

THE STATE UNIVERSITY SYSTEM OF FLORIDA

WASHINGTON E-UPDATE

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Budget and Appropriations Update -- President Obama is scheduled to send his fiscal year 2015 budget blueprint to Congress on March 4, followed a week later with the details behind the numbers. Regardless of reaction the document elicits, congressional appropriators will quickly dive into their work, hoping to build on the momentum achieved by passing last month's omnibus spending bill.

While nothing's official yet, we do know the budget request will stick to the \$1.014 billion discretionary spending cap set by the deal negotiated in December by Rep. Paul Ryan (R-WI) and Senator Patty Murray (D-WA). Of the total, \$492.5 billion is set aside for domestic discretionary programs, with the remainder allocated for defense.

Overall, the budget is about \$2 billion more than fiscal year 2015, and so long as Congress doesn't exceed the overall spending cap, no programs will face any across-the-board sequester cuts.

The president's budget, however, also will include \$56 billion for what's being billed as an "Opportunity, Growth and Security" initiative.

The plan, which is said to be paid for by closing tax loopholes and changing spending programs, is intended to replace the remaining FY2015 sequester cuts for nondefense discretionary programs. The initiative would split funding evenly between defense and domestic programs. It calls for the creation of 45 new manufacturing institutes, an efficiency program to modernize the electric grid and a proposal to expand access to pre-kindergarten programs.

What the president's plan does NOT include is a "grand bargain," as it did last year—a far-reaching deficit-reduction plan that included major reforms in Social Security and other entitlements as well as tax increases.

[We'll pass along more details on the president's budget as they emerge over the next few weeks.]

Whatever reception the president's budget receives on Capitol Hill, top House and Senate appropriators are poised—at least for now—to move quickly. Senate appropriations chair Barbara Mikulski (D-MD) is already issuing deadlines to her colleagues, calling for committee mark-ups to be completed by early June. But with the mid-term elections looming, Senate majority leader Harry Reid (D-NV) will need to weigh whether he wants to reignite debate on controversial issues like Obamacare before November.

On February 28, Senate Budget Committee Chair Patty Murray (D-WA) announced that her panel will not attempt to write a 2015 budget resolution this year, relying instead on the budget caps agreed to as part of last December's Bipartisan Budget Act agreement. Republicans quickly criticized the decision and the issue will certainly be part of the political debate heading into next fall's Congressional elections.

Farm bill provides \$125 million for citrus greening research

Culminating a prolonged, two-year struggle to legislate agricultural policy, Congress cleared a new farm bill February 4 and, along with it, provisions for significant new agricultural research on a devastating disease threatening Florida's citrus industry.

H.R. 2642 will provide \$125 million to support citrus greening research – a provision that was developed, negotiated and supported by many members of the Florida delegation in both the House and Senate.

The Emergency Citrus Disease Research and Extension Program will provide \$25 million per year over five years using funds from the Commodity Credit Corporation. The conference bill establishes a research program dedicated to “discovering or developing a cure or effective treatment for citrus greening and any other diseases and pests, domestic or invasive, that emerge to threaten the U.S. citrus producing and processing industry.”

The bill also establishes a “Citrus Disease Subcommittee” within the Department of Agriculture's specialty crops committee to advise the Department on research, extension and development issues and needs. Nine members will be selected from the producer community; five are designated in the bill to be from Florida.

The new farm bill funding is in addition to \$20 million provided for citrus greening research in the Fiscal 2014 omnibus appropriations bill enacted last month.

Section 7103 and 7106 in the [farm bill](#) and [report](#) discuss the new program.

Congress extends nation's debt ceiling for one year

Continuing a period of relative calm on Capitol Hill that started with last December's bipartisan agreement on a two-year budget deal, Congress agreed in mid-February to a one-year extension of the nation's borrowing authority, or debt limit.

The Temporary Debt Limit Extension Act (S 540) passed the House of Representatives by a vote of 221 to 201 and the Senate 55-43. The measure extends the debt limit through March 15, 2015. Despite initial discussion of linking the extension to certain domestic policy action, the final bill is a simple extension. The previous debt limit expired Feb. 7 and the Treasury Department had been using its “extraordinary measures” authority to continue funding the government before S.540 was enacted.

The extension removed any threat of a government agency shutdown this year, similar to the one last October that disrupted grant making processes.

Veterans' in-state tuition bill passes House, stalls in Senate

A bill to provide in-state tuition rates to veterans attending public universities under the GI Bill beginning July 2016 was passed in early February by the House but has since stalled in the Senate.

The GI Bill Tuition Fairness Act (HR 357) sponsored by Veterans Affairs Committee Chairman Jeff Miller (R-FL) was passed by the House February 2.

In administering the GI Bill benefits, the legislation would direct the VA to disapprove courses of education provided by a public university that does not charge tuition and fees for veterans at the same rate that is charged for in-state residents, regardless of the veteran's state of residence. The VA would also have waiver authority for special circumstances, for instance if a student veteran is called up for service while enrolled and attending school.

A bill identical to the House legislation was introduced in the Senate as S.257 by Senator Bill Nelson (D-FL). It was later incorporated into a much larger omnibus veterans bill, the Comprehensive Veterans Health and Benefits and Military Retirement Pay Restoration Act of 2014 (S.1982). That legislation covers a wide range of provisions dealing with medical, dental and mental health services, employment and training, career transition and survivor issues, and it would create 27 new medical facilities.

After debate was begun on the Senate floor last week, the omnibus legislation was effectively blocked February 27 due to concerns about the total cost of the package. The bill would have approved \$261 million in new mandatory budget authority for fiscal 2014 exceeding the limits set in the December Bipartisan Budget Act. Senator Jeff Sessions (R-AL) raised a point of order against the bill based on exceeding the budget caps and by a 56-41 vote the Senate did not waive the point of order. The bill could be modified in the future and returned to the Senate floor or individual pieces such as the in-state tuition provision could return as standalone legislation.

Tax reform proposal contains higher education changes

House Ways and Means Chairman Dave Camp (R-MI) released his legislative discussion draft on comprehensive tax reform February 26. While it appears the package is unlikely to achieve passage this year, it is the product of several years of development by Rep. Camp who will relinquish his committee chairmanship in the next Congress due to term limits.

If enacted, the plan would become the most expansive rewrite of the tax code since 1986, and would reshape policy from poverty aid to the complex accounting maneuvers multinational corporations use to claim tax breaks.

The proposed framework would sharply cut back tax rates for individuals and corporations while eliminating or scaling back many of the tax breaks that fill the code, including the mortgage interest deduction, a bedrock of the housing, real estate and construction industry.

The plan also proposes significant changes to higher education tax credits and deductions as follows:

- Section 1201 – American Opportunity tax credit – proposes to reform and consolidate the credit with the tuition tax credit, the Hope Scholarship Credit and the Lifetime Learning Credit.
- Section 1202 – Expansion of the Pell Grant exclusion from gross income.
- Section 1203 – Repeal of exclusion of income from U.S. savings bonds used to pay higher education tuition and fees.
- Section 1204 -- Repeal of deduction for interest on education loans.
- Section 1205 -- Repeal of deduction for qualified tuition and related expenses.
- Section 1206 -- No new contributions to Coverdell education savings accounts.
- Section 1207 -- Repeal of exclusion for discharge of student loan indebtedness.
- Section 1208 -- Repeal of exclusion for qualified tuition reductions.
- Section 1209 -- Repeal of exclusion for education assistance programs.
- Section 1210 -- Repeal of exception to 10-percent penalty for higher education expenses.

The Committee's section by section analysis with rationale is available [here](#). (Subtitle C beginning on page 8 contains the items related to education.) To view the full bill click [here](#).

Windstorm research bill approved by House Committee

Legislation to reauthorize windstorm research and development was approved February 28 by voice vote of the House Science, Space and Technology Committee.

The National Windstorm Impact Reduction Program Act, H.R. 1786 amends a now expired bill (PL 108-360) enacted in 2004 to foster research on hurricanes, tornadoes and other windstorms. The bill would move lead authority for the issue to the National Institute of Standards and Technology from the White House Office of Science and Technology Policy. Appropriations of \$21.4 million would be authorized annually for two years.

In addition to NIST, NSF, NOAA and FEMA would also share various roles. The bill seeks to “achieve major measurable reductions in the losses of life and property from windstorms through a coordinated Federal effort, in cooperation with other levels of

government, academia, and the private sector, aimed at improving the understanding of windstorms and their impacts and developing and encouraging the implementation of cost-effective mitigation measures to reduce those impacts.”

NIST would have primary responsibility in developing and promoting national standards and model building codes. NSF would be tasked to support engineering and atmospheric sciences to improve understanding on the behavior of storms and the impacts on buildings, utilities and other structures. FEMA would develop risk assessment tools and mitigation techniques and analysis.

A manager’s amendment at the Committee markup included social science research in the measure. It also calls on the four involved agencies to outline planned activities and spending levels in their annual budget requests.

NIST releases cybersecurity framework and roadmap documents; April workshop planned on “privacy engineering”

To help organizations charged with providing the nation's financial, energy, health care and other critical systems better protect their information and physical assets from cyber attack, the National Institute of Standards and Technology (NIST) released its [Framework for Improving Critical Infrastructure Cybersecurity](#) February 12. The document provides a voluntary structure that organizations, regulators and customers can use to create, guide, assess or improve comprehensive cybersecurity programs.

NIST also released a ["Roadmap" document](#) to accompany the framework. It lays out a path toward future framework versions and ways to identify and address key areas for cybersecurity development, alignment and collaboration. It says NIST will continue to serve as a convener and coordinator to work with industry and other government agencies to help organizations understand, use and improve the framework. This will include leading discussions of models for future governance of the framework, such as potential transfer to a non-government organization.

NIST had been charged with developing a cybersecurity framework for the nation in last year’s Presidential Executive Order 13636. The resulting product, created through public-private collaboration, is intended by the agency to provide a common language to address and manage cyber risk in a cost-effective way based on business needs, without placing additional regulatory requirements on businesses.

The framework allows organizations—regardless of size, degree of cyber risk or cybersecurity sophistication—to apply the principles and best practices of risk management to improve the security and resilience of critical infrastructure.

NIST leaders said organizations can use the framework to determine their current level of cybersecurity, set goals for cybersecurity that are in sync with their business environment, and establish a plan for improving or maintaining their cybersecurity. It

also offers a methodology to protect privacy and civil liberties to help organizations incorporate those protections into a comprehensive cybersecurity program.

The framework document is labeled "Version 1.0" and is described as a "living" document that will need to be updated to keep pace with changes in technology, threats and other factors, and to incorporate lessons learned from its use. According to the document, these updates will ensure the framework meets the needs of critical infrastructure owners and operators in a dynamic and challenging environment. To view the NIST website on cyber security, click [here](#).

White House cybersecurity coordinator Michael Daniel wrote a blogpost Feb. 18 describing the framework as an important first step. He wrote: "Cyber is a team sport, and we need everyone on the field playing their part. In fact, no single organization or sector or group can solve these challenges. The open and collaborative process that we used to develop the Framework represents a good, repeatable process for developing public policy on complex, pervasive technical issues." To read the blog, click [here](#).

NIST plans April workshop

As called for in the cybersecurity roadmap, NIST plans to hold a workshop on "privacy engineering" intended to help develop a consensus on best practices. The meeting will be held April 9-10 at the agency's headquarters in Gaithersburg, MD. Panel presentations, plenary discussions, and facilitated breakout discussions are planned. The workshop will focus on the advancement of privacy engineering as a basis for developing technical standards and best practices for the protection of individuals' privacy or civil liberties. By examining existing models such as security engineering and safety risk management, NIST says the workshop will explore the concepts of a privacy risk management model, privacy requirements and system design and development. Online registration is available by clicking [here](#).

Cybersecurity bills aim to keep NIST involved

Legislation working in both chambers would keep the National Institute of Standards and Technology (NIST) involved in the cybersecurity framework process on an ongoing basis, despite the agency's intention to handoff "ownership" of the framework document released Feb. 12 and future management to a private entity.

The Cybersecurity Act (S. 1353) sponsored by Senate Commerce Committee Chairman John D. Rockefeller (D-WVA) and Ranking Member John Thune (R-SD) envisions NIST acting to facilitate and support the development of a voluntary, industry-led set of standards and procedures to reduce cyber risks to critical infrastructure. The measure says NIST "on an ongoing basis, [shall] facilitate and support the development of a voluntary, industry-led set of standards, guidelines, best practices, methodologies, procedures and processes to reduce cyber risks to critical infrastructure."

Another bill, the National Cybersecurity and Critical Infrastructure Protection Act (H.R. 3696), passed by the House Homeland Security Committee Feb. 5 carries the same language as the Senate bill and adds that NIST shall “coordinate closely and continuously” with critical infrastructure operators and entities like sector coordinating councils and information sharing and analysis centers.

The Senate bill would also direct the National Science Foundation to support cybersecurity research and to review cybersecurity test beds. It would also allow NSF to award grants to institutions of higher education or research and development nonprofit institutions to establish additional test beds.

Sen. Rubio addresses higher education reform

Ways to reform higher education was the topic of a speech by Florida Senator Marco Rubio in Miami on February 10 at a forum set up by *National Journal*.

Sen. Rubio addressed the need for a more flexible accreditation system, universal income-based repayment for student loans, “Student Investment Plans” for education financing via investors, and his “Know Before You Go” bill to make certain outcome data on graduation rates, transfer rates, average graduate salary, and future employment for every college program publicly available to policymakers, parents, and prospective students.

He also addressed for-profit institutions and his personal experience in using Pell grants and student loans.

To read the speech or view the video, click [here](#).

Bipartisan deal reached to replace Medicare physician reimbursement system

Congressional negotiators reached a major policy agreement and introduced new legislation February 6 that would benefit physicians working in SUS medical facilities.

The bill would replace the Medicare Sustainable Growth Rate (SGR) formula that has existed since being put into place by Congress in 1997 to govern physician reimbursement under Medicare. Since then it has proven to be flawed and wildly unpopular but almost impossible to replace because of the accumulating cost of temporary, one-year “fixes” that were passed by Congress every year to override the formula’s indication for a cut to physician reimbursement payments.

The breakthrough followed months of talks among the leadership of all Committees of jurisdiction -- House Ways and Means, House Energy and Commerce and Senate Finance – both Democrats and Republicans.

The current SGR system is operating under a three-month extension – which expires March 31 -- passed by Congress last year to prevent a 24 percent cut to physician payments.

The SGR Repeal and Medicare Provider Payment Modernization Act of 2014 (H.R. 4015 and S 2000) would provide annual 0.5 percent increases over the next five years while transitioning to a system based on quality incentives, value and greater accountability measures. The current cost estimate for enacting this new policy is \$128 billion. At this point potential funding offsets required to pay for the change have not been identified.

Legislation would end financial aid exemption for Caribbean medical schools

Medical schools in the Caribbean would lose current exemptions from rules governing U.S. financial aid under legislation introduced in both the Senate and House.

Originally introduced in the Senate by Richard Durbin (D-IL) as S.1822, similar legislation (H.R. 3903) has now also been introduced in the House by Rep. Richard Burgess (R-TX.)

The Foreign Medical School Accountability Fairness Act would affect four “grandfathered” for-profit and one not-for-profit schools in the Caribbean region. Currently they are exempt from requirements that apply to other foreign medical schools who participate in the Title IV direct student loan program. For participation in financial aid, the legislation would end the exemption unless non-U.S. students and graduates comprise at least 60 percent of the foreign school. Also the institutions would be required to have at least 75 percent of its students and graduates pass the U.S. licensing exam for foreign graduates in the preceding year.

Sen. Durbin said he is concerned about the high amount of financial aid flowing into a relatively small number of schools, as well as high debt levels sustained by students there who are less likely to obtain medical residency slots in the U.S. when they graduate. Last year, only 53 percent of U.S. students graduating abroad were matched to a residency compared to 94 percent for those coming out of domestic medical schools.

Federal transportation report cites need for billions to transit system

A new report released February 28 by the Department of Transportation says \$80 billion per year is needed to keep the nation’s roads, bridges and transit system at status quo and billions more to enhance transportation systems.

“2013 Status of the Nation’s Highways, Bridges, and Transit: Conditions and Performance” shows investment lagging in all areas across federal, state and local

governments. The report, which is required by law to be issued every two years, says at least \$65 billion is needed annually to maintain current roads and bridges and another \$145.9 billion would be required to upgrade conditions. To read the report, click [here](#).

University activities in support of BRAIN research initiative sought

The White House Office of Science and Technology Policy blog Feb. 24 featured a post about the new multi-agency Brain Research through Advancing Neurotechnologies (BRAIN) initiative, a private-public partnership to tackle the essential question of how the brain works. Initial funding was included in the FY 2014 appropriations bill.

The blogpost asks universities, companies, and nonprofits to share information about their activities that support the BRAIN Initiative's goals. According to the post, the White House will hold an event to feature the role of these organizations in achieving the program's vision. Find more information [here](#).

Highlights of competitive grant opportunities at federal agencies

Agency: Department of Defense
Air Force -- Research Lab

Program: Human-Centered Intelligence, Surveillance

Description: This effort is an open-ended announcement soliciting innovative research concepts for the overall mission of the Human-Centered Intelligence, Surveillance, & Reconnaissance (ISR) Division. The core mission is to develop human-centered S&T that (1) enables the Air Force to better identify, locate and track humans within the ISR environment and (2) enhance the performance of ISR analysts. To accomplish this mission, the core S&T portfolio is structured into three major research areas: (1) Human Signatures - develop technologies to sense and exploit human bio-signatures at the molecular and macro (anthropometric) level, (2) Human Trust and Interaction – develop technologies to improve human-to-human interactions as well as human-to-machine interactions, and (3) Human Analyst Augmentation – develop technologies to enhance ISR analyst performance and to test the efficacy of newly developed ISR technologies within a simulated operational environment. Research areas include contamination detection, hazard assessment and management, individual and collective protection, and restoration and reconstitution of operational capability.

Due Date: 2/12/2018

Funding: \$46,400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251243>

Agency: Department of Defense
Air Force Academy

Program: Functional Polymers for Advanced Materials

Description: The Chemistry Research Center (CRC) was organized within the Department of Chemistry to plan, execute, and report research in the Department of Chemistry. The mission is to enhance cadet education through participation in research, provide professional development opportunities for faculty members, and support the technology base of the Air Force and Department of Defense. The CRC is seeking advances in organic, polymer, and materials chemistry for design and preparation of fluorosiloxane hybrid materials for membranes, metallized composites for structural energetics, and extended poly(aromatic)s for organic electronics. Projects will encompass organic/polymer synthesis, purification, and materials processing. Public benefit from these developments via potential commercial technology transfer for water repellent materials for apparel and cosmetics, antimicrobial waxes and coatings for paints, new composite materials for high strength, lightweight sporting goods components, and new portable, flexible electronic materials for display applications.

Due Date: 3/20/2014

Funding: \$175,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251624>

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

Program: DOD FY14 Combat Casualty Training Initiative Virtual Tissue Advancement Research Program

Description: The Combat Casualty Training Initiative (CCTI) Virtual Tissue Advancement Research Program Announcement is being offered for the first time in FY14. It seeks to advance the state of research under the CCTI by advancing the state of virtual tissues for use in surgical and other interventional procedure and skill simulation systems. The CCTI is primarily focused on the research and, ultimately, the development of medical training methods, technologies, systems, and competency assessment tools for the attainment and sustainment of military medical readiness. The CCTI advances these goals through research and development projects related to trauma care, surgical procedures, general surgery, and interventional procedures / skills. The results of this effort are intended to improve the fidelity of virtual reality human tissue and anatomical interactions to further the abilities to construct realistic

procedural surgical and interventional training systems. It is anticipated that research will lead to better methods to accurately simulate regional anatomic interactions, aggregated tissues (where different tissues connect and interact with each other), organ and structure interactions, organ physical properties as well as structure and tissue properties (here-in-after referred to as 'human tissue'). Research of the human tissue properties should include a prototype online interactive knowledge repository or library.

Due Date: 6/23/2014

Funding: \$7,200,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251302>

Agency: Department of Defense
Office of Naval Research

Program: FY 15 Communications and Networking Discovery and Invention

Description: Proposals for potential FY15 Exploratory Development/Applied Research (Budget Activity 6.2) projects are sought under the following focus areas. Highly innovative ideas in other general communications and networking areas that are not within the designated focus areas below, but nonetheless are important to the Navy/Marine Corps, as determined under the synopsis section above may also be considered: 1. Interference cancellation and tunable high-Q band-pass/band-reject filtering technologies, as well as electronic protection techniques, for bent pipe SATCOM. 2. Algorithms for multi-commodity flow optimization, with multiple priorities, and inclusive of channelized frequency allocation/management (e.g., HF-IP) for robust, automated, and dynamic traffic engineering and routing. 3. Flow control smoothing and latency/jitter reduction for networked disruption-prone directional links (e.g., airborne CDL) using predictive algorithms. 4. IP multicast techniques that work efficiently with link-state routing and strict-priority oriented automated traffic engineering.

Due Date: 6/30/2014

Funding: \$1,250,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251625>

Agency: Department of Education

Program: OSERS: NIDRR: Advanced Rehabilitation Research Training (ARRT)
Program: Community Living and Participation

Description: The purpose of the Disability and Rehabilitation Research Projects and Centers Program is to plan and conduct research, demonstration projects, training, and related activities, including international activities, to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities, and to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Rehabilitation Act). The purpose of NIDRR's ARRT program, which is funded through the Disability and Rehabilitation Research Projects and Centers Program, is to provide advanced research training and experience to individuals with doctorates, or similar advanced degrees, who have clinical or other relevant experience. ARRT projects train rehabilitation researchers, including researchers with disabilities, with particular attention to research areas that support the implementation and objectives of the Rehabilitation Act, and that improve the effectiveness of services authorized under the Rehabilitation Act.

Due Date: 4/14/2014

Funding: \$150,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251357>

Agency: Department of Energy
Golden Field Office

Program: Integrated Enhanced Geothermal Systems (EGS) Research and Development

Description: Through this announcement, the Geothermal Technologies Office (GTO) Enhanced Geothermal Systems (EGS) Subprogram seeks to advance subsurface characterization via an integrated technical approach to EGS R&D. GTO encourages the community to integrate technologies to address the challenges associated with quantifying reservoir complexity. GTO is interested in increasing the precision and accuracy of directly measured parameters and improving the ability to constrain calculated or inferred reservoir properties from these direct measurements. Critical parameters that GTO is interested in constraining include, but are not limited to: matrix to fracture heat transfer area; fluid mean residence time; in-situ stresses; fracture spacing; fracture aperture distribution; porosity; and reservoir volume. GTO seeks research projects that will facilitate a better understanding of physicochemical conditions to optimize subsurface engineering and stimulation methods, as well as assess and better understand the evolution and sustainability of a reservoir during long-term operations.

Due Date: 4/30/2014

Funding: See announcement

Website: <https://eere-exchange.energy.gov/>

Agency: Department of Energy
Office of Science

Program: Research and Development for Next Generation Nuclear Physics
Accelerator Facilities

Description: The Office of Nuclear Physics (NP), Office of Science (SC), U.S. Department of Energy (DOE), announces its interest in receiving applications for Research and Development efforts directed at challenges for next generation NP accelerator facilities.

Due Date: 4/8/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251201>

Agency: Department of Health and Human Services
Health Resources & Services Administration

Program: Reaching Practicing MCH Professionals in Underserved Areas Through
Education and Training Program

Description: This announcement solicits applications for grant funds to plan, develop, and implement the Reaching Practicing MCH Professionals in Underserved Areas Through Education and Training Program that is designed to address and strengthen the nation's Maternal and Child Health Public Health system by developing the public health workforce through innovative strategies that address the special educational needs of diverse public health professionals who provide MCH public health services in isolated, underserved, communities, including rural and frontier areas, U.S. jurisdictions, and Indian reservations. The Reaching Practicing MCH Professionals in Underserved Areas Through Education and Training Program is dedicated to serving diverse MCH public health professionals in isolated geographic areas of the country who are underserved through traditional education programs and may not otherwise have access to pursue their education.

Due Date: 3/21/2014

Funding: \$706,536

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251295>

Agency: Department of Health and Human Services
National Institute of Justice

Program: NIJ FY 14 Research and Evaluation on Justice Systems

Description: NIJ is seeking proposals for social and behavioral science research on, and evaluations related to, justice systems topics that bear directly and substantially upon state-, local-, tribal- or federal criminal and juvenile justice policy and practice.

Due Date: 4/28/2014

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

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251288>

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

Program: Additional Research Training Slots for NIDA-Supported NRSA Institutional Training (T32) Grants (Admin Supp)

Description: This administrative supplement program provides one to two years of support for additional training positions on NIDA-supported institutional Ruth L. Kirschstein National Research Service Award (NRSA) programs, in order to temporarily enhance research training capacity in NIDA mission-critical areas. This program is intended for T32 programs that have an excellent record of filling their existing training positions and have documented successful outcomes for their trainees.

Due Date: 3/21/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251853>

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

Program: Synthetic Psychoactive Drugs and Strategic Approaches to Counteract Their Deleterious Effects (R21)

Description: The purpose of this program is to support research to deepen our knowledge of the use of synthetic psychoactive drugs, their mechanisms of action, their health effects, and development of prevention strategies and strategies to treat patients in emergency departments and long range treatment.

Due Date: 5/7/2017

Funding: \$200,000 per award

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251795>

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

Program: Family-Centered Self-Management of Chronic Conditions (R21)

Description: This funding opportunity announcement seeks to build the science of family-centered self-management (FCSM) in chronic conditions.

Due Date: 5/7/2017

Funding: \$200,000 award ceiling

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251757>

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

Program: Exploratory Clinical Trials of Novel Interventions for Mental Disorders (R21/R33)

Description: The purpose of this funding is to support the efficient pilot testing of novel interventions for mental disorders in adults and children through an experimental therapeutics approach. Under this FOA, trials must be designed so that results, whether positive or negative, will provide information of high scientific utility and will support go/no-go decisions about further development or testing of the intervention. Studies of novel interventions include, but are not limited to behavioral, pharmacological, biologics-based, cognitive, device-based, interpersonal, physiological, or combined approaches. Support will be provided for up to two years (R21 phase) for preliminary milestone-driven testing and validating of the interventions mechanism of action, possibly followed by up to 3 years of support (R33 phase) for studies relating the mechanism to functional or clinical effects. Ultimately, this R21/R33 funding mechanism is intended to speed the translation of emerging basic science findings of mechanisms and processes underlying mental disorders into novel interventions that can be efficiently tested for their promise in restoring function and reducing symptoms for those living with mental disorders.

Due Date: 2/17/2015

Funding: \$2,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251736>

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

Program: Exploratory Clinical Trials of Novel Interventions for Mental Disorders (R33)

Description: The purpose of this funding is to support the efficient pilot testing of novel interventions for mental disorders in adults and children through an experimental therapeutics approach. Under this FOA, trials must be designed so that results, whether positive or negative, will provide information of high scientific utility and will support go/no-go decisions about further development or testing of the intervention. Studies of novel interventions include, but are not limited to behavioral, pharmacological, biologics-based, cognitive, device-based, interpersonal, physiological, or combined approaches. Support will be provided for testing and validating the interventions mechanism of action and for studies relating the mechanism to functional or clinical effects. Ultimately, this funding mechanism is intended to speed the translation of emerging basic science findings of mechanisms and processes underlying mental disorders into novel interventions that can be efficiently tested for their promise in restoring function and reducing symptoms for those living with mental disorders.

Due Date: 2/17/2015

Funding: \$3,000,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-15-310.html>

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

Program: Clinical Trials to Test the Effectiveness of Treatment, Preventive, and Services Interventions (R01)

Description: This funding seeks to support investigator-initiated clinical trials to establish the effectiveness of interventions and to test hypotheses regarding moderators, mediators, and mechanisms of action of these interventions. This grant supports clinical trials designed to test the therapeutic value of treatment and preventive interventions for which there is already evidence of efficacy, for use in community and practice settings. Applications might include research to evaluate the effectiveness or increase the clinical impact of pharmacologic, somatic, psychosocial (psychotherapeutic, behavioral), rehabilitative and combination interventions to prevent or treat mental illness. This funding also supports clinical trials to test patient-, provider-, organizational-, or systems -level services interventions to improve service access, engagement, quality, coordination, or delivery, with the goal of improved outcomes at the

individual and population level. The intervention research covered under this announcement is explicitly focused on practice-relevant questions. Applications must justify the potential impact of the proposed intervention/services models on practice and public health in terms of the magnitude of likely improvements in key outcomes (e.g., effect size, safety/tolerability profile, value and efficiency, and dissemination potential), as compared to existing approaches.

Due Date: 2/17/2015

Funding: \$9,000,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-15-320.html>

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

Program: Pilot Effectiveness Studies and Services Research Grants (R34)

Description: The purpose of announcement is to encourage pilot research consistent with NIMHs priorities for: 1) effectiveness research on interventions with previously demonstrated efficacy, for use with broader target populations or for use in community practice settings, and 2) innovative services research directions that require preliminary testing or development. Applications should provide resources for evaluating the feasibility, tolerability, acceptability and safety of approaches to improve mental health and modify risk factors, and for obtaining the preliminary data needed as a pre-requisite to a larger-scale intervention trial (e.g., comparative effectiveness study, practical trial) or large-scale services study.

Due Date: 2/17/2015

Funding: Total Funding: \$3,000,000; Award Ceiling: \$225,000

Website: <http://grants.nih.gov/grants/guide/rfa-files/RFA-MH-15-330.html>

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

Program: Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care (R01)

Description: This announcement seeks Research Project Grant applications that propose to use a common conceptual model to develop behavioral interventions to modify health behaviors and improve health outcomes in patients with comorbid chronic diseases and health conditions. Specifically, this funding will support research in primary care that uses a

multi-disease care management approach to behavioral interventions with high potential impact to improve patient-level health outcomes for individuals with three or more chronic health conditions. The proposed approach must modify behaviors using a common approach rather than administering a distinct intervention for each targeted behavior and/or condition. Diseases and health conditions can include, but are not limited to: mental health disorders (e.g., depression), diabetes, smoking, obesity, chronic pain, alcohol and substance abuse and dependence, chronic obstructive pulmonary disorder, cancer and hypertension.

Due Date: 5/7/2017

Funding: Not Specified

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251760>

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

Program: Prevention Innovation Program (PIP) (R01)

Description: This announcement, the Prevention Innovation Program (PIP), encourages Research Project Grant applications in non-vaccine biomedical prevention (nBP) research. The PIP is intended to support high-risk/innovative research and development efforts to establish and maintain a sustainable pipeline for the prevention of HIV acquisition/transmission. The PIP will support discovery and development of novel and under-explored nBP candidates/strategies, nBP delivery strategies, studies of the impact of nBP prevention strategies on genital and gastrointestinal (GI) mucosa function and emerging technologies that support microbicides, pre-exposure prophylaxis (PrEP), and Multipurpose Prevention Technologies (MPT) for prevention of HIV acquisition/transmission.

Due Date: 7/10/2014

Funding: Total Funding: \$2,400,000; Award Ceiling: \$400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251602>

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

Program: Innovation for HIV Vaccine Discovery (R01)

Description: The purpose of this announcement is to encourage applications from institutions/organizations proposing innovative, high risk, high impact research to identify novel vaccine concepts and targets that will aid in the

design and development of an effective immunogen that may provide long-term protection from either acquisition of or ongoing infection by HIV. The emphasis of this program is early discovery research that incorporates new ideas leading to the development of newly engineered conventional or entirely novel approaches for vaccines that may have significant impact on the design of immunogens or immunization strategies for an effective HIV vaccine. The program is open to established and new investigators and does not require research expertise in HIV prevention as a prerequisite for submitting an application.

Due Date: 7/15/2014

Funding: \$2,000,000

Website: <http://www.grants.gov/web/grants/search-grants.html>

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

Program: NIDA Avant-Garde Award Program for HIV/AIDS and Drug Use Research (DP1)

Description: The NIDA Avant-Garde Award Program for HIV/AIDS Research supports individual scientists of exceptional creativity who propose high-impact research that will open new areas of HIV/AIDS research and/or lead to new avenues for prevention and treatment of HIV/AIDS among drug abusers. The term avant-garde is used to describe highly innovative approaches that have the potential to be transformative. The proposed research should reflect approaches and ideas that are substantially different from those already being pursued by the investigator or others. The NIDA Avant-Garde award supports innovative, basic research that may lead to improved preventive interventions or therapies; creative, new strategies to prevent disease transmission; novel approaches to improve disease outcomes; and creative approaches to eradicating HIV or improving the lives of those living with HIV.

Due Date: 7/29/2016

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

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251321>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Graduate Research Fellowship Program in the Social and Behavioral Sciences

Description: NIJ is seeking proposals for funding innovative dissertation research under the NIJ Graduate Research Fellowship (GRF) Program that provides awards for research on crime, violence, and other criminal justice-related topics to accredited academic institutions that offer research-based doctoral degrees in social and behavioral academic disciplines relevant to NIJ's mission. NIJ invests in doctoral education by supporting universities that sponsor students who demonstrate the potential to successfully complete doctoral degree programs in disciplines relevant to the mission of NIJ and who are in the final stages of graduate study. Applicants sponsoring doctoral students are eligible to apply only if the doctoral research dissertation has direct relevance to providing science, technology, engineering, and mathematics to better prevent and control crime and ensure the fair and impartial administration of criminal justice in the United States.

Due Date: 5/12/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251814>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 W.E.B. Du Bois Fellowship for Research on Race, Gender, Culture, and Crime

Description: NIJ seeks applications for the W.E.B. Du Bois Fellowship for Research on Race, Gender, Culture, and Crime FY 2014. The Fellowship program seeks to advance knowledge regarding the confluence of crime, justice, and culture in various societal contexts. The Fellowship places particular emphasis on crime, violence, and the administration of criminal justice in diverse cultural contexts within the United States.

Due Date: 5/12/2014

Funding: Total Funding: \$300,000; Award Ceiling: \$150,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251832>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Research on Sentinel Events and Criminal Justice System Errors

Description: NIJ anticipates that up to a total of \$800,000 may become available for awards under this solicitation. From the total amount, NIJ anticipates that it will make one to multiple awards for a a 36-month project period.

Due Date: 5/22/2014

Funding: \$800,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251661>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Investigator-Initiated Research: The Comprehensive School Safety Initiative

Description: The Department of Justice Appropriations Act, 2014, provides funds for the National Institute of Justice (NIJ) to undertake a research-focused initiative, the Comprehensive School Safety Initiative, to increase the safety of schools nationwide. This wide-ranging initiative will bring together the nation's best minds to research the root causes of school violence, develop technologies and strategies for increasing school safety, and provide pilot grants to test innovative approaches to enhance school safety across the nation.

Due Date: 5/20/2014

Funding: \$1,000,000

Website: <https://ncjrs.gov/pdffiles1/nij/sl001118.pdf>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Data Resources Program 2014: Funding for Analysis of Existing Data

Description: The Data Resources Program (DRP) is designed to support secondary analysis of existing data enhance our understanding of crime and juvenile and criminal justice and inform policy and practice in the United States. It has promoted the preservation of data collected through NIJ research and evaluation since 1978. DRP strives to increase the transparency of NIJ-funded research by making resulting data publically available for further analyses. In recent years, the National Institute of Justice (NIJ), the Bureau of Justice Statistics (BJS), and the Office of Juvenile Justice and Delinquency Prevention (OJJDP) have entered into a partnership to request applications under the DRP solicitation for original research using

existing data available from the National Archive of Criminal Justice Data (NACJD) and other public sources.

Due Date: 5/5/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251564>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Research on Offender Decision-Making and Desistance From Crime

Description: The study of adult offender decision-making and desistance to commit crime typically has been approached from a rational choice perspective and a life-course perspective, respectively. With this solicitation NIJ seeks to expand the existing research by examining the process of adult offender decision-making. NIJ requests proposals that either expand the rational choice model and/or life-course model, use other theories to explain either the choice to commit crime or to desist from committing crime (e.g., behavioral economics, business models, psychology, or cognitive models), or any combination of these. Proposed research also should consider issues such as social context, emotions, default choices, or possibly environmental context to gain a better understanding of the overall decision-making process to commit or desist from committing crimes.

Due Date: 5/5/2014

Funding: \$1,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251552>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Postdoctoral Fellowship: Dating Abuse Among Adolescents and Young Adults

Description: NIJ is seeking proposals for postdoctoral fellows to analyze existing data or collect new data on dating abuse among adolescents and young adults. Some areas of particular interest to NIJ include, but are not limited to, the following: • Testing of behavioral measures of adolescent dating abuse victimization and/or perpetration. • Research that furthers our understanding of abuse within and between relationships, and stability and changes across partners. • Research that uses innovative methodologies

to examine the role of contextual factors, such as financial independence, social networks, and gender dynamics in dating violence. • Research about relationship violence and abuse during the transition to adulthood (Ages 16-24), which may include research involving college students.

Due Date: 4/28/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251287>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Research and Evaluation on Children Exposed to Violence

Description: NIJ is seeking multidisciplinary research and evaluation proposals related to childhood exposure to violence. In particular, NIJ seeks proposals that address polyvictimization, resilience, or justice system responses to children identified as being exposed to violence. For the purposes of this solicitation, "Children Exposed to Violence (CEV)" encompasses a broad area that includes children as both direct victims and as bystanders or observers of various forms of violence in the home, school, or community (including, but not limited to, peer victimization/bullying/harassment, child maltreatment, domestic violence, and community violence). Proposals may also address other types of violence to which children are exposed, with the exception of media violence (e.g., television and movie violence, music advocating aggression, and violent video games).

Due Date: 4/25/2014

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

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251249>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Research on Gangs and Gang Violence

Description: NIJ is interested in funding multiple criminal justice research projects involving research and/or evaluations of programs to improve our understanding and/or reduce gang membership and violence within the United States. Results from these projects should lead to better criminal justice policy, practice, and research, particularly at the local or state level, on issues surrounding gangs.

Due Date: 4/25/2014

Funding: \$1,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251246>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Testing Geospatial Predictive Policing Strategies

Description: NIJ is seeking applications for funding for research that explores the relationship between theory (of any discipline) to geospatial predictive policing strategies. In particular, NIJ is seeking proposals that focus on linking theories to current policing strategies, discerning potential disconnects in the levels of analysis between theory and practice, explicating what effects this may have on findings, and, finally, addressing means of adapting theory and practice based on the results.

Due Date: 4/25/2014

Funding: \$500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251248>

Agency: Department of Justice
National Institute of Justice

Program: NIJ FY 14 Research and Evaluation on the Abuse, Neglect, and Exploitation of Elderly Individuals

Description: NIJ is seeking proposals for research and evaluation related to the abuse, neglect, and exploitation of elderly individuals. Research that includes residents of residential care facilities also will be considered. Research proposed may be focused at the state, local, tribal, federal, juvenile justice policy and/or practice level.

Due Date: 4/25/2014

Funding: \$1,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251247>

Agency: Department of the Interior
Fish and Wildlife Service

Program: Migratory Bird Monitoring, Assessment, and Conservation

Description: Awardess will work with others to conserve, enhance, and better understand the ecology and habitats of migratory bird species.

Due Date: 3/11/2014

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251809>

Agency: Department of the Interior
Fish and Wildlife Service

Program: White Nose Syndrome Research

Description: The U.S. Fish and Wildlife Service (USFWS) is pleased to announce the availability of new research funding to investigate issues related directly to the management of white nose syndrome (WNS). This opportunity is open to nongovernmental, university, and private researchers, as well as State, Federal, and Tribal agency personnel. White nose syndrome continued to spread last winter (2012/2013), and is anticipated to continue its progression in 2014. As of 30 January 2014, WNS or evidence of the fungus *Pseudogymnoascus destructans* (Pd) has been reported from at least one location in 26 states and five Canadian provinces. Surveys in affected areas continue to reveal population declines associated with the disease, and evidence to date suggests that affected bat populations are not likely to stabilize or recover in the immediate future. The USFWS has targeted \$2 million for an open funding opportunity in 2014 to investigate critical gaps in our understanding of WNS that hinder our ability to control the disease.

Due Date: 3/31/2014

Funding: Total Funding: \$2,000,000; Award Ceiling: \$350,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251657>

Agency: National Endowment for the Humanities

Program: Preservation and Assistance Research and Development

Description: Preservation and Access Research and Development grants support projects that address major challenges in preserving or providing access to humanities collections and resources. These challenges include the need to find better ways to preserve materials of critical importance to the nation's cultural heritage from fragile artifacts and manuscripts to analog recordings and digital assets subject to technological obsolescence and to develop advanced modes of searching, discovering, and using such materials. Applicants should define a specific problem, devise procedures and potential solutions, and explain how they would evaluate their projects

and disseminate their findings. Project results must serve the needs of a significant number of humanists.

Due Date: 5/1/2014

Funding: \$400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251815>

Agency: National Endowment for the Humanities

Program: Preservation and Access Education and Training

Description: The Preservation and Access Education and Training program is central to NEH's efforts to preserve and establish access to cultural heritage collections. Thousands of libraries, archives, museums, and historical organizations across the country maintain important collections of books and manuscripts, photographs, sound recordings and moving images, archaeological and ethnographic artifacts, art and material culture collections, electronic records, and digital objects. The challenge of preserving and making accessible such large and diverse holdings is enormous, and the need for knowledgeable staff is significant and ongoing. Preservation and Access Education and Training grants are awarded to organizations that offer national or regional (multistate) education and training programs. Grants aim to help the staff of cultural institutions, large and small, obtain the knowledge and skills needed to serve as effective stewards of humanities collections. Grants also support educational programs that prepare the next generation of conservators and preservation professionals, as well as projects that introduce the staff of cultural institutions to new information and advances in preservation and access practices.

Due Date: 5/1/2014

Funding: \$350,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251813>

Agency: National Endowment for the Humanities

Program: Preservation Assistance Grants for Smaller Institutions

Description: Preservation Assistance Grants help small and mid-sized institutions such as libraries, museums, historical societies, archival repositories, cultural organizations, town and county records offices, and colleges and universities improve their ability to preserve and care for their significant humanities collections. These may include special collections of books and journals, archives and manuscripts, prints and photographs, moving

images, sound recordings, architectural and cartographic records, decorative and fine art objects, textiles, archaeological and ethnographic artifacts, furniture, historical objects, and digital materials.

Due Date: 5/1/2014

Funding: See announcement

Website: <http://www.neh.gov/grants/preservation/preservation-assistance-grants-smaller-institutions>

Agency: National Endowment for the Humanities

Program: Challenge Grants

Description: NEH challenge grants are capacity-building grants, intended to help institutions and organizations secure long-term support for their humanities programs and resources. Through these awards, many organizations and institutions have been able to increase their humanities capacity and secure the permanent support of an endowment. Grants may be used to establish or enhance endowments or spend-down funds that generate expendable earnings to support and enhance ongoing program activities. Challenge grants may also provide capital directly supporting the procurement of long-lasting objects, such as acquisitions for archives and collections, the purchase of equipment, and the construction or renovation of facilities needed for humanities activities. Funds spent directly must be shown to bring long-term benefits to the institution and to the humanities more broadly. Grantee institutions may also expend up to 10 percent of total grant funds (federal funds plus matching funds) to defray costs of fundraising to meet the NEH challenge. Because of the matching requirement, these NEH grants also strengthen the humanities by encouraging nonfederal sources of support.

Due Date: 5/1/2014

Funding: \$500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251599>

Agency: National Science Foundation

Program: Geography and Spatial Sciences Program

Description: As specified in the Geography and Spatial Sciences Program strategic plan, the goals of the NSF Geography and Spatial Sciences (GSS) Program are: To promote scientific research in geography and the spatial sciences that advances theory and basic understanding and that addresses the challenges facing society. To promote the integration of

geographers and spatial scientists in interdisciplinary research. To promote education and training of geographers and spatial scientists in order to enhance the capabilities of current and future generations of researchers. To promote the development and use of scientific methods and tools for geographic research. The Geography and Spatial Sciences Program sponsors research on the geographic distributions and interactions of human, physical, and biotic systems on Earth. Investigators are encouraged to propose plans for research about the nature, causes, and consequences of human activity and natural environmental processes across a range of scales. Projects on a variety of topics qualify for support if they offer promise of contributing to scholarship by enhancing geographical knowledge, concepts, theories, methods, and their application to societal problems and concerns.

Due Date: 9/4/2014

Funding: Total Funding: \$6,000,000; Award Ceiling: \$400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251562>

Agency: National Science Foundation

Program: Mechanics of Materials

Description: The Mechanics of Materials program supports fundamental research on the behavior of solid materials and respective devices under external actions. A diverse and interdisciplinary spectrum of research is supported with emphasis placed on fundamental understanding that i) advances theory, experimental, and/or computational methods in Mechanics of Materials, and/or ii) uses contemporary Mechanics of Materials methods to address modern challenges in material and device mechanics and physics. Proposed research can focus on existing or emerging material systems across time and length scales. Intellectual merit typically includes advances in fundamental understanding of deformation, fracture, fatigue, and contact through constitutive modeling, multiscale and multiphysics analysis, computational methods, or experimental techniques. Recent interests comprise, but are not limited to: contemporary materials including multiphase materials and material systems, soft materials, active materials, low-dimensional materials, phononic/elastic metamaterials, friction, wear; multiphysics methods, mechanics at the nano, meso and microscale and multiscale integration thereof, as well as approaches incorporating fundamental understanding of physics and chemistry into the continuum-level understanding of the response characteristics of materials and material systems. Broader impacts include, but are not limited to: advancing the relevant application of Mechanics of Materials to problems in new technological domains and engineering practice; increasing awareness of the importance and role of Mechanics of Materials in other

scientific communities as well as society in general; impacting graduate education in Mechanics of Materials across the US; strengthening undergraduate and K-12 education in and exposure to Mechanics of Materials; and engaging and encouraging the participation of groups traditionally underrepresented in STEM fields

Due Date: 10/1/2014

Funding: Not Specified

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251286>

Agency: National Science Foundation

Program: CubeSat-based Science Missions for Geospace and Atmospheric Research

Description: Lack of essential observations from space is currently a major limiting factor in many areas of geospace and atmospheric research. Recent advances in sensor and spacecraft technologies make it feasible to obtain key measurements from low-cost, small satellite missions. A particularly promising aspect of this development is the prospect for obtaining multi-point observations in space that are critical for addressing many outstanding problems in space and atmospheric sciences. Space-based measurements from small satellites also have great potential to advance discovery and understanding in geospace and atmospheric sciences in many other ways. To take full advantage of these developments, NSF is soliciting research proposals centered on small satellite missions. The overarching goal of the program is to support the development, construction, launch, operation, and data analysis of small satellite science missions to advance geospace and atmospheric research. Equally important, it will provide essential opportunities to train the next generation of experimental space scientists and aerospace engineers. To facilitate launch of the satellites as secondary payloads on existing missions, the focus of the program is on CubeSat-based satellites.

Due Date: 5/12/2014

Funding: \$900,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251200>

Agency: National Science Foundation

Program: Broadening Participation in Engineering

Description: The Broadening Participation in Engineering (BPE) Program is a Directorate-wide activity to support the development of a diverse and well-prepared workforce of engineering graduates, particularly those with advanced degrees. The BPE Program supports projects to engage and develop diverse teams that can offer unique perspectives and insights to challenges in engineering research and education. Throughout this program description, the term underrepresented groups will refer to and include the following: women, persons with disabilities, and ethnic/racial groups which are in the minority in engineering, specifically African Americans, Hispanics, Native Americans, Alaska Natives, and Pacific Islanders.

Due Date: 5/1/2014

Funding: \$300,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=251093>

Agency: National Science Foundation

Program: Secure and Trustworthy Cyberspace: Secure, Trustworthy, Assured and Resilient Semiconductors and Systems (SaTC: STARSS)

Description: Through this solicitation -- a track within the NSF Secure and Trustworthy Cyberspace (SaTC) program -- NSF and the Semiconductor Research Corporation (SRC) are announcing a joint partnership in the area of Secure, Trustworthy, Assured and Resilient Semiconductors and Systems (SaTC: STARSS) focused on research on Design for Assurance. Specifically, NSF and SRC will support research on new strategies for architecture, specification and verification, especially at the stages of design in which formal methods are currently weak or absent, with the aim of decreasing the likelihood of unintended behavior or access, increasing resistance and resilience to tampering, and improving the ability to provide authentication throughout the supply chain and in the field.

Due Date: 3/26/2014

Funding: \$500,000

Website:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=504996&WT.mc_id=USNSF_39&WT.mc_ev=click