

THE STATE UNIVERSITY SYSTEM OF FLORIDA

WASHINGTON E-UPDATE

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Budget and Appropriations Update -- Congress's work on the 12 annual appropriations bills ground to a halt in July, when House lawmakers became embroiled in a contentious battle over the confederate flag.

The controversy erupted during House debate over the Interior Department appropriations bill. In response to the deadly shootings at a historically black church in Charleston, South Carolina, lawmakers voted to bar the display of the confederate flag in federal cemeteries. Following those votes, an amendment was offered by Interior appropriations subcommittee chairman Ken Calvert (R-CA) which Democrats believed nullified the earlier amendments.

Rather than risk a series of politically embarrassing votes on the subject, House Speaker Boehner halted debate on the Interior spending bill, and said there would be no further action on appropriations bills...at least for now.

With Congress departing for a month-long summer recess, that leaves lawmakers with only a few legislative workdays in September (10 in the House, 15 in the Senate)—not enough time to vote on the 12 spending bills necessary to keep the government operating. Instead, Congress will have to pass a continuing resolution, or CR, providing the stopgap funding required to avoid a government shutdown.

That sets the stage later this year for Washington's version of "Deal or No Deal," as congressional lawmakers and the president try again to come up with a sweeping budget agreement. In recent months, lawmakers on both sides of the aisle have voiced frustration with tight spending caps that are taking their toll on both defense and social programs. And as it happens, year's end is also when Congress will have to vote on raising the government's nearly exhausted borrowing ceiling, a highway funding measure and a tax break extension—just as the election primary season and presidential campaigns are heating up.

Transportation 'patch' passed by Congress

With the nation's road projects at almost immediate risk, Congress passed another short-term extension (HR 3038) of the current surface transportation law at a cost of \$8 billion. The House and Senate completed action on July 30.

The bill sent to the President will extend MAP-21 three months until October 29. It continues existing programs – including University Transportation Centers and other research titles -- as authorized in the previous two-month extension that expired at the end of July. The nation's Highway Trust Fund had been once again near insolvency and without Congressional action, state road projects would have been in jeopardy starting August 1.

Leaders in both chambers pledged to negotiate a six-year highway reauthorization in the fall. The Senate passed its long-term highway bill July 30 that runs for six years but only contains spending offsets to cover the first three years. House Republicans are opposed to that approach. Efforts to attach a reauthorization of the Export Import Bank drew filibuster threats from conservative Senators such as Ted Cruz (R-TX) and Mike Lee (R-UT) and opposition from others in the House, and it was dropped.

Democrats in the House have introduced their own transportation reauthorization (HR 3064), the six-year GROW Act which incorporates the Administration's proposals for a \$478 billion program.

Legislation incorporates Administration's community college plan

Legislation was introduced July 8 in the House and Senate designed to legislate the free community college plan articulated by President Obama earlier this year. Likely to serve as a "messaging" bill, the [America's College Promise Act](#) (S. 1716) would make the first two years of community college free to eligible participating students.

Senators Tammy Baldwin (D-WI) and Cory Booker (D-NJ) teamed up in the Senate along with nine other Democratic cosponsors to write the legislation while in the House Congressman Bobby Scott (D-VA) sponsored the bill and has secured 60 cosponsors.

If passed, the bill would provide automatic appropriations of \$11.4 billion over the first 10 years of the program. The legislation does not contain any offset to cover the new spending.

A summary of the legislation by lead sponsor Sen. Baldwin outlines the key provisions:

“ Under the America's College Promise Act, a full-time community college student could save an average of \$3,800 in tuition per year. If all states participated under this program, an estimated 9 million students could benefit. This legislation:

- Creates a new partnership between the federal government and states and Indian tribes to help them waive resident tuition in two years of community and technical college programs for eligible students, while promoting key reforms to accelerate student success;
- Provides a federal match of \$3 for every \$1 invested by the state to waive community college tuition and fees for eligible students before other financial aid is applied;
- Ensures that programs offer academic credits which are fully transferable to four-year institutions in their state, or occupational training that leads to credentials in an in-demand industry;
- Maintains and encourages state funding for higher education; and

□ Establishes a new grant program to provide pathways to success at minority serving institutions by helping them cover a significant portion of tuition and fees for the first two years of attendance for low-income students.”

‘Pay as You Earn’ rule released

The Education Department issued a [proposed regulation](#) July 9 to expand the “Pay as You Earn” method for repaying federal student loans by capping loan payments at 10 percent of income.

The Department says that an additional six million borrowers will have access to this approach under the rule. Last year [President Obama issued a Presidential Memorandum](#) directing the Department to propose regulations to ease the burden of student loan debt by expanding repayment options available to borrowers and building awareness of income-driven repayment plans.

In addition to expanding the 10 percent payment cap, this proposal also contains other improvements, including:

- Creating a streamlined process to identify military service members who hold Federal Family Education Loan (FFEL) Program loans and who are eligible for lower interest rates while they are on active duty, a process that the Department already uses for servicemembers with Direct Loans.
- Requiring guaranty agencies to contact FFEL Program borrowers who rehabilitated their defaulted loans to provide them information on repayment plans, including income-driven repayment options, to help them decide which repayment plan to choose.

Bills approved rewriting No Child Left Behind Act

Both the House and Senate passed comprehensive legislation this month that would rewrite the No Child Left Behind Act.

The House bill (HR5 – the Student Success Act) was more contentious and partisan than the more recently passed Senate bill (Every Child Achieves Act), which was drafted under the leadership of Senators Lamar Alexander (R-TN) and Patty Murray (D-WA). The next step will be for House Education and Workforce and Senate HELP leadership to negotiate a conference version of these bills in the fall.

President Obama has already promised to veto the House bill due to its approach to decentralize the education system and defund many of the programs he has implemented, including the “Race to the Top” program. A White House statement on the House bill said, that it “abdicates the historic federal role in elementary and secondary education of ensuring the educational progress of all of America’s students, including students from low-income families, students with disabilities, English learners, and students of color.”

The President has been silent on the Senate bill, and Senators Alexander and Murray have emphasized their willingness to work with the White House in order to advance their education priorities and to overhaul No Child Left Behind. Issues that will inevitably arise during conference will include accountability provisions and common core.

Senator Alexander has stated that he hopes to get legislation to the President in the fall. The Student Success Act can be found [here](#). The Every Child Achieves Act can be found [here](#).

White House memo details science priorities for FY17 budgets

The heads of the White House Office of Management and Budget and the Office of Science and Technology Policy issued a [joint memo](#) to federal research agencies July 9 on research priorities for the next Federal budget.

The document outlines multi-agency science and technology priorities for agencies in formulating their Fiscal Year 2017 budget submissions to the Administration in the fall.

The memo provides a good indication of where agencies may place emphasis and additional resources for the coming year. Among the areas highlighted are many where the State University System is invested: advanced manufacturing, life sciences innovation, neuroscience, cybersecurity, high performance computing, oceans, earth observations, global climate change, energy and commercialization of breakthroughs.

John Holdren and Shaun Donovan write:

“Federal government funding for research and development (R&D) is essential to address societal needs in areas in which the private sector does not have sufficient economic incentive to make the required investments. Key among these is basic research—the fundamental, curiosity driven inquiry that is a hallmark of the American research enterprise and a powerful driver of new technology. Simply supporting research is not sufficient, however, Federal agencies should ensure that the results of that research are made available to other scientists, to the public, and to innovators who can translate them into the businesses and products that will improve all of our lives.”

Senate hearing considers campus sexual assault bills

Combating sexual assault on campus was covered in a hearing July 29 by the Senate Health, Education, Labor, and Pensions (“HELP”) Committee, another in a series of hearings leading up to reauthorization of the Higher Education Act.

The hearing consisted of two panels. The first included Senators Claire McCaskill (D-MO), Dean Heller, (R-NV), Kirsten Gillibrand (D-NY), and Kelly Ayotte (R-NH) testifying

regarding the Campus Accountability and Safety Act (CASA) that they have cosponsored.

The second panel included Janet Napolitano, currently the President of the University of California; Dana Bolger, co-founder of “Know Your IX”; Dolores Stafford, Executive Director, National Association of Clery Compliance Officers; and Molly Benz Flounlacker, Associate Vice President for Federal Relations at the Association of American Universities. The hearing can be viewed [here](#).

Chairing the hearing, Senators Susan Collins (R-ME) and Patty Murray (D-WA) emphasized the need for improved coordination on sexual assault issues in universities. Senator Collins highlighted the value of a Title IX Coordinator, who could serve as a helpful resource for students facing the trauma of a sexual assault. She also pointed to the need to bolster university infrastructure but leave law enforcement at the helm of this issue. To her mind, staff trainings and education are vital in improving the ongoing university response to sexual assault. Senator Murray highlighted the need for student input at every level, and importance of sexual assault as a public health issue.

In their discussions of the newest CASA bill, Senators touted its bipartisan nature, highlighting that it presently has 33 bipartisan sponsors. Senator McCaskill said that it empowers victims using different systems, and that the inclusion of a counseling advisor is central to the legislation. Perhaps most importantly, she noted, would be an increase in transparency regarding the campus judicial process for all parties. Senator Gillibrand underscored the need for Senators to take this seriously as an issue, and mentioned that some colleges have more rigorous requirements for students who cheat than those accused of sexual assault. She also noted that the SUNY system has endorsed every aspect of this legislation.

Ms. Napolitano highlighted campus sexual assault as a criminal, public, and cultural issue, and relayed the processes that the University of California has taken to address these issues, including a system-wide task force for preventing dating, domestic violence, and stalking. Ms. Napolitano highlighted also a need to make legislation scalable, since there is such a wide range of college and university sizes, and to better coordinate requirements of the Department of Education. Ms. Bolger highlighted a need for increased transparency and for additional funding to the Office of Civil Rights at the Department of Education.

Senators on both sides seemed extremely engaged on this issue and it was clear that it will be a priority in the coming months.

FAMU president discusses land transfer at House hearing

President Elmira Mangum of FAMU testified July 15 at a House Agriculture Committee hearing held to commemorate the 125th anniversary of the 1890 land grant universities, noting that Florida agriculture and the nation are served by two land grant schools in the state -- FAMU and UF.

In her testimony, she said that the USDA's pending transfer of 3,800 acres in Brooksville to the university would be the single largest transfer of land to an HBCU in history. She said the additional land would enable development of new programs on biotech innovations for startup farmers and ranchers.

Rep. Gwen Graham (D-FL), a member of the committee, introduced Dr. Mangum's testimony and encouraged collaborating with veteran training groups in developing programs on the new land. Rep. Ted Yoho (R-FL), also a member of the committee and a graduate of the UF veterinary college, questioned Dr. Mangum on the challenges she faces in getting students interested in agriculture. He also sought university help in convincing the public of the benefits of genetically modified foods. To read Dr. Mangum's written testimony or view the webcast, [click here](#).

Senate leaders seeking input for next America COMPETES bill on R&D policy

A new effort was announced July 8 by the Senate Commerce, Science and Transportation Committee (and ranking Member Bill Nelson of Florida) to obtain input on R&D policy in advance of writing the Senate version of the next America COMPETES authorization.

The effort seeks input on reauthorizing the National Science Foundation, the National Institute of Standards and Technology, and research and development policy at other federal agencies.

Sen. John Thune (R-SD) and Sen. Bill Nelson (D-FL), who respectively serve as the chairman and ranking member of the Committee on Commerce, Science, and Transportation, and Sen. Ted Cruz (R-TX) who chairs the Subcommittee on Space, Science, and Competitiveness, announced that Sen. Cory Gardner (R-CO) and Sen. Gary Peters (D-MI) will lead the effort to gather input from the U.S. science and research community and other interested parties on federal research and development policy priorities.

"The Commerce Committee seeks a bipartisan path for reauthorizing federal research and development programs carried out by agencies last authorized by the COMPETES Act," said Thune, Nelson, and Cruz. "Both Sen. Gardner and Sen. Peters have experience working across the aisle during their service in the U.S. House and Senate. We have great confidence in their ability to point our committee in the right direction."

The COMPETES Acts of 2007 and 2010 served as the authorizing vehicles for the National Science Foundation, the National Institute of Standards and Technology, the Department of Energy's Office of Science, and the Advanced Research Projects Agency-Energy, and also set policy at the White House Office of Science and Technology Policy. No legislative reauthorization of agency priorities has been enacted into law since COMPETES 2010.

Beginning this month, Sens. Gardner and Peters will lead participants in a series of meetings and briefings related to reauthorization. Topics will include (1) maximizing basic research; (2) improving Science, Technology, Engineering, and Math (STEM) education research and practices for students; and (3) translating federal research results into innovative commercial applications for the benefit of the economy and society. Members of the public and interested groups seeking to provide input are invited to submit information via SciencePolicy@commerce.senate.gov. Submissions are requested no later than Friday, August 21.

New higher education bills introduced in the House

A number of new bills were introduced this month in the House of Representatives aimed at higher education reform. All the bills are bipartisan and cosponsored by Representatives John Kline (R-MI) and Bobby Scott (D-VA), the Chairman and Ranking Member respectively of the House Education and Workforce Committee. Their joint support suggests the provisions are likely candidates for inclusion in the House's reauthorization of the Higher Education Act later this year.

The bills are:

- HR 3180, the Flexible Pell Grant for 21st Century Students [Act](#);
- HR 3179, the Empowering Students through Financial Counseling [Act](#);
- HR 3177, the Simplifying the Application for Student Aid [Act](#); and
- HR 3178, the Strengthening Transparency in Higher Education [Act](#).

HR 3179 would require annual loan counseling and exit counseling for students receiving Pell grants and other student loans. Currently counseling is only required upon entrance and exit for students. HR 3177, similar to Senator Alexander's FAST Act, seeks to reform FAFSA by allowing parents and students to fill out financial aid information early. HR 3178 seeks to help students make "informed decisions" in the college decision-making process by streamlining and providing college data, ensuring that data reflects the changing college demographics, increasing coordination between federal agencies, and bettering institutional price calculators. HR 3180 would make Pell grants available to applicable students year round.

Senate hearing investigates ways to speed development of life-saving cures

"Unlocking the Cures for America's Most Deadly Diseases" was the topic of a hearing July 14 by the Senate Commerce, Science and Transportation Committee's Subcommittee on Science, Space and Competitiveness.

Witnesses represented a range of stakeholder interests, from provider and patient to researcher and prize developer. According to Sen. Ted Cruz (R-TX), who chaired the

hearing, almost 600,000 Americans will face cancer this year and 700,000 will die from Alzheimer's Disease. Cruz blamed regulatory burdens for slowing innovation in drug development, but also said more federal investment in medical research is necessary.

That message was echoed by Sen. Gary Peters (D-MI), Sen. Tom Udall (D-NM) and by Dr. Keith Yamamoto, Vice Chancellor for Research at the University of California San Francisco, whose testimony focused on the benefits of increased federal investment in basic research and precision medicine. More funding for research at NIH and other agencies would mean more grant dollars for academic institutions, incentivizing knowledge discovery by the public sector and also the private sector, which takes its cues from the federal government, he said.

Sen. Ron Johnson (R-WI), Sen. Roger Wicker (R-MS) and witness Dr. Tom Coburn, cancer patient and former Republican Senator from Oklahoma, agreed with Cruz that the FDA regulatory scheme has a hand in delaying the development of new treatments. Coburn said that while the FDA has been a punching bag for Congress in recent years, reforms are necessary to make the FDA more collaborative and transparent. Payment reforms and intellectual property reforms are also needed to incentivize breakthrough treatments, he added. Sen. Wicker shared his new bill, the Patient-Focused Impact Assessment Act, which would promote transparency by asking the FDA to share how they use patient input in the drug approval process.

Witness Christopher Frangione, VP of Prize Development at XPRIZE, explained how prize competitions can incentivize collaboration for breakthrough treatments, particularly between the public and private sectors. Keith Huber of the Manhattan Institute also emphasized the importance of partnerships, saying how tech giants like Google and Yahoo have a lot to teach the federal government, especially the FDA, about building databases and assessing software.

Webcast of the hearing and full witness testimony can be found [here](#).

Call for FAFSA reform joined by Gates Foundation

Recent discussions about the Senate reauthorization of the Higher Education Act have emphasized the necessity for reexamination and overhaul of financial aid counseling and FAFSA. To this end, Senators Lamar Alexander (R-TN) and Michael Bennett (D-CO) recently introduced the Financial Aid Simplification and Transparency Act ("FAST Act"). Sen. Alexander chairs the Senate education committee that will undertake the reauthorization effort.

This FAST Act seeks to reduce the financial aid application process, which presently requires students to answer 108 questions in a FAFSA application, to a two-question document. President Obama has also proposed shortening and simplifying the FAFSA application process. Some of these efforts have been met with concern from some universities and states who argue that such a drastic reduction in information will hinder their ability to accurately understand a student's financial background, and consequently

their need for financial aid. Nevertheless, in Washington, DC, FAFSA reform seems to be a truly bipartisan endeavor and have “legs.”

The Bill and Melinda Gates Foundation has now joined the voices calling for FAFSA reform in concert with the release of a white paper this month. The document urges policymakers to streamline the FAFSA application and to allow parents and students to begin the aid process earlier. The Gates Foundation proposes leaving in targeted questions that would aid states and universities in fully understanding a student’s financial status while still streamlining the application.

This effort by the Gates Foundation represents its first major higher education proposal following an announcement earlier this year that the group plans to participate more vocally in higher education debates. The overall goals of the Foundation in higher education are to improve retention and completion, with an emphasis on increasing outcomes for low income and first generation students.

The Gates Foundation white paper can be found [here](#).

NIH seeking input on its new strategic planning framework

The National Institutes of Health has begun a process to develop a five-year, NIH-wide strategic plan and is seeking input. The goal is to outline a vision for biomedical research that ultimately extends healthy life and reduces illness and disability.

The proposed framework for this plan identifies areas of opportunity across all biomedicine disciplines and unifying principles to guide the agency’s support of the biomedical research enterprise. The aim is to pursue cross-cutting areas of research that span NIH’s 27 Institutes, Centers and Offices.

All NIH stakeholders are invited to review the framework as part of the request for information (RFI) in [NOT-OD-15-118](#) and to provide feedback via the [RFI submission site](#).

NIH will host a series of webinars in August to gather additional input about the framework. More information about these events will be posted soon on the [NIH Strategic Planning Web page](#).

[View the RFI: NOT-OD-15-118.](#)

[Visit the NIH Strategic Planning Web page.](#)

[Submit your comments via the RFI submission site.](#)

Risks to electric grid considered at Senate hearing

The risk of a geomagnetic disturbance (GMD) or electromagnetic pulse (EMP) and ramifications for the U.S. electric grid were discussed at a July 22 hearing held by the

Senate Homeland Security and Government Affairs Committee. As Chairman of the committee—and the only member present for most of the hearing—Sen. Ron Johnson (R-WI) did the majority of witness questioning, focusing on the federal government's lack of preparedness for these low probability, high consequence events. The panel of witnesses explained the difference between these two types of events and made policy recommendations to protect the grid from damage and, more importantly, some emphasized, quickly recover power after such an event.

Witness R. James Woolsey, former Director of Central Intelligence, focused his testimony on an EMP attack. An EMP would occur if another country, like Iran or North Korea, put a nuclear weapon into orbit and detonated it over the U.S. According to witness Joseph McClelland of the Federal Energy Regulatory Commission, a single EMP attack could wipe out major parts of the nation's electric grid. While deterrence is the best prevention of such an attack, it would cost an estimated \$10-20 billion to fully protect infrastructure and "Washington is completely dysfunctional on this issue," said Woolsey.

Unlike EMP attacks, GMD events are inevitable and cannot be predicted, said McClelland. Witness Richard Garwin, Fellow Emeritus at the IBM Thomas J. Watson Research Center, explained in his testimony the various kinds of space weather events and which pose the greatest threat to the Bulk Power System. Garwin's policy recommendations include federal programs to implement "rapid islanding" of the grid, train operators to bring down transmission lines in case of an event, and install neutral current blocking devices on prioritized transformers.

This last recommendation was of great interest to Chairman Johnson, who said "the government has done nothing" to mitigate against these events since information regarding the threat of solar storms and EMP attacks was declassified in 2004. Witness Christopher Currie of the Government Accountability Office confirmed that the Department of Homeland Security has not carried out the vast majority of recommendations made by a 2008 FERC Commission on electric reliability. According to Garwin, fitting the few hundred prioritized transformers with neutral current blocking devices would cost less than \$100 million and Johnson indicated he would consider proposing an amendment to the appropriations bill to fund that effort.

Webcast of the hearing and full witness testimony can be found [here](#).

Citrus greening briefing on Capitol Hill features IFAS speaker

Citrus greening was the topic of a briefing on Capitol Hill July 23 sponsored by the Congressional Soils Caucus Alliance and it featured a speaker from University of Florida.

Dr. Jim Graham, Professor of Soil Microbiology at UF's Institute of Food and Agricultural Sciences, Citrus Research and Education Center was joined by Dr. Georgios Vidalakis, Extension specialist, plant pathologist and the director of the Citrus Clonal Protection

Program at UC Riverside; and Dr. Mary Palm, from USDA-Animal and Plant Health Inspection Service and Plant Protection and Quarantine National Coordinator for Citrus Pest Programs

Dr. Graham focused on the history and science of citrus greening, formally called Huanglongbing (HLB). He explained that the disease originated on the Indian subcontinent and is caused by a virus transmitted through insects. The pathogen causes stem-end breakdown and premature fruit drop. Dr. Graham's analysis is that Florida's citrus industry will continue to decline, with further closures of some orange processing plants. He said short-term solutions include thermotherapy with steam and acid treatment of irrigation systems. However, he concluded that more funding is needed to find long-term sustainable solutions. Find his presentation [here](#).

Dr. Vidalakis discussed how California prevented HLB from spreading to commercial growers. He also weighed on Brazil's innovative approaches to handling the disease. Find out more from [his presentation here](#).

Dr. Palm spoke about the successes of the Citrus Health Response Program's HLB Multiagency Coordination Initiative (HLBMAC), which funds coordinated projects on vector control, sustainability and early detection. She stressed FY2016 will continue to build on the successes of HLBMAC to reach the goal of safeguarding and sustaining the U.S. citrus industry. [Read more here](#).

Highlights of competitive grant opportunities at federal agencies

Agency: Department of Commerce

Program: Marine Fisheries Initiative (MARFIN)

Description: The National Marine Fisheries Service (NMFS), Southeast Region, is seeking proposals under the Marine Fisheries Initiative Program (MARFIN), for research and development projects that optimize the use of fisheries in the Gulf of Mexico, Puerto Rico, the U.S. Virgin Islands, and off the South Atlantic states of North Carolina, South Carolina, Georgia, and Florida involving the U.S. fishing industry (recreational and commercial), including fishery biology, resource assessment, socio-economic assessment, management and conservation, selected harvesting methods, and fish handling and processing. This program addresses NOAA's mission goal "Healthy Oceans."

Due Date: October 2, 2015

Funding: \$2,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277995>

Agency: Department of Energy
Golden Field Office

Program: DOE Traineeship in Power Engineering (Leveraging Wide Bandgap Power Electronics)

Description: Through this Announcement, DOE intends to fund university-led traineeship programs that strategically address workforce training needs in the area of power engineering, leveraging wide bandgap power electronics. The following objectives guide the Office of Energy Efficiency and Renewable Energy (EERE) Advanced Manufacturing Office's (AMO) traineeship efforts: •Advance the DOE mission – DOE funded Traineeship Programs are designed and implemented to advance specific Science, Technology, Engineering and Math (STEM) workforce competencies required for the DOE's unique mission to ensure America's security and prosperity by addressing its science, energy, and environmental challenges

Due Date: September 3, 2015

Funding: \$5,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277912>

Agency: Department of Energy
Office of Science

Program: FY 2016 Research Opportunities in High Energy Physics

Description: The Office of High Energy Physics invites new and renewal grant applications for support of research programs in High Energy Physics.

Due Date: September 17, 2015

Funding: \$40,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277813>

Agency: Department of Energy
Office of Science

Program: Intermediate Neutrino Research Program

Description: The Office of High Energy Physics invites new grant applications for support of innovative research in neutrino physics. They are interested in research that would align with the goals of the Intensity Frontier Program (<http://science.energy.gov/hep/research/intensity-frontier/>) in investigating

the properties and interactions of the known neutrinos and in searching for new types of neutrinos, as part of implementation of the strategic plan.

Due Date: September 2, 2015

Funding: \$10,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277790>

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

Program: A Community Research Resource of Microbiome-Derived Factors Modulating Host Physiology in Obesity, Digestive and Liver Diseases, and Nutrition

Description: The purpose of this announcement is to invite applications from multidisciplinary research teams to create a community research resource of key members of the microbiota and factors they elaborate which modulate host physiology and pathophysiology related to obesity, nutrition, or liver, exocrine pancreatic, or digestive diseases, and to disseminate it broadly to the research community, in order to advance the development of microbiome-based interventions for prevention and treatment of these diseases. The resource will include annotated genome sequences and cultures of the key microbes, chemical structures of the key compounds they elaborate, datasets used to identify key microbes and compounds, and software for novel analytic methods developed to enable their identification.

Due Date: October 19, 2016

Funding: \$6,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277313>

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

Program: Collaborative Projects to Accelerate Research in Organ Fibrosis

Description: This announcement invites Research Project Grant (R01) applications from collaborating investigators to characterize and compare mechanisms of aberrant fibrogenesis and/or fibrosis resolution in different organ systems; develop novel therapeutic strategies aimed to lessen organ fibrosis; or develop novel technologies to study fibrosis.

Due Date: October 21, 2016

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277902>

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

Program: Developmental Mechanisms of Human Structural Birth Defects

Description: The purpose of this announcement is to support innovative, multidisciplinary, interactive, and synergistic program projects (P01s) that integrate basic, translational, and clinical approaches to understanding the developmental biology and genetic basis of significant congenital human malformations. To contain costs, each program project will consist of only three component research projects and associated cores. At least one project must use basic research in an animal model system and at least one project must be clinical or translational in nature

Due Date: November 18, 2015

Funding: \$3,330,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277852>

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

Program: Establishing Outcome Measures for Clinical Studies of Oral and Craniofacial Diseases and Conditions

Description: The goal of this announcement is to support the development of well-founded outcome measures, including establishing their reliability and validity, for clinical studies of those with oral and craniofacial diseases and conditions.

Due Date: September 7, 2018

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277923>

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

Program: Innovative Basic Research on Adducts in Cancer Risk Identification and Prevention

Description: This announcement encourages research projects focused on adducts to cellular macromolecules as indicators of exposures to cancer risk factors relevant to human populations. The priority is on projects that will focus on

adductomic approaches, i.e., address some aspects of the totality of adducts. These projects should explore the basic aspects of adducts/adductomics that may have a potential utility in cancer detection, cancer prevention, and/or assessing cancer risks. The projects should be relevant to adducts in humans and human populations but may be conducted using various model systems (e.g., cultured cells, animals, etc.).

Due Date: July 11, 2018

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277235>

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

Program: Lymphatics in Health and Disease in the Digestive System, Kidney, and Urinary Tract

Description: This announcement is to encourage Research Project Grant (R01) applications for research into aspects of lymphatic vessel physiology, development and pathophysiology related to health and diseases of the digestive system, kidney, and urinary tract organs. However, studies with the major focus on immune mechanisms are not encouraged. Studies to understand the factors that control local lymphatic vessel functional anatomy and physiology and development during health or disease in these organs/systems, and the mechanisms by which alterations of lymphatic vessel function affect organ function, are of interest.

Due Date: September 7, 2018

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278073>

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

Program: NINDS Research Program Award

Description: The purpose of the NINDS Research Program Award (RPA) is to provide longer-term support and increased flexibility to investigators whose outstanding records of research achievement demonstrate their ability to make major contributions to neuroscience. RPAs will support the overall research programs of NINDS-funded investigators for up to 8 years, at a

maximum level of \$750,000 direct costs per year. This greater funding stability will provide investigators increased freedom to embark upon research that breaks new ground or extends previous discoveries in new directions. It will also allow Program Directors/Principal Investigators (PDs/PIs) to take greater risks and to undertake research projects that require a longer timeframe.

Due Date: January 7, 2016

Funding: \$20,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277833>

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

Program: Novel and Innovative Tools to Facilitate Identification, Tracking, Manipulation, and Analysis of Glycans and their Functions

Description: This program solicits development of new, more easily accessible tools, reagents, and technologies to facilitate identification, tracking, manipulation, and analysis of glycans with their biological binding partners and determine their functions. This initiative may build on efforts that interface with existing technologies and procedures to make them easier to access and use. As applicable, efforts must consider: factors for scale-up; efforts to make instrumentation broadly accessible and cost-effective for the end-user; and compatibility of data generated with integration into existing databases.

Due Date: October 15, 2015

Funding: \$4,500,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277840>

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

Program: Occupational Safety and Health Education and Research Centers

Description: The National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, invites grant applications for funding Education and Research Centers (ERCs) that are focused on occupational safety and health training, research training, education and outreach. NIOSH is mandated to provide an adequate supply of qualified personnel to carry out the purposes of the Occupational Safety and Health

Act, and the ERCs are one of the principal means for meeting this mandate.

Due Date: October 20, 2019

Funding: \$1,800,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=277993>

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

Program: Physical Activity and Weight Control Interventions Among Cancer Survivors: Effects on Biomarkers of Prognosis and Survival (R21)

Description: This announcement encourages transdisciplinary and translational research that will identify the specific biological or biobehavioral pathways through which physical activity and/or weight control (either weight loss or avoidance of weight gain) may affect cancer prognosis and survival. Research applications should test the effects of physical activity, alone or in combination with weight control (either weight loss or avoidance of weight gain), on biomarkers of cancer prognosis among cancer survivors identified by previous animal or observational research on established biomarkers other than insulin/glucose metabolism, especially those obtained from tumor tissue sourced from repeat biopsies where available.

Due Date: September 7, 2018

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278102>

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

Program: Supplements to Support Evaluation of the NCI Cancer Genomics Cloud Pilots

Description: The purpose of this announcement is to support projects that will incorporate the use of one or more of the NCI Cancer Genomics Cloud Pilots into ongoing research activities. The use of an infrastructure in which large scale genomic data is co-located with computational resources and analysis tools is expected to lead to increased research efficiency and broader access to tools and data for cancer researchers, an important priority for the NCI. The activities and outcomes of projects funded through these supplements will help inform NCI's future plans for providing a computational infrastructure for genomics data.

Due Date: October 18, 2015

Funding: See announcement

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278063>

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

Program: Type 1 Diabetes Pathfinder Award (DP2)

Description: The Type 1 Diabetes Pathfinder Award (DP2) was first initiated in 2008 as part of the Strategic Plan for Type 1 Diabetes Research (<http://www.T1Diabetes.nih.gov/plan>). The goal is to support a small number of early stage investigators of exceptional creativity who propose bold and highly innovative new research approaches that have the potential to produce a major impact on broad, important problems in biomedical and behavioral research relevant to type 1 diabetes and its complications. The Type 1 Diabetes Pathfinder Award initiative complements ongoing efforts by NIH and its Institutes and Centers to fund early stage investigators through R01 grants, which continue to be the major sources of NIH support for early stage investigators. The research proposed need not be in a conventional biomedical or behavioral discipline but must be relevant to type 1 diabetes.

Due Date: February 17, 2016

Funding: \$10,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278146>

Agency: National Science Foundation

Program: Biomedical Engineering

Description: The goal of the Biomedical Engineering (BME) program is to provide opportunities to develop novel ideas into discovery-level and transformative projects that integrate engineering and life sciences in solving biomedical problems that serve humanity in the long-term. BME projects must be at the interface of engineering and life sciences, and advance both engineering and life sciences. The projects should focus on high impact transformative methods and technologies. Projects should include methods, models and enabling tools of understanding and controlling living systems; fundamental improvements in deriving information from cells, tissues, organs, and organ systems; new approaches to the design of structures and materials for eventual medical use in the long-term; and novel methods for reducing health care costs through new technologies

Due Date: October 20, 2015

Funding: \$10,400,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278085>

Agency: National Science Foundation

Program: Biophotonics

Description: The goal of the Biophotonics program is to explore the research frontiers in photonics principles, engineering and technology that are relevant for critical problems in fields of medicine, biology and biotechnology. Fundamental engineering research and innovation in photonics is required to lay the foundations for new technologies beyond those that are mature and ready for application in medical diagnostics and therapies. Advances are needed in nanophotonics, optogenetics, contrast and targeting agents, ultra-thin probes, wide field imaging, and rapid biomarker screening. Low cost and minimally invasive medical diagnostics and therapies are key motivating application goals.

Due Date: October 20, 2015

Funding: \$6,000,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278090>

Agency: National Science Foundation

Program: Biotechnology and Biochemical Engineering

Description: The Biotechnology and Biochemical Engineering (BBE) program supports fundamental engineering research that advances the understanding of cellular and biomolecular processes in engineering biology and eventually leads to the development of enabling technology for advanced manufacturing and/or applications in support of the biopharmaceutical, biotechnology, and bioenergy industries, or with applications in health or the environment. A quantitative treatment of biological and engineering problems of biological processes is considered vital to successful research projects in the BBE program. Fundamental to many research projects in this area is the understanding of how biomolecules, cells and cell populations interact in their environment, and how those molecular level interactions lead to changes in structure, function, phenotype, and/or behavior. The program encourages highly innovative and potentially transformative engineering research leading to novel bioprocessing and manufacturing approaches, and proposals that address emerging research areas and technologies that effectively integrate knowledge and practices from different disciplines while incorporating ongoing research into educational activities.

Due Date: October 20, 2015

Funding: \$8,200,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278079>

Agency: National Science Foundation

Program: Cognitive Neuroscience

Description: The Cognitive Neuroscience program seeks highly innovative proposals aimed at advancing a rigorous understanding of human cognition, including how the human brain mediates action, affect, creativity, decision making, intentionality, perception, social processes, and thought. Topics may bear on core functions such as attention, emotion, empathy, executive processes, language, learning, memory, music, sensory processing, sleep, representation of self and other, reasoning and rhythm. Topics may also include how human cognition develops and changes in the brain across the lifespan. The program is particularly interested in supporting the development of new techniques and technologies for recording, analyzing, and modeling complex brain activity and human brain mapping. Such projects should include a plan for sharing new software and other technologies with the research community at large.

Due Date: August 13, 2015

Funding: \$8,000,000

Website:

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5316&WT.mc_id=USNSF_39&WT.mc_ev=click

Agency: National Science Foundation

Program: Cultural Anthropology Program - Doctoral Dissertation Research Improvement Grants

Description: The primary objective of the Cultural Anthropology Program is to support basic scientific research on the causes, consequences, and complexities of human social and cultural variability. Anthropological research spans a wide gamut, and contemporary cultural anthropology is an arena in which diverse research traditions and methodologies are valid. Recognizing the breadth of the field's contributions to science, the Cultural Anthropology Program welcomes proposals for empirically grounded, theoretically engaged, and methodologically sophisticated research in all sub-fields of cultural anthropology. Because the National Science Foundation's mandate is to support basic research, the NSF

CulturalAnthropology Program does not fund research that takes as its primary goal improved clinical practice or applied policy.

Due Date: August 17, 2015

Funding: \$800,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=275093>

Agency: National Science Foundation

Program: Energy for Sustainability

Description: The goal of the Energy for Sustainability program is to support fundamental engineering research that will enable innovative processes for the sustainable production of electricity and fuels. Processes for sustainable energy production must be environmentally benign, reduce greenhouse gas production, and utilize renewable resources. Current topics of interest include: Biomass Conversion, Biofuels; Bioenergy: Fundamental research on innovative approaches that lead to the intensification of biofuel and bioenergy processes is an emphasis area of this program. Specific areas of interest include, but are not limited to: biological, thermochemical, or thermocatalytic routes for the conversion of lignocellulosic biomass to advanced biofuels beyond cellulosic ethanol; microbial fuel cells for direct production of electricity from renewable carbon sources; hydrogen production from autotrophic or heterotrophic microorganisms; hydrocarbons and lipids from phototrophic or heterotrophic microorganisms. Proposals that focus primarily on chemical reactor analysis related to biomass conversion should be submitted to Process Systems, Reaction Engineering and Molecular Thermodynamics (CBET 1403), and proposals related to the combustion of biomass should be sent to Combustion and Fire Systems (CBET 1407).

Due Date: October 20, 2015

Funding: \$13,093,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278093>

Agency: National Science Foundation

Program: Environmental Sustainability

Description: The General Age Related Disabilities Engineering (GARDE) program supports fundamental engineering research that will lead to the development of new technologies, devices, or software that improve the quality of life of persons with disabilities. Research may be supported that

is directed toward the characterization, restoration, and/or substitution of human functional ability or cognition, or to the interaction of persons with disabilities and their environment. Areas of particular interest are disability-related research in neuroengineering and rehabilitation robotics. Emphasis is placed on significant advancement of fundamental engineering knowledge that facilitates transformative outcomes. We discourage applications that propose incremental improvements.

Due Date: October 20, 2015

Funding: \$7,066,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278094>

Agency: National Science Foundation

Program: General & Age-Related Disabilities Engineering

Description: The goal of the GEMSSTAR program 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: October 20, 2015

Funding: \$4,600,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278084>

Agency: National Science Foundation

Program: Interdisciplinary Behavioral and Social Science Research

Description: The Interdisciplinary Behavioral and Social Science Research competition promotes the conduct of interdisciplinary research by teams of investigators in the social and behavioral sciences. Emphasis is placed on support for research that involves researchers from multiple SBE disciplinary fields and that integrates scientific theoretical approaches and methodologies from multiple SBE disciplinary fields. Emphasis also is placed on the significance of expected intellectual contributions that are

likely to yield generalizable insights and information that will enhance theoretical perspectives and advance basic knowledge and capabilities across multiple SBE disciplinary fields.

Due Date: December 1, 2015

Funding: \$10,500,000

Website:

http://www.nsf.gov/pubs/2015/nsf15588/nsf15588.htm?WT.mc_id=USNSF_25&WT.mc_ev=click

Agency: National Science Foundation

Program: Nano-Biosensing

Description: The Nano-Biosensing program supports fundamental engineering research on devices and methods for measurement and quantification of biological analytes. Proposals that incorporate emerging nanotechnology methods are especially encouraged. Areas of interest include: Proposals on multi-purpose sensor platforms that exceed the performance of current state-of-the-art measurement methods. Projects on novel transduction mechanisms and sensor designs suitable for measurement in practical matrix and sample-preparation free approaches. These include error-free detection of pathogens and toxins in food matrices, waterborne pathogens, parasites, toxins, biomarkers in body fluids, and others. Proposals that address highly selective bio-recognition elements which exhibit zero false negative responses.

Due Date: October 20, 2015

Funding: \$7,600,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=276741>

Agency: National Science Foundation

Program: Thermal Transport Processes

Description: The Thermal Transport Processes program supports engineering research aimed at gaining a basic understanding of the thermal transport phenomena and processes that are driven by thermal gradients, and manipulation of these processes to achieve engineering goals. Of specific interest is research that explores active and passive control of the dynamics of thermal processes, and simulations and experiments that bridge and model information across multiple scales. Application areas of interest include: Cooling and heating of components, devices and equipment.

Due Date: October 20, 2015

Funding: \$7,047,000

Website: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=278089>