

THE STATE UNIVERSITY SYSTEM OF FLORIDA

WASHINGTON E-UPDATE

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Budget and Appropriations Update – With just two weeks left before the federal government runs out of money, lawmakers still hope to fashion a massive spending bill that can placate all sides and avoid another disastrous government shutdown.

But the signs are growing that congressional leaders may have to pass another short-term continuing resolution, or CR, through December 18, should negotiators need more time to strike a budget agreement. The White House has already signaled it would not block a one-week extension to the CR, if it meant averting a partial shutdown while lawmakers finalize the appropriations deal. The current CR expires December 11 and House Appropriations Chair Hal Rogers (R-KY) said this week that he still hopes to resolve all differences and release a final bill on Dec. 7, which would give both chambers enough time to pass it before the 11th.

Key lawmakers and staff, in concert with congressional leaders, worked throughout the Thanksgiving holiday recess haggling over the remaining snags in the \$1.1 trillion bill. Committee aides said progress has been made but the talks continue around the clock to iron out the final details.

While spending levels are always an issue, policy riders appear to be the big obstacles to a budget agreement. There is growing focus, for example, on security-related issues following the terrorist attacks in Paris last month. House Democrats on December 2 rejected an initial Republican offer for completing the bill.

According to Senator Barbara A. Mikulski (D-MD), the top Senate Democratic appropriator, negotiators have worked out most funding issues on seven of the 12 annual spending titles but that some of the most politically contentious nondefense bills, including Financial Services, Interior-Environment and Labor-HHS-Education, were still unresolved.

At issue for the spending bill that funds the National Institutes of Health and the Centers for Disease Control and Prevention is how Congress decides to handle calls to defund Planned Parenthood.

NIH Could Gain From Budget Deal

Despite the tenuous nature of the current budget negotiations, key lawmakers hope to open a path for Congress to deliver consistent annual budget increases for the National Institutes of Health.

Senator Roy Blunt (R-MO), chairman of the Senate Appropriations Labor-HHS-Education Subcommittee, said he is working to boost NIH's budget through the fiscal 2016 spending package. Blunt said NIH's budget could benefit in the years ahead from the momentum.

Earlier this year, Blunt called for a \$2 billion increase for NIH, lifting its annual spending to \$32.1 billion. This would be the largest baseline increase the NIH has received since Congress doubled the agency's funding over a five-year span concluding in 2003. The companion House bill included a \$1.1 billion increase, or about \$100 million more than the White House requested.

Leaders in both chambers view extra funding for the NIH as a sweetener to help clear the appropriations package. Blunt contends that his approach is a more likely path to the stable trajectory of budget increases that NIH Director Francis S. Collins has asked Congress to provide.

House oversight hearing finds many flaws with Federal student aid program management by Education Department

The Education Department's Office of Federal Student Financial Aid came under pointed questioning November 18 during a joint House hearing by the Education and Workforce Subcommittee on Higher Education and Workforce Training, chaired by Rep. Virginia Foxx (R-NC), and the Oversight and Government Reform Subcommittee on Government Operations, chaired by Rep. Mark Meadows (R-NC.)

The tone of the hearing, entitled "Federal Student Aid: Performance-Based Review," was quickly set by Rep. Foxx who said, "We all know that the Federal financial aid system is broken." Testifying were James Runcie, Chief Operating Officer at the Department of Education; Melissa Emrey-Arras, Director of Education, Workforce, and Income Security at GAO; Kathleen Tighe, Inspector General at the Department of Education; Ben Miller, Senior Director of Postsecondary Education at the Center for American Progress; and Justin Draeger, President of the National Association of Student Financial Aid Administrators.

Recent reports by GAO and the Inspector General have identified management weaknesses and concerns regarding the FSA's communication with servicers and other practices. A webcast of the hearing can be found [here](#).

A number of issues arose with a considerable emphasis on accountability and oversight of the Office of Federal Student Aid and its contractors and loan servicers.

Among them were almost \$2 billion in estimated improper payments to borrowers in 2015; confusing signals to loan servicers; a gainful employment reporting “disaster” thanks to mixed messages from the Department; the lack of a common manual for servicers; serious potential computer vulnerabilities in the database housing borrowers’ personal information; and the refusal of a key subcontractor of Accenture holding the data to supply information to the Department’s Inspector General.

Another interesting issue raised by the Inspector General was the need to rethink loan disbursement policy for online courses whose students may not need the same level of financial support as students in “brick and mortar” classes. She said numerous fraud rings are operating for online courses where people apply fraudulently just to get the disbursement up front and then disappear. One solution she suggested was spreading out loan payments over the semester to discourage fraud.

Representative Meadows noted that Congress needs to increase oversight of this Office but also highlighted the importance of transparent reporting processes and internal accountability and oversight. Though critical, Democrats were slightly more lenient to the Department, noting what they consider progress in the form of direct lending and access. Representatives accused the office of failing to communicate, of failing to oversee services, and of failing to take responsibilities for any missteps in the process.

Rep. Foxx closed the hearing noting that the entire system is more complex than in 1990 when there was only one loan forbearance option and two repayment options. She contrasted that with today when there are 13 forbearance and 15 repayment options available. She ended the hearing speaking to the Education Department representatives saying, “You are harming the people you are supposed to be helping – and that has got to stop.” She promised to address issues in the coming reauthorization of the Higher Education Act.

House-Senate conference committee agrees on replacement for No Child Left Behind

A conference committee working on *Elementary and Secondary Education Act* legislation to replace *No Child Left Behind* reached a compromise agreement November 19 on a new bill blending the House-passed *Student Success Act* (HR 5) and the Senate-passed *Every Child Achieves Act* (S. 1177.) Both Republicans and Democrats on the conference committee support the agreement, including Senate HELP Committee Ranking Member Patty Murray (D-WA.)

The bill is expected to pass both chambers before the end of the year. Passage will allow the education committees to turn their attention to rewriting the Higher Education Act in the coming year. To read the final bill, click [here](#).

The new legislation:

- repeals adequate yearly progress and replaces it with a statewide accountability system;

- maintains annual, statewide assessments in reading and math in grades 3 through 8 and once in high school, as well as science tests given three times between grades 3 and 12;
- ensures States are able to choose their challenging academic standards in reading and math aligned to higher education in the state without interference from Washington;
- transfers responsibility to states for identifying schools and providing support for improvement in struggling schools, and prohibits the federal government from interfering in state and local decisions regarding accountability and school improvement activities by prescribing specific methods or systems;
- improves accountability for learning outcomes for all students;
- maintains maintenance of effort and supplement not supplant, with additional flexibility for States and school districts;
- provides resources to States and school districts to implement various activities to support teachers, principals, and other educators, including by providing high quality induction services for new teachers, ongoing evidence-based professional development for teachers, and opportunities to recruit new educators to the profession;
- provides resources to States and school districts to support English learners and requires States to develop statewide entrance and exit procedures for English learner programs to ensure that English learners are reclassified upon achieving English proficiency;
- authorizes the new Student Support and Academic Enrichment grant program to help States and local school districts target federal resources on local priorities to better serve disadvantaged students;
- improves the Charter Schools Program by investing in new charter school models, as well as allowing for the replication and expansion of high-quality charter school models;
- significantly streamlines and reduces the number of existing federal programs, while authorizing dedicated funding to support important priorities, including innovation, teacher quality, afterschool programming, increased access to STEM education, arts education, and accelerated learning, safe and healthy students, literacy, and community involvement in schools, and other bipartisan priorities.

For more information, visit edworkforce.house.gov/k12education.

Rep. Buchanan assumes Ways and Means subcommittee chair

Florida's Rep. Vern Buchanan is benefiting from the move by Rep. Paul Ryan to become House Speaker.

Ryan's departure from the Ways and Means Committee created a reshuffling of seniority and in the process Rep. Buchanan was named chair of the Human Resources Subcommittee, which has jurisdiction over federal assistance for families, children, the disabled, and the unemployed. Among them are Supplemental Social Security Income,

which helps the disabled, and Temporary Assistance for Needy Families or TANF, the current version of welfare. The move will put him at the center of debate over efforts to reform the nation's welfare system.

Buchanan has served on the House Ways and Means Committee since January of 2011. His appointment as subcommittee chair marks the first time a Floridian has led a Ways & Means Subcommittee since Rep. Clay Shaw chaired the Trade Subcommittee in the 109th Congress (2005-2006). Buchanan is Florida's only member on the Ways and Means Committee.

"As the new chairman, I look forward to working with my colleagues in a bipartisan manner to make sure our nation's welfare laws and safety net truly help those in need without trapping them in a cycle of poverty," Buchanan said in a statement, noting that Speaker Ryan has made welfare reform one of his top priorities in Congress.

Universities seeking one-year extension of Perkin Loan program

Six SUS institutions joined more than 500 other colleges and universities in signing a [letter](#) by the American Council on Education to Congressional leaders November 20 seeking a one-year extension of the Perkins Loan program. The letter was signed by FAMU, FIU, FSU, the UF College of Medicine, UCF and USF.

The program began in 1958 and requires a partial match by each university. The letter points out that approximately 1,500 institutions participate in the program, which is targeted at students with exceptional financial need. Last year, over 500,000 students borrowed an average of \$2,000 in Perkins loans.

The letter states the advantages for graduate students: "These loans, which have comparable interest rates to Stafford loans for undergraduates and are available at a lower interest rate for graduate students, include forgiveness provisions for many public service positions after 10 years."

Without an extension, the groups write, 100,000 students who would be eligible will be denied access to the program and forced to find alternative (and more expensive) financing or forego their educations altogether.

The House passed a bipartisan bill ([H.R. 3594](#)) Sept. 28 to extend the authorization of the program through October 2016. Sen. Lamar Alexander (R-TN), chair of the Senate Committee on Health, Education, Labor and Pensions, opposed a unanimous consent motion in the Senate to adopt the House bill, effectively forcing the expiration of the program. New Perkins Loans can now be issued only to existing recipients as of October 2014.

The letter explains that H.R. 3594 would prolong authorization of the program for one year to allow Congress to consider it within the framework of the pending reauthorization of the Higher Education Act.

Deal achieved on new transportation bill; university transportation centers included

A bipartisan conference agreement was reached December 1 on a new five-year, \$305 billion transportation authorization, clearing the path for an expected quick passage. The current bill expires December 4.

The Fixing America's Surface Transportation Act, or FAST Act, would authorize programs -- including the University Transportation Centers research program -- through fiscal 2020. To read the conference bill, H.R. 22, [click here](#).

The 1,300-page bill is paid for with revenue from the current 18.4 cents per gallon gas tax as well as a \$70 billion package of offsets. They include cutting the dividend paid by the Federal Reserve to some member banks, taking reserves from a Federal Reserve surplus account and selling part of the Strategic Petroleum Reserve. It also reauthorizes until 2019 the charter for the Export-Import Bank, which has been a target of some conservatives. Additionally the bill restores \$3 billion in crop insurance payments that had been cut in the recent two-year budget deal on appropriations.

The bill targets \$205 billion to highway spending and another \$48 billion to transit projects over the next five years.

UTC program

The competitive University Transportation Centers (UTC) program is fully funded through the Highway Trust Fund. Currently six SUS institutions have grant funding through the program.

The bill authorizes the UTC program at \$72.5 million in 2016 rising to \$77.5 million in 2020. The program would continue to have a three-tier structure with national, regional and Tier 1 centers. The Transportation Department is instructed in the bill to make the next round of awards no later than one year from the date of enactment.

Five national center consortia will be awarded in the \$2 to 4 million range with 100% matching funds required. Ten regional center consortia will receive between \$1.5 million and \$3 million each, also with 100 percent matching funds needed. Up to 20 Tier 1 centers would each receive between \$1 million and \$2 million each with a 50 percent match required.

Strategic Plan

The bill contains a provision requiring development of a 5-year transportation research and development strategic plan to guide future federal transportation R&D activities. The measure calls for input from external stakeholders and publication of the plan on a

public website by the end of 2016. An interim assessment of the plan is required after two-and-a-half years.

New technology development grant program

The bill also creates a new \$60 million per year “Advanced Transportation and Congestion Management Technologies Deployment” program. This initiative will provide 5 to 10 large competitive grants for development of model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. The bill calls for the program to be operational within 6 months of enactment.

Education Department takes executive action to increase transparency and promote accountability outcomes

The Department of Education announced a series of executive actions November 6 taken in an effort to increase transparency and promote outcomes-driven accountability. Also included were legislative proposals for the rewrite of the Higher Education Authorization Act focusing on reforming the accreditation process.

A Department press release said these actions come in the wake of the recent failure of fully accredited Corinthian/Heald schools, recommendations by the bipartisan National Advisory Committee on Institutional Quality and Integrity (NACIQI), and a December 2014 report by the Government Accountability Office.

The following executive actions are intended as a move to improve oversight activities by accreditors and the Department and to strengthen the focus on student outcomes and transparency.

- Publishing each accreditor’s standards for evaluating student outcomes
- Increasing transparency in the accreditation process and in institutional oversight
- Increasing coordination within the Department and among accreditors, agencies, and states to improve oversight
- Publishing key student and institutional metrics for postsecondary institutions arranged by accreditors
- Promoting greater attention to outcomes within current accreditor review processes

The Department’s current authority related to accreditation and student outcomes is narrowly defined in statute. As a result, the Department also released legislative reform proposals that it believes would help protect students and taxpayers, and help improve outcomes in higher education.

Further details on each of the executive actions and legislative proposals can be found at: <http://www.ed.gov/news/press-releases/department-education-advances-transparency-agenda-accreditation>

NIH-owned chimpanzees retired from research

After years of pressure from animal rights activists and even Congress, the National Institutes of Health moved on November 18 to end its chimpanzee research colony. Each of the remaining chimps will be retired and resettled in sanctuaries according to NIH Director Francis Collins.

“It is time to acknowledge that there is no further justification for the 50 chimpanzees to continue to be kept available for invasive biomedical research,” Dr. Collins wrote, describing the current conditions “a tipping point.”

Over the past five years, the NIH has been working to reduce the size of its chimp research program, diminishing the program from more than 400 chimps to 50 in 2013.

The U.S Fish & Wildlife Service’s recent tightening of rules concerning captive chimps, including listing them on the endangered species list, eventually contributed to the decision. This designation requires that researchers apply for and obtain additional permits to use captive chimps in research if it could harm the animal.

An overall drop in demand for captive chimps in research studies ensued, (only one proposals since 2013 that was later withdrawn) prompting NIH to end its biomedical research involving the 50 NIH-owned chimps. Collins also said his agency would develop plans for how to phase out support for other chimps that are not owned by NIH but receive support from the agency.

However, while animal rights activists are happy about NIH’s decision, some biomedical scientists are concerned with the future of their research. “Given NIH’s primary mission to protect public health, it seems surprising,” said Frankie Trull, president of the Foundation for Biomedical Research in Washington DC in response to NIH’s decision. Others, particularly conservation researchers, are especially worried, though chimp research for conservation work may still be allowable under the Fish & Wildlife Service’s regulations. The NIH memo regarding the matter can be found [here](#).

Highlights of competitive grant opportunities at federal agencies

Agency: NOAA, Department of Commerce

Program: FY2016 NOAA Bay Watershed Education and Training (B-WET) Hawaii Program

Description: The NOAA Bay Watershed Education and Training (B-WET) Hawaii Program is a federal funding opportunity which meets NOAA's mission of science, service and stewardship. This B-WET program supports the vision of a future where societies and their ecosystems are healthy and resilient in the face of sudden or prolonged change. The purpose for this financial assistance is to support our communities by developing a well-

informed citizenry involved in decision-making that positively impacts our coastal, marine and watershed ecosystems in the State of Hawaii. This opportunity is a competitively-based grant that provides funding to assist in the development of new programs, encourage innovative partnerships among environmental education programs and support geographically targeted programs to advance environmental education efforts that complement national and state school requirements. The B-WET Hawaii Program plays a foundational role as an environmental education program that promotes locally relevant, experiential learning in the K-12 environment on priority topics, such understanding climate, ocean and earth sciences and community resilience to hazards. Funded projects provide meaningful watershed educational experiences for students, professional development for teachers, service learning opportunities for students, and support regional education and environmental priorities.

Due Date: January 19, 2016

Funding: Total Program Funding: \$1,000,000; Award Ceiling: \$150,000; Award Floor: \$25,000

Website: <http://www.coast.noaa.gov/regions/pacific/education/bwet/>

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

Program: DoD USAMRMC FY16 Broad Agency Announcement for Extramural Medical Research
Department of Defense

Description: This Fiscal Year 2016 (FY16) Broad Agency Announcement (BAA) is intended to solicit extramural research and development ideas. Projects funded under this BAA must be for basic and applied research and that part of development not related to the development of a specific system or hardware procurement. Projects must be for scientific study and experimentation directed toward advancing the state-of-the-art or increasing knowledge or understanding rather than focusing on a specific system or hardware solution. Research and development funded through this BAA is intended and expected to benefit and inform both military and civilian medical practice and knowledge. This BAA provides a general description of USAMRMC's research and development programs, including research areas of interest, evaluation and selection criteria, pre-proposal/pre-application and full proposal/application preparation instructions, and general administrative information.

Due Date: N/A

Funding: 9/30/2016

Website: https://www.usamraa.army.mil/pages/baa_forms/index.cfm

Agency: Department of Defense
Office of Naval Research

Program: SSBN Security Technology Department of Defense

Description: The Office of Naval Research (ONR) and the Undersea Influence, Counter-USW Branch (N974B) of the Chief of Naval Operations' (CNO) Undersea Warfare Division (N97) are interested in receiving proposals focused on the identification of science and physics based signal detection technologies that, individually or as a system, can impact the security of the SSBN and submarines in general. Passive and active detection technologies with near term (0-5 years), mid-term (5-10 years) and far term (10-20 years) implications will be considered. As part of its effort to understand the impact of technology on submarine security and survivability, the SSBN Security Technology Program may entertain proposals focused on improving the understanding of the generation, radiation, propagation, scatter, and detection of a variety of signal types (acoustic, chemical, optical, electromagnetic, hydrodynamic and radiological) associated with a submarine's operation.

Due Date: 30-Sep-16

Funding: See announcement

Website: <http://www.onr.navy.mil/contracts-grants/funding-opportunities>

Agency: Department of Defense
Office of Naval Research

Program: Long Range Broad Agency Announcement (BAA) for Navy and Marine Corps Science and Technology Department of Defense

Description: The Office of Naval Research is interested in receiving proposals for Long-Range Science and Technology Projects which offer potential for advancement and improvement of Navy and Marine Corps operations. Readers should note that this is an announcement to declare ONR's broad role in competitive funding of meritorious research across a spectrum of science and engineering disciplines.

Due Date: 30-Sep-16

Funding: See announcement

Website: <http://www.onr.navy.mil/contracts-grants/funding-opportunities>

Agency: Department of Energy
Advanced Research Projects Agency Energy

Program: Innovative Development in Energy-Related Applied Science (IDEAS) 2015

Description: This announcement is intended to provide rapid support to revolutionary applied energy research (Studies) that may lead to new ARPA-E programs to develop transformational and disruptive energy technologies. Studies are defined as single-phase efforts of durations less than 12 months and cost less than \$500,000. Awards will be issued through Grants.

The broad objective of this FOA is to identify disruptive concepts in energy-related technologies that challenge the status quo and represent a leap beyond today's technology. An innovative concept alone is not enough; the idea must also have the potential to be impactful—meaning that, if successful, it represents a fundamentally new paradigm in energy technology with the potential to make a significant impact on ARPA-E's Mission Areas (see Section I.A). Concepts of particular interest have the potential to achieve percentage-level reductions in U.S. energy consumption, energy-related imports, or greenhouse gas emissions.

Due Date: September 30, 2016

Funding: Total Program Funding: \$10,000,000; Award Ceiling: \$500,000

Website: <https://arpa-e-foa.energy.gov/>

Agency: Department of Energy
Office of Science

Program: Experimental Program to Stimulate Competitive Research (EPSCoR); Building EPSCoR-State/National Laboratory Partnerships Department of Energy

Description: The Department of Energy's Experimental Program to Stimulate Competitive Research (DOE EPSCoR) announced its interest in receiving applications for building EPSCoR-State/DOE-National Laboratory Partnerships. These partnerships are to advance fundamental energy oriented scientific and engineering research collaborations with the DOE Federally Funded Research and Development Centers (DOE FFRDCs hereafter referred to as the National Laboratories) (Information on the DOE National Laboratories can be found at <http://www.energy.gov/about-national-labs>). Participation by graduate students and/or postdoctoral fellows is required. Junior faculty from EPSCoR jurisdictions are encouraged to apply. Utilization of DOE user facilities is encouraged.

Due Date: January 28, 2016

Funding: Total Program Funding: \$3,000,000; Award Ceiling: \$200,000

Website: <http://science.energy.gov/bes/epscor/>

Agency: Department of Energy
Office of Science

Program: Environmental System Science

Description: The Office of Biological and Environmental Research (BER) of the Office of Science, announced its interest in receiving applications for research in Environmental Systems Science, including Terrestrial Ecosystem Science and Subsurface Biogeochemical Research. The mission of the Climate and Environmental Sciences Division within BER is to advance a robust predictive understanding of Earth's climate and environmental systems and to inform the development of sustainable solutions to the Nation's energy and environmental challenges. The goal of the Environmental System Science activity in the Office of Biological and Environmental Research is to advance a robust predictive understanding of terrestrial environments, extending from bedrock to the top of the vegetated canopy and from molecular to global scales in support of DOE's energy and environmental missions. Using an iterative approach to model-driven experimentation and observation, interdisciplinary teams of scientists work to unravel the coupled physical, chemical and biological processes that control the structure and functioning of terrestrial ecosystems across vast spatial and temporal scales. State-of-science understanding is captured in conceptual theories and models which can be translated into a hierarchy of computational components and used to predict the system response to perturbations caused, for example, by changes in climate, land use/cover or contaminant loading. Basic understanding of the system structure and function is advanced through this iterative cycle of experimentation and observation by targeting key system components and processes that are suspected to most limit the predictive skill of the models.

Due Date: January 22, 2016

Funding: Total Program Funding: \$5,000,000; Award Ceiling: \$600,000

Website: http://science.energy.gov/~media/grants/pdf/foas/2016/SC_FOA_0001437.pdf

Agency: Department of Energy
Office of Science

Program: Atmospheric System Research Program

Description: The goal of the ASR program is to improve the scientific understanding and treatment of clouds, aerosols, and radiative transfer processes in atmospheric models, that in turn are combined with ocean, terrestrial, and

ice sheet models to make projections of climate change. ASR conducts research to: determine the properties of, and interactions among, aerosols, clouds, precipitation, and radiation that are most critical to understand in order to improve their representation in climate models; ascertain the roles of atmospheric dynamics, thermodynamic structure, radiation, surface properties, and chemical and microphysical processes in the life cycles of aerosols and clouds, and develop and evaluate models of these processes; and identify and quantify processes along the aerosol-cloud-precipitation continuum that affect the radiative fluxes at the surface and throughout the atmosphere and the radiative and latent heating rate profiles, and improve the ability to accurately model these processes.

Due Date: April 20, 2016

Funding: Award Ceiling: \$300,000; Award Floor: \$50,000

Website:

http://science.energy.gov/~media/grants/pdf/foas/2016/SC_FOA_0001430.pdf

Agency: Department of Energy
Office of Science

Program: Atmospheric System Research Program – New Data Products

Description: The Atmospheric System Research Program in the Climate and Environmental Sciences Division, Office of Biological and Environmental Research of the Office of Science, supports research on key cloud, aerosol, precipitation, and radiative transfer processes that has the potential to improve the accuracy of regional and global climate models. The ASR program hereby announces its interest in research grant applications to develop new proof-of-concept data products from ARM site instruments, such that new data products represent novel and improved information involving geophysical variables that in turn are utilized by regional and global climate models. Of most interest are improved data products for those geophysical quantities that currently exhibit large errors or uncertainties and/or have been limiting the predictability of climate models.

Due Date: January 13, 2016

Funding: Award Ceiling: \$250,000; Award Floor: \$75,000

Website:

http://science.energy.gov/~media/grants/pdf/foas/2016/SC_FOA_0001431.pdf

Agency: Department of Health and Human Services
Assistant Secretary for Preparedness and Response

Program: Broad Agency Announcement (BAA) for the Advanced Development of Medical Countermeasures for Pandemic Influenza- BARDA Department of Health and Human Services

Description: BARDA encourages the advanced research, development and acquisition of medical countermeasures such as vaccines, therapeutics, and diagnostics, as well as innovative approaches to meet the threat of Pandemic Influenza in support of the preparedness mission and priorities of the HHS Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) articulated in the 2014 PHEMCE Implementation Plan.

Due Date: 10/30/2017

Funding: Total Program Funding: \$415,000,000

Website:
https://www.fbo.gov/index?s=opportunity&mode=form&id=7385613ec6a9fd810553d3d7a2fba297&tab=core&_cview=1

Agency: Department of Health and Human Services
Assistant Secretary for Preparedness and Response

Program: Broad Agency Announcement for Advanced Research and Development to Expedite the Identification, Development, and Manufacturing of Medical Countermeasures against Infectious Diseases - BARDA

Description: BARDA encourages the advanced research, development and acquisition of medical countermeasures such as vaccines, therapeutics, and diagnostics, as well as innovative approaches to meet the threat of Chemical, Biological, Radiological and Nuclear (CBRN) agents in support of the preparedness mission and priorities of the HHS Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) articulated in the 2014 PHEMCE Implementation Plan for CBRN Threats.

Due Date: 10/30/2017

Funding: Total Program Funding: \$50,000,000

Website:
https://www.fbo.gov/index?s=opportunity&mode=form&id=ee0398a4c2b023f9ac5db86b01583604&tab=core&_cview=1

Agency: Department of Health and Human Services
Assistant Secretary for Preparedness and Response

Program: Broad Agency Announcement for the Advanced Research and Chemical, Biological, Radiological, and Nuclear Medical Countermeasures for BARDA

Description: BARDA encourages the advanced research, development and acquisition of medical countermeasures such as vaccines, therapeutics, and diagnostics, as well as innovative approaches to meet the threat of Chemical, Biological, Radiological and Nuclear (CBRN) agents in support of the preparedness mission and priorities of the HHS Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) articulated in the 2014 PHEMCE Implementation Plan for CBRN Threats.

Due Date: 10/30/2017

Funding: Total Program Funding: \$415,000,000

Website:

<https://www.fbo.gov/index?s=opportunity&mode=form&id=e7fad0d9693597f68cf5bb7e498eb138&tab=core&cvview=1>

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

Program: Administrative Supplements for Complementary Health Practitioner Research Experience (Admin Supp)

Description: AHRQ's Patient Safety Portfolio is addressing patient safety and medication research by focusing on the safe usage of medications. This perspective centers on how medications move through the health care system and how this systemic process can be improved so that patients are not harmed, while health care delivery is improved. The PS Portfolio encourages the involvement of all members of the health care team, especially patients, and families; nurses, pharmacists, technicians (pharmacy and medication administration technicians), health care administrators, risk managers, and physicians) across all settings of care (including in the home) as well as the home).

Due Date: 9/1/2018

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-013.html>

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

Program: Examination of Survivorship Care Planning Efficacy and Impact (R21)Department of Health and Human Services

Description: The purpose of this announcement is to stimulate developmental research evaluating the effect of care planning on self-management of late effects of cancer therapy; adherence to medications, cancer screening, and health behavior guidelines; utilization of follow-up care; survivors' health and psychosocial outcomes. How organizational-level factors influence the implementation of care planning and its associated costs is also of interest. Specifically, the FOA aims to stimulate research that will: 1) develop and test metrics for evaluating the impact of survivorship care planning; 2) evaluate the impact of survivorship care planning on cancer survivors' morbidity, self-management and adherence to care recommendations, utilization of follow-up care; 3) evaluate effects of planning on systems outcomes, such as associated costs and impact on providers and organizations implementing the care planning; and 4) identify models and processes of care that promote effective survivorship care planning. The ultimate goal of this FOA is to generate a body of science that will inform the development and delivery of interventions that improve follow-up care for cancer survivors.

Due Date: 1/7/2019

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-011.html>

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

Program: Examination of Survivorship Care Planning Efficacy and Impact (R01)

Description: The purpose of this announcement is to stimulate developmental research evaluating the effect of care planning on self-management of late effects of cancer therapy; adherence to medications, cancer screening, and health behavior guidelines; utilization of follow-up care; survivors' health and psychosocial outcomes. How organizational-level factors influence the implementation of care planning and its associated costs is also of interest. Specifically, the FOA aims to stimulate research that will: 1) develop and test metrics for evaluating the impact of survivorship care planning; 2) evaluate the impact of survivorship care planning on cancer survivors' morbidity, self-management and adherence to care recommendations, utilization of follow-up care; 3) evaluate effects of planning on systems outcomes, such as associated costs and impact on providers and organizations implementing the care planning; and 4) identify models and processes of care that promote effective survivorship care planning. The ultimate goal of this FOA is to generate a body of science that will inform the development and delivery of interventions that improve follow-up care for cancer survivors.

Due Date: 1/7/2019

Funding: N/A

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-012.html>

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

Program: Adaptation/Optimization of Technology (ADOPTech) to Support Social Functioning (R21)

Description: The purpose of this announcement is to facilitate the development and testing of new, cutting-edge technologies to enhance functioning in individuals with social impairments. Projects funded under this FOA would create “social prosthetics”: scalable technology or devices that would augment performance in this domain.

Due Date: 2/3/2016

Funding: Total Program Funding: \$2,500,000; Award Ceiling: \$200,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-17-150.html>

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

Program: NIDA Research Center of Excellence Grant Program (P50)

Description: This announcement is to provide support for research Centers that (1) conduct drug abuse and addiction research in any area of NIDA's mission, (2) have outstanding innovative science, (3) are multidisciplinary, thematically integrated, synergistic, and (4) serve as national resource(s) to provide educational and outreach activities to drug abuse research communities, educational organizations, the general public, and policy makers in the NIDA research fields. It is expected that a Center will transform knowledge in the sciences it is studying. Incremental work should not be the focus of Center activities; rather, new and creative directions are required. The P50 Center of Excellence is expected to foster the career development and mentoring of new investigators who would be given meaningful roles to play in the Center projects. A goal of this program is to create NIDA Centers that are national community resources for furthering drug abuse research by sharing their findings, their data, and their resources as appropriate for researchers to use and build upon and to advance research in this field.

Due Date: 1/7/2019

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-16-009.html>

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

Program: Pre-clinical Research Based on Existing Repurposing Tools

Description: This announcement will support rigorous, pre-clinical studies that establish the rationale for a clinical trial, where the hypothesis originates from use of a published or publicly available method for identifying new indications for existing drugs or biologics (therapeutics). The goal of an individual project will be to explore the potential new use of an existing investigational, phase 2a-ready, or FDA-approved drug or licensed biologic; a pre-clinical study funded through this initiative will serve as a use case to demonstrate the utility of an independent crowdsourcing effort or of a computational algorithm to predict new uses of a drug or biologic. Applicants must clearly identify the published or publicly available method used to identify a novel therapeutic/indication pair or combination therapy, in addition to describing the pre-clinical studies that will serve as the use case. This use cases must have a scientifically supported rationale where objective, quantifiable effects of the therapy can be measured.

Due Date: 1/13/2016

Funding: Total Program Funding: \$4,300,000; Award Ceiling: \$250,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-TR-16-001.html>

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

Program: B Cell Immunology Program for HIV-1 Vaccine Development (BCIP) (R01)

Description: The objective of this announcement is to solicit hypothesis-driven, multidisciplinary research to elucidate the complexities and developmental plasticity of B cells associated with the induction of potent, durable, adaptive immune responses against HIV-1.

Due Date: 3/17/2016

Funding: Total Program Funding: \$2,000,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-15-055.html>

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

Program: Discovery/Development of Novel Therapeutics for Eukaryotic Pathogens (R21/R33) Department of Health and Human Services

Description: The purpose of this FOA is to solicit applications to support early stage translational research focused on the discovery and development of novel therapeutics against select eukaryotic pathogens.

Due Date: 2/10/2016

Funding: Total Program Funding: \$4,500,000

Award Ceiling: \$200,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-15-054.html>

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

Program: Promoting Caregiver Health Using Self-Management (R01)

Description: The purpose of this initiative is to stimulate research in promoting caregiver health using self-management. Caregiving is an important science area since the number of people living longer with chronic conditions is growing. Informal caregivers (lay caregivers) are defined as unpaid individuals (spouses, partners, family members, friends, or neighbors) involved in assisting others with activities of daily living and/or medical tasks. Formal caregivers are paid, delivering care in ones home or care settings (daycare, residential care facility) (Family Caregiver Alliance, 2012). This concept focuses on informal caregivers.

Due Date: 3/3/2016

Funding: Total Program Funding: \$1,400,000; Award Ceiling: \$350,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-NR-16-003.html>

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

Program: NIH Director's Early Independence Awards (DP5)

Description: The NIH Directors Early Independence Award Program supports exceptional investigators who wish to pursue independent research directly after completion of their terminal doctoral/research degree or clinical residency, thereby forgoing the traditional post-doctoral training period and accelerating their entry into an independent research career.

Due Date: 1/29/2016

Funding: Total Program Funding: \$4,000,000; Award Ceiling: \$250,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-15-006.html>

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

Program: Personalized Strategies to Manage Symptoms of Chronic Illness (R15)

Description: The purpose of this initiative is to encourage interdisciplinary research to decrease symptom burden and enhance health-related quality of life (HRQL) in persons with chronic illness through a) increasing knowledge of the biological mechanisms of symptoms and b) promoting innovative, cost-effective, targeted interventions to prevent, manage or ameliorate these symptoms.

Due Date: 1/7/2019

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-006.html>

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

Program: Personalized Strategies to Manage Symptoms of Chronic Illness (R01)

Description: The purpose of this initiative is to encourage interdisciplinary research to decrease symptom burden and enhance health-related quality of life (HRQL) in persons with chronic illness through a) increasing knowledge of the biological mechanisms of symptoms and b) promoting innovative, cost-effective, targeted interventions to prevent, manage or ameliorate these symptoms.

Due Date: 1/7/2019

Funding: Award Ceiling: \$300,000

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-006.html>

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

Program: Personalized Strategies to Manage Symptoms of Chronic Illness (R21)

Description: The purpose of this initiative is to encourage interdisciplinary research to decrease symptom burden and enhance health-related quality of life (HRQL) in persons with chronic illness through a) increasing knowledge of the biological mechanisms of symptoms and b) promoting innovative,

cost-effective, targeted interventions to prevent, manage or ameliorate these symptoms.

Due Date: 1/7/2019

Funding: See announcement

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-008.html>

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

Program: Collaborative Activities to Promote Metabolomics Research (Admin Supp)

Description: This Administrative Supplement funding opportunity is part of the Common Fund Metabolomics Program created to increase and improve the nations ability to undertake metabolomics analyses in translational and clinical research. Metabolomics has great potential to advance our understanding of human diseases, but requires specialized expertise in metabolomics study design, technology, and data analysis and interpretation. This FOA supports supplemental funds to current NIH-funded research projects for new interactive collaborations between basic or clinical researchers and metabolomics experts to add a metabolomics approach to the existing Research Strategy for the project. In addition to enhancing the parent grant by adding metabolomics analyses, collaborative projects must include activities to increase the expertise of the biomedical research group in key aspects of metabolomics study design, analysis, and data interpretation.

Due Date: 2/15/2016

Funding: Award Ceiling: \$100,000

Website: <http://grants.nih.gov/grants/guide/pa-files/PA-16-005.html>

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

Program: Research Using Biosamples and Subjects from Type 1 Diabetes Clinical Studies Complications (DP3)

Description: This announcement invites applications for studies on the complications of type 1 diabetes using subjects and/or samples from clinical studies on type 1 diabetes.

Due Date: 3/3/2016

Funding: Total Program Funding: \$5,000,000; Award Ceiling: \$1,000,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-15-019.html>

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

Program: Pilot Clinical Trials for the Spectrum of Alzheimers Disease and Age-related Cognitive Decline (R01)

Description: This announcement invites applications that propose to develop and implement Phase I or II clinical trials of promising pharmacological and non-pharmacological interventions in individuals with age-related cognitive decline and in individuals with Alzheimer's disease (AD) across the spectrum from pre-symptomatic to more severe stages of disease, as well as to stimulate studies to enhance trial design and methods.

Due Date: 9/7/2018

Funding: Total Program Funding: \$10,000,000

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-16-365.html>

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

Program: Phase III Clinical Trials for the Spectrum of Alzheimer's Disease and Age-related Cognitive Decline (R01)

Description: This announcement encourages R01 grant applications that propose to develop and implement Phase III clinical trials of promising pharmacological and non-pharmacological interventions in individuals with age-related cognitive decline and across the Alzheimer's disease (AD) spectrum from pre-symptomatic to more severe stages of disease.

Due Date: 9/7/2018

Funding: Total Program Funding: \$25,000,000

Website: <http://grants.nih.gov/grants/guide/pa-files/PAR-16-364.html>

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

Program: Diabetes Research Centers (P30)

Description: This announcement invites applications for Diabetes Research Centers, formerly named Diabetes Endocrinology Research Centers (DERCs) and Diabetes Research and Training Centers (DRTCs). Diabetes Research Centers are designed to support and enhance the national research effort in diabetes, its complications, and related endocrine and metabolic diseases. Diabetes Research Centers support three primary research-related activities: Research Core services, a Pilot and Feasibility (P and F) program, and an Enrichment program. All activities pursued by Diabetes Research Centers are designed to enhance the efficiency, productivity, effectiveness and multidisciplinary nature of research in Diabetes Research Center topic areas. The NIDDK Diabetes Research Centers program in 2015 consists of 16 Centers each located at outstanding research institutions with documented programs of excellence in diabetes-related research. General information about the NIDDK Diabetes Research Centers program may be found at www.diabetescenters.org.

Due Date: 7/14/2016

Funding: Total Program Funding: \$5,000,000; Award Ceiling: \$1,000,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-DK-15-026.html>

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

Program: The Role of the Human Virome in Heart, Lung, and Blood Health and Resilience (R61/R33)

Description: The human virome includes viruses that infect host cells, virus-derived elements in our chromosomes, and viruses that infect other types of organisms that inhabit the human body. The virome may influence the host in profound ways independent of classical viral diseases. The purpose of this announcement is to support research to identify and evaluate the basic underlying molecular and physiological mechanisms by which the virome may influence heart, lung, and blood (HLB) health and resilience.

Due Date: 8/9/2016

Funding: Total Program Funding: \$2,630,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-HL-17-002.html>

Agency: Department of the Interior
Fish and Wildlife Service

Program: Wildlife Without Borders - Africa Program

Description: In collaboration with U.S. Agency for International Development's Central Africa Regional Program for the Environment (CARPE), USFWS is providing this funding opportunity to reduce threats to key wildlife populations, and to develop the requisite individual and institutional conservation capacity to undertake long-term conservation programs. Please see A Results-Based Vision for Conservation in Central Africa on the USFWS website for greater detail on our approach to wildlife conservation in Central Africa. Funding will only be considered for projects that impact wildlife populations in the following countries: Burundi, Cameroon, Chad, Central African Republic, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Republic of Congo, Rwanda, and Sao Tome and Principe. Please review each USFWS funding priority below for specific details, including what USFWS wants to achieve through its funding support (i.e., Desired Results). Each funding priority also identifies factors that, in USFWS experience, are basic requirements (also known as prerequisites or enabling conditions) for projects to effectively implement proposed activities. Applicants should address these factors in the Statement of Need. USFWS supports wildlife conservation projects in Central Africa through multiple mechanisms: the Wildlife Without Borders Africa (WWB-Africa) Program, and the funds created by Congressional acts for the conservation of African elephants, great apes and marine turtles.

Due Date: 15-Jan-16

Funding: Estimated Total Program Funding: \$12,000,000; Award Ceiling: \$100,000;

Website: <http://www.fws.gov/international/grants-and-reporting/how-to-apply.html>

Agency: Department of the Interior
National Park Service

Program: NAGPRA Repatriation

Description: Awards to defray costs associated with the packaging, transportation, contamination removal, reburial and/or storage of NAGPRA-related human remains and/or cultural items.

Due Date: 6/1/2016

Funding: Total Program Funding: \$1,750,000

Website: <http://www.nps.gov/nagpra/GRANTS/INDEX.HTM>

Agency: NASA
NASA Headquarters

Program: Research Opportunities in Materials Science - MaterialsLab Open Science Campaigns for Experiments on the International Space Station

Description: NASA's Physical Sciences Research Program conducts fundamental and applied physical sciences research, with the objective of enabling improved space systems and technological advances that support new products and other benefits on Earth. NASA's experiments in the various disciplines of physical science reveal how physical systems respond to the near absence of gravity. They also reveal how other forces that on Earth are small, as compared to gravity, can dominate system behavior in space. This NASA Research Announcement (NRA) solicits materials science research proposals to define broadly scoped investigations to be conducted aboard the International Space Station (ISS). The research will be conducted as part of the NASA Physical Sciences MaterialsLab Open Science Campaign. Proposers are expected to define high-content experiments that explore a broad range of questions and gather a significant amount of data. These data will be made available to the global community of researchers through the NASA Physical Sciences Informatics system

Due Date: 1/14/2016

Funding: See announcement

Website:
<http://nspires.nasaprs.com/external/solicitations/summary.do?method=init&solld={448DDA10-1224-9A37-07BA-5F3DF54064B2}&path=open>

Agency: National Science Foundation

Program: Nanomanufacturing

Description: The NSF Nanomanufacturing Program supports fundamental research in novel methods and techniques for batch and continuous processes, top-down (addition/subtraction) and bottom-up (directed self-assembly) processes leading to the formation of complex heterogeneous nanosystems. The program supports basic research in nanostructure and process design principles, integration across length-scales, and system-level integration. The Program leverages advances in the understanding of nano-scale phenomena and processes (physical, chemical, electrical, thermal, mechanical and biological), nanomaterials discovery, novel nanostructure architectures, and new nanodevice and nanosystem concepts. It seeks to address quality, efficiency, scalability, reliability, safety and affordability issues that are relevant to manufacturing. To

address these issues, the Program encourages research on processes and production systems based on computation, modeling and simulation, use of process metrology, sensing, monitoring, and control, and assessment of product (nanomaterial, nanostructure, nanodevice or nanosystem) quality and performance.

Due Date: February 16, 2016

Funding: See announcement; Award Ceiling: \$300,000;

Website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13347

Agency: National Science Foundation

Program: Engineering for Natural HazardsNational Science Foundation

Description: The Engineering for Natural Hazards (ENH) program supports fundamental research to understand and mitigate the impact of natural hazards on constructed civil infrastructure. Natural hazards considered by the ENH program include earthquakes, windstorms (such as tornadoes and hurricanes), tsunamis, and landslides. The constructed civil infrastructure supported by the ENH program includes building systems, such as the soil-foundation-structure-envelope-nonstructural system, as well as the façade and roofing, and other structures, geostructures, and underground facilities, such as tunnels. While a project may focus on a single natural hazard, research that considers civil infrastructure performance over its lifetime in the context of multiple hazards, that is, a multi-hazard approach, is encouraged. Research may integrate geotechnical, structural, and architectural engineering advances with discoveries in other science and engineering fields, such as earth and atmospheric sciences, materials science, mechanics of materials, dynamical systems and control, systems engineering, decision theory, risk analysis, high performance computational modeling and simulation, and social, behavioral, and economic sciences. Multi-disciplinary and international collaborations are encouraged.

Due Date: February 16, 2016

Funding: See announcement

Website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505177

Agency: National Science Foundation

Program: Materials Engineering and ProcessingNational Science Foundation

Description: The Materials Engineering and Processing (MEP) program supports fundamental research addressing the processing and mechanical performance of engineering materials by investigating the interrelationship of materials processing, structure, properties and/or life-cycle performance for targeted applications.

Due Date: February 16, 2016

Funding: See announcement

Website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504950

Agency: National Science Foundation

Program: Manufacturing Machines and Equipment National Science Foundation

Description: The MME program supports fundamental research that enables the development of new and/or improved manufacturing machines and equipment, and optimization of their use, with a particular focus on equipment appropriate for the manufacture of mechanical and electromechanical devices, products, and systems featuring scales from microns to meters (proposals relating to nanomanufacturing should be submitted to the CMMI NanoManufacturing program, and those relating to the manufacture of electronic devices such as IC products should be submitted to the ECCS Division). Proposals relating to a wide range of manufacturing operations are encouraged, including both subtractive and additive processes, forming, bonding/joining, and laser processing. Of particular interest are proposals that relate to the manufacture of equipment and facilities that enable the production of energy products. Competitive projects will propose hypothesis-driven research that advances the frontiers of knowledge in relevant areas. Proposals submitted to the MME program should include a clearly articulated research (not developmental) objective and a coherent plan to accomplish the stated objective. Both experimental and theoretical work are supported.

Due Date: February 16, 2016

Funding: See announcement

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

Agency: National Science Foundation

Program: Integrative Strategies for Understanding Neural and Cognitive

Description: This program calls for innovative, integrative, boundary-crossing proposals that can best capture those opportunities. NSF seeks proposals that are bold, risky, and transcend the perspectives and approaches typical of single-discipline research efforts. This cross-directorate program is one element of NSF's broader effort directed at Understanding the Brain, a multi-year activity that includes participation in the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. NSF envisions a connected portfolio of transformative, integrative projects that create synergistic links across investigators and communities, yielding novel ways of tackling the challenges of understanding the brain in action and in context. In this second phase of the program, Integrative Strategies for Understanding Neural and Cognitive Systems is open to proposals to advance the foundations of one or more of the integrative research themes described below. Two of the themes are continued from FY15: Neuroengineering and Brain-Inspired Concepts and Designs, and Individuality and Variation. Two additional themes for FY16 are Cognitive and Neural Processes in Realistic, Complex Environments; and Data-Intensive Neuroscience and Cognitive Science. Within each theme, advances in theory and methods, technological innovations, educational approaches, research infrastructure, and workforce development are all of significant interest. Proposals must be consistent with the missions of the participating directorates. High-risk, high-payoff approaches are expected. Proposals must directly address risks and how they will be managed, potentially transformative payoffs, and the relationship between the risks and rewards at stake.

Due Date: January 26, 2016

Funding: Total Program Funding: \$16,500,000; Award Ceiling: \$1,000,000; Award Floor: \$150,000

Website: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf16508

Agency: National Science Foundation

Program: Long Term Research in Environmental Biology National Science Foundation

Description: The Long Term Research in Environmental Biology (LTREB) Program supports the generation of extended time series of data to address important questions in evolutionary biology, ecology, and ecosystem science. Research areas include, but are not limited to, the effects of natural selection or other evolutionary processes on populations, communities, or ecosystems; the effects of interspecific interactions that vary over time and space; population or community dynamics for

organisms that have extended life spans and long turnover times; feedbacks between ecological and evolutionary processes; pools of materials such as nutrients in soils that turn over at intermediate to longer time scales; and external forcing functions such as climatic cycles that operate over long return intervals. The Program intends to support decadal projects.

Due Date: August 2, 2016

Funding: Estimated Total Program Funding: \$1,500,000; Award Ceiling: \$450,000

Website: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf16500

Agency: USDA
Business and Cooperative Programs

Program: REAP Energy Audit and Renewable Energy Development Assistance Program

Description: Grantees assist rural small businesses and agricultural producers by conducting and promoting energy audits, and providing renewable energy development assistance (REDA).

Due Date: 2/1/2016

Funding: Total Program Funding: \$1,864,000; Award Ceiling: \$100,000;

Website: <http://www.rd.usda.gov/programs-services/rural-energy-america-program-energy-audit-renewable-energy-development-assistance>

Agency: National Science Foundation

Program: Critical Techniques, Technologies and Methodologies for Advancing Foundations and Applications of Big Data Sciences and Engineering

Description: The BIGDATA program seeks novel approaches in computer science, statistics, computational science, and mathematics, along with innovative applications in domain science, including social and behavioral sciences, geosciences, education, biology, the physical sciences, and engineering that lead towards the further development of the interdisciplinary field of data science. The solicitation invites two types of proposals: "Foundations" (F): those developing or studying fundamental theories, techniques, methodologies, and technologies of broad applicability to big data problems; and "Innovative Applications" (IA): those developing techniques, methodologies, and technologies of key importance to a Big Data problem directly impacting at least one specific application. Projects in this category must be collaborative, involving researchers from domain

disciplines and one or more methodological disciplines, e.g., computer science, statistics, mathematics, simulation and modeling, etc. While IA proposals may address critical big data challenges within a specific domain, a high level of innovation is expected in all proposals which should, in general, strive to provide solutions with potential for a broader impact on data science and its applications. IA proposals may focus on novel theoretical analysis and/or on experimental evaluation of techniques and methodologies within a specific domain. Proposals in all areas of sciences and engineering covered by participating directorates at NSF are welcome. While notions of volume, velocity, and variety are commonly ascribed to big data problems, other key issues include data quality and provenance. Data-driven solutions must carefully ascribe quality and provenance to results in a manner that is helpful to the users of the results.

Due Date: Feb 9, 2016

Funding: Estimated Total Program Funding: \$26,500,000; Award Ceiling: \$2,000,000; Award Floor: \$400,000

Website: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf16512

Agency: National Science Foundation

Program: Long-Term Ecological Research (LTER) New Site Competition

Description: NSF currently supports 25 LTER research sites and, through this solicitation, invites proposals to establish three (3) new LTER sites. Research proposals should address questions in one of two broad ecosystems: Arid/semi-arid ecosystems: The Division of Environmental Biology (DEB) anticipates support and management of one (1) new site with a focus on arid or semi-arid ecosystems. The location of the research site for proposals submitted to develop a new arid/semi-arid ecosystem LTER must be within the United States, including its territories and protectorates. Ocean/coastal ocean ecosystems: The Division of Ocean Sciences (OCE) anticipates support and management of two (2) new sites that focus on ocean or coastal ocean ecosystems; defined as ecological systems from the shoreline outward on continental shelves and including the Laurentian Great Lakes, Congressionally defined as interior oceans. Preference will be given to proposals developing a new ocean/coastal ocean ecosystem LTER site located within the United States, including its territories and protectorates, but other locations are not precluded. To address ecological questions that cannot be resolved with short-term observations or experiments, NSF established the Long Term Ecological Research Program (LTER) in 1980.

Due Date: Aug 2, 2016

Funding: Estimated Total Program Funding: \$3,154,000

Website: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf16509

Agency: National Science Foundation

Program: Service, Manufacturing and Operations Research

Description: The Service, Manufacturing and Operations Research (SMOR) program supports research leading to the creation of new mathematical models, analyses, and algorithms for decision-making related to design, planning, and operation of service and manufacturing systems. Specifically, the program supports two main types of research: (i) innovations in general-purpose methodology related to optimization, stochastic modeling, and decision and game theory; and (ii) research grounded in relevant applications that require the development of novel and customized analytical and computational methodologies. Both types of proposals must be motivated by an application area of interest to the program. Application areas of interest include supply chains and logistics; risk management; healthcare; environment; energy production and distribution; mechanism design and incentives; production planning, maintenance, and quality control; and national security. Of particular interest are methods that incorporate increasingly rich and diverse sources of data to support decision-making.

Due Date: Feb 16, 2016

Funding: N/A

Website: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=505202

Agency: National Science Foundation

Program: Graduate Research Internship Program (GRIP)

Description: The new internship initiative described in the GRIP Dear Colleague Letter 16-015 expands opportunities for NSF Graduate Fellows to enhance their professional development by engaging in mission related research experiences with partner agencies across the federal government. GRIP is open only to NSF Graduate Fellows, recipients of the Graduate Research Fellowship Program (GRFP) award.

Due Date: Feb 16, 2016

Funding: Estimated Total Program Funding: \$5,000

Website: <http://www.nsf.gov/pubs/2016/nsf16015/nsf16015.pdf>

Agency: National Science Foundation

Program: Historically Black Colleges and Universities - Undergraduate Program (HBCU-UP)

Description: To meet the nation's accelerating demands for STEM talent, more rapid gains in achievement, success and degree production in STEM for underrepresented minority populations are needed. The Historically Black Colleges and Universities Undergraduate Program (HBCU-UP) is committed to enhancing the quality of undergraduate STEM education and research at HBCUs as a means to broaden participation in the nation's STEM workforce. To this end, HBCU-UP provides awards to develop, implement, and study evidence-based innovative models and approaches for improving the preparation and success of HBCU undergraduate students so that they may pursue STEM graduate programs and/or careers. Support is available for Targeted Infusion Projects, Broadening Participation Research Projects, Research Initiation Awards, Implementation Projects, Achieving Competitive Excellence Implementation Projects, and Broadening Participation Research Centers; as well as other funding opportunities.

Due Date: Full Proposal Deadline Date: December 16, 2015

Targeted Infusion Projects, Broadening Participation Research Projects, Implementation Projects, ACE Implementation Projects

Full Proposal Deadline Date: January 20, 2016

Broadening Participation Research Centers

Funding: See announcement

Website:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5481&WT.mc_id=USNSF_39&WT.mc_ev=click

Agency: National Science Foundation

Program: Oceanographic Facilities and Equipment Support

Description: Oceanographic facilities and equipment are supported by the Integrative Programs Section (IPS) of the Division of Ocean Sciences Division (OCE), Directorate for Geosciences (GEO). These awards are made for the procurement, conversion and/or up-grade, enhancement or annual operation of platforms in the ocean, coastal, near-shore and Great Lakes. Awards are generally directed specifically to support facilities that lend themselves to shared use within the broad range of federally-supported research and education programs. Most of these platforms and facilities

also receive partial support from federal agencies other than NSF. This includes state and local governments and private sources on a proportional basis; usually through a daily rate mechanism. The primary objective of these awards is to ensure the availability of appropriate facilities for federally-funded investigators and educators. Individual project-based facilities and instrumentation, limited to one, or a small group of investigators, should be supported through appropriate research programs as opposed to the IPS programs listed herein.

Due Date: Full Proposal Accepted Anytime
Other Facility Activities: Contact Program
Ship Acquisition and Upgrade: Contact Program
Full Proposal Target Date: December 15, 2015
Oceanographic Instrumentation
December 15, Annually Thereafter
Full Proposal Target Date: December 15, 2015
Shipboard Scientific Support Equipment
December 15, Annually Thereafter
Full Proposal Target Date: November 15, 2016
Ship Operations
November 15, Annually Thereafter
Full Proposal Target Date: November 15, 2016
Oceanographic Technical Services
November 15, Annually Thereafter

Funding: Estimated Total Program Funding: \$5,000 to \$8,000,000

Website: <http://www.nsf.gov/pubs/2013/nsf13589/nsf13589.pdf>
<http://www.nsf.gov/pubs/2016/nsf16015/nsf16015.pdf>

Agency: National Science Foundation

Program: EarthCube: Enterprise Governance

Description: EarthCube is a community-driven activity to transform the conduct of geosciences research and education, sponsored through a partnership between the NSF Directorate of Geosciences and Division of Advanced

Cyberinfrastructure in the Directorate for Computer and Information Science and Engineering. EarthCube aims to create a well-connected and facile environment to share data and knowledge in an open, transparent, and inclusive manner, thus accelerating the ability of the geosciences community to understand and predict the Earth system. Achieving EarthCube will require a long-term dialog between NSF and the interested scientific communities to develop cyberinfrastructure that is thoughtfully and systematically built to meet the current and future needs of geoscientists.

Due Date: December 14, 2015

Funding: \$1,500,000 to \$2,400,000

Website: <http://www.nsf.gov/pubs/2015/nsf15603/nsf15603.pdf>

Agency: National Science Foundation

Program: Small Business Technology Transfer (STTR)

Description: The Small Business Technology Transfer (STTR) Program is intended to stimulate technological innovation in the private sector by strengthening the role of small business concerns in meeting Federal research and development needs, increasing the commercial application of federally supported research results, and fostering and encouraging participation by socially and economically disadvantaged and women-owned small businesses.

Due Date: Full Proposal Deadline Date: December 11, 2015

Funding: Anticipated Funding Amount: \$11,250,000

Website: <http://www.nsf.gov/pubs/2015/nsf15604/nsf15604.pdf>

Agency: National Science Foundation

Program: Discovery Research PreK-12 (DRK-12)

Description: The Discovery Research PreK-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 STEM education innovations and approaches. 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. Projects should result in research-informed and field-tested outcomes and products that inform teaching and learning. Teachers and students who

participate in DRK-12 studies are expected to enhance their understanding and use of STEM content, practices and skills.

Due Date: Full Proposal Deadline Date: December 11, 2015

Funding: Anticipated Funding Amount: \$50,000,000

Website: <http://www.nsf.gov/pubs/2015/nsf15592/nsf15592.pdf>

Agency: National Science Foundation

Program: Archaeology and Archaeometry

Description: The goal of the Archaeology Program is to fund research which furthers anthropologically relevant archaeological knowledge. In accordance with the National Science Foundation's mission such research has the potential to provide fundamental scientific insight. While within the broad range of "archaeology" the focus is on projects judged to be significant from an anthropological perspective, the Program sets no priorities based on time period, geographic region or specific research topic. The Program administers four competitions each of which is described below. It also supports projects submitted under NSF-wide competition guidelines. These include CAREER, EAGER, RAPID and Research Experiences for Undergraduates Supplement requests.

Due Date: Full Proposal Target Date: December 20, 2015

Archaeology - Senior Research

December 20, Annually Thereafter

Full Proposal Target Date: July 1, 2016

Archaeology - Senior Research

July 1, Annually Thereafter

Funding: See announcement

Website:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=11690&WT.mc_id=USNSF39&WT.mc_ev=click