar public service institutions, and emphasizes research topics leading to more effective systems modeling and analysis as a means to improved planning, resource allocation, and policy development.

Infrastructure Management and Extreme Events (IMEE)
National Science Foundation (NSF)
Due date: Oct 01, 2012

The IMEE program focuses on the impact of large-scale hazards on civil infrastructure and society and on related issues of preparedness, response, mitigation, and recovery. The program supports research to integrate multiple issues from engineering, social, behavioral, political, and economic sciences. It supports fundamental research on the interdependence of civil infrastructure and society, development of sustainable infrastructures, and civil infrastructure vulnerability and risk reduction.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13353

NASA Broad Agency Announcement (BAA): Unique and Innovative Space Technology
National Aeronautics and Space Administration (NASA)
Due date: Oct 03, 2012 (anticipated)

The Game Changing Technology Division (GCT), within NASA's Office of the Chief Technologist (OCT) is soliciting executive summaries, white papers, and proposals for research and development (R&D) for technology that is innovative and unique and promises to enable revolutionary (game-changing) improvements to the efficiency and effectiveness of the USA's space capability. Novel (unique) capabilities are sought that address NASA Space Technology Grand Challenges or any of the 14 Technology Areas (TAs) identified in NASA's draft Space Technology Roadmap and listed below:
TA01 Launch Propulsion Systems
TA02 In-Space Propulsion Technologies
TA03 Space Power and Energy Storage
TA04 Robotics, Tele-Robotics and Autonomous Systems
TA05 Communication and Navigation
TA06 Human Health, Life Support and Habitation Systems
TA07 Human Exploration Destination Systems
TA08 Science Instruments, Observatories and Sensor Systems
TA09 Entry, Descent and Landing Systems
TA10 Nanotechnology
TA11 Modeling, Simulation, Information Technology and Processing
TA12 Materials, Structures, Mechanical Systems and Manufacturing
TA13 Ground and Launch Systems Processing
TA14 Thermal Management Systems

GCT may publish special topics as modifications to this BAA throughout the year, to highlight technology challenges of special interest.

GCT's normal practice (independent of this solicitation) will be to develop focused projects designed to achieve specific metrics and to competitively select performers with project specific
solicitations. In these scenarios, the technology (focused project) under development, while revolutionary, is not unique among a community of performers. For example, a technology may have been widely discussed and analyzed during its early stage development or there are alternative technologies or approaches to achieve the project goals. The goals/metrics for these projects are developed by GCT staff to guide a maturing technology or capability to a readiness level and acceptance level that facilitates its smooth transition to NASA applications.

GCT recognizes that innovation is often unpredictable and sudden. This solicitation addresses these circumstances. Revolutionary concepts can emerge quickly from new developments and from concepts that integrate relatively mature and proven technology into new arrangements or systems. These concepts/technologies are often "discovered" by individuals and organizations in a manner that is proprietary, unique, or isolated. This solicitation is focused upon these types of sudden and unexpected innovations that hold a potential for providing a "game changing" impact on the efficiency and effectiveness of space capability. Technology of interest to this solicitation must adhere to GCT standing interest in revolutionary technology, but must also have a unique character in their "discovery" for which GCT's normal program development process is not intended to support.

http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solId={B038DDD9-9361-A4A8-06AD-38A2650D03EF}&path=open

**Implications of the Economic Downturn for Health, Wealth, and Work at Older Ages**
United States Department of Health and Human Services (HHS)
**Due date: Oct 05, 2012**

This FOA invites research on the implications of exogenous shocks, such as those produced by the recent economic downturn, for health, economic circumstances, and planning throughout the life-cycle. The recent financial crisis emphasizes that there is much to learn, and scientific research is needed to address many of the questions, concerns, and implications that have arisen.


**Social-Behavioral Research Grant**
American Lung Association (ALA)
**Due date: Oct 20, 2012 (anticipated)**

The objective of the grant is to provide seed monies to junior investigators working on various disciplines of social science examining risk factors affecting lung health including psychosocial lung health research, behavioral lung health research, health services and health policy research, epidemiological and biostatistical lung health research, and public health education research. This grant includes studies concerning the ethical, legal, and economic aspects of health services and policies. The ALA is particularly interested in receiving meritorious applications from individuals working in areas that are aligned with the following mission-related Strategic Planning Goals: eliminate tobacco use and tobacco-related lung diseases; improve the air we
breathe so it will not cause or worsen lung disease; and reduce the burden of asthma, COPD, and lung cancer on patients and their families.

http://www.lungusa.org/finding-cures/grant-opportunities/grant-offerings.html

Chemistry of Life Processes (CLP)  
National Science Foundation (NSF)  
Due date: Oct 31, 2012

The CLP program supports the investigation of problems at the Chemistry-Biology interface in which the primary approach or tools employed are those of chemistry. The fundamental examination of mechanisms, dynamics, recognition and structure/function relationships at the molecular level is at the core of the CLP program. Projects that integrate experimental and theoretical chemical approaches into studies of biomolecules or biomolecular processes in the domain of proteins, nucleic acids, carbohydrates and lipids will be considered. The use of small molecules such as ligands, inhibitors, signal transducers or molecular beacons to interrogate biological systems is a characteristic mode of inquiry for CLP investigators. The program also welcomes the application of computational and spectroscopic methods to examine Nature's macromolecular machinery and processes.

Appropriate areas of inquiry include, but are not limited to, peptide design, protein-protein and protein-nucleic acid interactions, post-translational modification alternative base pairs, epigenetics, signal and energy transduction pathways, and molecular definition of emerging "codes" such as those associated with glycomics and histones. Mechanisms of enzyme and metalloenzyme activity, ribozyme and/or riboswitch function and of DNA damage and covalent modification are also central themes in the program.

Proposals that predominantly utilize biological tools or techniques may be more appropriate for the Division of Molecular and Cellular Biosciences (MCB). Proposals that address biomedical problems may be more appropriate for the National Institutes of Health or other health-directed funding agencies.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503417