

The State University System of Florida

Washington E-Update

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Budget & Appropriations Update -- For the past several days lawmakers in the Republican-controlled House and Democratic-controlled Senate played chicken over a spending bill to keep the government running. When neither side blinked, President Obama ordered federal government agencies to begin shutting down, furloughing thousands of workers and curtailing some services for the first time in over 17 years.

Indeed, the only semblance of cooperation between the two camps came as Congress passed legislation ensuring that members of the armed forces are paid during the shutdown.

At issue has been passage of a stop-gap spending bill called a continuing resolution, or CR, necessary because Congress has thus far failed to pass any of the government's 12 annual appropriations bills for the fiscal year that began October 1.

In the days leading up to the October 1 deadline, the House repeatedly passed a CR with provisions to defund all or part of the Affordable Care Act, the health reform law enacted in 2010. The Senate and the president dug in their heels, arguing that the issue had no place on a government-wide spending bill. Senate Majority Leader Harry Reid described the Democratic position in the impasse stating, "We will not negotiate with a gun to our head."

It is hard to predict how long the shutdown will last, but we expect a series of back and forth legislative maneuvers by the House, Senate and White House for the remainder of the week, and eventually some negotiations. One possible option is a one-week CR to buy congressional leaders more time to work out a compromise.

Absent that, 800,000 workers at federal agencies, including the Department of Education, will continue to be furloughed and more than a million others will be asked to work without pay as "essential" employees.

Mandatory programs, i.e. those not dependent on annual congressional appropriations, will continue under a government shutdown, but often at a slower pace. For example, Social Security checks will continue to flow, but federal workers who enroll new beneficiaries or handle inquiries from existing enrollees will be furloughed.

Department of Education

For the Department of Education, about 90 percent of the 4,225 employees will be furloughed, with only senior officials and a skeleton staff working to provide oversight on

the student loan and Pell grant programs. Student financial assistance and Pell grants will continue to be paid, but SEOG grants and work-study program will not be paid during the shutdown. New extramural research grants will not be processed by the agencies such as NIH and NSF. To read the Department of Education's shutdown plan, click [here](#). A link to all agency contingency plans is located [here](#).

Debt ceiling

The CR impasse is likely to evolve into a negotiation over the raising the nation's current \$16.7 trillion debt ceiling. The Treasury Department has said the government will exhaust its borrowing authority on October 17. Last week House Republicans had planned to advance a bill this week to offer a one-year suspension of the debt ceiling in return for a delay in starting the healthcare reform law and a number of tax and other provisions. With government now shut down, a modified proposal from the House is likely.

This is not the first time that the government has shut down. Since 1976, on 17 occasions government has experienced a funding gap of one day or more. About half of those occurred over a weekend, causing only minimal disruption. But the mother of all shutdowns, beginning in late 1995, turned the lights out twice for a total of 26 days.

Education Department launches effort to develop college rating system and tie Federal aid to scores

Following speeches by President Obama in mid-August, the Department of Education officially launched its "College Affordability and Value Outreach Initiative" September 19, an agenda intended to slow rising tuition costs and provide students with information to make informed decisions.

The plan includes three goals: paying for performance; promoting innovation and competition; and ensuring that student debt remains affordable.

As part of this plan, the President directed the Education Department to develop a ratings system by the 2015 school year to "better inform students and encourage institutions to improve." These ratings will compare colleges with similar missions and identify those that do the most to help students from disadvantaged backgrounds, as well as colleges that are improving their performance. In the future, the Department has proposed using the rating system to steer Federal educational assistance toward high-performing colleges.

Once the rating system is in place, the President said he plans to ask Congress to allocate federal financial aid based on the scores by 2018.

To develop the college ratings system, the Department is holding a series of meetings to get input from stakeholders. DoEd plans to address key themes in developing the rating system:

- College access, such as the percentage of students receiving Pell grants;
- College affordability, such as average tuition, scholarships, and loan debt; and
- Outcomes, such as students' graduation and transfer rates, graduate earnings, and advanced degrees of college graduates.

Feedback on the Department's plan and suggestions for the ratings system can be sent by any interested stakeholder to collegefeedback@ed.gov. To read a factsheet on the plan, click [here](#).

The Department plans to issue a proposed rating system and then make it available for public comment. Once the measures are finalized, ratings will be published on the [College Scorecard](#) before the 2015 school year. The Department of Education indicated that it plans to continue to refine these measures over coming years in collaboration with the higher education community, students and families, and the public.

CBO report projects doubling of national debt

With Congress wrestling over how to continue funding the federal government at the start of Fiscal 2014, the Congressional Budget Office issued a new projection September 17 saying that the tax cuts made permanent at the end of last year will double the size of the national debt over the next 25 years.

Federal health care spending, currently the major driver of the budget, is said to be slowing. The report says however: "Although federal deficits are projected to decline over the next several years under current law, increasing interest costs and growing spending for Social Security and major health care programs would soon cause them to rise steadily...The larger deficits would cause federal debt to grow faster than the economy. By 2038, debt would reach 100 percent of GDP and would be on an upward path, CBO projects—a trend that could not be sustained indefinitely."

"To put the federal budget on a sustainable path for the long term, lawmakers would have to make significant changes to tax and spending policies — letting revenues rise more than they would under current law, reducing spending for large benefit programs below the projected levels, or adopting some combination of those approaches," CBO said.

The report states that Congress would have to find savings of \$2 trillion over ten years just to keep current debt levels steady. Savings of \$4 trillion would be required over the decade to shrink debt back to historic levels under 40 percent of the economy. Debt currently stands at 70 percent of the economy.

"The bottom line remains the same as it was last year: The federal budget is on a course which cannot be sustained indefinitely," CBO Director Douglas Elmendorf said in releasing the report. To read the report, visit: <http://www.cbo.gov/publication/44521>

Senate bill focuses on ocean energy R&D

Legislation has been introduced in the Senate intended to encourage research and development for next generation of hydropower including renewable energy from ocean currents, waves, and tides, and flowing water in lakes and rivers.

The Marine and Hydrokinetic Renewable Energy Act of 2013 (S. 1419) encourages private investment in marine hydrokinetic (MHK) power technologies by streamlining the regulatory process for pilot projects that generate energy from oceans, lakes and rivers. The bill was introduced by Senate Energy and Natural Resources Committee Chairman Ron Wyden, D-OR, and Ranking Member Lisa Murkowski, R-AK.

The bill reauthorizes the Energy Department's marine hydrokinetic research, development and demonstration programs, including the National Marine Renewable Energy Research, Development, and Demonstration Centers. It also designates the Federal Energy Regulatory Commission as the lead agency to coordinate environmental reviews and sets a goal of licensing pilot programs in one year or less.

According to a Committee fact sheet, the Department of Energy has released two nationwide resource assessments that indicate the waves, tides, and ocean currents off the nation's coasts could contribute significantly to the United States' total annual electricity production. DOE is currently developing a strategy to support its vision of producing at least fifteen percent of our nation's electricity from water power, including conventional hydropower, by 2030. To read the bill, click [here](#).

Committees start planning for Higher Education Act reauthorization with hearings

The Chairman and Ranking Member of the Senate HELP Committee – the committee with jurisdiction over education legislation – formally launched their process to reauthorize the Higher Education Act in an announcement September 17. The current law which governs higher education policy expires at the end of 2013 and new legislation is expected to be drafted sometime next year.

The two Senators, Tom Harkin (D-IA) and Lamar Alexander (R-TN), said they will hold a series of 12 hearings in the coming months and released a letter outlining a process for stakeholder input as the hearings are announced. To read the letter click [here](#), of the release, click [here](#).

A dedicated email address, hea_reauth113@help.senate.gov, has been established to take recommendations before each hearing. Among the topics expected to be covered are:

The roles of the state, the federal government, and accreditors in higher education;

- Keeping college affordable;
- Examining ways to increase quality in higher education;
- Student access;
- Innovative approaches to improving student success;
- Student financial aid; and
- Teacher preparation programs.

The Committee held an HEA hearing, *The Triad: Promoting a System of Shared Responsibility. Issues for Reauthorization of the Higher Education Act*, September 19.

Democrats said they are likely to focus on affordability issues during the reauthorization process. The hearing covered the oversight roles of accreditation boards, states and the federal government. To view the hearing or read the testimonies, click [here](#).

Energy bill with higher education provisions stalled in the Senate

A bipartisan energy efficiency bill has been debated off and on throughout September on the Senate floor but largely delayed as it fell victim to being used as a vehicle for about 80 amendments, including several unrelated amendments aimed primarily at defunding the Affordable Care Act. No energy legislation has passed the Senate since 2007 and it had appeared that this narrow bill would break the long impasse.

Work on the Energy Savings and Industrial Competitiveness Act of 2013, S. 1392, slowly ground to a halt over three weeks after amendments were filed by Louisiana Republican David Vitter dealing with federal contributions to health care exchanges for Members of Congress and executive branch officials. The Vitter amendments led to retaliatory amendments by Democrats.

Among its provisions, the underlying bill would direct the Energy Department to provide grants to establish training and assessment centers at institutions of higher learning to identify and promote opportunities, concepts, and technologies for expanding building energy and environmental performance.

The bill also would:

- support the development and updating of national model building energy codes for residential and commercial buildings to enable the achievement of aggregate energy savings targets established by this Act,
- encourage and support the adoption by states and local governments of building energy codes that meet or exceed the national codes, and
- support full compliance with state and local codes.

House Chairmen urge Senate to drop provisions on use of military student assistance funds by for-profits

Four House Committee Chairmen have taken aim at two provisions in the Senate version of the Fiscal 2014 defense appropriations bill that would limit the use of veterans and servicemember education benefits by for-profit colleges.

The chairmen represent the Education and Workforce Committee, Armed Services Committee, Veterans Affairs Committee and the Veterans' Affairs Subcommittee on Economic Opportunity.

Senate Defense Appropriations Chair Richard Durbin (D-IL) included the language in his committee's bill, approved this summer. The first provision restricts institutions from using federal military higher education funds for marketing and recruiting practices.

The Congressmen write that the language is overly broad and that it implies that the funding causes "institutions to prey on unsuspecting students and as a practical matter, since revenue streams are fungible, it is highly questionable whether it is possible to isolate federal funds from general operations."

The second provision would include military education benefits in the so-called "90/10" rule in the Higher Education Act governing the revenue limit that for-profit colleges can receive from federal student aid.

The letter urges the Senate Appropriations Committee to drop both provisions and let next year's reauthorization of the Higher Education Act handle the issues. To read the letter, click the icon.



[Letter to the House Appropriations Committee Regarding HR 2397.pdf](#)

CRS report covers National Nanotechnology Initiative

The federal government's National Nanotechnology Initiative (NNI) is the topic of a newly released report by the Congressional Research Service, an arm of the Library of Congress that conducts research and analyses for Member of Congress.

The report covers the history, legislative underpinnings, agencies, appropriations and other background related to the program. Although federal nanoscale science, engineering, and technology R&D had been underway for over a decade, the NNI was first initiated as a Presidential technology initiative in 2000.

The original participating agencies were NSF, DOD, the Department of Energy, NIST, NASA, and NIH. However in 2013, 27 agencies now participate in the NNI, including 16 that have received appropriations to conduct or fund nanotechnology R&D. Since its first year of funding in FY2001, the NNI's annual appropriations grew four-fold to a peak

of \$1.9 billion in FY2010. Since then, however, federal nanotechnology funding has declined, falling to an estimated \$1.6 billion in FY2013. President Obama has requested \$1.7 billion in NNI funding for FY2014. To read the report, click the icon:



Medicare SGR fix still on the Congressional “to do” list

Congress returned from its August recess with a host of pressing issues, including funding the federal government in fiscal year 2014 and raising the debt ceiling. These issues have pushed addressing the Medicare sustainable growth rate (SGR) to the backburner.

The SGR, which governs physician reimbursement, has been a thorn in Congress’s side for the past decade. As physicians exceed the volume target set by the SGR, reimbursement is cut accordingly under the formula. However, Congress has allowed reimbursement to be cut only once. Instead, each year Congress has passed a temporary “patch” keeping reimbursement constant or increasing it slightly. By doing this, the cost of replacing the flawed formula has soared, sometimes to as high as \$300 billion dollars.

Because of decreasing utilization of services, the cost of SGR replacement has gone “on sale,” falling to \$135 billion this year. The decreased cost has led to real debate over how to replace the formula with a sustainable system that makes sense for both providers and beneficiaries. With the potential for the score to increase at the end of the November, lawmakers see now as the time to act.

At the start of the year, the House Energy & Commerce and Ways & Means Committees, the two committees with jurisdiction over Medicare, began working together to develop replacement legislation. Prior to the August recess, the Energy & Commerce Committee passed legislation on a bipartisan basis (HR 2810) that would replace the SGR with a period of modest payment increases. During that period of payment stability, providers would have the opportunity to enroll in the Quality Update Incentive Program outlined in the legislation or alternate payment models, like primary care medical homes, accountable care organizations or other models approved by HHS.

The major hurdle for HR 2810 is that it was passed without any offsetting savings, which is where Republicans and Democrats are likely to differ. The Ways & Means Committee must weigh in on the proposal, and the Senate Finance Committee has been working on a yet-to-be released replacement plan of its own. Whatever the endgame, it must be reached prior to January 1, 2014, when the SGR will dictate a 24.4 percent cut to providers.

No action has been taken on this issue since Congress returned from its summer recess, making it seem more likely that another “patch” will be needed. Leaders are

said to be considering a short-term patch, running for 6 months or less, to give Congress the time it needs to agree on a replacement with savings offsets.

UF professor testifies at Senate hearing on access to dental care

UF College of Dentistry professor Frank A. Catalanotto testified at a Senate hearing on the nation's dental access issues September 12.

Senator Bernard Sanders (I-VT), chair of the Subcommittee on Primary Health and Aging of the Health, Education, Labor and Pensions Committee, called the hearing entitled: "Dental Crisis in America: The Need to Address Cost." Sanders is sponsor of the "The Comprehensive Dental Reform Act of 2013" to provide dental health coverage to millions of Americans through Medicare, Medicaid and the VA. The Senator pledged to expand access to comprehensive coverage for dental care under the new healthcare reform law, and said he will introduce the bill soon.

He pointed out that dental care is not included as an essential benefit that must be offered by the insurance exchanges scheduled to start operating in October.

Catalanotto, the lead witness of a four-person panel, discussed data illustrating a lack of access to oral health services for low-income seniors, children and other populations.

He discussed the role of dental schools, such as the UF College, in training a diverse workforce, and providing care in community based settings. He advocated a new workforce model for the U.S. that would incorporate a "dental therapist" who could work under the supervision of a dentist but provide limited restorative dental care. He said they are currently being used in two states, and over 50 countries with good results.

To view a video of the hearing or read the testimony, click [here](#).

High priority research areas for "BRAIN Initiative" announced by NIH

The National Institutes of Health announced its initial areas of high-priority brain research that will guide \$40 million of fiscal year 2014 funding within the BRAIN Initiative --Brain Research through Advancing Innovative Neurotechnologies. The initiative aims to accelerate work on technologies that give a dynamic picture of how individual cells and complex neural circuits interact. The ultimate goal is to enhance understanding of the brain and improve prevention, diagnosis and treatment of brain diseases.

The initiative was announced in April <<http://www.whitehouse.gov/the-press-office/2013/04/02/remarks-president-brain-initiative-and-american-innovation>>. The

President called for a total of \$110 million in the 2014 fiscal year budget to support the effort, of which \$40 million is expected to be allocated by NIH.

NIH Director Francis Collins then assembled a BRAIN Working Group of expert neuroscientists to identify key areas of research for funding and they provided recommendations to the NIH Director's Advisory Committee which along with Collins endorsed the plans September 16.

NIH's fiscal 2014 investment will focus on nine areas of research. The vision for the initiative is to combine these areas of research into a coherent, integrated science of cells, circuits, brain and behavior. The recommendations are:

- Generate a census of brain cell types
- Create structural maps of the brain
- Develop new, large-scale neural network recording capabilities
- Develop a suite of tools for neural circuit manipulation
- Link neuronal activity to behavior
- Integrate theory, modeling, statistics and computation with neuroscience experiments
- Delineate mechanisms underlying human brain imaging technologies
- Create mechanisms to enable collection of human data for scientific research
- Disseminate knowledge and training

The working group will continue to meet over the course of the next nine months to develop the longer term scientific plan, which is expected to be delivered to the NIH in June 2014.

The BRAIN Initiative is jointly led by NIH, the Defense Advanced Research Projects Agency (DARPA) of the U.S. Department of Defense, and the National Science Foundation. Private partners-including the Allen Institute for Brain Science, Howard Hughes Medical Institute, and Kavli Foundation-are also committed to ensuring success through investment in the initiative.

For more information about the BRAIN Initiative and the ACD working group:
NIH BRAIN Initiative website <<http://www.nih.gov/science/brain/index.htm>>
NIH BRAIN Initiative Feedback website <<http://brainfeedback.nih.gov/>>
NIH Advisory Committee to the Director BRAIN Working Group website
<<http://acd.od.nih.gov/brain.htm>>

Highlights of competitive grant opportunities at federal agencies

Agency: Department of the Interior
National Park Service

Program: 2014 Preservation Technology and Training Grants

Description: The Preservation Technology and Training (PTT) Grants program provides funding for innovative research that develops new technologies or adapts existing technologies to preserve cultural resources. NCPTT does not fund "Bricks and Mortar" grants.

Due Date: 11/19/2013

Funding: Total Funding: \$100,000; Award Ceiling: \$40,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243013>

Agency: Department of Defense
Dept of the Army -- Materiel Command

Program: Fiscal Year (FY) 2014 Department of Defense Multidisciplinary Research Program of the University Research Initiative-Army Submission

Description: The MURI program supports basic research in science and engineering at institutions of higher education that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined by the DoD, "basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress."

Due Date: 12/16/2013

Funding: Total Funding: \$250,000,000; Award Ceiling: \$2,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242253>

Agency: Department of Defense
Dept of the Army -- Materiel Command

Program: THE DEPARTMENT OF DEFENSE (DoD) FISCAL YEAR 2014
DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM
(DURIP)

Description: The Department of Defense has announced the Fiscal Year 2014 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as "universities") to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment.

Due Date: 10/21/2013

Funding: \$1,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241893>

Agency: Department of Defense
Dept. of the Army -- USAMRAA

Program: DoD Breast Cancer Breakthrough Award

Description: The intent of the BCRP Breakthrough Award is to support promising research that has the potential to lead to or make breakthroughs in breast cancer. The critical components of this award mechanism are: Impact: Research supported by the Breakthrough Award will have the potential for a major impact and accelerate progress toward ending breast cancer. The impact may be near-term or long-term, but must be significant and move beyond an incremental advancement. Applications must articulate the pathway to making an impact for breast cancer patients, even if clinical impact is not an immediate outcome.

Due Date: 1/15/2014

Funding: \$13,100,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240675>

Agency: Department of Defense
Dept. of the Army -- USAMRAA

Program: DOD FY13 Militarily Relevant Peer Reviewed Alzheimer's Disease -
Quality of Life Research Award

Description: Military personnel who suffer from Traumatic Brain Injuries (TBIs) face an increased risk for developing several long-term health problems. These conditions include Alzheimer's-like dementia, aggression, memory loss, depression, and symptoms similar to those of other neurological diseases. Research funded through the FY13 Quality of Life Research Award (QUAL) Program Announcement/Funding Opportunity is intended to develop best practices for in-patient and out-patient care of TBI and/or Alzheimer's Disease. Applications must include a multi-institutional team of up to 5 partners to: 1) assess the standards of care for their patients across the partners; 2) develop and measure best practices that would reduce the burden on the caregiver and patient; and 3) have a dissemination plan by which the best practices can become the elements of a new standard of care across the partners. Examples of partnering sites can be any combination of educational, non-profit, not-for-profit, and for-profit organizations, including hospitals and departments within an organization. The endpoints of the study should lead to changes in standards of care that positively affect quality of life for the patient and reduce the burden on the caregiver. The research impact is intended to benefit the military community, while also meeting a public purpose for the benefit of the civilian community.

Due Date: 12/16/2013

Funding: \$1,450,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240317>

Agency: Department of Defense
Naval Supply Systems Command

Program: Multi-INT Research Initiatives at the Naval Postgraduate School

Description: The Naval Postgraduate School (NPS) is interested in receiving proposals for research initiatives that offer potential for advancement and improvement in the following multi-intelligence (Multi-INT) research topic areas: • Inferencing and Reasoning• Orchestrated Resource Management• VisualizationA detailed description of each area, along with submittal instructions, is contained herein.The Center for Multi-INT Studies (CMIS) supports research that develops theoretical foundations, models, and algorithms to enable timely, robust, and optimal sense making, situation awareness and decision making. Researchers must consider incomplete information in highly complex and dynamic intelligence, surveillance and reconnaissance (ISR) systems. These ISR systems are often comprised of centralized and distributed sensors, human observers, database management systems, and associated databases. Such systems operate in uncertain, resource-constrained environments against

problems of significant complexity and urgency. Approaches developed are expected to include multi-disciplinary methodologies.

Due Date: 9/15/2014

Funding: See announcement

Website: <http://www.nps.edu/Research/documents/BAA-13-005.pdf>

Agency: Department of Defense
Office of Naval Research

Program: Minerva Research Initiative

Description: The Office of Naval Research is interested in receiving proposals for the Minerva Research Initiative (<http://minerva.dtic.mil>), a DoD-sponsored, university-based social science research program initiated by the Secretary of Defense. This program is a multi-service effort. Ultimately, however, funding decisions will be made by OSD personnel, with technical inputs from the Services. The program focuses on areas of strategic importance to U.S. national security policy. It seeks to increase the Department's intellectual capital in the social sciences and improve its ability to address future challenges and build bridges between the Department and the social science community. Minerva brings together universities, research institutions, and individual scholars and supports multidisciplinary and cross-institutional projects addressing specific topic areas determined by the Department of Defense. The Minerva Research Initiative aims to promote research in specific areas of social science and to promote a candid and constructive relationship between DoD and the social science academic community.

Due Date: 2/14/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240549>

Agency: Department of Defense
Office of Naval Research

Program: THE DEPARTMENT OF DEFENSE (DoD) FISCAL YEAR 2014
DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM
(DURIP) - For Navy Submission

Description: The Department of Defense (DoD) announces the Fiscal Year 2014 Defense University Research Instrumentation Program (DURIP), a part of the University Research Initiative (URI). DURIP is designed to improve the capabilities of U.S. institutions of higher education (hereafter referred to as

“universities”) to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment. NAVY SUBMISSION

Due Date: 10/21/2013

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240541>

Agency: Department of Defense
Office of Naval Research

Program: Fiscal Year (FY) 2014 Department of Defense Multidisciplinary Research Program of the University Research Initiative (MURI)

Description: The MURI program supports basic research in science and engineering at U.S. institutions of higher education that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined by the DoD, “basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress.” (DoD 7000.14.R, vol. 2B, chap.5). DoD’s basic research program invests broadly in many specific fields to ensure that it has early cognizance of new scientific knowledge.

Due Date: 12/16/2013

Funding: \$250,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240153>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Nutrition and Alcohol-Related Health Outcomes (R03)

Description: This announcement encourages applications that propose to examine associations between nutrition and alcohol-related health outcomes in humans and animal models. The goal of this program is to stimulate a broad range of research on the role of nutrition in the development,

prevention, and treatment of a variety of alcohol-related health outcomes including alcohol use disorder and chronic disease.

Due Date: 1/7/2017

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243458>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Nutrition and Alcohol-Related Health Outcomes (R01)

Description: This announcement encourages applications that propose to examine associations between nutrition and alcohol-related health outcomes in humans and animal models. The goal of this program is to stimulate a broad range of research on the role of nutrition in the development, prevention, and treatment of a variety of alcohol-related health outcomes including alcohol use disorder and chronic disease.

Due Date: 5/7/2017

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-13-359.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Nutrition and Alcohol-Related Health Outcomes (R21)

Description: This announcement encourages applications that propose to examine associations between nutrition and alcohol-related health outcomes in humans and animal models. The goal of this program is to stimulate a broad range of research on the role of nutrition in the development, prevention, and treatment of a variety of alcohol-related health outcomes including alcohol use disorder and chronic disease.

Due Date: 1/7/2017

Funding: \$200,000 per award

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-13-361.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Neurological Sciences Academic Development Award (K12)

Description: The purpose of the NINDS Neurological Sciences Academic Development Award (NSADA K12) is to facilitate and support the research career development of pediatric neurologists at educational institutions or professional organizations who have made a commitment to independent research careers. The NSADA program is intended to provide three consecutive years of support to individuals to provide them with the knowledge, tools and research experience that will enable them to transition to significant, individually-supported research.

Due Date: 10/12/2015

Funding: maximum of \$90,000 per scholar

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-13-362.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Disaster Mental Health Intervention Research Center (P60)

Description: The National Institute of Mental Health (NIMH) announces a unique opportunity for investigators to utilize diverse but related infrastructure, technology, human, and material resources to plan and implement multiple research projects directed toward improving mental health response to disasters and other emergency events.

Due Date: 2/3/2014

Funding: \$250,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243273>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Advancing the Science of Geriatric Palliative Care (R21)

Description: This announcement encourages research grant applications focused on palliative care in geriatric populations. This program emphasizes studies in a variety of settings including ambulatory care, hospitals (and specific sites within hospitals including specialty wards, intensive care units and emergency departments), assisted living facilities, and short- and long-term care facilities; however, hospice and end-of-life settings are not included within the scope of this grant, as they are the subject of other NIH programs. Rather, this program highlights research on palliative care in settings and at time points earlier in geriatric patients' disease or disability trajectories. Types of studies may include observational, quasi-experimental, or interventional studies using primary data collection and/or

secondary analyses. Leveraging on-going cohorts, intervention studies, networks, data and specimen repositories, and other existing resources and infrastructure are encouraged

Due Date: 1/7/2017

Funding: \$200,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243114>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Harvesting the Neuroimaging Cornucopia for Pancreatic Islet Imaging Reagents for Diabetes Research (DP3)

Description: This announcement encourages applications from institutions/organizations to allow researchers with access to major clinical nuclear molecular imaging facilities to screen their libraries of existing positron emission tomography (PET) or single photon emission computed tomography (SPECT) neuroimaging agents that are already approved for use in human subjects research in order to find tools to enhance in vivo study of the beta cells of the human pancreatic islet. Diabetes ensues with the loss or dysfunction of beta cells and the inability to monitor their mass is an enormous barrier to understanding the natural history of human diabetes or the course of disease in an individual patient. Because human pancreatic islet beta cells are distinct from those of rodent models of diabetes and yet have many of the neurotransmitter systems found in the human brain, screening of existing human neuroimaging agents directly in human subjects and human tissues may be a cost-efficient way to identify promising beta cell imaging agents.

Due Date: 2/20/2014

Funding: Total Funding: \$1,000,000; Award Ceiling: \$300,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242577>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Translational Research to Improve Diabetes and Obesity Outcomes (R01)

Description: This announcement encourages NIH Research Project Grants to test practical, sustainable, and cost efficient adaptations of efficacious strategies or approaches to prevent and treat diabetes and/or obesity. Research focused on the prevention or reversal of obesity, prevention of type 2 diabetes, improved care of type 1 and type 2 diabetes, or the prevention or delay of the complications of these conditions is encouraged. The approaches tested should have the potential for wide

dissemination and implementation outside of an academic setting such as in routine clinical practice or communities at risk.

Due Date: 1/7/2017

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242355>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Sustained Release of Antivirals for Treatment and Prevention of HIV (SRATP) (R01)

Description: The purpose of this announcement is to encourage grant applications that address the long term goal and objective of developing sustained release strategies for HIV treatment or prevention. Applications may propose treatment or prevention products delivered using sustained release platforms (oral, injection, implant or direct delivery to HIV target mucosa) that will provide a minimum of one week (treatment) or one month (prevention) of efficacy/protection

Due Date: 1/7/2016

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242276>

Agency: Department of Health and Human Services
National Institutes of Health

Program: NIDCR Small Grant Program for New Investigators (R03)

Description: This NIDCR Small Grant Program for New Investigators supports basic and clinical research conducted by scientists who are in the early stages of establishing an independent research career in oral, dental, and craniofacial research. This R03 grant mechanism supports pilot or feasibility studies and developmental research projects with the intention of obtaining sufficient preliminary data for a subsequent investigator-initiated Research Project Grant application. Clinical trials of any phase will not be supported by this grant.

Due Date: 9/7/2016

Funding: \$150,000 per award

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-13-348.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: NIGMS National Centers for Systems Biology (P50)

Description: The National Institute of General Medical Sciences (NIGMS) invites grant applications from institutions/organizations proposing to establish Centers of Excellence in Systems Biology. The goal of this initiative is to promote pioneering research, research training, and outreach programs focused on systems-level inquiries of biomedical phenomena within the NIGMS mission. The description of the NIGMS mission can be found on the website, <http://www.nigms.nih.gov>.

Due Date: 10/23/2014

Funding: Total Funding: \$10,000,000; Award Ceiling: \$2,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242293>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Early Career Award in Chemistry of Drug Abuse and Addiction (ECHEM) (R21/R33)

Description: This program seeks to facilitate the entry of new-to-NIH investigators into basic chemistry research applied to drug abuse and addiction.

Due Date: 9/7/2016

Funding: \$250,000 per award

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-13-350.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Academic Research Enhancement Award (Parent R15)

Description: The purpose of the Academic Research Enhancement Award (AREA) program is to stimulate research in educational institutions that provide baccalaureate or advanced degrees for a significant number of the Nation's research scientists, but that have not been major recipients of NIH support. AREA grants create opportunities for scientists and institutions, otherwise unlikely to participate extensively in NIH research programs, to contribute to the Nation's biomedical and behavioral research effort. AREA grants are intended to support small-scale research projects proposed by faculty members of eligible, domestic institutions, to expose

students to meritorious research projects, and to strengthen the research environment of the applicant institution.

Due Date: 9/7/2016

Funding: \$300,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242296>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Developmental Centers for Interdisciplinary Research in Benign Urology (P20)

Description: The purpose of this announcement is to seek applications for the Developmental Centers for Interdisciplinary Research in Benign Urology Program. The intent of this Program is to build research teams composed of individuals with complementary expertise who propose to develop innovative resources or new research projects that utilize integrative approaches addressing research questions relevant to benign urological diseases. Each Developmental Center is centered on a single Project and must contain an Administrative Core and an Educational Enrichment Program. As part of the larger efforts in the Division of Kidney, Urologic and Hematologic Diseases to expand and enhance the urology research community, the Developmental Centers Program will work in partnership with the George M. OBrien Urology Cooperative Research Centers Program and the Multidisciplinary K12 Urologic Research Career Development Program.

Due Date: 11/18/2013

Funding: Total Funding: \$1,000,000; Award Ceiling: \$200,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242093>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Development of Appropriate Pediatric Formulations and Pediatric Drug Delivery Systems (R21)

Description: This announcement encourages grant applications to address different and complementary research needs for the development and acceptability of pediatric drug formulations in different age groups. Development and testing of novel pediatric drug delivery systems is also part of this initiative.

Due Date: 9/7/2016

Funding: \$200,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241774>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Bridges to the Doctorate

Description: This announcement encourages Research Education Grant applications from institutions that propose to enhance the pool of masters degree students from underrepresented backgrounds who are trained and available to participate in NIH-funded research. This initiative promotes partnerships/consortia between colleges or universities granting a terminal masters degree with institutions that offer the doctorate degree. The program expects that the joint efforts of doctorate degree-granting and masters degree-granting institutions will foster the development of a well-integrated institutional program that will provide students with the necessary academic preparation and skills to enable their transition and successful completion of the Ph.D. degree in biomedical and behavioral sciences.

Due Date: 9/25/2015

Funding: \$250,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241158>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Paul B. Beeson Patient-Oriented Research Career Development Award in Aging

Description: The National Institute on Aging and the National Institute of Neurological Disorders and Stroke are pursuing this initiative to encourage and assist the development of future leaders in the field of aging by supporting clinically trained (primarily physician) faculty members early in their careers to gain additional research training and to establish independent programs in aging research. The John A. Hartford Foundation (<http://www.jhartfound.org/>) and The American Federation for Aging Research (<http://afar.org/>) are interested in independently funding applications submitted under this initiative

Due Date: 11/14/2013

Funding: \$1,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241154>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Mechanisms of Alcohol and Stimulant Co-Addiction (R01)

Description: This announcement encourages applications from institutions/organizations that propose to study the neurobiological and behavioral mechanisms that might explain how alcohol and stimulants interact at genetic, epigenetic, cellular, neurocircuitry and behavioral levels to promote co-addiction.

Due Date: 1/7/2017

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-13-339.html>

Agency: Department of Health and Human Services
National Institutes of Health

Program: Neuroscience Research on Drug Abuse (R03)

Description: Substance abuse results in widespread changes in brain structure and function, and research is needed to explain these changes and how they affect behavior. The goals of the research areas described in this Neuroscience of Drug Abuse announcement are to understand the neurobiological mechanisms underlying drug abuse and addiction, with special emphasis on changes that occur during chronic drug use, withdrawal and relapse. An understanding of the basic mechanisms underlying drug addiction can help to identify targets for prevention and treatment interventions. Research utilizing basic, translational, or clinical approaches is appropriate.

Due Date: 1/7/2017

Funding: \$100,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240915>

Agency: Department of Health and Human Services
National Institutes of Health

Program: NHLBI Investigator-Initiated Resource-Related Research Projects (R24)

Description: This announcement, issued by the National Heart Lung and Blood Institute, invites Resource-Related Research Project applications to

support projects that will enhance the capabilities of ongoing basic, translational, and clinical research through the development of resources or infrastructure for use by the broader scientific community for furthering research.

Due Date: 10/29/2013

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-13-335.html>

Agency: Department of State
Bureau of Democracy

Program: DRL China 2013 Request for Statements of Interest

Description: The Bureau of Democracy, Human Rights, and Labor announces a Request for Statements of Interest from organizations interested in submitting proposals for projects that support the bureau's policy priorities of fostering democracy and human rights in China. This solicitation does not constitute a formal Request for Proposals: DRL will invite select organizations that submit SOIs to expand their ideas in full proposals at a later date.

Due Date: 9/24/2013

Funding: \$1,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243653>

Agency: Department of the Interior
Fish and Wildlife Service

Program: NAWCA Small Grants

Description: The U.S. Small Grants Program is a competitive, matching grants program that supports public-private partnerships carrying out projects in the United States that further the goals of the North American Wetlands Conservation Act. These projects must involve long-term protection, restoration, enhancement and/or establishment of wetlands and associated uplands habitats for the benefit of all wetlands-associated migratory birds.

Due Date: 10/31/2013

Funding: Total Funding: \$3,000,000; Award Ceiling: \$75,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241434>

Agency:

Department of Commerce

Program: Climate Program Office FY 2014, NOAA

Description: Climate variability and change present society with significant economic, health, safety, and national security challenges. NOAA advances scientific and technical programs to help society cope with, and adapt to, today's variations in climate and to prepare for tomorrow's. Toward this end, the agency conducts and supports climate research, essential oceanic and atmospheric observations, modeling, information management, assessments, interdisciplinary decision support research, outreach, education, and stakeholder partnership development. These investments are key to NOAA's mission of "Science, Service, and Stewardship" and are guided by the agency's vision to create and sustain enhanced resilience in ecosystems, communities, and economies, as described in NOAA's Next Generation Strategic Plan (NGSP) .

Due Date: 11/14/2013

Funding: Total Funding: \$11,000,000; Award Ceiling: \$200,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=239854>

Agency: National Endowment for the Humanities

Program: Sustaining Cultural Heritage Collections

Description: Sustaining Cultural Heritage Collections (SCHC) helps cultural institutions meet the complex challenge of preserving large and diverse holdings of humanities materials for future generations by supporting preventive conservation measures that mitigate deterioration and prolong the useful life of collections. Libraries, archives, museums, and historical organizations across the country are responsible for collections of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art, and historical objects that facilitate research, strengthen teaching, and provide opportunities for life-long learning in the humanities. To preserve and ensure continued access to such collections, institutions must implement preventive conservation measures, which encompass managing relative humidity, temperature, light, and pollutants in collection spaces; providing protective storage enclosures and systems for collections; and safeguarding collections from theft and from natural and man-made disasters. As museums, libraries, archives, and other collecting institutions strive to be effective stewards of humanities collections, they must find ways to implement preventive conservation measures that are scientifically sound and sustainable. This program therefore helps cultural repositories plan and implement

preservation strategies that pragmatically balance effectiveness, cost, and environmental impact. Such a balance can contribute to an institution's financial health, reduce its use of fossil fuels, and benefit its green initiatives, while ensuring that significant collections are well cared for and available for use in humanities programming, education, and research.

Due Date: 12/3/2013

Funding: \$350,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241056>

Agency: National Science Foundation

Program: Physics at the Information Frontier

Description: Physics at the Information Frontier (PIF) includes support for data-enabled science, community research networks, and new computational infrastructure, as well as for next-generation computing. It focuses on cyber-infrastructure for the disciplines supported by the Physics Division while encouraging broader impacts on other disciplines. Disciplines within the purview of the Physics Division include: atomic, molecular, optical, plasma, elementary particle, nuclear, particle astrophysics, gravitational and biological physics.

Due Date: 11/29/2013

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243253>

Agency: National Science Foundation

Program: Experimental Gravitational Physics

Description: The Gravitational Physics program supports research at the frontiers of science aimed towards answering questions about the nature of space and time, the gravitational attraction at atomically small and cosmological large distances and the use of gravitational waves to explore the universe. The Experimental Gravitational Physics program supports research that includes tests on the inverse distance square law of gravitational attraction, Lorentz invariance and Equivalence Principle as well as the direct detection of gravitational waves. This 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. This includes tasks that range from instrument science, data analysis and detector characterization to

source population calculations and the connection between the gravitational waves and the electromagnetic and neutrino signatures of astrophysical events. In addition, the program supports infrastructure activities such as short- and long-term visitor programs, workshops, and research centers involving the participation of external scientists from universities, national laboratories, and industry, as well as graduate students and postdoctoral fellows.

Due Date: 10/30/2013

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243174>

Agency: National Science Foundation

Program: Theoretical Gravitational Physics

Description: The Gravitational Physics program supports research at the frontiers of science aimed towards answering questions about the nature of space and time, the gravitational attraction at atomically small and cosmological large distances and the use of gravitational waves to explore the universe. The Theoretical Gravitational Physics program supports research on classical and quantum gravity theory, including gravitational wave source simulations and other phenomena associated with strong field gravity and the interface between gravitation and quantum mechanics. This includes formulating new approaches for theoretical, computational, and experimental research that explore the fundamental laws of physics and the behavior of physical systems and, in some cases, interpreting the results of experiments. The effort also includes a considerable number of interdisciplinary grants. In addition, the program supports infrastructure activities such as short- and long-term visitor programs, workshops, and research centers involving the participation of external scientists from universities, national laboratories, and industry, as well as graduate students and postdoctoral fellows.

Due Date: 10/30/2013

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=243173>

Agency: National Science Foundation

Program: Particle Astrophysics

Description: Particle physics plays an essential role in the broader enterprise of the physical sciences. It inspires U.S. students, attracts talent from around the

world, and drives critical intellectual and technological advances in other fields. It is entering an era of unprecedented potential as a result of new discoveries about matter and energy in the Universe. Particle Physics seeks to explore the fundamental nature of matter, energy, space, and time.

Due Date: 10/30/2013

Funding: Total Funding: \$15,000,000; Award Ceiling: \$2,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242314>

Agency: National Science Foundation

Program: Experimental Elementary Particle Physics

Description: Particle physics plays an essential role in the broader enterprise of the physical sciences. It inspires U.S. students, attracts talent from around the world, and drives critical intellectual and technological advances in other fields. And the field is entering an era of unprecedented potential as a result of new discoveries about matter and energy in the Universe. The Particle Physics program seeks to explore the fundamental nature of matter, energy, space, and time. At the NSF, particle physics is supported by four programs within the Division of Physics: (1) the Theory program, which includes fundamental research on the forces of nature and the early history of the universe as well as support for the experimental program by providing guidance and analysis for high energy experiments; (2) the Elementary Particle Physics (EPP) program, which supports particle physics at accelerators; (3) the Particle Astrophysics (PA) program, which supports non-accelerator experiments; and (4) the new Accelerator Science program which supports research at universities into the educational and discovery potential of basic accelerator physics. EPP also supports advances in detector development and new methods of utilizing distributed computing in support of collaborative research, for example, grid development, both nationally and internationally.

Due Date: 10/30/2013

Funding: \$50,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242313>

Agency: National Science Foundation

Program: Manufacturing Enterprise Systems

Description: The MES program supports research on design, planning, and control of operations in manufacturing enterprises. Research is supported that is both grounded in an interesting and relevant application and requires the development of novel analytical and computational methodologies that

may be of broader interest. Topics of interest include supply chain optimization and management; production planning and scheduling; monitoring and control of manufacturing processes; and maintenance and repair. Of particular interest are methods that incorporate increasingly rich enterprise process and product information and models, methods that address sustainability, and methods that incorporate characteristic uncertainty and risk.

Due Date: 2/15/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242214>

Agency: National Science Foundation

Program: Biomechanics and Mechanobiology

Description: The BMMB Program supports fundamental research in biomechanics and mechanobiology. An emphasis is placed on multiscale mechanics approaches in the study of organisms that integrate across molecular, cell, tissue, and organ domains. The influence of in vivo mechanical forces on cell and matrix biology in the histomorphogenesis, maintenance, regeneration, and aging of tissues is an important concern. In addition, the relationships between mechanical behavior and extracellular matrix composition and organization are of interest. 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.

Due Date: 2/15/2014

Funding: \$400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242213>

Agency: National Science Foundation

Program: Discovery Research K-12

Description: The Discovery Research K-12 program (DRK-12) seeks to significantly enhance the learning and teaching of science, technology, engineering and mathematics (STEM) by preK-12 students and teachers, through research and development of innovative resources, models and tools (RMTs). Projects in the DRK-12 program build on fundamental research in STEM education and prior research and development efforts that provide theoretical and empirical justification for proposed projects. Teachers and students who participate in DRK-12 studies are expected to enhance their

understanding and use of STEM content, practices and skills. DRK-12 invites proposals that address immediate challenges that are facing preK-12 STEM education as well as those that anticipate radically different structures and functions of pre-K 12 teaching and learning. The DRK-12 program has four major research and development strands: (1) Assessment; (2) Learning; (3) Teaching; and (4) Implementation Research. The program recognizes that there is some overlap among the strands. Proposals may address more than one strand. For example, projects in the Learning Strand may also include assessments of student learning, and/or support for teachers and plans for larger dissemination and use. Likewise, the Teaching Strand has a specific focus on RMTs for teacher education and professional development, but these are often based on a particular curriculum or set of instructional materials or tools. The Implementation Research strand that replaces the Scale-up strand in the previous solicitation might potentially address any or a combination of the other three strands. The program supports three types of projects: (1) Exploratory, (2) Full Design and Development, and (3) Conferences, Workshops, and Syntheses. All three types of projects apply to each of the four DRK-12 strands.

Due Date: 12/6/2013

Funding: Total Funding: \$50,000,000; Award Ceiling: \$3,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242153>

Agency: National Science Foundation

Program: Research on Education and Learning

Description: The Research on Education and Learning (REAL) program represents the substantive foci of three previous EHR programs: Research and Evaluation on Education in Science and Engineering (REESE), Research in Disabilities Education (RDE), and Research on Gender in Science and Engineering (GSE). What is distinctive about the new REAL program is the emphasis placed on the accumulation of robust evidence to inform efforts to (a) understand, (b) build theory to explain, and (c) suggest interventions (and innovations) to address persistent challenges in STEM interest, education, learning, and participation. The program supports advances in research on STEM (science, technology, engineering, and mathematics) learning and education by fostering efforts to explore all aspects of education research from foundational knowledge to improvements in STEM learning and learning contexts, both formal and informal, from childhood through adulthood, for all groups, and from the earliest developmental stages of life through participation in the workforce, resulting in increased public understanding of science and engineering. The REAL program will fund research on, human learning in STEM;

learning in STEM learning environments, and broadening participation research.

Due Date: 1/10/2014

Funding: Total Funding: \$51,000,000; Award Ceiling: \$2,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242156>

Agency: National Science Foundation

Program: Catalyzing New International Collaborations

Description: The Catalyzing New International Collaborations program supports the participation of US-based researchers and students in activities intended to catalyze new international research collaborations.

Due Date: 1/22/2014

Funding: Total Funding: \$2,000,000; Award Ceiling: \$75,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=242157>

Agency: National Science Foundation

Program: Division of Integrative Organismal Systems

Description: The Division of Integrative Organismal Systems (IOS) supports research aimed at understanding why organisms are structured the way they are and function as they do. Proposals should focus on organisms as a fundamental unit of biological organization. Principal Investigators (PIs) are encouraged to apply systems approaches that will lead to conceptual and theoretical insights and predictions about emergent organismal properties. Areas of inquiry include, but are not limited to, developmental biology and the evolution of developmental processes, nervous system development, structure, and function, physiological processes, functional morphology, symbioses, interactions of organisms with biotic and abiotic environments, and animal behavior. Proposals are welcomed in all areas of science supported by the Division of Integrative Organismal Systems.

Due Date: 8/1/2014

Funding: \$55,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=241815>

Agency: National Science Foundation

Program: Biomedical Engineering

Description: The mission of the Biomedical Engineering (BME) program is to provide opportunities to develop novel ideas into discovery-level and transformative projects that integrate engineering and life science principles in solving biomedical problems that serve humanity in the long-term. The Biomedical Engineering (BME) program supports fundamental research in the following BME themes: Neural engineering (brain science, computational neuroscience, brain-computer interface, neurotech, cognitive engineering) Cellular biomechanics (motion, deformation, and forces in biological systems; how mechanical forces alter cell growth, differentiation, movement, signal transduction, transport, cell adhesion, cell cytoskeleton dynamics, cell-cell and cell-ECM interactions; genetically engineered stem cell differentiation with long-term impact in tissue repair and regenerative medicine) The BME projects must be at the interface of engineering and life sciences, and advance both engineering and life sciences. The projects should focus on high impact transforming methods and technologies.

Due Date: 10/29/2013

Funding: Total Funding: \$10,400,000; Award Ceiling: \$600,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=240182>