

ASA Participates in 5th Annual Climate Science Day on Capitol Hill

Steve Pierson, ASA Director of Science Policy

Four members of the ASA Advisory Committee for Climate Change Policy (ACCCP) went to Washington, DC, in early February to participate in the fifth annual Climate Science Day (CSD) on Capitol Hill. Sponsored and organized by the Climate Science Working Group—which is comprised of some 20 professional associations and other scientific organizations—the event brings scientists of many disciplines together to meet with members of Congress or their staff to discuss climate change and how it may affect a particular state or congressional district. The principal goals are for members or their staff to discuss climate science with scientists from their state with expertise on the topic and for them to contact the scientists should questions come up related to climate science.

Leonard Smith of the London School of Economics and Pembroke College, Oxford, who has participated in each of the five CSDs, noted how his experience this year was different than years past: “This year, we had Republican members openly discussing the challenges posed by climate change and suggesting common political ground could be found; that is a big change from previous years.” He added, “On CSD in 2011, the House was still trying to get a budget together, making it difficult to have a conversation. This year, a member of Congress had to pop out of our meeting to vote on the Keystone XL pipeline and our next meeting was delayed as the member was returning from the same vote. This seemed to actually lead to a more relaxed discussion of the science and direct, well-targeted questions about climate from the member.”

2013 CSD veteran Michael Stein of The University of Chicago, like Smith, also found a greater willingness among some Republican staffers to acknowledge that anthropogenic climate change is an issue Congress will need to address, and sooner rather than later. A highlight of Stein’s visit was the opportunity to meet with Bill Foster, an Illinois representative and physicist who engaged in fairly detailed discussions about the storage challenges related to renewable energy.

The Ohio State University’s Peter Craigmile—also a returning CSD participant—observed, “As



in previous years, staffers on Capitol Hill were very interested in learning about local impacts of climate change, especially from extreme storms. We also had many discussions about the role that understanding climate has to play in energy policy.”

The fourth ASA participant was Bruno Sanso of the University of California, Santa Cruz, chair of the ACCCP and a first time CSD participant.

This year’s CSD had 22 participants sponsored by the American Chemical Society; American Geophysical Union; American Meteorological Society; Ecological Society of America; and the agronomy, crops, and soil societies, among others. The 11 teams of scientists of different disciplines each had 6–10 meetings with personal offices and committee staff.

To prepare CSD participants for their day on the Hill, the participants spent the previous afternoon hearing from professional society staff and congressional Hill staff about how to have successful meetings on the Hill and about the objectives of CSD. They also were given time to meet with their teammates to plan for each of their scheduled meetings. Three of the ASA participants—all authors of the ASA whitepaper “Statistical Science: Contributions to the Administration’s Research Priority on Climate Change” (www.amstat.org/policy/pdfs/ClimateStatisticsApril2014.pdf)—also met with program directors at the National Science Foundation to share the whitepaper, learn more about how to get statisticians involved in NSF-funded climate research, and make the case that such engagement would contribute to the science. ■

Jim Elsner (Florida State University) and Leonard Smith (right) discuss local climate issues with a Florida representative on the House Science, Space, and Technology Committee.

SCIENCE POLICY

FY16 Budget Requests Position NIH, NSF, and Federal Statistical Agencies Well for Congressional Deliberations

Steve Pierson, ASA Director of Science Policy

President Obama's proposed budget for fiscal year 2016 (FY16) contains healthy increases for the NIH, NSF, and many federal statistical agencies. However, realizing the proposed increases will be a challenge with sequestration levels back in place. (The Bipartisan Budget Act of 2013 suspended sequestration for FY14 and FY15.)

The ASA urges its members and the broader statistical community to contact their senators and representative to support increases for the agencies you most rely on.

NIH and NSF

The FY16 request for NIH is \$31.3 billion, an increase of \$1 billion (3.3 %) over the FY15 budget. Of the requested increase, \$200 million is for the president's new Precision Medicine Initiative (PMI) and another \$70 million is for his BRAIN Initiative, which would bring its total funding to \$135 million. If fully funded, NIH officials estimate it could fund 1,200 more research grants than it can in FY15, raising its proposal success rate from an estimated 17.2% in FY15 to 19.3%.

Of the \$200 million proposed for NIH's portion of the PMI, \$70 million would—according to the White House PMI fact sheet—go to the National Cancer Institute to “scale up efforts to identify genomic drivers in cancer and apply that knowledge in the development of more effective approaches to cancer treatment.” \$130 million is for the “development of a voluntary national research cohort of a million or more volunteers to propel our understanding of health and disease and set the foundation for a new way of doing research through engaged participants and open, responsible data sharing.” The NIH documents characterize the cancer component of the PMI as nearer-term goal and the broader applications to health and disease as a longer-term goal.

According to Francis Collins's FY16 request slides, the \$70 million in additional BRAIN Initiative funding in FY16 at NIH would be used to develop innovative technologies to advance basic neuroscience and new, noninvasive tools for human

brain imaging; generate methods for classifying the brain's diverse cells/circuits; and improve technologies for recording and modulating groups of cells that act together in circuits.

For Big Data to Knowledge (BD2K), the request proposed an increase of \$19.5 million to \$63 million. (The FY15 proposed level was for \$88 million.)

The \$380 million (5.2%) increase for NSF would raise its budget to \$7.7 billion, in part to support the following four cross-foundation initiatives:

- Understanding the Brain (\$144 million)
- Risk and Resilience (\$58 million)
- Innovations at the Nexus of Food, Energy, and Water Systems (\$75 million)
- Inclusion Across the Nation of Communities of Learners that have been Underrepresented for Diversity in Engineering and Science (NSF includes \$15 million)

The request also supports funding for the following ongoing NSF-wide priorities:

- Clean Energy
- Cyber-Enabled Materials, Manufacturing, and Smart Systems (CEMSS)
- Cyberinfrastructure Framework for 21st-Century Science, Engineering, and Education (CIF21)
- Innovation Corps (I-Corps)
- NSF Research Traineeship (NRT)
- Research at the Interface of Biological, Mathematical, and Physical Sciences (BioMaPS)
- Science, Engineering, and Education for Sustainability (SEES)
- Secure and Trustworthy Cyberspace (SaTC)

Of the \$380 million proposed increase, nearly \$100 million is for the Education and Human Resources (EHR) Directorate, which would amount

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President Obama's Precision Medicine Initiative was rolled out on January 30. Read more here: www.amstat.org/misc/StatsBachelors2003-2013.pdf

to an 11% increase for the directorate. \$253 million is the requested increase for NSF's research and related activities, which would be a 4% increase. It is worth noting that the FY15 request similarly favored HER, but Congress did not approve. For the NSF Division of Mathematical Sciences, the FY16 request is for \$235.5 million, \$3.74 million (1%) above FY15.

Federal Statistical Agencies

The proposed increases for the federal statistical agencies are generally ambitious, signaling the strong support of the administration for federal statistical data.

The requested increase for the Bureau of Economic Analysis (BEA) is \$14 million (14%), which includes \$5 million for the move of BEA from downtown Washington, DC, to the headquarters of the U.S. Census Bureau in Suitland, Maryland. The remaining part of the increases is for three initiatives to better understand small businesses, energy components of our economy, and trade services.

The requested increase for the Bureau of Justice Statistics (BJS) is \$20.4 million (50%), a large portion of which is to provide subnational estimates from the National Crime Victimization Survey.

The Energy Information Administration (EIA) has requested an increase of \$14 million (12%) and proposed five new initiatives.

The National Center for Education Statistics (NCES) has a requested increase of \$42 million (18%) to conduct numerous surveys.

The National Center for Science and Engineering Statistics (NCSES) would see a \$3.6 million increase (6.3%) for numerous projects. Similarly, the National Agricultural Statistics Service (NASS) would see a \$7.6 million (4.4%) increase and the Internal Revenue Service Statistics of Income Division (SOI) would see a \$1.8 million (5%) increase.

The National Center for Health Statistics (NCHS) requested \$5 million to improve its vital statistics program. The NCHS request also seeks an additional \$12 million from the Prevention and Public Health Fund for additional content and/or sample increases for the National Health Interview Survey and National Ambulatory Medical Care Survey.

The increase for the U.S. Census Bureau is especially large, \$412 million (38%), because of its ramping up of its 2020 decennial census work and what they are calling a re-engineered census, which, according to Department of Commerce Congressional Justification, "includes sweeping design changes, including new methodologies to conduct in-field address canvassing, innovative ways of optimizing self-response, the use of administrative records to

Table 1: FY16 Budget Requests for NIH, NSF, and 13 Primary Federal Statistical Agencies

	FY13	FY14	FY15	FY16 Request	FY16 Change from FY15
Research Agency (in millions of dollars)					
NIH	29300	30070	30311	31300	3.3%
NSF	6884	7172	7344	7724	5.2%
Statistical Agency (in millions of dollars)					
BEA	89.8	95.0	96.3	110.0	14.2%
BJS	41.3	45.0	41.0	61.4	49.8%
BLS	577.2	592.2	592.2	632.7	6.8%
BTS	26.0	26.0	26.0	29.0	11.5%
Census	841.7	945.0	1088.0	1500.0	37.9%
EIA	99.5	117.0	117.0	131.0	12.0%
ERS*	71.4*	78.1*	85.4	86.0	0.7%
NASS*	166.0*	161.2*	172.4	180.0	4.4%
NCES	226.0	235.0	232.0	274.4	18.3%
NCHS*	138.7*	140.0*	155.4	160.4	3.2%
NCSES	41.6	47.1	58.3	62.0	6.3%
ORES	27.5	29.0	30.0	27.0	-10.0%
SOI	33.1	35.0	36.2	38.0	5.0%

*ERS, NASS, and NCHS went through accounting changes last year, so the FY15 levels aren't comparable with the FY13 and FY14 levels.

reduce the nonresponse follow-up workload, and the use of technology to replace tasks previously accomplished manually."

The Bureau of Labor Statistics (BLS) would see a \$41 million increase (6.8%), which includes \$25 million to improve the Job Openings and Labor Turnover Survey and \$10 million to restore funding for the International Price Program export price indexes.

The request for the Bureau of Transportation Statistics (BTS) is a \$3 million (11%) increase to conduct the intercity passenger travel survey and vehicle inventory and use survey.

The Economic Research Service (ERS) and Social Security Administration Office of Research, Evaluation, and Statistics (ORES) fare the worst in the FY16 request, with the former getting a 1% and the latter a 10% cut.

Details on the FY16 requests can be found in the ASA Community blog entry at <http://bit.ly/1xcSrEs>, where one also can find links to the analyses from the Consortium of Social Science Associations and Council of Professional Associations on Federal Statistics. ■

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Information is available at <http://1.usa.gov/1ByXMal> and www.nih.gov/precisionmedicine.