NSF Reauthorization: A Discussion Draft and a Set of Hearings

The House of Representatives has left town until December 2. The Senate, having changed the filibuster rule for Executive Branch nominees, is adjourned until December 9. The negotiations between the House and Senate Budget Committee chairs, Rep. Paul Ryan (R-WI), and Sen. Patty Murray (D-WA), to find an agreement that will allow the FY 2014 appropriations to move forward before the current Continuing Resolution expires on January 15, 2014, have not succeeded so far.

With the Coburn amendment still restricting the funding of political science projects by the National Science Foundation (NSF), with the consequences of shutdown and sequester still taking their toll on all government agencies, and the July-nominated France Cordova still not confirmed as the new NSF director, two congressional committees turned their attention to a different, but
somewhat related issue.

The Senate Commerce, Science and Transportation Committee, chaired by Sen. Jay Rockefeller (D-WV), and the House Subcommittee on Research and Technology, chaired by Rep. Larry Buschon (R-IN), held hearings on reauthorizing the America COMPETES (Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science) Act, which includes provisions related to the NSF.

COMPETES or FIRST

As speakers at both hearings, the Senate's on November 6, and the House's on November 13, reminded everyone, the COMPETES legislation emerged in 2007 following the publication of a National Academies' report, *Rising Above the Gathering Storm*, that decried a crisis in funding for research in the physical sciences and engineering and a lack of attention to Science, Technology, Engineering, and Math (STEM) education. Enacted with bipartisan support in 2007 and then again in 2010, COMPETES authorized the doubling of NSF funding, among many other provisions. The 2010 version also tried to codify the second of NSF's merit review criteria: demonstrating broad societal impacts.

The House Science, Space, and Technology Committee, chaired by Rep. Lamar Smith (R-TX), has decided to split COMPETES into two bills and, with the help of clever acronym developers, is now calling one bill FIRST (Frontiers in Innovation, Research, Science, and Technology), which includes NSF, STEM Education, the National Institute of Standards and Technology, and the White House Office of Science and Technology. (If they had changed two letters, they could have named the bill after former Sen. Majority Leader Bill Frist (R-TN), a medical doctor.) The second bill, which deals with the Department of Energy, is called EINSTEIN (Enabling Innovation for Science, Technology, and Energy in America Act.)

Throughout most of 2013, Chairman Smith and his staff have been wrestling with the scientific community and NSF over the possible provisions in the FIRST bill. In the, spring the Committee released something they called the High Quality Research Act, which generated enormous pushback from the scientific community regarding the perception that it wanted to muck around with NSF's merit review process, viewed as the "gold standard" by many in the U.S. and abroad.

The Committee also questioned certain individual grants awarded by NSF, based on interpretations of titles and abstracts. Many of these grants were supported by NSF's Social, Behavioral, and Economic Sciences directorate, leading to a fear that the Committee would do harm to these sciences in the coming NSF reauthorization.

A number of meetings have taken place between the House Committee Chairman and his staff with the hierarchy of NSF and the National Science Board (NSB), the Foundation's policy overseer, to see if some accommodation could be reached on the concerns of the congressional committee.

Early this month, the House Science Committee released a Discussion Draft of FIRST. The November 13 hearing focused on the provisions of this document. The draft did not include dollar figures for the agencies, as is usual in a reauthorization bill. The Committee suggested it was awaiting the outcome of the budget negotiations before including funding numbers.

Discussion Draft Provisions Questioned

One section of the draft has drawn the attention of NSF and the broader scientific community. Section 104, called “Greater Accountability in Federal Funding for Research.” It requires, “prior to any award of Federal funding,” that the NSF director determine and then “publish on its website a written justification” as to whether the award “is in the national interest” and is “worthy of federal funding.” In addition the award must achieve one or more of the following goals: a) increased economic competitiveness of the United States; 2) advancement of the health and welfare of the American public; c) development of a STEM workforce and increased public scientific literacy in
the United States; d) increased partnerships between academia and industry in the United States; and f) support for the national defense. Ranking Subcommittee member Rep. Dan Lipinski (D-IL) asked whether these provisions were necessary. He further wanted to know what "the national interest" meant in this context.

The witnesses at the hearing included two former NSF Assistant Directors, Tim Killeen (Geosciences Directorate) and Richard Buckius (Engineering Directorate), Dan Sarewitz of the Center for Science Policy Outcomes at Arizona State University, and James Brown, head of the STEM Education Coalition.

Killeen, now the President of the Research Foundation for SUNY and the Vice Chancellor for Research of the SUNY system, used Hurricane Sandy and the response to it as an examples of illustrating his first principle of any NSF reauthorization: "Make a strong statement that the United States sees robust funding across all disciplines of basic scientific and engineering research as a top national priority." He cited NSF's Organic Act of 1950 that called for the new agency to "promote the progress of science, to advance the national health, prosperity and welfare, [and] to secure the national defense" as an already existing set of provisions for NSF awards.

Buckius, now Vice President for Research at Purdue, testified that he thought that these requirements could be met with "a slight increase in administrative load." He objected however, to the clause about the prior publication of awards and associated information, arguing it "will severely compromise the [merit review] process and add tremendous administrative burden."

Sarewitz, using The Economist's October 19th cover story "How Science Goes Wrong" as a starting point, argued that problems with science "lie with the institutions and cultures of science, and thus will not likely be solved without incentives for change that come from outside of the science enterprise itself." With regard to Section 104, Sarewitz called the provision as proposed "a meaningless level of rubber stamping to the grant approval process." Instead, he suggested a post-review accountability process that would ensure that peer review panels have given "full consideration," to both of NSF's review criteria: "intellectual merit" and "broader impacts."

He also focused on another function that a post-review accountability process could serve, which is to identify over-hyped proposals. This should be done rigorously, he argued, "by analyzing the specific claims and promises that are made in the proposal, and assessing the plausibility on the basis of a broader understanding of the state of the field being researched, as well as the technical and institutional capabilities available to the grant applicant."

Provision on the Social and Behavioral Sciences

Not specifically mentioned during the hearing, the discussion draft also includes in Section 105 some rather strange language concerning the social and behavioral sciences. The Section states: "A directorate of the Foundation other than the Directorate for Social, Behavioral, and Economic Sciences (SBE) may fund social and behavioral science research focused on its mission areas if such research is determined to be a higher priority than other research in that directorate's mission portfolio."

In his opening statement at the hearing, Lipinski made it clear that he believes that "there is ample evidence that this [SBE] research is just as important as any NSF conducts." He argued that "any reauthorization of NSF should provide sustainable funding to all scientific disciplines and not impose any restrictions or conditions on any specific types of research." This is echoed in a draft bill prepared by the Democrats on the House Science, Space, and Technology Committee, led by Ranking Member Rep. Eddie Bernice Johnson (D-TX), which also makes a strong statement that NSF should continue to support "unfettered, competitive, merit-reviewed basic research across all fields of science and engineering, including the social and behavioral sciences."

Senator Alexander Still Wants to Double NSF Funding
The Senate hearing on November 6 included an appearance by Sen. Lamar Alexander (R-TN) as a witness. Alexander was a key player in the enactment of the original COMPETES legislation (at the moment no new acronyms from the Senate.) He told the panel it was time “to finish the job” of the earlier legislation and reiterated the call for doubling the budgets of the NSF and other agencies in the bill in seven years. Like the *Rising Above the Gathering Storm* report, he once again raised the specter of the loss of U.S. leadership in science, technology, and innovation. He noted the bipartisan approach that led to COMPETES and said the Committee’s role was to “reauthorize goals” and the appropriators (now including him) would face the realities of the actual spending decisions.

Kelvin Droegemeier, National Science Board Vice Chairman and Vice President for Research at the University of Oklahoma, testified and strongly reiterated the Board's support for NSF funding for all the sciences. He defended NSF’s merit review system, noting that the Board had recently re-examined the criteria of Intellectual Merit and Broader Impacts. He also referenced Nobel Prize winner Alvin Roth’s research in economics that led to the facilitation of kidney exchanges (see *Update, September 23, 2013*).

Chairman Rockefeller and new Committee member Sen. Ed Markey (D-MA) made strong statements decrying sequestration and the recent government shutdown and their impact on science (see story below). Rockefeller asked if the Senate had the “guts and political will” to act responsibly and continue strong support for the U.S. scientific and innovation enterprise. Sen. Ron Johnson (R-WI) countered by arguing that the debt and deficits still dwarfed all other considerations with regard to federal funding.

Most of the rest of the hearing focused on the testimony of Maria Klawe, who discussed the shortage of computer science majors, particularly women, and how programs at Harvey Mudd, the college she heads, have made great progress in starting to solve this problem. Sens. Amy Klobuchar (D-MN) and Maria Cantwell (D-WA) were quite impressed.

What happens next is hard to determine. With very little time left on the legislative calendar for 2013, it appears all of this will get carried over into the second session of the 113th Congress in 2014. The discussion draft has certainly fulfilled its job of promoting a lot of reactions, but without a budget agreement, a possible full-year Continuing Resolution at FY 2013 levels still looming, and a House and Senate headed down different paths this is one reauthorization that may not occur no matter what the acronym.

**Senate HELP Panel Examines Ensuring Access to Higher Education by Simplifying Federal Student Aid**

On November 14, the Senate Health, Education, Labor and Pensions (HELP) Committee held a hearing to examine the federal financial aid process and how it can be made more accessible and effective through simplification. HELP Chairman Sen. Tom Harkin (D-IA) began by stating that students from wealthy families are seven times more likely to have earned a bachelor’s degree by the age of 24 than those from low-income families. The federal financial aid system -- if working as it should -- would go a long way to closing that gap. If the process were simpler, he argued, more families and potential students would utilize it, resulting in a cyclical change that would have reverberations through the entire economy. Harkin indicated that the purpose of the hearing is to “take a look at what’s working, what’s not, and what needs to be done.”

The witnesses for the hearing were Bridget Long, Academic Dean and Professor of Education, Harvard Graduate School of Education; Kim Cook, Executive Director, National College Access Network; Judith Scott-Clayton, Professor of Economics and Education, Columbia University; and Kristin Conklin, Founding Partner, HCM Strategists.

Ranking Member Sen. Lamar Alexander (R-TN) demonstrated the necessity of reforming the federal student aid process by displaying the application in its current state -- 10 pages of application with 68 pages of instruction -- or in his words, “lots of pages of well-intentioned clutter.”
Long asserted that the persistent gaps to college access by family income can be attributed to three barriers: financial needs, academic preparation, and complexity of enrollment for financial aid. She continued that empirical research has shown financial aid access has a positive impact on short-, medium-, and long-term outcomes. In a small-scale test of a streamlined FAFSA application, 30 percent more high school students attended college. Cook also stressed the importance of simplifying financial aid, stating that it encompasses what she called the "three A's of college success": awareness, affordability, and access. She believes that financial aid information should be presented earlier in the application process, comparing the current system to buying a car or house before finding out what your financing options are.

Scott-Clayton asked the, in her opinion, too-frequently-asked question: Is college worth it? According to her, the answer is a "resounding yes," and that this is even asked at all comes from misconceptions about college access. Many students, she said, put off college as an option not because they have no desire to go, but because the decision is overwhelming. Congress can go a long way to alleviating these barriers by prorating Pell Grants based on individual course loads and by restructuring how student loans are repaid. Conklin reiterated much of what Scott-Clayton said: a more accessible federal student aid program would increase access and outcomes by helping more students see that not only is college possible, it can be affordable. They agreed that the biggest winners of a reformed system would be those who are largely marginalized currently.

In questioning, Sen. Bob Casey (D-PA) brought up the possibility of personalized help for those applying to federal financial aid as a way of increasing access. Scott-Clayton responded that studies have demonstrated a meaningful impact at small scales of a personalized guidance system, but she was concerned it would be difficult to scale up both in cost and in effectiveness. Further, she said a very effective use of one-on-one help would come from an "intervention" for students who have accepted financial aid but over the summer ultimately decide not to attend college. She finished by stating that this could be more effective and cheaper if the financial aid application itself were simplified.

Sen. Tammy Baldwin (D-WI) inquired about how this program could be better adapted to focus on the needs of non-traditional students and those who focus on a trade or occupational certificate. Long responded that she agreed with the Senator's concerns and that any changes to federal financial aid must take into account programs that are not of the traditional earned-credit type. Conklin said that simplification of the financial aid process would go a long way in responding to the needs of non-traditional students. Alexander concluded the briefing on a similar note, stating that simplifications to the system would "change the fiction that people believe they can't go to college."

---

**Dying Young: Why Your Social and Economic Status May Be a Death Sentence In America**

On November 20, the Primary Health and Aging Subcommittee of the Senate HELP (Health, Education, Labor and Pensions) Committee held a hearing to examine the relationship between socio-economic status and health in America. This hearing focused on themes similar to those brought up in a briefing this September on "What's Ailing America: Shorter Lives, Poorer Health," sponsored by the Coalition for the Advancement of Health Through Behavioral and Social Sciences Research (CAHT-BSSR), a COSSA-organized coalition (see [Update, October 7, 2013](#)). The witnesses for the November 20 hearing were Steven Woolf (who was a panelist at the September briefing), Director, Center on Society and Health and Professor of Family Medicine and Population Health, Virginia Commonwealth University; Lisa Berkman, Director, Harvard Center for Population and Development Studies; Nicholas Eberstadt, Henry Wendt Chair in Political Economy, American Enterprise Institute; David Kindig, Professor of Population Health Sciences, University of Wisconsin; Sabrina Shrader, Masters of Social Work student; and Michael Reisch, Professor of Social Justice, University Maryland School of Social Work.
In his opening statement, Subcommittee Chairman Sen. Bernie Sanders (I-VT) laid out the importance of this hearing: “I think people would be shocked” when they learn of the disparity in quality of life from one part of the country to another, he said. As a nation, America is far behind many, if not most, developed countries in the world in terms of life expectancy, and some American counties have life expectancies lower than many Sub-Saharan African nations. The purpose of this hearing, Sanders concluded, is to examine why some people today are living shorter, sicker lives than their parents and what can be done to ameliorate the problem.

Woolf began his statement by detailing some troubling facts about health quality in America. American children are less likely to reach the age of five than children in other developed nations; our infant mortality rate is most similar to many countries in central Africa; regional disparities in health quality are stark -- one out of four Virginia deaths, for example, would be prevented if all Virginians had the same quality of health as those in wealthy Fairfax County; Azerbaijan has a higher life expectancy than some areas of Chicago. These striking facts, he said, demonstrate that “economic policy is not just economic policy -- it's health policy.” In other words, “the lower people's income, the earlier they die and the sicker they live,” he declared.

Berkman discussed some of the challenges United States labor policies and practices present for creating positive health outcomes for employees. For instance, studies have shown that when managers are more attentive to work-family issues, employees are half as likely to develop cardiovascular diseases and are much less likely to be diagnosed with diabetes. In her view, the primary problem in policymaking is the tendency to only address "short-term economic turnaround or employment or labor when in fact the spillover to health may be enormous."

Eberstadt pointed out how complex this issue is. For instance, whites, who are much more likely to have visited a doctor, have, on average, lower life expectancy than Latinos or Asians. “If the US only had Latino and Asian Americans, we would be the healthiest country on earth.” These questions demonstrate the complexity of the issue. Similarly, Kindig discussed the importance of a multi-faceted approach to improving across-the-board health outcomes in the U.S. While health care access is important, studies show other factors, such as access to early childhood education, can have an equally important role in an individual's long-term health.

Shrader, a Masters student from McDowell County WV -- the county with the lowest life expectancy for men and second lowest for women in the country -- discussed her life coming out of such an impoverished region. She said that throughout her life, due to her and her family's poverty, any illness or accident was a virtual "death sentence." With the stress this level of poverty places on the daily lives of the people she grew up around, there is no surprise as to the low quality of health and resulting shorter life expectancy of those from the poorest parts of the country. When asked by Sanders specifically what it was about the quality of life in McDowell County that makes health so much worse, Shrader responded that alcohol and drug abuse is widespread, and that everybody consistently fights to pay their bills, heat their homes, and feed their families.

Sen. Elizabeth Warren (D-MA) delved deeper into this problem of low income affecting health and the citizenry more generally. Woolf pointed out that with more low-income families working, due to increased income inequality, the nation's overall workforce will continue to be sicker and less-educated, leading to an inability to compete with workers from other countries with better health outcomes. Reisch raised other issues, such as decreasing mobility among the working class. Working-class families will not attend college and they will be locked into low-income, less-healthy communities, he added. Furthermore, three-fourths of low-income children will remain in their neighborhoods throughout their lives, exacerbating the problems.

Warren and Sanders concluded the hearing by asking the witnesses to give their opinions on how to disrupt this vicious cycle of low income and poor health outcomes. Woolf stated that education reform beginning at the pre-K level is an important first step. He also said that other countries have adopted policies such as extended maternal leave and job and workforce support that have been highly successful. Reisch said that he believes a lot of progress is possible at the community level through developing community health centers and food cooperatives, for example. The consensus
among the witnesses, though, was that improved access to quality education at all levels is imperative in making lasting changes to across the board health outcomes in the United States.

In closing, Sanders summarized the importance of the hearing: "You have shed light on issues that we just don't talk about enough. If we invest in our people and create a healthier, more loving society we create not only a happier society, but we end up saving the taxpayers' money as well."

### AHRQ Director Proposes New Agency Priorities

Richard Kronick, the new Director of the Agency for Healthcare Research and Quality (AHRQ), proposed a realigned AHRQ mission and agency priorities at a recent meeting of the Friends of AHRQ. Kronick, a political scientist by training, took over at the agency in August (see Update, September 9, 2013).

The retooled mission statement Kronick proposed defines the agency's goals as "to produce evidence to make health care safer; higher quality; more accessible, equitable, and affordable; and to work with HHS [Department of Health and Human Services] and other partners to make sure that the evidence is understood and used." Kronick explained that this mission statement places more emphasis on AHRQ's status as a research agency. Kronick shared the four priorities he sees for the agency going forward, which are realigned in accordance with the proposed mission statement.

The first priority, producing evidence to improve health care quality, includes research mandated by the Affordable Care Act (ACA) into improving the methodology, training, and dissemination of Patient-Centered Outcomes Research (PCOR). In addition, Kronick discussed a program to improve the quality of cardiovascular care in small and medium primary-care practices, as part of HHS's Million Hearts Initiative.

AHRQ's second major priority is improving health care safety. This includes building on AHRQ's previous success in preventing healthcare-associated infections (HAIs), accelerating patient safety improvements in hospitals, reducing harm associated with obstetrical care, supporting medical liability reform, and accelerating patient safety improvements in nursing homes.

The third agency priority Kronick outlined was increasing health care accessibility by evaluating ACA coverage expansions. This work will give the HHS Secretary and Congress evidence to make informed decisions. Kronick acknowledged that, given the current political climate, this type of work could make AHRQ a target again (a House Appropriations Subcommittee tried to eliminate the agency in 2012), but he argued that evaluating the ACA is critical for AHRQ to fulfill its mission. This evaluation will cover topics like determining the effects of expanded coverage, whether people have a usual source of care, how they utilize health services, what happens to their health and financial stability, what impact coverage has on labor markets, and what enrollment strategies are most and least effective.

The final priority Kronick laid out is to improve health care affordability, efficiency, and transparency. This covers work to improve the data, measures, and reporting strategies needed to convey information on health care cost and quality. In addition, AHRQ plans to develop and disseminate tools to measure and enhance the efficiency of health systems.

### NIAMS Seeks Comments on Its Long-Range Plan for FY 2015-2019

The National Institute of Arthritis and Musculoskeletal and Skin Diseases’ (NIAMS) mission is to support research into the causes, treatment, and prevention of arthritis and musculoskeletal and skin diseases, the training of basic and clinical scientists to care out this research, and the dissemination of information on research progress in these diseases. Recognizing that "research needs, opportunities, and challenges change," the Institute is in the process of updating the Plan, designed to help guide the research it supports over the next five years. Accordingly, NIAMS is seeking feedback from researchers in academia and industry, health care professionals, patient
advocates and health advocacy organizations, scientific or professional organizations, federal agencies, and other interested members of the public on its Long-Range Plan for Fiscal Years (FY) 2015 -2019. Organizations are strongly encouraged to submit a single response that reflects the views of the organization and membership as a whole.

NIAMS' plan for FY 2010-2014 includes five disease or tissue-specific areas and covers the Institute's broad mission: arthritis and rheumatic diseases; skin biology and diseases; bone biology and disease; muscle biology and diseases; and musculoskeletal biology and diseases. The 2010-2014 Plan recognizes the “importance of acknowledging transdisciplinary areas and approaches.” Accordingly, the Plan emphasizes that “many of the complex diseases and conditions relevant to the NIAMS mission can be seen through a new lens using genome-wide analyses, novel behavioral/biopsychosocial research methods, systems biology approaches, and new imaging modalities.” It also highlights needs and opportunities that are relevant to many NIAMS research communities: health disparities, training and careers, infrastructure, and information dissemination and outreach.

According to NIAMS, “[t]he Plan is not comprehensive; It does not mention every research area or disease of interest by name. As a broad outline for the NIAMS, however, it informs the Institute's priority setting process while enabling the Institute to adapt to the rapidly changing biomedical and behavioral science landscapes.

For more information and/or to submit comments, see: http://www.niams.nih.gov/About_Us/Mission_and_Purpose/long_range_form.asp. Comments are due by January 15, 2014.

---

**NDD Report Focuses on Harmful Effects of Budget Cuts**

A newly released report, "Faces of Austerity: How Budget Cuts Have Made Us Sicker, Poorer, and Less Secure," authored by NDD United, a coalition of over 3,200 partners, including COSSA, fighting to stop the harmful effects of budget cuts, details the stories of those affected by sequestration, including the impact of devastating cuts to social and behavioral science research funding. The release of this report was aligned with a Congressional briefing that brought a mixed group of people -- scientists, a pre-K educator, nonprofit organizers, and others -- together to tell their stories to stakeholders and Congressional staffers.

American Sociology Association Executive Officer and COSSA Board Member Sally Hillsman had this to say about sequestration and the report: "the ASA is deeply concerned about the impact of sequestration and other cuts on the federal government's social and behavioral science research programs-- programs that are crucial to our nation's economic health and infrastructure. I hope Congress and the Administration take the time to read this critical report, which should inspire them to work in good faith towards a balanced budget agreement that ensures an end to the sequestration and restoration of the nondefense discretionary (NDD) programs' budgets."

Additionally, Senator Tom Harkin (D-IA), Chairman of the Senate Labor, Health and Human Services, and Education Appropriations Committee, stated his desire to find a solution to sequestration. "From the Head Start student eager to go to school to the medical researcher on the cusp of a breakthrough, this report shows the real-life impact of the budget debate -- a debate that touches the lives of so many Americans. Our economy is stronger when we invest in infrastructure, job training, and education programs. Our families are safer when we invest in public health and public safety. Our lives are better when we invest in life-saving research. I urge the budget conference to bring an end to sequestration because we cannot afford another year of these cuts," Harkin said.

BECS Meeting Focuses on Implementing the Climate Action Plan

At the autumn meeting of the National Academies' Board on Environmental Change and Society (BECS), representatives from federal agencies and the private sector discussed implementation of the President's Climate Action Plan (see Update, July 8, 2013).

Paul Gunning, Environmental Protection Agency (EPA) Climate Change Division, gave an update on EPA's progress in fulfilling the Action Plan's directive to reduce emissions from power plants. The emissions regulations for new power plants are signed and awaiting publication in the Federal Register. Gunning explained that because the bulk of the implementation of emissions regulations for existing plants will fall to the states, EPA has created an outreach plan to engage stakeholders as it develops these new regs.

Jonathan Pershing, Office of Energy Policy and Systems Analysis at the Department of Energy (DoE), argued that the diversity of actors in the energy sector make it an area where insights from the social sciences would be extremely valuable. DoE needs the cooperation of state and local actors, who have a variety of perspectives, autonomy, and decision-making capacity in order to reduce emissions from energy use. Pershing suggested that social science could help decision-makers better utilize the technical information DoE produces. In addition social science contributions could assist with technology diffusion (to speed adoption of energy-efficient appliances), informing political and behavioral decision-making, and valuing intangible aspects of the energy system (the "-ilities": reliability, affordability, sustainability, etc.).

Doug Arent, Joint Institute for Strategic Energy Analysis, National Renewable Energy Laboratory (NREL), explained that the social and behavioral sciences play a major role in conserving energy use. Even in high performance buildings, 30 percent of energy performance is related to occupancy behavior. In addition, decision science can help NREL understand the risks and uncertainties of investing in solar technology.

Robert Marshall, Earth Networks, which operates a comprehensive weather observation, lightning detection, and greenhouse gas monitoring network, explained how Earth Networks independently measures, reports, and verifies greenhouse gas emissions. This type of monitoring can be used to identify sources of emissions (such as identify methane leaks from natural gas wells) without the incentives that may compromise self-reported emissions inventories. Earth Networks pioneered the creation of "SmartHome" technologies that automatically program thermostats to align with the weather, which have been shown to reduce energy use by five percent. Marshall explained that a national decrease of five percent in energy use equates to $11 billion in consumer savings (or 1.7 billion Chipotle burritos).

Briefing Shares the Work of CDC's REACH Grants

On November 13, the Joint Center for Political and Economic Studies hosted a Congressional briefing on the Centers for Disease Control and Prevention's (CDC) Racial and Ethnic Approaches to Community Health (REACH) Minority-serving National Organizations (MNO) grants. The REACH program is an important component of CDC's efforts to eliminate racial and ethnic health disparities in the United States. The CDC distributes grants to support community-based, participatory approaches to identify, develop, and disseminate effective strategies for addressing health disparities across a wide range of health priority areas. The program consists of 50 community grants and six to national organizations that serve minority communities, which were the focus of the briefing.

Brian Smedley, Health Policy Institute, Joint Center for Political and Economic Studies, introduced the briefing and shared a short video presentation from the Inter-Tribal Council of Michigan, which described their tobacco reduction efforts.

Rod Lew, Asian Pacific Partners for Empowerment, Advocacy and Leadership (APPEAL) discussed
APPEAL’s efforts to reduce health disparities among Asian Americans, Native Hawaiians, and Pacific Islanders (AANHPI), an incredibly diverse population comprised of two racial categories and speakers of 100 different languages. APPEAL’s focus has been on reducing tobacco use and combating obesity in the AANHPI population. He emphasized the importance of tailoring approaches to the community and culture they are operating in, building on existing relationships, and nurturing leadership within the communities. Lew highlighted the work of NAPNEHD, the National Asian American and Pacific Islander Network to Eliminate Health Disparities, which operates in New York City and Palau.

Nicolette Warren, Society for Public Health Education (SOPHE), shared some of the details of SOPHE’s Health Equity Project, “Sustainable Solutions for Health Equity.” Two SOPHE chapters, one in Jenkins County, Georgia and one in northern California were awarded grants for pilot programs aimed at addressing diabetes disparities in their communities. The Jenkins Country project is taking a community-based participatory approach to reducing disparities among African Americans in rural Georgia by integrating healthy messages into everyday activities. The northern California program focuses on the American Indian/Alaska Native population and works with community partners to change attitudes about exercise and nutrition.

Valerie Rochester, Black Women’s Health Initiative, spoke about efforts to address the disparities in breast and cervical cancer rates experienced by Black women. She noted that Black women are more likely to be diagnosed at a young age, develop more aggressive forms of cancer, and die more often from cancer. The REACH-funded activities focus on building awareness of these disparities, education, and early detection in Atlanta, Chicago, and Washington, D.C. Rochester emphasized the importance of grounding the approach in the socioeconomic realities of the community (e.g., making sure that facilities are conveniently located) and of taking the unique needs of the population into account. For example, because Black women tend to have denser breast tissue, traditional mammography equipment may not detect tumors. Programs targeting Black women need to use digital mammography units to provide effective screening.

Autumn Saxton-Ross, Joint Center for Political and Economic Studies Health Policy Institute, discussed efforts to integrate social media into the Health Policy Institute’s “Place Matters” work. Place Matters operates in 19 communities to “build the capacity of local leaders around the country to identify and improve social, economic, and environmental conditions that shape health.” Saxton-Ross explained how two Place Matters teams were using social media, including Facebook, Twitter, and YouTube, in Bernalillo County, New Mexico and Baltimore, Maryland. The team in Bernalillo County (which contains Albuquerque) used social media to raise awareness about the effects of mining and development, and the Baltimore team focused on building engagement around housing and education.

Delia Pompa, National Council of La Raza, spoke about how REACH funding assists efforts to reduce the disparity in cervical cancer rates among Latina women. She explained that cultural barriers can prevent Hispanic women from getting cervical cancer screenings, including high poverty rates, language barriers, and knowledge gaps. Programs in Chicago and Washington, D.C. target these barriers with toolkits for community health workers.

**Modeling Social Behavior - Funding Opportunity**

The National Institutes of Health (NIH) is seeking research applications that develop and test innovative theories and computational, mathematical, or engineering approaches to deepen the understanding of complex social behavior. According to the funding opportunity announcement (FOA), *Modeling Social Behavior* (PAR-13-374), models help explain observations, understand system dynamics, illuminate uncertainties, offer options for interventions, set boundaries of parameters and outcomes, discipline our thinking, and identify new questions. These are valuable, tangible results of applying modeling, especially mathematical and computational modeling to social behavior research.
The FOA encourages applications that build transdisciplinary teams of scientists spanning a broad range of expertise. Minimally, such teams should include investigators with expertise in the social and behavioral science as well as computational and systems modeling. Applications from cross-trained investigators with expertise in complex systems and computational thinking and approaches are also encouraged. Applications are expected to demonstrate bridge-building between disciplines, scales and levels. It further encourages both small research projects focusing on theory building and testing, development and testing of innovative methods or methodological approaches and small infrastructure projects focusing on development and testing of shared resources as well as larger more integrative research projects focusing on the modeling of complex behavior.

Participating NIH institutes and centers include: Cancer (NCI); Alcohol Abuse and Alcoholism (NIAAA); Biomedical Imaging and Bioengineering (NIBIB); Child Health and Human Development (NICHD); Dental and Cranofacial Research (NIDCR); Environmental Health Sciences (NIEHS); General Medical Sciences (NIGMS); Mental Health (NIMH); Center for Complementary and Alternative Medicine (NCCAM); Division of Program Coordination, Planning and Strategic Initiatives (DPCPSI); and the Office of Disease Prevention (ODP).

**NIGMS** is interested in mathematical and computational systems modeling of social and behavioral and social phenomena and processes, including the emergence of new functionality from simple behaviors; the influence of interrelationships between affect and cognitive processing on collective behavior; the role of resilience in collective behavior; use of social media and internet-based communities and other dynamic social networks to understand principles of collective behavior and improve human health; use of geocoded data in modeling and role in helping understand and influence collective behavior at multiple scales; and the use of "Big Data" and new technologies for research into collective behavior and for monitoring and intervening to improve public health.

**NIAAA** is interested in basic and applied research on systems-based modeling approaches to advance understanding of behavior; decision-making; and interventions pertaining to alcohol consumption and alcohol-related outcomes, including: modeling the role of social interactions and social context in moderating or amplifying risky drinking behaviors and associated adverse outcomes; modeling decision-making processes in social contexts as they pertain to alcohol-related behaviors and outcomes; modeling social determinants of effectiveness in preventive or treatment interventions for alcohol-related outcomes and alcohol use disorders; and modeling interactions between social and life-cycle influences and associated risk and protective factors on drinking trajectories and alcohol-related outcomes.

**NICHD** encourages basic and applied research on models of behavior and social processes associated with health, disability, and developmental outcomes from the pre-conception period into adulthood. Topics of interest to NICHD include: models of the complex relationship between demographic and environmental factors and their effects on health and population processes, including fertility, family formation, population distribution and immigration; child, maternal, reproductive and population health models utilizing multi-level perspectives; models that address the complex factors affecting intellectual, behavioral and physical disability outcomes, rehabilitation outcomes, and long-term impacts of disability on individuals and families; and models that address policy resistant health problems such as the connections between sexually transmitted diseases and/or chronic disease risk factors within individuals and communities.

**NIDCR** is interested in projects that help develop and test causal explanation of oral health behavior across complex social systems and/or multi-level causal explanations of oral health.

**NIEHS** is interested in support research that: use visual analytic software to model collective behavior and group dynamics and/or to identify individuals and communities demonstrating resilient attributes in the context of environment exposures and negative social factors; develop models that situate individual behaviors within the context of community exposures - what role do culture and belief play in understanding risk and behavior change when individual beliefs differ from community values; develop models that integrate variance in the level of risk associated with multiple aggressors or the combined impact of chronic and multiple exposures across the lifespan;
and develop approaches to integrate data from either wearable devices informing on personal environment and/or data bases of geospatial distributions of ambient pollutant levels into computational models of risk.

NIMH is particularly interested in applications that seek to build transdisciplinary teams that can apply appropriate modeling techniques to multidimensional social neuroscience data. Topics of interest to NIMH include: explanatory, predictive and informative models and simulations of normal and abnormal structures and functions of the nervous system relevant to social behavior and cognition; mathematical, statistical and other quantitative analyses of research related to social neuroscience; theoretical and computational approaches to delineate and understand the structures and functions of neural circuits relevant to social behavior and cognition; theoretical and computational approaches that relate nervous system processes to social learning, representations of social context, social inference, and social information and consolidation; and theory and algorithms for designing experiments and integration and analyzing data related real-time dyadic interactions, among other topics.

NCCAM encourages research designed to better understand: the drivers of use of complementary health approaches; the patterns of purchasing of complementary health products; along with research that would better understand or model complementary health practitioner utilization; and how access to medical care influences utilization of complementary health approaches, or vice versa.

Applications may be submitted on or after January 5, 2014. For more information and/or to apply, see: http://grants.nih.gov/grants/guide/pa-files/PAR-13-374.html.

Consortium of Social Science Associations

Members

Governing Members

- American Association for Public Opinion Research
- American Economic Association
- American Educational Research Association
- American Historical Association
- American Political Science Association
- American Psychological Association
- American Society of Criminology
- American Sociological Association
- American Statistical Association
- Association of American Geographers
- Association of American Law Schools
- Law and Society Association
- Linguistic Society of America
- Midwest Political Science Association
- National Communication Association
- Population Association of America
- Society for Research in Child Development

Colleges and Universities

- Arizona State University
- Boston University
- Brown University
- University of California, Berkeley
- University of California, Irvine
- University of California, Los Angeles
- University of California, San Diego
- University of California, Santa Barbara
- Carnegie-Mellon University
- University of Chicago
- Clark University
- University of Colorado
- Columbia University
- University of Connecticut
- Cornell University
- University of Delaware
- Duke University
- Georgetown University
- George Mason University
- George Washington University
- Harvard University
- Howard University
- University of Idaho
- University of Illinois
- Indiana University
- University of Iowa
- Johns Hopkins University
- John Jay College of Criminal Justice, CUNY
- University of Maryland

Membership Organizations

- Academy of Criminal Justice Sciences
- American Evaluation Association
- American Finance Association
- American Psychosomatic Society
- Association for Asian Studies
- Association for Public Policy Analysis and Management
- Association of Academic Survey Research Organizations
- Association of Research Libraries
- Council on Social Work Education
Economic History Association
History of Science Society
Justice Research and Statistics Association
Midwest Sociological Society
National Association of Social Workers
North American Regional Science Council
North Central Sociological Association
Rural Sociological Society
Social Science History Association
Society for Anthropological Sciences
Society for Behavioral Medicine
Society for Empirical Legal Studies
Society for Research on Adolescence
Society for Social Work and Research
Society for the Psychological Study of Social Issues
Southern Political Science Association
Southern Sociological Society
Southwestern Social Science Association

Centers and Institutes
American Academy of Political and Social Sciences
American Council of Learned Societies
American Institutes for Research
Brookings Institution
Center for Advanced Study in the Behavioral Sciences
Cornell Institute for Social and Economic Research
Institute for Social Research, University of Michigan
Institute for Women’s Policy Research
National Opinion Research Center
Population Reference Bureau
RTI International
RWJF Center for Health Policy at the University of New Mexico
Social Science Research Council
Vera Institute of Justice

COSSA
Executive Director: Howard J. Silver
Deputy Director: Angela L. Sharpe
Assistant Director for Public Affairs: Julia Milton
Assistant Director for Government Relations: Josh McCrain
President: James S. Jackson

Address all inquiries to COSSA at newsletters@cossa.org  Telephone: (202) 842-3525

The Consortium of Social Science Associations (COSSA) is an advocacy organization promoting attention to and federal support for the social and behavioral sciences.

UPDATE is published 22 times per year. ISSN 0749-4394.