

# THE STATE UNIVERSITY SYSTEM OF FLORIDA

## WASHINGTON E-UPDATE

Prepared by Cavarocchi-Ruscio-Dennis Associates, Editor -- Brent Jaquet  
Contributors -- Dom Ruscio, Erika Miller, Tiffany Kaszuba, Zara Day, Gabriel Alvaro, Corrie Hodges, Amanda Bragg

June 2016

***Budget and Appropriations Update*** – Even with an election and fewer legislative workdays than normal, Congress seems to be on a path to get some things done.

Despite a slow start, for the past three weeks appropriations bills have been flowing through the House and Senate. The early lineup of fiscal 2017 bills so far looks similar to previous years, leading off with popular funding titles for veterans, military construction projects, transportation infrastructure, energy programs and water projects. But the path to completion gets steeper as larger and more controversial appropriations bills—dubbed the “ugly stepsisters” by Senator Barbara Mikulski, the ranking Democrat on Senate Appropriations—increasing the chances that Congress hits a wall before long.

So far, the House has passed the fiscal 2017 Military Construction-VA bill, the same day the Senate passed a Military Construction-VA and Transportation-HUD package (HR 2577). Two weeks ago, the Senate passed its Energy-Water bill, the earliest date that’s been done in modern history.

Those fights are likely to pale in comparison to what could come if either chamber attempts to bring up spending bills dealing with immigration, labor and environmental programs. Passions over those divisive issues could be further inflamed by the rhetoric coming from the presidential campaigns.

Last summer, the House debate over an Interior-Environment spending bill (HR 2822) became so heated over a confederate flag issue that the whole appropriations process was shut down.

That measure and two other difficult bills, Labor-HHS-Education and State-Foreign Operations, haven’t been passed by either chamber since 2009. The Financial Services spending bill has only been passed by the House once during that span, in 2014, and it’s hasn’t been passed by the Senate.

Appropriators typically leave most of those bills toward the end of the committee markup schedule. The congressional calendar is so brief this year that there’s little chance those measures will hit the floor in either chamber before the new fiscal year begins next October 1.

Of course, a lot depends on whether House GOP leaders are able to muster votes from the conservative Freedom Caucus, which says they'll consider the merits of each bill on its own. With larger and more contentious bills on the horizon, Republican leaders will have to hope those members like what they see.

## **New microbiome research initiative announced by OSTP**

The White House Office of Science and Technology Policy (OSTP), in collaboration with Federal agencies and private-sector stakeholders, announced a new \$121 million research effort -- the National Microbiome Initiative (NMI) -- on May 13 designed to foster the integrated study of microbiomes across different ecosystems.

Microbiomes are the communities of microorganisms that live on or in people, plants, soil, oceans, and the atmosphere. Microbiomes maintain healthy function of these diverse ecosystems, influencing human health, climate change, food security, and other factors. Dysfunctional microbiomes are associated with issues including human chronic diseases such as obesity, diabetes, and asthma; local ecological disruptions such as the hypoxic zone in the Gulf of Mexico; and reductions in agricultural productivity.

Numerous industrial processes such as biofuel production and food processing depend on healthy microbial communities. Although new technologies have enabled exciting discoveries about the importance of microbiomes, scientists still lack the knowledge and tools to manage microbiomes in a manner that prevents dysfunction or restores healthy function.

The NMI aims to advance understanding of microbiome behavior and enable protection and restoration of healthy microbiome function. After a year-long fact-finding process, scientists from Federal agencies, academia, and the private sector converged on three recommended areas of focus for microbiome science, which are now the goals of the NMI:

- (1) **Supporting interdisciplinary research** to answer fundamental questions about microbiomes in diverse ecosystems.
- (2) **Developing platform technologies** that will generate insights and help share knowledge of microbiomes in diverse ecosystems and enhance access to microbiome data.
- (3) **Expanding the microbiome workforce** through citizen science, public engagement, and educational opportunities.

The NMI builds on strong and ongoing Federal investments in microbiome research, and will launch with a combined Federal agency investment of more than \$121 million in Fiscal Year (FY) 2016 and 2017 funding for cross-ecosystem microbiome studies.

This includes:

- The **Department of Energy** proposes \$10 million in new funding in FY 2017 to support collaborative, interdisciplinary research on the microbiome.
- The **National Aeronautics and Space Administration (NASA)** proposes \$12.5 million in new funding over multiple years to expand microbiome research across Earth's ecosystems and in space.
- The **National Institutes of Health** will invest an extra \$20 million into microbiome research in grants in FY 2016 and FY 2017 with a particular emphasis on multi-ecosystem comparison studies and investigation into design of new tools to explore and understand microbiomes.
- The **National Science Foundation** proposes \$16 million in FY 2017 for microbiome research that spans the spectrum of ecosystems, species, and biological scales.
- The **U.S. Department of Agriculture** proposes more than \$15.9 million for FY 2017 to expand computational capacities for microbiome research and human microbiome research through the Agricultural Research Service, and approximately \$8 million for FY 2017 to support investigations through the National Institute of Food and Agriculture of the microbiomes of plants, livestock animals, fish, soil, air, and water as they influence food-production systems.

In addition, following OSTP's national call to action [issued](#) in January, more than 100 external institutions announced new efforts to support microbiome science. These include groups such as the Bill and Melinda Gates Foundation which will invest \$100 million over 4 years to investigate and develop tools to study human and agricultural microbiomes.

## **Labor Department issues final overtime rule with higher ed impacts**

After two years in the making, the Department of Labor issued its new final regulation on overtime May 18 with many effects for universities. The regulation focuses primarily on updating the salary and compensation levels needed for Executive, Administrative and Professional workers to be exempt.

The regulation was first proposed last July prompting over 270,000 written comments from all types of stakeholders, including a comment letter on behalf of our System. The effective date for the new rule is December 1, 2016. The initial increases to the standard salary level (from \$455 to \$913 per week or \$47,476 annually) and the highly compensated employees total annual compensation requirement (from \$100,000 to \$134,004 per year) will be effective on that date. Future automatic updates to those thresholds will occur every three years, beginning on January 1, 2020.

The American Council on Education criticized the rules in a statement by its President, Molly Corbett Broad who wrote: "'The new rule will turn many lower-level, salaried employees into hourly workers who are eligible for overtime pay. But requiring such a dramatic and costly change to be implemented so quickly will leave many colleges with no choice but to respond to this regulation with a combination of tuition increases, service reductions and, possibly, layoffs."

Addressing the application of the new rules to postdoctoral researchers, NIH Director Francis Collins and Labor Secretary Thomas Perez published a [blog](#) in Huffington Post saying that NIH will increase the awards for National Research Service Awards (NRSAs) to above the new income threshold. The current award level for NRSAs begin at \$43,692. NIH Deputy Director for Extramural Research Michael Lauer also posted a [blog](#) further discussing the NRSA change and acknowledging “that increased salaries will impact other financial and staffing operations at grantee institutions.”

According to a DOL fact sheet the rule will affect institutions of higher education in the following ways:

***Bona fide teachers:*** Teachers are not subject to the salary level requirement for the white collar exemption. Teachers are exempt if their primary duty is teaching, tutoring, instructing, or lecturing. Teachers include professors, adjunct instructors, and teachers of skilled and semi-skilled trades and occupations.

***Coaches:*** Athletic coaches and assistant coaches may fall under the exemption if their primary duty is teaching, which may include instructing athletes in how to perform their sport. If, however, their duties primarily include recruiting athletes or doing manual labor, they are not considered teachers. A coach could primarily be responsible for instructing athletes but also spend some time recruiting or doing manual labor and still be considered ineligible for overtime.

***Graduate and undergraduate students:*** Generally, the Department views graduate and undergraduate students who are engaged in research under a faculty member’s supervision in the course of obtaining a degree to be in an educational relationship and not an employment relationship with the school or with a grantor. As such, the Department will not assert such workers are entitled to overtime. Graduate students whose primary duty is teaching or serving as a teaching assistant fall under the FLSA’s teaching exemption. Students who are participants in a bona fide educational program and who serve as resident advisors in exchange for reduced room and board charges or tuition credit similarly are not considered to be in an employment relationship with the institution.

***Academic administrative personnel:*** The administrative personnel that help run higher education institutions and interact with students outside the classroom, such as department heads, academic counselors and advisors, intervention specialists and others with similar responsibilities are subject to a special salary threshold that does not apply to white-collar employees outside of higher education. These employees are not entitled to overtime compensation if they are paid at least as much as the entrance salary for teachers at their institution.

***Public Higher Education Institutions May Utilize Provisions for State and Local Employees:*** Employees of public higher education institutions may also be public sector employees for whom specific provisions in the FLSA will further limit the impact of the final rule. Specifically, public institutions may be able to use compensatory (“comp”) time as an option to satisfy their obligation to provide overtime compensation.

***Comp time:*** Pursuant to an agreement with employees or their representatives, state or local government agencies, including higher education institutions whose employees are treated as

state employees under state law, may provide their employees with comp time instead of cash payment for overtime hours

***Postdoctoral researchers:***

Sciences: Postdoctoral researchers in the sciences who engage only in research activities and do not teach are not covered by the teaching exemption. These employees are generally considered professional employees and are subject to the salary threshold for exemption from overtime.

Humanities: Many postdoctoral researchers in the humanities also teach. To the extent that they have a primary duty of teaching, they will be subject to the teaching exemption and not entitled to overtime compensation. If they do not teach, however, and earn less than the new threshold, they will be eligible for overtime.

***Non-academic administrative employees:*** For administrative employees who do not meet the special provision for academic administrative employees, such as admission counselors and recruiters, they will be eligible for overtime if they earn below the salary level set in the final rule and they work more than 40 hours in a week.

***Other salaried workers:*** To the extent that higher education institutions employ workers whose duties are not unique to the education setting—like managers in food service or supervisors of security guards—they will be covered by the final rule, just like their counterparts at other kinds of institutions and businesses, unless another exemption applies.

For more specific information see the DoL [fact sheet](#) or [guidance document](#).

## **Science agency funding contained in House CJS bill**

The House Appropriations Committee approved its 2017 Commerce, Justice, Science appropriations bill May 24. Overall, the \$56 billion measure is \$279 million higher than this year's spending. The House bill carries funding for many key science funding agencies:

☐ ***National Science Foundation*** – The legislation provides \$7.4 billion – \$57 million less than fiscal year 2016. Research and Related Activities is increased by \$46 million targeted to programs that foster innovation and U.S. economic competitiveness, including funding for research on advanced manufacturing, physics, mathematics, cybersecurity, neuroscience and STEM education. Reductions are made in equipment and construction costs.

***National Aeronautics and Space Administration*** – NASA receives \$19.5 billion in the bill, \$223 million above 2016. This funding includes:

☐ \$4.2 billion for Exploration – an increase of \$153 million. This includes funding to continue the development of the Orion Multi-Purpose Crew Vehicle and Space Launch System flight program and related ground systems.

☐ \$5.6 billion for NASA Science programs – an increase of \$8 million. This targets funding to planetary science, astrophysics, and heliophysics to ensure the continuation

of critical research and development programs, while reducing funding for lower-priority research.

☐ **National Oceanic and Atmospheric Administration** – The legislation provides \$5.6 billion for NOAA, which is \$185 million below the 2016 funding level. Funding is targeted to the National Weather Service, which receives \$1.1 billion. The bill also includes full funding for the continuation of the current Joint Polar Satellite System weather satellite program and the Geostationary Operational Environmental Satellite program. According to the Committee statement, to make these investments, the bill “reduces funding in lower-priority NOAA activities such as climate research, ocean services, and others.”

☐ **National Institute of Standards and Technology** – NIST is funded at \$865 million – \$99 million below 2016.

☐ **Patent and Trademark Office** – The bill provides \$3.2 billion for the PTO, which is equal to the Congressional Budget Office estimated amount of fees to be collected by the PTO during fiscal year 2017. The bill also includes a provision that allows the PTO to use any fees in excess of the estimated collected amount, subject to congressional approval.

To read the full Committee report click [here](#) or a summary of the bill, [click here](#).

## **Committee hearing considers new COMPETES Act**

Reauthorization of the America Competes Act was the topic of a hearing May 11 by the Senate Committee on Commerce, Science and Transportation. During the hearing, witnesses made recommendations on how to best advance the U.S technological enterprise through the legislative vehicle.

Kelvin Droegemeier, former Vice Chair of the National Science Board said the federal government should prioritize investments on research that supports basic science and innovation. Droegemeier also recommended the committee address the administrative burden that researchers currently face when requesting and managing federal research grants. Finally, he recommended more stable science budgets to allow more effective strategic research and planning.

Jeanette Wing, Vice President for Research at Microsoft recommended that committee allow experts to make research decisions at the agencies. She called for a reaffirmation of the merit-based peer review process and called for legislation to ensure research decisions are left to science agencies and scientific experts. Furthermore, she suggested committee members not undermine social and behavioral research as they help us understand the country challenges.

Robert Atkinson, President of the Information Technology and Innovation Foundation suggested the committee members focus their policies on key areas of the U.S.

technological enterprise. He said the science innovators and entrepreneurs would greatly benefit from reforms to the SBIR program. He also suggested that federal funds should be directed to investments in existing programs that focus on researching high performance computing, recruiting STEM talent and identifying high-skilled immigration.

The questions and comments from committee members focused on research prioritization. Sen. Jerry Moran (R-KS) asked the witnesses if all federal research should be treated equally. Atkinson said that all areas of research cannot be treated equally since some areas tend to have a greater economic impact than others. Moreover, Sen. Ed Markey (D-MA) stated that research funding decisions should be apolitical, and responsive to the needs and capabilities of science and technology.

Committee members also asked the witnesses about the role of the federal government and private industry in funding basic science research. Wing stated that the federal government has a duty to invest in basic research because it produces the talent needed to sustain science agencies and industry. Also, Droegemeier pointed out that the role of the federal government is essential because the profit returns of basic research are often uncertain, discouraging private industry from investing in its funding.

Members also asked questions and made comments on:

- STEM workforce,
- Increasing participation of underrepresented populations in science.
- More effective coordination and management of federal research activities.

A video recording of this hearing can be found [here](#).

## **High-school students will qualify for Pell Grants under \$20 million DoEd experiment**

An experiment aiming to facilitate access of post-secondary curricula for low-income high school students is being launched by the Education Department. Under the initiative, the participating post-secondary institutions will be allowed to waive financial aid regulations that forbid high-school students from qualifying for Federal Pell Grants. The Department estimates that 10,000 low-income students will benefit from approximately \$20 million in Federal Pell Grants. Forty-four colleges and universities from 23 states were approved to participate.

The Department will allow students to register for dual-enrollment courses provided by post-secondary and secondary institutions across the nation. Not only new dual enrollment students will be able to apply for the Pell grants, but also qualifying students currently paying for their courses out of pocket. According to the Department, this will allow low-income high-school students to increase their chances to succeeding in

college and obtaining a professional career, making their social mobility chances greater

The Department states in a fact sheet on the initiative that exposure to college coursework and dual-enrollment programs during high school enhances academic outcomes and reduces college expenses. The dual enrollment experiment seeks to reshape the way secondary institutions educate the nation's students. The Administration envisions innovative high schools with personalized teaching that promote project-problem oriented learning. The plan is to accomplish this goal by fostering stronger partnerships between higher and secondary education institutions.

For additional information regarding the Administration's dual enrollment experiment, please read the [fact sheet](#).

## **Zika funding winding its way through Congress**

Funding for the Federal Zika virus response effort has been approached differently in each chamber this month following the President's request for a \$1.9 billion emergency supplemental appropriations back in February. The funding would cover a variety of activities by agencies, particularly HHS, CDC and NIH.

In the Senate, members voted to add a \$1.1 billion emergency Zika funding measure to the Fiscal 2017 spending bill covering Military Construction-VA and Transportation-HUD which passed the Senate May 19. The Zika package, negotiated by leaders in both parties, carries an emergency designation, meaning that the funding is outside the budget caps and does not have to be offset.

In the House, Appropriations Chairman Hal Rogers (R-KY) introduced a much smaller bill that would provide \$622 million to be available only through the end of the fiscal year in September. Instead of being considered emergency funding, the proposal would repurpose funding in the Department of Health and Human Services to cover the new spending. The Administration has said the President would veto the House bill if it survives the legislative process. During March, the Administration reprogrammed about \$600 million from Ebola efforts to cover new Zika startup work.

House and Senate leaders have begun to discuss how to bridge the gap between the two bills but agreement is expected to take several weeks.

## **Bill aims to aid saving for college**

Senators Burr (R-NC) and Casey (D-PA) introduced bipartisan legislation May 28 to incentivize students from low and moderate income families to attend college.



The *Boost Saving for College Act* ([S 2869](#)) would provide a saver's tax credit to certain families saving for college in designated 529 accounts.

Families making less than \$30,750 would receive up to \$1,000 in tax credits if they contribute to a 529 plan. Families who earn less than \$61,500 would receive up to \$2,000 in credits. Employers would also be incentivized to match savings, and those employers that offer matching contributions would become eligible to receive up to \$1,000 in tax credits under this bill. Money not spent by students on their education could be rolled into a Roth individual retirement account or a savings accounts for people with disabilities (ABLE account).

## **Rep. Clawson not running for reelection; at least 10 Florida Congressional seats will turn over**

Another member of the Florida delegation announced this month that he will not be back for the next Congressional session. Rep. Curt Clawson won't seek re-election to his 19th District seat, saying he wants to spend more time with his ailing father.

The announcement brings to 10 the number of Florida representatives who will not be returning to their seats either through resignations, retirements or running for another office. And in addition, Florida will pick up a new Senator as well through the race to succeed Senator Marco Rubio.

Reps. Jeff Miller, Ander Crenshaw and Rich Nugent previously announced their retirement while Rep. Daniel Webster plans to compete in the redrawn district now represented by Nugent. Reps. David Jolly, Ron DeSantis, Alan Grayson and Patrick Murphy are all leaving their Congressional seats to vie for Florida's open Senate position. Freshman Member Gwen Graham signaled her intention not to run for reelection to explore a gubernatorial campaign for 2018.

## **NSB policy paper identifies benefits of higher education system for the nation and declines in federal and state support**

The National Science Board, the policy making body for the National Science Foundation, issued a new [policy brief](#) this month on the public and private benefits of higher education institutions, also capturing information on the declines in federal and state support since 2011.

The NSB brief joins other recent reports, including the American Academy of Arts & Sciences' [Lincoln Project](#), in highlighting the broad public value of the nation's higher education system and emphasizing the need for public investment in its research and educational missions. An accompanying "sense of the Board" [statement](#) underscores higher education's value in fostering a civically engaged society.

The brief draws on data from several chapters of *Science and Engineering Indicators 2016* to highlight the higher education sector's importance as a catalyst for the nation's research enterprise and for the development of a workforce that makes the U.S. globally competitive. It makes the case that it is in the interest of all Americans—regardless of their personal educational aspirations—to ensure that these institutions thrive.

In its accompanying statement, the Board characterizes U.S. colleges and universities as “more important than ever to the future health, safety, security, and economic competitiveness of our nation.” Looking beyond the economic impacts, the Board also stresses some of the less quantifiable benefits noting that “higher education plays a broader, intangible, and crucial role in supporting the past, current, and future success of our democratic society.”

The Board's policy brief makes the case for prioritizing public support for the nation's institutions of higher education at a time when there are many worthy investments of limited public funds at the federal and state levels. In addition to highlighting some lesser-known contributions of U.S. colleges and universities, the brief draws attention to several threats facing this vital national resource. These include declining federal investments in academic research.

Federal funding of Research & Development at institutions of higher education has declined by 11 percent since 2011, the longest multiyear decline in federal funding in this data series that goes back to 1972. The report also documents recent declines in state funding for public colleges and universities and the concomitant rapid growth in net tuition, developments that the Board called attention to in its 2012 [report](#), *Diminishing Funding and Rising Expectations: Trends and Challenges for Public Research Universities*.

## **DARPA Proposers Day event set for June**

The DARPA Defense Sciences Office has released the information about an important DARPA Defense Sciences Office "Proposers Day" meeting in advance releasing its annual Broad Agency Announcement scheduled for June.

The Proposer Day will be held on Wednesday and Thursday, June 22-23 at the DARPA Conference Center in Arlington, VA.

The mission of the Defense Sciences Office is to identify and pursue high-risk, high-payoff research initiatives across a broad spectrum of science and engineering disciplines and to transform these initiatives into important, radically new, game-changing technologies for U.S. national security. In support of this mission, the anticipated DSO Office-wide Broad Agency Announcement (BAA) will invite proposers to submit innovative basic or applied research concepts in a number of technical area.

The goals of this event are to: (1) familiarize participants with DSO's mission; (2) promote understanding of the anticipated Office-wide BAA; and (3) facilitate discussions with potential DARPA performers.

The meeting can be attended in person or via webcast and pre-registration is required for both. More information is available at: <http://www.darpa.mil/news-events/dso-proposers-day>

## **National Library of Medicine director named**

Patricia Flatley Brennan, R.N., Ph.D., was named this month to become director of the National Library of Medicine at NIH. The NLM is the world's largest biomedical library and the producer of digital information services used by scientists, health professionals and members of the public worldwide. Dr. Brennan is expected to begin her new role in August 2016.

Dr. Brennan moves to NIH from the University of Wisconsin-Madison, where she is the Lillian L. Moehlman Bascom Professor at the School of Nursing and College of Engineering. She also leads the Living Environments Laboratory at the [Wisconsin Institutes for Discovery](#) that develops new ways for effective visualization of high dimensional data. She Brennan has been a pioneer in the development of information systems for patients. She developed ComputerLink, an electronic network designed to reduce isolation and improve self-care among home care patients. She directed HeartCare, a web-based information and communication service that helps home-dwelling cardiac patients recover faster, and with fewer symptoms. She also directed Project HealthDesign, an initiative designed to stimulate the next generation of personal health records. Dr. Brennan also conducts external evaluations of health information technology architectures, and works to repurpose engineering methods for health care.

She received a master of science in nursing from the University of Pennsylvania and a Ph.D. in industrial engineering from the University of Wisconsin-Madison. Following seven years of clinical practice in critical care nursing and psychiatric nursing, Dr. Brennan held several academic positions at Marquette University, Milwaukee; Case Western Reserve University, Cleveland; and the University of Wisconsin-Madison.

## **Highlights of competitive grant opportunities at federal agencies**

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Medical Clinical Trial Award

**Description:** The PRMRP Clinical Trial Award supports the rapid implementation of clinical trials with the potential to have a significant impact on a disease or condition addressed in at least one of the Congressionally directed FY16 PRMRP Topic Areas. Clinical trials may be designed to evaluate promising new products, pharmacologic agents (drugs or biologics), devices, clinical guidance, and/or emerging approaches and technologies. Proposed projects may range from small proof-of-concept trials (e.g., pilot, first in human, Phase 0) to demonstrate feasibility or inform the design of more advanced trials, through large-scale trials to determine efficacy in relevant patient populations. All studies must be responsive to the healthcare needs of the military Service members, Veterans, and/or beneficiaries; however, the use of military or Veteran populations is not required.

**Due Date:** 10/26/2016

**Funding:** Total Program Funding: \$48,000,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283564>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Medical Focused Program Award

**Description:** The vision of the FY16 PRMRP is to improve the health and well-being of all military Service members, Veterans, and beneficiaries. The PRMRP challenges the scientific and clinical communities to address at least one of the FY16 Topic Areas with original ideas that foster new directions along the entire spectrum of research and clinical care. The program seeks applications in laboratory, clinical, behavioral, epidemiologic, and other areas of research to advance knowledge in disease etiology, improve prevention, detection, diagnosis, treatment, and quality of life for those affected by a relevant disease or condition, and to develop and validate clinical care or public health guidelines.

**Due Date:** 10/26/2016

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

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283529>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Medical Investigator-Initiated Research Award

**Description:** The PRMRP Investigator-Initiated Research Award is intended to support studies that will make an important contribution toward research and/or patient care for a disease or condition related to at least one of the Congressionally directed FY16 PRMRP Topic Areas. The rationale for a research idea may be derived from a laboratory discovery, population-based studies, a clinician's first-hand knowledge of patients, or anecdotal data. Applications must include relevant data that support the rationale for the proposed study. These data may be unpublished or from the published literature.

**Due Date:** 10/19/2016

**Funding:** Total Program Funding: \$91,300,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283565>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Medical Technology/Therapeutic Development Award

**Description:** The PRMRP Technology/Therapeutic Development Award is a product-driven award mechanism intended to provide support for the translation of promising preclinical findings into products for clinical applications, including prevention, detection, diagnosis, treatment, or quality of life, in at least one of the Congressionally directed FY16 PRMRP Topic Areas. Products in development should be responsive to the healthcare needs of military Service members, Veterans, and/or beneficiaries

**Due Date:** 10/19/2016

**Funding:** Total Program Funding: \$45,000,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283566>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Medical Discovery Award

**Description:** The intent of the PRMRP Discovery Award is to support innovative, non-incremental, high-risk/potentially high-reward research that will provide new insights, paradigms, technologies, or applications. Studies supported by this award are expected to lay the groundwork for future avenues of scientific investigation. The proposed research project should include a well-formulated, testable hypothesis based on a sound scientific rationale and study design.

**Due Date:** 7/21/2016

**Funding:** Total Program Funding: \$14,400,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283528>

**Agency:** U.S. Department of Defense  
Dept of the Army -- Materiel Command

**Program:** Proof of Concept Commercialization Pilot Program

**Description:** The Department of Defense (DoD) is soliciting applications from current/recent grantawardees to receive mentoring and funding to accelerate the innovation of the funded research. The I Corps @ DoD program is designed to support the acceleration of innovation by providing Principle Investigators (PIs) with training, mentorship and funding. The purpose of funding under this Broad Agency Announcement (BAA) is to accelerate the commercialization of basic research innovations from qualifying institutions. The goals of this program are to spur the transition of fundamental research, to encourage collaboration between academia and industry, and to train students to understand innovation and entrepreneurship.

**Due Date:** 9/15/2016

**Funding:** Total Program Funding: \$500,000 Award Ceiling: \$70,000 Award Floor: \$40,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283584>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Cancer Translational Team Science Award

**Description:** Applications to the Fiscal Year 2016 (FY16) Peer Reviewed Cancer Research Program (PRCRP) are being solicited for the Defense Health Agency, Research, Development, and Acquisition (DHA RDA) Directorate, by the U.S. Army Medical Research Acquisition Activity (USAMRAA). As directed by the Office of the Assistant Secretary of Defense for Health Affairs (OASD[HA]), the DHA RDA Directorate manages the Defense Health Program (DHP) Research, Development, Test, and Evaluation (RDT&E) appropriation. The managing agent for this Program Announcement/Funding Opportunity is the Congressionally Directed Medical Research Programs (CDMRP). The PRCRP was initiated in 2009 to provide funding for research of exceptional scientific merit and is managed by the CDMRP. Appropriations for the PRCRP from FY09

through FY15 totaled \$149.8 million (M). The FY16 appropriation is \$50M. The goal of the PRCRP is to improve quality of life by decreasing the impact of cancer on active duty Service members, their families, and the American public. The PRCRP is charged by Congress with the mission to investigate cancer risks and knowledge gaps that may be relevant to active duty Service members, their families, and other military beneficiaries.

**Due Date:** 9/13/2016

**Funding:** Total Program Funding: \$16,000,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283062>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Cancer Career Development Award

**Description:** The PRCRP Career Development Award supports independent, early-career investigators to conduct impactful research with the mentorship of an experienced cancer researcher (i.e., the Designated Mentor) as an opportunity to obtain the funding, guidance, and experience necessary for productive, independent careers at the forefront of cancer research. This award supports impactful research projects with an emphasis on discovery. Under this award mechanism, the early-career investigator is considered the Principal Investigator (PI), and the application should focus on the PI's research and career development. It should be clear that the proposed research is intellectually designed by the PI and not a product of the Designated Mentor. Preliminary data are not required. However, logical reasoning and a sound scientific rationale for the proposed research must be demonstrated. Key elements of the award are as follows: • Principal Investigator: The PI must be an independent, early-career researcher or physician-scientist within 10 years after completion of his/her terminal degree (excluding time spent in residency or on family medical leave). Time spent as a postdoctoral fellow is not excluded. The application must articulate the potential impact the proposed work will have on cancer research and/or patient care. Impactful research will, if successful, accelerate the movement of promising ideas in cancer research into clinical applications.

**Due Date:** 9/13/2016

**Funding:** Total Program Funding: \$9,790,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283062>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Peer Reviewed Cancer Idea Award with Special Focus

**Description:** The Idea Award with Special Focus supports innovative, untested, high-risk/potentially high-reward concepts, theories, paradigms, and/or methods in cancer research that are relevant to Service members, their families, Veterans, and other military beneficiaries. The "Special Focus" of this award mechanism is on exposures, conditions, or circumstances that are unique to the military, disproportionately represented in a military beneficiary population, or may affect mission readiness. Cancers or circumstances with cancer risk that may affect military families are of special importance to the care and well-being of the military for total mission readiness. The advancement of knowledge in cancer research, patient care, and/or treatment options in the military health system is critical to active duty Service members, their families, Veterans, other military beneficiaries, and the American public. The proposed research approach should be innovative. Innovative research may introduce a new paradigm, challenge existing paradigms, look at existing problems from new perspectives, or exhibit other highly creative qualities. The outcome of research supported by this award should be the generation of robust preliminary data that can be used as a foundation for future research projects to understand the mechanisms of initiation or progression of cancer, the quality of life during and following cancer treatment, etc. This award is not intended to support ongoing research in the applicant's laboratory; therefore, inclusion of preliminary data other than serendipitous findings or in very small amounts is not consistent with the exploratory nature of this award.

**Due Date:** 9/13/2016

**Funding:** Total Program Funding: \$13,440,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283060>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Psychological Health/Traumatic Brain Injury Cognitive Resilience and Readiness Research Award

**Description:** The FY16 PH/TBIRP CR3A seeks to support research that will increase our understanding of what and how key scientific and biomedical elements influence and correlate with cognitive skills assessment, enhancement, and training for Service members, and related specialty occupations. This Program Announcement/Funding Opportunity is focused on delivering solutions for Service member performance sustainment and health



protection and should demonstrate broader potential public use benefit of the research. Novel approaches which contribute to cognitive resilience and readiness are encouraged. Solutions that can be translated from laboratory environments and integrated into existing military training and practice with minimal disruption (noninvasive) to existing routine operations are encouraged. Both applied (preclinical) research and clinical trials within specific topic areas addressing the prevention of military-relevant psychological health issues and enhancement of operational performance are allowed.

**Due Date:** 9/7/2016

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

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283811>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Neurofibromatosis Clinical Trial Award

**Description:** The NFRP Clinical Trial Award supports research with the potential to have a major impact on the treatment or management of NF. Clinical trials may be designed to evaluate promising new products, pharmacologic agents (drugs or biologics), devices, clinical guidance, and/or emerging approaches and technologies. Proposed projects may range from small proof-of-concept (i.e., pilot, first in human, or Phase 0) trials to demonstrate feasibility or inform the design of more advanced trials, through large-scale trials to determine efficacy in relevant patient populations. Funding from this award mechanism must support a clinical trial and may not be used for preclinical research studies. A clinical trial is defined as a prospective accrual of human subjects where an intervention (e.g., device, drug, biologic, surgical procedure, rehabilitative modality, behavioral intervention, or other) is tested on a human subject for a measurable outcome with respect to exploratory information, safety, effectiveness, and/or efficacy.

**Due Date:** 8/1/2016

**Funding:** Total Program Funding: \$1,440,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283684>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Neurofibromatosis New Investigator Award

**Description:** The intent of the NFRP New Investigator Award is to support the continued development of promising independent investigators and/or the transition of established investigators from other research fields into a career in the field of NF research. Prior experience in NF research is not required. However, Principal Investigators (PIs) with a limited background in NF research are strongly encouraged to have a collaborator who is experienced in the NF field. Research projects may focus on any phase of research, excluding clinical trials. Applications must include preliminary and/or published data that are relevant to NF and the proposed research project. Preclinical Research: All projects should adhere to a core set of standards for rigorous study design and reporting to maximize the reproducibility and translational potential of preclinical research. While these standards are written for preclinical studies, the basic principles of randomization, blinding, sample-size estimation, and data handling derive from well-established best practices in research and should be applied. For projects involving animal studies, applicants should consult the ARRIVE (Animal Research: Reporting In Vivo Experiments) guidelines to ensure relevant aspects of rigorous animal research are adequately planned for and, ultimately, reported.

**Due Date:** 8/1/2016

**Funding:** Total Program Funding: \$2,880,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283687>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** DoD Neurofibromatosis Exploration-Hypothesis Development Award

**Description:** The NFRP Exploration – Hypothesis Development Award supports the initial exploration of innovative, high-risk, high-gain, and potentially groundbreaking concepts in NF research. Studies supported by this award mechanism are expected to lay the groundwork for future avenues of scientific investigation. The proposed research project should include a well-formulated, testable hypothesis based on strong scientific rationale and study design. The presentation of preliminary and/or published data is encouraged, but not required. The proposed research project should be innovative. Innovative research may introduce a novel paradigm, challenge existing paradigms, examine existing problems from novel perspectives, or exhibit other highly creative qualities. Research that is an incremental advance upon published data is not considered innovative and is not consistent with the intent of this award mechanism. It is the responsibility of the Principal Investigator (PI) to clearly and explicitly articulate how the proposed research project is innovative in the field of

NF. Research involving human subjects and human anatomical substances is permitted

**Due Date:** 8/1/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283669>

**Agency:** U.S. Department of Defense  
Dept. of the Army -- USAMRAA

**Program:** Tuberos Sclerosis Complex Postdoctoral Development Award

**Description:** The TSCRCP Postdoctoral Development Award mechanism is being offered for the first time in FY16. The Postdoctoral Development Award supports recent doctoral or medical graduates to conduct impactful research with the mentorship of an experienced TSC researcher (i.e., Mentor). This opportunity allows for junior investigators to develop and investigate a TSC research project and further their intellectual development as a TSC researcher of the future. Under this award mechanism, the junior investigator is considered the Principal Investigator (PI), and the application should focus on the PI's research and TSC career development. It should be clear that the proposed research is intellectually designed by the PI with assistance from the Mentor. Applicants for this award must exhibit a strong desire to develop and pursue a career in TSC research, with clear evidence for a researcher development plan that will lead to a successful independent career in TSC. Applicants must also demonstrate that the proposed research has high potential to lead to or make breakthroughs in TSC. Inclusion of preliminary data is not required. However, logical reasoning and a sound scientific rationale for the proposed research must be demonstrated. Clinical trials will not be supported by this mechanism.

**Due Date:** 7/18/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283653>

**Agency:** U.S. Department of Defense  
DARPA - Defense Sciences Office

**Program:** Accelerated Computation for Efficient Scientific Simulation (ACCESS)

**Description:** The Defense Sciences Office at the Defense Advanced Research Projects Agency (DARPA) is soliciting research proposals in technologies for the acceleration of scientific simulations of physical systems characterized by

coupled partial differential equations (PDEs). The Accelerated Computation for Efficient Scientific Simulation (ACCESS) Program seeks innovative ideas for computational architectures that will achieve the equivalent of petaflops performance in a benchtop form-factor and be capable of what traditional architectures would define as “strong” scaling for predictive scientific simulations of interest. DARPA expects achieving these goals will require the parallel development of non-traditional component technologies exploiting novel hybrid analog/digital techniques, algorithms, instruction sets, controllers, and the integration and optimization of these components within prototype systems. Specifically excluded is research that primarily results in evolutionary improvements to the existing state of practice.

**Due Date:** 6/28/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283611>

**Agency:** U.S. Department of Defense  
Air Force Office of Scientific Research

**Program:** Multidisciplinary Research Program of the University Research Initiative (FY17 AF SUBMISSION)

**Description:** The MURI program supports basic research in science and engineering at U.S. institutions of higher education (hereafter referred to as "universities") that is of potential interest to DoD. The program is focused on multidisciplinary research efforts where more than one traditional discipline interacts to provide rapid advances in scientific areas of interest to the DoD. As defined in the DoD Financial Management Regulation: Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress. DoD's basic research program invests broadly in many specific fields to ensure that it has early cognizance of new scientific knowledge. Detailed descriptions of the topics and the Topic Chief for each can be found in Section VIII, entitled, "Specific MURI Topics," of this FOA. The detailed descriptions are intended to provide the offeror a frame of reference and are not meant to be restrictive to the possible approaches to achieving the goals of the topic and the program.

**Due Date:** 11/5/2016

**Funding:** Total Program Funding: \$60,000,000 Award Ceiling: \$7,500,000 Award Floor: \$1,500,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283045>

**Agency:** U.S. Department of Energy  
Office of Science

**Program:** Research, Development and Training in Isotope Production

**Description:** The Office of Nuclear Physics (NP), Office of Science (SC), U.S. Department of Energy (DOE), hereby announces its interest in receiving applications for Research and Development (R&D) on novel methods to produce radioactive or enriched stable isotopes needed for a wide variety of research and applications. This announcement is administered under the NP Isotope Development & Production for Research and Applications (IDPRA) Sub-Program. The proposed research and development should generate data relevant to isotope production or lead to new and innovative technologies, or improvements to existing technologies, to foster enhanced production of isotopes. Successful proposals will clearly describe how the outcome of the proposed work would support and enhance the production of isotopes used for research and applications in medicine, homeland security, the physical sciences, biological and geological sciences, energy, industry, etc. Applications incorporating effective ways to train personnel with essential knowledge and skills related to the production, processing, purification, and distribution of enriched stable and radioactive isotopes are strongly encouraged

**Due Date:** 7/1/2016

**Funding:** Total Program Funding: \$10,000,000 Award Ceiling: \$10,000,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283293>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** BD2K Open Educational Resources for Skills Development in Biomedical Big Data Science (R25)

**Description:** The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this Big Data to Knowledge (BD2K) R25 program is to support educational activities that complement and/or enhance the training of a workforce to meet the nations biomedical, behavioral and clinical research needs.

**Due Date:** 8/2/2017

**Funding:** Total Program Funding: \$1,500,000 Award Ceiling: \$200,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283968>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** Grants for Early Medical/Surgical Subspecialists' Transition to Aging Research (GEMSSTAR) (R03)

**Description:** The goal of the GEMSSTAR FOA is to provide support for early-stage physician-scientists, trained in medical or surgical specialties, to launch careers as future leaders in research on aging or in geriatrics. To achieve this goal, the GEMSSTAR FOA provides small grants to conduct transdisciplinary research on aging or in geriatrics research that will yield pilot data for subsequent aging- or geriatrics-focused research projects. As part of its focus on facilitating the development of early-stage physician-scientists who will become leaders in research on aging or in geriatrics, the GEMSSTAR FOA seeks to encourage the provision of supportive environments for candidates, and NIA will consider the extent to which a supportive environment is available to candidates in selecting GEMSSTAR candidates.

**Due Date:** 10/6/2016

**Funding:** Total Program Funding: \$1,700,000 Award Ceiling: \$75,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283720>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** Centers of Research Translation (CORT) (P50)

**Description:** This announcement invites applications for Centers of Research Translation (CORT). Overall, a CORT research program could be carried out by a synergistic team of scientists who will address a highly significant translational research challenge in a single or a group of highly-related disease(s) or condition(s) within the mission of the NIAMS. The focus of research could be either 1) a disease-targeted translational theme addressed by synergistic Research Projects with optional Research Cores; or 2) a disease-related critical translational research question addressed through a single collaborative Research Project enabled by a number of highly interactive Research Cores whose work is integrated over time during the development and implementation of the Project. A CORT must have a minimum of three highly meritorious research components consisting of one or more translational Research Projects

and one or more Research Cores. An Administrative Core is required in all applications. To facilitate a team science approach, the lead investigators of the research components must be drawn from relevant and, as appropriate, different research disciplines, and may be based in different departments, divisions, and/or institutions. Combined, the projects and cores will generate new knowledge that will improve our understanding of human pathophysiology, and lead to identification of new targets, other tangible products or deliverables and development of more effective treatment, diagnostic or prevention strategies for human disease.

**Due Date:** 10/11/2016

**Funding:** Total Program Funding: \$6,000,000 Award Ceiling: \$1,000,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283741>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** BD2K Predoctoral Training in Biomedical Big Data Science (T32)

**Description:** The purpose of this announcement is to solicit applications for graduate training programs in Big Data Science, for the expressed purpose of training the next generation of scientists who will develop computational and quantitative approaches and tools needed by the biomedical research community to work with Big Data in the biomedical sciences. The proposed training programs should prepare qualified individuals for careers in developing new technologies and methods that will allow biomedical researchers to maximize the value of the growing volume and complexity of biomedical data.

**Due Date:** 7/25/2016

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

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283688>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** Specialized Alcohol Research Centers (P50)

**Description:** This Funding Opportunity Announcement invites applications for specialized Alcohol Research Centers using the P50 mechanism. The overall purpose of the NIAAA Alcohol Research Center program is to provide leadership in conducting and fostering interdisciplinary, collaborative research on a wide variety of topics relevant to the Institutes mission. These topics include, but are not limited to: the nature, etiology,

genetics, diagnosis, treatment, and prevention of alcohol use disorders and their biomedical, psychosocial, and economic consequences across the lifespan. Centers also are regional or national resources that contribute to the development of new research methods, technologies and approaches that sustain innovative goal-directed research.

**Due Date:** 12/5/2016

**Funding:** Total Program Funding: \$1,150,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283668>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** Growing Great Ideas: Research Education Course in Product Development and Entrepreneurship for Life Science Researchers (R25)

**Description:** The NIH Research Education Program (R25) supports research education activities in the mission areas of the NIH. The over-arching goal of this NIDA R25 program is to support educational activities that enhance the training of a workforce to meet the nations biomedical, behavioral and clinical research needs. To accomplish the stated over-arching goal, this FOA will support creative educational activities with a primary focus on Courses for Skills Development.

**Due Date:** 7/20/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283099>

**Agency:** U.S. Department of Health and Human Services  
Administration for Community Living

**Program:** Disability and Rehabilitation Research Projects (DRRP) Program: National Research Center for Parents with Disabilities and their Families

**Description:** The purpose of NIDILRR DRRPs, which are funded through the Disability and Rehabilitation Research Projects and Centers Program, is to improve the effectiveness of services authorized under the Rehabilitation Act by developing methods, procedures, and rehabilitation technologies that advance a wide range of independent living and employment outcomes for individuals with disabilities, especially individuals with the most significant disabilities. The intended outcome of this particular DRRP is to generate new knowledge about effective policies, practices, services or interventions for addressing the needs of parents with disabilities and their families. The DRRP must contribute to this outcome by conducting



research to identify or develop promising practices for serving and supporting parents with disabilities in the community, and by testing the effectiveness of at least one of these practices or interventions. The DRRP must also collect and/or analyze existing data to provide national estimates of the prevalence of parenting with a disability in the United States.

**Due Date:** 7/5/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283579>

**Agency:** U.S. Department of Health and Human Services  
National Institutes of Health

**Program:** Methodology and Measurement in the Behavioral and Social Sciences (R21)

**Description:** The purpose of this Funding Opportunity Announcement is to invite qualified researchers to submit grant applications aimed at improving and developing methodology in the behavioral and social sciences through innovations in research design, measurement, data collection and data analysis techniques.

**Due Date:** 9/7/2019

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283874>

**Agency:** National Science Foundation

**Program:** Division of Physics: Investigator-Initiated Research Projects

**Description:** The Division of Physics (PHY) supports physics research and education in the nation's colleges and universities across a broad range of physics disciplines that span scales of space and time from the largest to the smallest and the oldest to the youngest. The Division is comprised of disciplinary programs covering experimental and theoretical research in the following major subfields of physics: Accelerator Science; Atomic, Molecular and Optical Physics; Computational Physics; Elementary Particle Physics; Gravitational Physics; Integrative Activities in Physics; Nuclear Physics; Particle Astrophysics; Physics of Living Systems; Plasma Physics (supported under a separate solicitation); and Quantum Information Science. Additional Information The Physics Division strongly encourages single proposal submission for possible co-review rather than

multiple submissions of proposals with slight differences to several programs.

**Due Date:** 12/1/2016

**Funding:** See Announcement

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283841>

**Agency:** National Science Foundation

**Program:** NSF/DOE Partnership in Basic Plasma Science and Engineering

**Description:** Plasma Physics is a study of matter and physical systems whose intrinsic properties are governed by collective interactions of large ensembles of free charged particles. 99.9% of the visible Universe is thought to consist of plasmas. The underlying physics of the collective behavior in plasmas has applications to space physics and astrophysics, materials science, applied mathematics, fusion science, accelerator science, and many branches of engineering. The National Science Foundation (NSF), with participation of the Directorates for Engineering, Geosciences, and Mathematical and Physical Sciences, and the Department of Energy, Office of Science, Fusion Energy Sciences are continuing the joint Partnership in Basic Plasma Science and Engineering begun in FY1997 and renewed several times since. As stated in the original solicitation (NSF 97-39), which is superseded by the present solicitation, the goal of the initiative is to enhance basic plasma research and education in this broad, multidisciplinary field by coordinating efforts and combining resources of the two agencies. The current solicitation also encourages submission of proposals to perform basic plasma experiments at NSF and DOE supported user facilities, such as the Basic Plasma Science Facility at the University of California, Los Angeles and facilities located at DOE national laboratories, designed to serve the needs of the broader plasma community.

**Due Date:** 10/21/2016

**Funding:** Total Program Funding: \$3,500,000 Award Ceiling: \$250,000 Award Floor: \$25,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283674>

**Agency:** National Science Foundation

**Program:** Political Science Doctoral Dissertation Research Improvement Grants (PS DDRIG)

**Description:** The Political Science Program supports scientific research that advances knowledge and understanding of citizenship, government, and politics. Research proposals are expected to be theoretically motivated, conceptually precise, methodologically rigorous, and empirically oriented. Substantive areas include, but are not limited to, American government and politics, comparative government and politics, international relations, political behavior, political economy, and political institutions. In recent years, program awards have supported research projects on bargaining processes; campaigns and elections, electoral choice, and electoral systems; citizen support in emerging and established democracies; democratization, political change, and regime transitions; domestic and international conflict; international political economy; party activism; political psychology and political tolerance. The Program also has supported research experiences for undergraduate students and infrastructural activities, including methodological innovations, in the discipline.

**Due Date:** 6/15/2016

**Funding:** Total Program Funding: \$700,000

**Website:** <http://www.nsf.gov/pubs/2015/nsf15571/nsf15571.htm>

**Agency:** National Science Foundation

**Program:** Alliances for Graduate Education and the Professoriate (AGEP)

**Description:** The Alliances for Graduate Education and the Professoriate (AGEP) program seeks to advance knowledge about models to improve pathways to the professoriate and success for historically underrepresented minority doctoral students, postdoctoral fellows and faculty, particularly African Americans, Hispanic Americans, American Indians, Alaska Natives, Native Hawaiians, and Native Pacific Islanders, in specific STEM disciplines and/or STEM education research fields. New and innovative models are encouraged, as are models that reproduce and/or replicate existing evidence-based alliances in significantly different disciplines, institutions, and participant cohorts. The AGEP program goal is to increase the number of historically underrepresented minority faculty, in specific STEM disciplines and STEM education research fields, by advancing knowledge about pathways to career success. The program objectives include: To support the development, implementation and study of innovative models of doctoral education, postdoctoral training, and faculty advancement for historically underrepresented minorities in specific STEM disciplines and/or STEM education research fields; and to advance knowledge about

the underlying issues, policies and practices that have an impact on the participation, transitions and advancement of historically underrepresented minorities in the STEM academy.

**Due Date:** 6/14/2016

**Funding:** Total Program Funding: \$6,000,000 to \$8,000,000

**Website:** <http://www.nsf.gov/pubs/2016/nsf16552/nsf16552.htm>

**Agency:** National Science Foundation

**Program:** Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (RISE)

**Description:** The Centers of Research Excellence in Science and Technology (CREST) program provides support to enhance the research capabilities of minority-serving institutions (MSI) through the establishment of centers that effectively integrate education and research. MSIs of higher education denote institutions that have undergraduate enrollments of 50% or more (based on total student enrollment) of members of minority groups underrepresented among those holding advanced degrees in science and engineering fields: African Americans, Alaska Natives, American Indians, Hispanic Americans, Native Hawaiians, and Native Pacific Islanders. CREST promotes the development of new knowledge, enhancements of the research productivity of individual faculty, and an expanded presence of students historically underrepresented in science, technology, engineering, and mathematics (STEM) disciplines. CREST Postdoctoral Research Fellowship (PRF) awards provide research experience and training for early career scientists to work at active CREST Centers to meet the CREST Program goal of building the research capacity of MSIs and advancing the nation's STEM workforce and leadership. HBCU-RISE awards specifically target HBCUs to support the expansion of institutional research capacity as well as the production of doctoral students, especially those from groups underrepresented in STEM, at those institutions.

**Due Date:** 6/13/2016

**Funding:** Total Program Funding: \$17,800,000

**Website:** <http://www.nsf.gov/pubs/2016/nsf16525/nsf16525.htm>

**Agency:** National Science Foundation

**Program:** US Ignite: Networking Research and Application Prototypes Leading to Smart & Connected Communities

**Description:** US Ignite is an initiative that seeks to promote US leadership in the development and deployment of next-generation gigabit applications with the potential for significant societal impact. The primary goal of US Ignite is to break a fundamental deadlock: there is insufficient investment in gigabit applications that can take advantage of advanced network infrastructure because such end-to-end infrastructure is rare and geographically dispersed. And conversely, there is a lack of broad availability of advanced broadband infrastructure for open experimentation and innovation because there are few advanced applications and services to justify it. US Ignite aims to break this deadlock by providing incentives for imagining, prototyping, and developing gigabit applications that address national priorities, and by leveraging and extending this network testbed across US college/university campuses and cities.

**Due Date:** 6/14/2016

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

**Website:** <http://www.nsf.gov/pubs/2016/nsf16553/nsf16553.htm>

**Agency:** National Science Foundation

**Program:** Division of Physics: Investigator-Initiated Research Projects (PHY)

**Description:** The Division of Physics (PHY) supports physics research and education in the nation's colleges and universities across a broad range of physics disciplines that span scales of space and time from the largest to the smallest and the oldest to the youngest. The Division is comprised of disciplinary programs covering experimental and theoretical research in the following major subfields of physics: Accelerator Science; Atomic, Molecular and Optical Physics; Computational Physics; Elementary Particle Physics; Gravitational Physics; Integrative Activities in Physics; Nuclear Physics; Particle Astrophysics; Physics of Living Systems; Plasma Physics (supported under a separate solicitation); and Quantum Information Science. Additional Information: The Physics Division strongly encourages single proposal submission for possible co-review rather than multiple submissions of proposals with slight differences to several programs.

**Due Date:** 10/26/2016

**Funding:** Total Program Funding: \$90,000,000

**Website:**

[http://www.nsf.gov/pubs/2016/nsf16566/nsf16566.htm?WT.mc\\_id=USNSF\\_25&WT.mc\\_ev=click](http://www.nsf.gov/pubs/2016/nsf16566/nsf16566.htm?WT.mc_id=USNSF_25&WT.mc_ev=click)

**Agency:** National Science Foundation

**Program:** Computer and Information Science and Engineering (CISE) Research Initiation Initiative (CRII)

**Description:** With the goal of encouraging research independence immediately upon obtaining one's first academic position after receipt of the PhD, the Directorate for Computer and Information Science and Engineering (CISE) will award grants to initiate the course of one's independent research. Understanding the critical role of establishing that independence early in one's career, it is expected that funds will be used to support untenured faculty or research scientists (or equivalent) in their first three years in a primary academic position after the PhD, but not more than a total of five years after completion of their PhD. One may not yet have received any other grants or contracts in the Principal Investigator (PI) role from any department, agency, or institution of the federal government, including from the CAREER program or any other program, post-PhD, regardless of the size of the grant or contract, with certain exceptions noted below. Serving as co-PI, Senior Personnel, Postdoctoral Fellow, or other Fellow does not count against this eligibility rule. Grants, contracts, or gifts from private companies or foundations; state, local, or tribal governments; or universities do not count against this eligibility rule.

**Due Date:** 8/10/2016

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

**Website:**

[http://www.nsf.gov/pubs/2016/nsf16565/nsf16565.htm?WT.mc\\_id=USNSF\\_25&WT.mc\\_ev=click](http://www.nsf.gov/pubs/2016/nsf16565/nsf16565.htm?WT.mc_id=USNSF_25&WT.mc_ev=click)

**Agency:** National Science Foundation

**Program:** NSF/DOE Partnership in Basic Plasma Science and Engineering

**Description:** Plasma Physics is a study of matter and physical systems whose intrinsic properties are governed by collective interactions of large ensembles of free charged particles. 99.9% of the visible Universe is thought to consist of plasmas. The underlying physics of the collective behavior in plasmas has applications to space physics and astrophysics, materials science, applied mathematics, fusion science, accelerator science, and many

branches of engineering. The National Science Foundation (NSF), with participation of the Directorates for Engineering, Geosciences, and Mathematical and Physical Sciences, and the Department of Energy, Office of Science, Fusion Energy Sciences are continuing the joint Partnership in Basic Plasma Science and Engineering begun in FY1997 and renewed several times since. As stated in the original solicitation (NSF 97-39), which is superseded by the present solicitation, the goal of the initiative is to enhance basic plasma research and education in this broad, multidisciplinary field by coordinating efforts and combining resources of the two agencies. The current solicitation also encourages submission of proposals to perform basic plasma experiments at NSF and DOE supported user facilities, such as the Basic Plasma Science Facility at the University of California, Los Angeles and facilities located at DOE national laboratories, designed to serve the needs of the broader plasma community.

**Due Date:** 10/21/2016

**Funding:** Total Program Funding: \$3,500,000

**Website:**

[http://www.nsf.gov/pubs/2016/nsf16564/nsf16564.htm?WT.mc\\_id=USNSF\\_25&WT.mc\\_ev=click](http://www.nsf.gov/pubs/2016/nsf16564/nsf16564.htm?WT.mc_id=USNSF_25&WT.mc_ev=click)

**Agency:** U.S. Department of State  
Ocean and International Environmental Scientific

**Program:** Low Emission Accelerator Partnership (LEAP)

**Description:** A grant for up to \$2,000,000 in FY 2015 Economic Support Funds will be awarded for work that will advance low emission development through coordination and support to developing countries on the implementation of their Nationally Determined Contributions (NDCs) under the Paris Agreement on climate change.

**Due Date:** 7/11/2016

**Funding:** Total Program Funding: \$2,000,000 Award Ceiling: \$2,000,000 Award Floor: \$1,750,000

**Website:** <http://www.grants.gov/web/grants/view-opportunity.html?oppld=283644>

**Agency:** National Science Foundation

**Program:** Robert Noyce Teacher Scholarship Program

**Description:** The National Science Foundation Robert Noyce Teacher Scholarship Program seeks to encourage talented science, technology, engineering, and mathematics majors and professionals to become K-12 STEM teachers. The program invites creative and innovative proposals that address the critical need for recruiting and preparing highly effective K-12 STEM teachers, especially in high-need local educational agencies. The program offers four tracks: Track 1: The Robert Noyce Teacher Scholarships and Stipends Track, Track 2: The NSF Teaching Fellowships Track, Track 3: The NSF Master Teaching Fellowships Track, and Track 4: Noyce Research Track. In addition, Capacity Building proposals are accepted from proposers intending to develop a future Track 1, 2, or 3 proposal.

**Due Date:** 9/6/2016

**Funding:** Total Program Funding: \$56,530,000

**Website:** <http://nsf.gov/pubs/2016/nsf16559/nsf16559.htm>