STUDENT *Spotlight*

Bridget Kimsey

Community College of Vermont

Pictured from L-R, former Secretary of the Agency of Commerce and Community Development Patricia Moulton presents CCV undergraduate Bridget Kimsey with the VT EPSCoR Native American Scholarship Award. Bridget is one of nine students nationally to attend the 2016 National Institutes of Health annual NIH Visit Week for Native American students.

Read more about Bridget on the Foundation's website.

EPSCoR IDeA

Year-end wrap up | December 2016

VAN SCOYOC ASSOCIATES

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A note from Stu Van Scoyoc

Thank you all for your participation in the December joint Board meeting. We had very thoughtful discussions on important matters related to the EPSCoR/IDeA programs and heard from important stakeholders and thought leaders that will help shape our planning moving forward.

The 114th Congress has adjourned and many important funding decisions have been deferred until next year. The 115th Congress will convene on January 3, 2017, and we expect a lot of legislative activity early in the year ranging from tax reform to Obamacare repeal to the completion of the fiscal year (FY) 2017 appropriations process.

Prior to adjourning, Congress approved a Continuing Resolution (CR) that will fund most federal government operations until April 28, 2017. It maintains the current budget cap level of $1.07 trillion put into place under the Budget Control Act of 2011. The CR continues policy and funding provisions included in currently enacted FY2016 Appropriations legislation and does not include controversial riders or major changes in existing federal policy.

The CR contains $5.8 billion for the Department of Defense and $4.3 billion for the State Department/USAID to support military and diplomatic efforts to fight ISIS and terror around the globe, to provide essential resources that will ensure our national security, and to increase the readiness of our troops. It also includes $4.1 billion in disaster relief funding to address damages caused by recent natural disasters, including Hurricane Matthew, floods, drought, and other severe weather events.

The CR also includes funding for the recently approved 21st Century Cures Act of 2016. The CR provides $872 million which will boost critical medical research, drug approval, and drug abuse efforts. This includes $20 million for the Food and Drug Administration Innovation account, $352 million for the National Institutes of Health Innovation account, and $500 million for states to respond to the opioid abuse crisis. You will find additional details about this important piece of bipartisan legislation in this newsletter.

"In addition to reaffirming the importance of the EPSCoR program, the American Innovation and Competitiveness Act aims to maximize basic research opportunities, reduce administrative burdens for researchers, encourage scientific entrepreneurship, and promote oversight of taxpayer-funded research. "

Finally, Congress also completed work on the reauthorization of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act. In addition to reaffirming the importance of the EPSCoR program, the American Innovation and Competitiveness Act aims to maximize basic research opportunities, reduce administrative burdens for researchers, encourage scientific entrepreneurship, and promote oversight of taxpayer-funded research. The legislation also promotes diversity in STEM fields and incentivizes private-sector innovation. Highlights from this bill are also included in this newsletter.

While 2016 was an interesting and unusual year in politics, we expect an extremely interesting and busy 2017 in the nation's capital. Our Foundation and Coalition teams are working hard to be prepared at the start of the 115th Congress to hit the ground running.

Sincerely,

H. Stewart "Stu" Van Scoyoc
President, Van Scoyoc Associates

Recap of December joint board meeting

Members of the EPSCoR/IDeA Foundation and Coalition met for a joint board meeting on December 6th to discuss the year's accomplishments, plan for the 115th Congress, and hold an in-depth discussion about the future of the EPSCoR/IDeA programs. The agenda focused on data collection, evaluation and communicating a strong message for EPSCoR/IDeA.

Following the introduction from Foundation Chairman Dr. Michael Khonsari, the group listened to a presentation from Dr. Kelvin Droegemeier from the University of Oklahoma, a longtime member of the National Science Board. Dr. Droegemeier spoke about how we convey EPSCoR/IDeA successes and impacts in our states. Dr. Droegemeier also discussed the challenges facing the programs.

The Boards continued their ongoing discussion on data collection with Dr. Jason Owen Smith from the Institute for Research on Innovation and Science (IRIS) at the University of Michigan. Dr. Owen Smith informed the group about the benefits of IRIS to highlight the economic impact of research and development dollars.

Dr. Denise Barnes, the Section Head for NSF EPSCoR gave a presentation on the findings and recommendations made in recent studies of the EPSCoR program and also introduced representatives from the Office of Integrative Activities (OIA) Evaluation and Assessment Capability (EAC) Section.

Finally, the group heard from a new team member, Chris Barron, Director of Communications at VSA, who will be working with the organization on communications. This is a topic that has been the subject of much discussion in recent years and we welcome Chris to the team.

In summary, the meeting will serve as the foundation for developing a "simple" message on the importance and benefits the EPSCoR/IDeA programs bring to their states, collection of critical data to support that message, and the development of an effective communications message.

The Boards thank our guests for their time, insight, and leadership on issues critical to nationwide federal research and development!

American Innovation and Competitiveness Act

Before adjourning, Congress approved the American Innovation and Competitiveness Act, legislation to reauthorize the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act from 2010.

The legislation seeks to maximize basic research opportunities, reduce administrative burdens for researchers, and encourage scientific entrepreneurship while promoting diversity in STEM fields and incentivizing private-sector innovation, and aims to improve manufacturing. The legislation directly impacts programs within the National Science Foundation (NSF), National Institute of Standards and Technology (NIST), and the White House Office of Science and Technology Policy (OSTP).

EPSCoR Reaffirmation and Update

- Recognizes that the EPSCoR structure requires each participating state to develop a science and technology plan suited to state and local research, education, and economic interests and objectives;
- Credits EPSCoR with advancing the research competitiveness of participating states, improving awareness of science, promoting policies linking scientific investment and economic growth, and encouraging partnerships between government, industry, and academia;
- Affirms that EPSCoR proposals are evaluated through a rigorous and competitive merit-review process;
- Includes a Sense of Congress stating that maintaining the nation's scientific and economic leadership requires the participation of talented individuals nationwide, EPSCoR investments into State research and education capacities are in the federal interest and should be sustained, and EPSCoR should maintain its experimental component by supporting innovative methods for improving research capacity and competitiveness;
- Recommends program managers to consider such modifications that more closely align with current agency priorities and initiatives, focus on achieving critical scientific, infrastructure, and educational needs of that agency, and encourage collaboration between EPSCoR-eligible institutions and researchers, including with institutions and researchers in other States and jurisdictions;
- Directs EPSCoR program officials to improve communication between State and Federal agency proposal reviewers and continue to reduce any associated administrative burdens; and,
- Adapts the National Academies of Science recommendation to rename the program the Established Program to Stimulate Competitive Research (EPSCoR), officially cementing it as a permanent part of the NSF's research portfolio

Maximizing Basic Research

- Reaffirms the appropriateness of NSF's intellectual merit and broader impacts criteria
- Promotes transparency by requiring public notices of grants to justify the project's expenditures and confirm that they align with NSF's priorities
- Includes updates to the Networking and Information Technology Research and Development (NITRD) programs, and the National Institute of Standards and Technology's (NIST's) laboratory and education outreach programs

American Innovation and Competitiveness Act (Continued)

Administrative and Regulatory Burden Reduction

- Establishes an inter-agency working group to provide recommendations on eliminating unnecessary paperwork for researchers and institutions
- Repeals obsolete agency reports and unfunded government programs

Science, Technology, Engineering, and Mathematics

- Establishes a STEM Advisory Panel composed of academic and industry representatives to provide recommendations on federal STEM programs
- Creates a working group to study how to improve inclusion of women and underrepresented individuals in STEM fields and reaffirms the necessity of broadening participation in STEM fields through NSF programs

Leveraging the Private Sector

- Updates prize competition authority to encourage greater participation in federal prize competitions
- Permits federal science agencies to use crowdsourcing as a tool to conduct agency projects

Manufacturing

- Encourages Improved Manufacturing: Adjusts the federal cost-share ratio and implements new accountability and oversight provisions within NIST's Hollings Manufacturing Extension Partnership (MEP) program

Innovation and Technology Transfer

- Authorizes the I-Corps program to help scientists move research from the laboratory to the marketplace.
- Directs NSF to continue awarding translational research grants and strengthen public-private cooperation

21st Century Cures Act

The 21st Century Cures Act reauthorizes the National Institutes of Health (NIH) through 2020 and modifies the federal review and approval processes in an effort to promote the discovery and development of new medical advances and treatments. The legislation will provide $6.3 billion in new funding over 10 years to help achieve those goals. It also includes provisions to improve the nation's mental health treatment system, modify Medicare to address numerous issues and provide a means for small businesses to help their employees buy health insurance.

The legislation modifies current federal processes involving medical research, developing drugs and other treatments, and testing and approving those drugs and treatments in an effort to accelerate the development and delivery of cures to diseases and medical conditions. As part of that effort, it reauthorizes NIH for three years and modifies elements of Food and Drug Administration (FDA) drug and medical device review and approval process.

The 21st Century Cures Act creates three separate "Innovation Accounts" in the Treasury for NIH research, FDA activities and opioid abuse response activities, into which a total of $6.3 billion would be transferred from the general Treasury over 10 years, including $4.8 billion for the NIH (with specified amounts for the Obama administration's cancer "moonshot," precision medicine and brain research initiatives), $500 million for the FDA to implement its drug and medical device review and approval process modifications, and $1 billion (over two years) for opioid addiction treatment and prevention grant programs.

The NIH, FDA and opioid addiction response funding would be in addition to regular discretionary funding for those activities provided through the annual appropriations process and would also have to be provided through annual appropriations measure. However, that additional spending would effectively be exempt from discretionary budget caps. To offset the spending, the measure cancels certain funding from the 2010 health care law, and it requires the sale of oil from the Strategic Petroleum Reserve.

NIH Reauthorization

The three-year discretionary authorization for NIH totals nearly $107 billion: $34.9 billion for FY 2018, $35.6 billion for FY 2019 and $36.5 billion for FY 2020.

One significant change to this version of 21st Century Cures compared to previous versions is that the additional funding provided is discretionary rather than mandatory. This means that the appropriations committee will have to approve the additional funds provided for NIH and FDA each year.

The 21st Century Cures Act will create the NIH Innovation Account which totals $4.8 billion over ten years (2017 to 2026). The NIH Innovation Fund can be used for the following activities:

- Precision Medicine — A total of $1.455 billion over 10 years, including for the advancement of a cohort of individuals to support the goals of the Precision Medicine Initiative, which focuses on medical treatments tailored to individuals based on their specific genetic characteristics.
- Regenerative Medicine — A total of $30 million for fiscal 2017 through 2020 for the NIH to award grants for clinical research to further the field of regenerative medicine using adult stem cells, including autologous stem cells. Grants would be contingent upon the recipient making available non-federal contributions toward the costs of such research.
- Brain Research — A total of $1.511 billion over 10 years for the Brain Research Through Advancing Innovative Neurotechnologies (BRAIN) Initiative, which focuses on understanding the human mind and new ways to treat, prevent and cure disorders like Alzheimer's, schizophrenia, autism, epilepsy and traumatic brain injury.
- Cancer "Moonshot" — A total of $1.8 billion over 10 years for the administration's initiative to support the development of cancer vaccines, more sensitive diagnostic tests for cancer, immunotherapy and the development of combination therapies, as well as research that has the potential to transform the scientific field but is inherently higher-risk.
- $500 million for the Food and Drug Administration (over 10 years) to implement provisions of Title III to move drugs and medical devices to patients more quickly, while maintaining the same standard for safety and effectiveness
- $1 billion (over 2 years) for grants to states to supplement opioid abuse prevention and treatment activities, such as improving prevention activities, training for health care providers, and expanding access to opioid treatment programs

21st Century Cures Act (Continued)

NIH Strategic Plan & Administration

The new law requires NIH to issue a six-year strategic plan to outline the direction of biomedical research investments. It also specifies that directors of national research institutes and centers have five-year terms, with no limit to the number of terms that a director may serve.

Among other reporting requirements, the NIH must report on efforts to prevent and eliminate duplicative biomedical research that is not necessary for scientific purposes. It also changes reports of the director of the NIH from biennial to triennial.

The measure includes a range of provisions aimed at reducing the administrative burden for researchers, including a review of regulations related to the disclosure of financial conflicts of interest. It also requires OMB to establish an advisory committee to be known as the research policy board.

Young Emerging Scientists

The legislation modifies loan repayment programs under the Public Health Service Act for NIH researchers by establishing separate programs for intramural and extramural researchers. It provides for payments of up to $50,000 each year of an individual's principal and interest on educational loans, up from the current maximum of $35,000.

In addition, NIH will develop the "Next Generation of Researchers Initiative" to coordinate, develop, modify and prioritize policies and programs to improve opportunities for new researchers. It requires NIH to report to Congress on any actions taken in response to recommendations from the National Academy of Sciences as part of the study on policies affecting the next generation of researchers.

Accelerate Research

The NIH's National Center for Advancing Translational Science was established in FY 2012 with a focus on getting disease cures and treatments to more patients more quickly. The measure removes certain restrictions on the center's conduct of Phase II and III clinical trials for rare diseases.

It provides NIH with more flexibility to use "other transaction" authority, a special process used by federal agencies for obtaining high-risk, high-reward research and development or prototypes from commercial sources outside of federal procurement regulations (i.e., other than by grant or contract). In order to use this authority, the NIH institute or center must submit a proposal and receive approval.

It also directs NIH to utilize its prize authority to support innovation prize competitions to advance biomedical science and improve health outcomes for serious diseases. NIH must track the effect of innovations funded by prize competitions and their effect on federal expenditures.

Dr. Chris Lawson is the new chair of the EPSCoR/IDeA Coalition of States

The EPSCOR/IDeA Coalition of States is please to announce that Dr. Chris Lawson from the University of Alabama at Birmingham has been elected to serve as the next chairman of the Coalition Board. Dr. Lawson was the Vice-Chair of the Coalition.

Dr. Lawson is a Professor of Physics, with research interests in nonlinear optics and optical sensing. He has been Principal Investigator (PI) for over 40 research and education grants valued at more than $20 million, and he established the Center for Optical Sensors and Spectroscopies at UAB in 2004.

Dr. Lawson received his B.S. and Ph.D. in Physics at Oklahoma State University and his M.S. Degree in Physics at the University of Colorado. In addition to his role as Professor of Physics at UAB, since 2010 Dr. Lawson has served as the Executive Director of Alabama EPSCoR which includes the seven Ph.D. granting institutions within the state, the Alabama Department of Commerce, the Alabama Commission for Higher Education, and the Economic Development Partnership of Alabama.

Dr. Lawson also serves as Director of the Graduate Research Scholars Program (GRSP); a statewide award program designed to attract the best and brightest graduate students and increase Alabama's high-tech human resources. To date, a total of 48 M.S. degrees and 146 Ph.D. degrees have been awarded to nearly 250 recipients of GRSP awards.

Prior to joining UAB, Dr. Lawson performed defense related research in nonlinear optics, fiber optics, optical sensors, and optical system design at BDM International in McLean Virginia as Manager and then as Director / Principal Scientist of Optical Sciences.

The EPSCoR/IDeA community congratulates Dr. Lawson on his new leadership position and looks forward to working with him next year!

Trump Administration Transition Update

The incoming Trump Administration continues to announce appointments to key positions in the White House. The United States Senate will begin confirmation hearings for these appointees in January 2017. The following appointments have been announced so far:

- Department of Defense - Retired General James Mattis
- Department of State - Rex Tillerson
- Department of Homeland Security - Retired General John Kelly
- Department of Energy - Former Texas Governor Rick Perry
- Department of Interior - Rep. Ryan Zinke (R-MT-At Large)
- Department of Commerce - Wilbur Ross
- Department of Education - Betsy DeVos
- Department of Health and Human Services - Rep. Tom Price (R-GA-06)
- Department of Housing & Urban Development - Dr. Ben Carson
- Department of Labor - Andrew Puzder
- Department of Transportation - Elaine Chao
- Department of Treasury - Steven Mnuchin
- National Security Advisor - Retired Army Lt. Gen. Michael Flynn
- CIA Director - Rep. Mike Pompeo (R-KS-04)
- Attorney General - Sen. Jeff Sessions (R-AL)
- Environmental Protection Agency - Scott Pruitt
- Small Business Administration - Linda McMahon

Science in the News

- Is Donald Trump pushing more scientists toward political activism?
- Scientists are frantically copying U.S. climate data, fearing it might vanish under Trump
- The Top 11 Science and Health Stories of 2016

BUDGET UPDATE

FY2017 Federal Research & Development Snapshot

HIGHLIGHTS

- The House Appropriations Committee proposed to boost NIH funding by $1.25 billion over the current level of $33.3 billion, while the Senate Appropriations Committee proposed a $2 billion increase.
- Both the House and Senate Appropriations Committees propose an increase for NASA in FY2017 that is $1 billion more than the president's budget request.
- The House and Senate have both proposed increasing the DOE Office of Science by $50 million over the FY2016 funding level of $5.35 billion.
- The Senate Appropriations Committee bill would hold funding for NSF research steady at $6.034 billion while the House would increase it by less than 1 percent to $6.079 billion. This is in line with the president's budget request which also proposed $6.079 billion in discretionary spending for NSF research next year.

FY2017 EPSCoR/IDeA Budget Summary

Numbers in millions of dollars

Agency	FY15 Omnibus	FY16 Omnibus	FY17 Budget Request	FY17 Coalition Goals	FY17 House	FY17 Senate
NSF	159.69	160.0	162.13*	170.0	170.7	160.0
NIH	273.325	320.8	320.84	331.14	333.3	333.4
DOE	10.0	15.0	8.5	20.0	10.0	20.0
USDA	48.7**	52.5**	N/A	56.25**	56.25**	56.25**
NASA	18.0	18.0	9.0	25.0	18.0	18.0
Totals	**509.72**	**566.3**	**500.47*** **	**602.39**	**588.25**	**587.65**

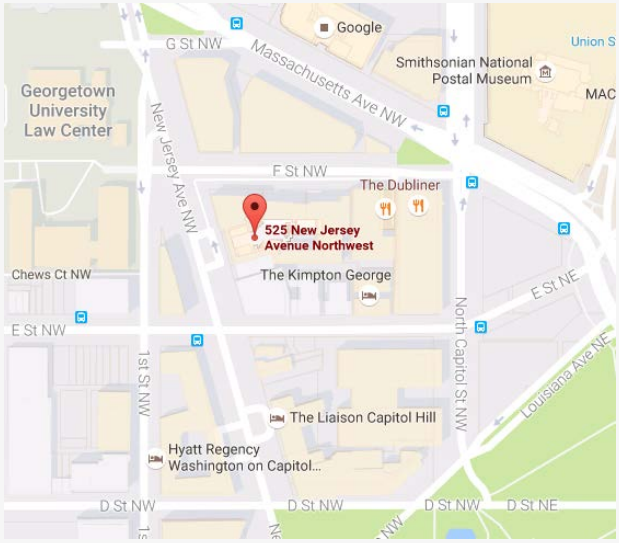
* *Represents discretionary spending only*
** *Represents 15 percent of the Agriculture and Food Research Initiative (AFRI) budget*
*** *Figure does not include AFRI funding*

Upcoming Events

February 27-28, 2017

2017 Coalition of EPSCoR/IDeA States Annual Meeting

Washington Court Hotel
525 New Jersey Avenue NW
Washington, D.C. 20001



For accommodations:
Mention the Van Scoyoc Companies corporate rate when calling the Hotel George, or
Use code 21813 for a discounted rate at the Hyatt Regency—Capitol Hill

Follow the EPSCoR/IDeA Coalition on Twitter @EPSCoR_IDeA.

The Coalition has a new website!
Find important legislative updates and other information from the EPSCoR/IDeA Coalition.
This site will be updated as the new legislative session progresses.
www.epscorideacoalition.org

EPSCoR/IDeA FOUNDATION

Check out the EPSCoR/IDeA Foundation's website at www.epscorideafoundation.org