

**Comments/Issues Raised by Maryland Senator Barbara Mikulski
Senate Session on the Coburn Amendment 2631 to H.R. 2847
October 13, 2009**

Coburn Amendment 2631 proposes to eliminate the National Science Foundation's program for political science research.

Sen. Mikulski: Mr. President, first, we acknowledge the need for the Commerce Department to clean up its act in terms of its spending. The Senator from Oklahoma has indeed identified the very programs that give me heartburn as well: the NOAA satellite program, which continually has cost overruns; the decennial census, until we intervened with Secretary Gutierrez, had become a techno boondoggle; the backlog at the Patent and Trademark Office is well known.

However, he proposes to increase funds for the IG, even though the bill already meets the request for this office. This amendment is unnecessary because we provide \$27 million for the Commerce inspector general. This matches what President Obama said he wanted to put in the Federal budget, and he thought it would do the job. In fiscal year 2009, the IG of Commerce received 25.8. So we puffed it up 1.2 million already. In addition to the stimulus package, just to be sure that money was going in the right direction, we in the subcommittee, working on a bipartisan basis with Senator Shelby, put in an additional \$6 million to make sure we did have oversight and accountability. We have not received any indication from the IG that that IG needs more money. Unnecessary funding will not make those problems go away. What we want to do is be able to push them, advocate them, and stand sentry.

The building restoration which this amendment proposes to do will only add to the Commerce Department's problems. It is called the Herbert C. Hoover Building. The building is in substandard condition. It really is in substandard condition. It is the only building over there that has not been upgraded in several years. Funding in this bill would begin to modernize it, particularly in much needed health and safety codes--heating, air conditioning, electricity, and plumbing. Funding in this covers the long partnership with GSA. I want the Senator from Oklahoma to know I agree that we have to stand sentry on Commerce. If you go over the bill, I have added some tough provisions with Senator Shelby on oversight--particularly on this NOAA satellite program. But taking from much needed repairs at Commerce to fund the much needed repairs in oversight I don't think cuts it. I will oppose the amendment of the Senator from Oklahoma, though I think he and I are on the same broadband about necessary stewardship.

Presiding Officer: The Senator from Oklahoma is recognized.

Sen. Coburn: We have communication from the GSA that says this amendment will not inhibit any of the plans, upgrades, or improvements to the Herbert C. Hoover Building. No. 2, we all admit there are problems at the Commerce Department. We have a 12.6-percent increase in spending but we increase the IG by 4.4 percent. We are going to increase spending three times faster than the ability to track it and oversee it. We did increase it 4.4 percent, but we increased the agency 12.6 percent. We have our priorities

backward. We should be increasing the IG by 12.6 percent and the agency 4 percent, or 1.6 percent to match inflation.

This amendment will not, in any way, according to GSA, impede their ability to make the corrections that they need to make in terms of health and safety at the Herbert C. Hoover Building.

I thank the chairman for her recognition of the problems at this agency. The answer to solve it is to let the dogs run. Let them find it. Let them go after it. Let them bring to light transparency, and let them bring the reports that we need so we can make the changes we need.

Sen. Mikulski: I want to make a comment about the status of the Commerce Department building. I will be very clear that the subcommittee, on a bipartisan basis, supports vigorous oversight. The Commerce Building has not been renovated in more than 20 years. Let me quote to you from the *Washington Post* in an article called "NOAA's Ark." It says:

When the Marine ecologist Jane Lubchenko was finally confirmed in March as the Under Secretary of Commerce in charge of NOAA, she went to check into her new digs on the fifth floor at the Commerce Department. It was a fine corner on 15th and Constitution, nothing fancy, but it overlooked the Washington Monument. But when she opened the door and she went to powder her nose, she found a massive Norwegian rat. The critter had come in through the derelict plumbing that was in her office. Now, she, with her typical good humor, laughed it off and said, as an ecologist, she found it biologically fascinating that sewer rats were able to come into the Commerce Department.

We told her she couldn't have a grant to study it, but we wanted to do something about the renovation. That is what we are--we want the best and the brightest to work in our government agencies, and to come up with new ideas such as in NOAA, to save the planet, to do the necessary scientific research to save fisheries. In that case, it would have influenced the economy of my State tremendously. We cannot minimize the need to refurbish that building. Air pockets have been developing in the plumbing at the Department of Commerce, and in order to get rid of the rats, you have to have regular flushes. This is not a laughing matter. It sounds like a laughing matter, but I want to be able to go forward to modernize the Commerce Department, working with the Secretary, and continue our vigorous oversight. Let's modernize the building. I hope we can defeat that amendment.

There is an amendment that the Senator from Oklahoma has offered that requires more transparency in our reports to Congress. I think that is a good idea. Again, discussing this with my colleague, Senator Shelby, we both think it is a good idea. If the Senator from Oklahoma will concur--because I am for transparency and I believe we cannot have enough of it so that the American people can see things and make up their own minds--in the interest of time, I would accept the amendment.

If the Senator would be willing to do a voice vote, I would be more than willing to accommodate that. I think the amendment is excellent and I believe it improves the bill. I am happy to accept it, or have it voice voted, or have a recorded vote, whatever the Senator wants.

Sen. Mikulski: Mr. President, for a point of clarification, the time of the Senator from Oklahoma has expired and how much time do I have?

Presiding Officer: There is 22\1/2\ minutes.

Sen. Mikulski: Mr. President, I would like to speak on these amendments for as much time as I may consume, and then if there is some remaining time, perhaps we could, in the interest of comity, share some time. As I understand it, there is a vote scheduled at 5:30.

Presiding Officer: The Senator is correct.

Sen. Mikulski: Mr. President, before the Senator leaves, I wish to give him two punch lines. First of all, I know he doesn't think much of political science. He made that clear. But I wish to bring to his attention that Dr. Elinor Ostrom, who just won the Nobel Prize for Economics, is a political scientist. She received most of her funding through the National Science Foundation--28 grant awards since 1974. Those grants helped her lay the groundwork for winning the Nobel Prize. She is a political scientist, but she used that talent to win the prize. I will elaborate on that. I am a big fan of her work.

The other point I wish to bring to the Senator's attention is that the National Science Foundation has an \$8 million agreement with DOD in their Social Science Department on the social science dimensions of national security, conflicts, and cooperation. DOD, under its Minerva initiative, has joined with the National Science Foundation because they want academic researchers involved in studying authoritarian regimes, the strategic impact of religious and cultural change, terrorist organizations, and other new dimensions in social security. I will describe those grants in detail.

Sen. Coburn: Will the Senator yield for a question?

Sen. Mikulski: In a minute. What I wish to make clear is that the National Science Foundation has helped fund the work that laid the groundwork for a talented person to win not only the Nobel Prize but to come up with the kind of ideas where maybe we could win markets and jobs. The Department of Defense thought enough of the National Science Foundation's Social Science Department to come up with an \$8 million--and it is not a lot of money--but an \$8 million agreement to fund 17 projects, where they are going to be studying things such as authoritarian regimes, terrorist organizations, the impact on religious and cultural change, and how maybe they could avoid us being blown up. If one of those studies helps one policymaker make one decision to save one marine, I think it is worth the 8 million bucks, and I am willing to put it in the Federal budget.

I will be happy to yield for a question.

Sen. Coburn: Mr. President, will the Senator agree that the Defense Department funds all sorts of research in all sorts of scientific areas, and they don't necessarily do that on the predicate--they do it on the basis of what their need is. There is a very big difference, does the Senator agree, between the social sciences and political science?

Sen. Mikulski: Will the Senator from Oklahoma agree that political science is one of the branches of social science?

Sen. Coburn: Sure, and I am only targeting with my amendment political science, not social sciences, if the Senator reads my amendment.

Sen. Mikulski: Within these DOD grants, I am not sure which ones are sociology, Anthropology or political science because it is in that one directorate.

Sen. Coburn: I thank the chairman for allowing me to ask a question.

Sen. Mikulski: Mr. President, I oppose, as you can see, the amendment of the Senator from Oklahoma. He wants to eliminate \$9 million from the political science program at the National Science Foundation. I don't like targeting an individual science area. Today it might be political science. Another Senator might target biology. Remember how we stifled science under the gag rules and gag guidelines of stem cell research?

Also, I don't like trivializing academic research and academics, that somehow or another there is worthwhile science and then there are others that can be minimized or trivialized.

First, I remind everyone about the work of the National Science Foundation. The NSF has received bipartisan support, and in rising above the gathering storm, the National Academy of Sciences pointed out that the National Science Foundation is one of our lead agencies in promoting innovation through its research and its education programs.

This bill also supports the funding for the Directorate for Social, Behavior and Economic Science. That is the one, which I talked about with the Senator from Oklahoma, which oversees the political science office. This directorate's mission is to use basic research to understand human and institutional behavior vital to rebuilding our national infrastructure and understanding how we operate as a society.

This program began in 1962, and over the years, it has also included an open, transparent relationship with the Department of Defense. This is not black-box research. This is out-of-the-box research so maybe we could figure out our world better and deal with conflict resolution or when we are in a conflict, how we can work with other people around the world and build democratic societies and democratic institutions.

In recent news, we also were awakened with great pride that two American Women won the Nobel Prize. One is Dr. Greider, in my home State of Maryland at Johns Hopkins. I talked with Dr. Greider the other day. Wow, what a great American scientist. She answered her own phone. She was going to join her daughter at a soccer game right after she had gotten the call from Stockholm. As we talked about her groundbreaking research in microbiology, she said she was able to do her work because of the grants she had received through the National Institutes of Health. They had helped her get her

education, and they had helped her do her research. They helped her to win the Nobel Prize. But for herself, she thought the prize would be a tribute to what her work was in microbiology that could lead to saving lives.

We also had another woman win the Nobel Prize--Dr. Elinor Ostrom. Her training is in political science. She won the Nobel Prize for economics. She is the first woman ever to win the prize for economics--an American woman. Although not in the Congress, she has received several political science grants from NSF because political science also looks at institutions which also have an impact on our economy. Since 1974, Dr. Ostrom has received over 20 grants, and these grants helped her do her fieldwork all over the world in relationship to the economic activity of people and communities. The Royal Swedish Academy of Sciences thought enough of her work to award her the Nobel Prize. But long before they heard of her in Stockholm, the National Science Foundation had heard of her and helped her with her award-winning research.

We have to keep this going. Our National Science Foundation and our other scientific institutions must go where no thought has gone before. That is the point of discovery. Discovery has led to innovation. Innovation leads to the new ideas that lead to the new jobs in our society. A society that doesn't innovate stagnates. And innovation comes not only in engineering, though much needed; it doesn't only come in physics, though much desired; it doesn't come only in medicine, in the biological research, though much revered; a lot of this is the basic social sciences.

As I said to the Senator from Oklahoma, for the last 8 years there has been a relationship between DOD and the National Science Foundation--again, in open, transparent research. And here, I am quoting from the "Federal Technology Watch," October 6, 2009. "Federal Technology Watch" is a weekly report on Federal technology, science, and policy areas.

Mr. President, I ask unanimous consent to have printed in the Record the article from which I am going to quote.

There being no objection, the material was ordered to be printed in the Record, as follows:

[From the Federal Technology Watch, Oct. 9, 2009]

NSF Finds Declining Federal Support of Academic R&D

US universities reported science and engineering r&d expenditures of \$51.9-billion in FY08, according to a new National Science Foundation (NSF) report released Oct. 2. However, the preliminary findings of NSF's Survey of Research and Development Expenditures at Universities and Colleges are that federal funding decreased as a share of the academic r&d total, from 64% in FY05 to 60% in FY08. Despite this drop, the federal government retains its traditional role as the largest source of academic r&d funding.

The FY08 survey data showed an increase in federally funded expenditures of 2.5% in current dollars, reaching \$31.2-billion. After adjusting for inflation, this is a 0.2%

increase from FY07 and follows two years of real declines since FY05.

Other statistical notes from the NSF report include:

--Combined sources of non-federal funding grew 8.3% during FY08;

--State and local government funding of r&d expenditures grew in FY08 8.8%, increasing to \$3.4-billion from \$3.1-billion in FY07;

--Industry funding of academic r&d grew 7.1% to \$2.9-billion in FY08;

--Funding from academic institutions increased 7% to \$10.4-billion in FY08.

Also, r&d funds for joint projects that were passed through primary university recipients to other university sub-recipients almost doubled from FY00 to FY08, growing from \$700-million to \$1.4-billion in constant 2000 dollars. The current dollar amount of \$1.7-billion represents 3.3% of total academic r&d expenditures in FY08, compared with 2.3% of the total in FY00.

InfoBrief 09-318, written by NSF analyst Ronda Britt of the r&d statistics program, is available at: <www.nsf.gov/statistics/infbrief/nsf09318/nsf09318.pdf>

Electric Vehicle Forum

The first-ever US-China Electric Vehicle Forum was held last week in Beijing, China.

Attended by over 140 US and Chinese officials from government, industry, academia and advocacy groups, the forum discussed progress made in the electric vehicle industry and opportunities for future collaboration.

The event, co-hosted by Department of Energy (DOE) assistant secretary for policy and international affairs David Sandalow and Chinese Science & Technology Minister Wan Gang, highlighted the rapidly growing electric vehicle industry in both countries.

“The US and China share a strong common interest in putting millions of electric vehicles on the road soon, which will lessen our dependence on foreign oil and help address the global climate challenge,” Sandalow said Sept. 29.

“Working together, we can accomplish more than acting alone.”

America and China are the two largest auto markets and energy consumers, and together emit over 40% of the world's greenhouse gases. The forum offered a venue for experts to exchange views on recent electric vehicle developments and

identify promising opportunities for technical and policy collaboration.

This year is the 30th anniversary of the US-China Science & Technology Agreement, which represented the first agreement between the two countries following normalization of relations in the 1970s.

"By working together, the US and China can leverage technological breakthroughs, increase consumer acceptance and grow market penetration of clean vehicles," said White House counselor for energy and climate change Jody Freeman, who was a speaker at the forum.

NSF-DOD Projects Funded

\$8-million has been awarded to 17 projects by the National Science Foundation (NSF) under a joint NSF/Department of Defense (DOD) solicitation.

The competition, Social and Behavioral Dimensions of National Security, Conflict and Cooperation, is focused on basic social and behavioral science of strategic importance to US national security policy, as part of the DOD's Minerva Initiative launched in 2008.

Four topic areas that address the needs of national security policymakers and the ideals of open academic basic research were determined jointly by DOD and NSF for the solicitation. They are: authoritarian regimes, the strategic impact of religious and cultural change, terrorist organizations and ideologies, and new dimensions in national security.

These proposals were funded under the 2009 competition:

- Status, manipulating group threats, and conflict within and between groups: Patrick Barclay (Univ. of Guelph) & Stephen Bernard (Indiana Univ.);
- Behavioral insights into national security issues: Rachel Croson (UT Dallas) & Charles Holt (Univ. of Virginia);
- Experimental analysis of alternative models of conflict bargaining: William Reed (William Marsh Rice Univ.), Charles Holt (Univ. of Virginia), Timothy Nordstrom (Univ. of Mississippi), and David Clark (State Univ. of New York--Binghamton);
- Terror, conflict processes, organizations, and ideologies: Completing the picture: Stephen Shellman (College of William & Mary), Remco Chang (Univ. of North Carolina--Charlotte), Michael Covington (Univ. of Georgia), Joseph Young (Southern Illinois Univ.--Carbondale), & Michael Findley (Brigham Young Univ.);

- How politics inside dictatorships affects regime stability and international conflict: Barbara Geddes (UCLA) & Joseph Wright (Pennsylvania State Univ.);
- Mapping terrorist organizations: Martha Crenshaw (Stanford Univ.);
- People, power, and conflict in the Eurasian migration system: Cynthia Buckley (UT Austin);
- Strategies of violence, tools of peace, and changes in war termination: Virginia Fortna (Columbia Univ.);
- Avoiding water wars: Environmental security through river treaty institutionalization: Jaroslav Tir (Univ. of Georgia);
- Predicting the nature of conflict--an evolutionary analysis of the tactical choice: Laura Razzolini (Virginia Commonwealth Univ.) & Atin Basuchoudhary (Virginia Military Institute);
- Fighting and bargaining over political power in weak states: Robert Powell (UC Berkeley);
- Political economy of terrorism and insurgency (workshop): Eli Berman (UC San Diego);
- Substantive expertise, strategic analysis and behavioral foundations of terrorism (workshop): Rachel Croson (UT Dallas);
- New armies from old: Merging competing military forces after civil wars (workshop): Roy Licklider (Rutgers Univ.);
- Engaging intensely adversarial states: The strategic limits and potential of public diplomacy in US national security policy: Geoffrey Wiseman (Univ. of Southern California);
- Deciphering civil conflict in the Middle East: J. Craig Jenkins (Ohio State Univ.); and
- Modeling discourse and social dynamics in authoritarian regimes: Jeff Hancock (Cornell Univ.), Arthur Graesser (Univ. of Memphis) & David Beaver (UT Austin).

DOD partnered with NSF to reach the broadest range of academic, social and behavioral science, and this collaboration combines the insights of DOD with the peer review expertise of NSF in support of the agencies' desire to promote basic social and behavioral scientific research in areas that will benefit the US.

EPA's Nanotech Strategy

A new research strategy to understand better how manufactured nanomaterials may harm human health and the environment was outlined by the Environmental Protection Agency (EPA) on Sept. 29.

The strategy describes what research EPA will support over

the next several years to generate information about safe use of nanotechnology and products that contain nano-scale materials. It also includes research into ways nanotechnology can be used to clean up toxic chemicals in the environment.

Nanomaterials are between one and 100 nanometers and used in hundreds of consumer products, including sunscreen, cosmetics and sports equipment. The unusual light-absorbing properties of zinc or titanium nanoparticles make high-SPF nano sunscreens clear rather than white and studies have shown that they provide superior protection against UV radiation.

Part of EPA's role among federal agencies is to determine the potential hazards of nanotechnology and develop approaches to reduce or minimize any risks identified. As part of the strategy, EPA researchers are investigating widely-used nanomaterials, such as the carbon nanotubes used in vehicles, sports equipment and electronics, and titanium dioxide used in paints, cosmetics and sunscreens.

The research, being conducted in EPA's own laboratories and by grant recipients as part of a collaborative effort with other federal agencies and the international community, uses a multi-disciplinary approach that examines all aspects of nanomaterials in the environment, from their manufacture and use to their disposal or recycling.

EPA's new nanotech web site offers details about the research: <www.epa.gov/nanoscience>

President Extends PCAST

On Sept. 29, President Barack Obama signed Executive Order (E.O.) 13511, which extended terms of several federal advisory committees including the President's Council of Advisors on Science and Technology (PCAST), E.O. 13226, as amended (Office of S&T Policy), until Sept. 30 2011.

Other committees whose terms are extended include the following: Committee for the Preservation of the White House, E.O. 11145, as amended (Interior Dept.); National Infrastructure Advisory Council; E.O. 13231, as amended (Department of Homeland Security); Federal Advisory Council on Occupational Safety and Health, E.O. 12196, as amended (Labor Dept.), President's Board of Advisors on Historically Black Colleges and Universities, E.O. 13256 (Education Dept.), President's Board of Advisors on Tribal Colleges and Universities, E.O. 13270 (Education Dept.), President's Commission on White House Fellowships, E.O. 11183, as amended (Office of Personnel Management), President's Committee on

the National Medal of Science, E.O. 11287, as amended (National Science Foundation), President's Export Council, E.O. 12131, as amended (Commerce Dept.), President's National Security Telecommunications Advisory Committee, E.O. 12382, as amended (Department of Homeland Security), and the Trade and Environment Policy Advisory Committee, E.O. 12905 (Office of the US Trade Representative).

E.O. 13511 took effect Sept. 30 2009.

US-Russian Nuclear Talks

Deputy Energy Secretary Daniel Poneman and Russia's State Atomic Energy Corporation's (Rosatom) director general Sergei Kiriyenko held the first meetings of the joint US-Russian Nuclear Energy and Nuclear Security Working Group last week.

The Sept. 28-29 meetings opened with a session hosted by Energy Secretary Steven Chu, who met with director general Kiriyenko and deputy secretary Poneman to discuss a number of issues, including the two countries' mutual work securing vulnerable nuclear materials, efforts to increase cooperation on civil nuclear technologies, and cooperation on other nuclear security issues.

“The US and Russia have a long and successful track record of cooperation in the area of nuclear security,” said Poneman. “These meetings and our visits to Oak Ridge National Laboratory and the Y-12 National Security Complex demonstrate how seriously our countries take our shared responsibility to promote peaceful uses of nuclear energy while combating nuclear dangers. I look forward to continuing this record by expanding our cooperation in fulfillment of our presidents' joint statement.”

The meetings, which ended with a plenary session co-chaired by Poneman and Kiriyenko, were the first since the working group was established under the US-Russia Bilateral Presidential Commission during the July 2009 Presidential Summit. The Nuclear Energy and Nuclear Security Working Group is co-chaired by Poneman and Kiriyenko. In addition to talks in Washington DC, the meetings included a visit by director general Kiriyenko and Poneman to the National Nuclear Security Administration's Y-12 National Security Complex and Oak Ridge National Laboratory (ORNL) in Oak Ridge, Tenn.

“This visit is devoted to an in-depth discussion of the issues of nuclear energy and nuclear security as stipulated by the mandate from the presidents of the Russian Federation and the US,” said Kiriyenko. “We're looking forward to the

expansion of our bilateral cooperation on these issues."

After their meeting with Secretary Chu, Poneman and Kiriyenko flew to Tennessee to visit ORNL and Y-12, where they watched a joint nuclear security training exercise. At Y-12, Poneman and Kiriyenko discussed nuclear materials management issues and toured the recently completed Highly Enriched Uranium Materials Facility. During their ORNL visit, Kiriyenko and Poneman received a briefing at the Radiochemical Engineering Development Center and the Spallation Neutron Source.

As a result of the meeting, a joint action plan was formulated by the working group and will be forwarded to President Obama and President Medvedev through Secretary of State Hillary Clinton and Russian Foreign Minister Sergey Lavrov. Secretary Clinton and Foreign Minister Lavrov serve as the Bilateral Commission Coordinators.

DHS Cyber Hires Authority

The Department of Homeland Security (DHS) has received new authority to recruit and hire cybersecurity professionals over the next three years to help the agency meet its broad mission to protect the nation's cyber infrastructure, systems and networks.

"Effective cybersecurity requires all partners--individuals, communities, government entities and the private sector--to work together to protect our networks and strengthen our cyber resiliency," Homeland Security Secretary Janet Napolitano said Oct. 1 at the launch of National Cybersecurity Awareness Month. "This new hiring authority will enable [us] to recruit the best cyber analysts, developers and engineers in the world to serve their country by leading the nation's defenses against cyber threats."

A collaboration between DHS, the Office of Personnel Management (OPM) and Office of Management and Budget (OMB), the new authority allows DHS to fill up to 1,000 critical cybersecurity staff positions over three years across all of its components. These roles include cyber risk & strategic analysis, cyber incident response, vulnerability detection & assessment, intelligence & investigation, and network & systems engineering. But DHS doesn't anticipate needing to fill all the posts.

The announcement was made by Secretary Napolitano at a National Cybersecurity Awareness Month ceremony with Deputy Defense Secretary William Lynn III and White House national

security staff acting senior director for cybersecurity Chris Painter.

For National Cybersecurity Awareness Month details, visit: <www.staysafeonline.org>

SBA Awards Prime Grants

The Small Business Administration (SBA) announced Oct. 2 that 58 non-profit organizations from 32 states and the District of Columbia are to receive grant funding under the Program for Investment in Microentrepreneurs Act (PRIME) to assist low-income and very low-income entrepreneurs with training and technical assistance to start, operate, and grow their businesses.

"SBA remains committed to helping small businesses start, grow and succeed, and PRIME is one of our many tools for doing this," SBA administrator Karen Mills said last week.

"Thanks to larger funding this year, we were able to provide grant dollars to more recipients across more states. These grant recipients are on the front line of helping entrepreneurs in particularly underserved communities with critical tools to help them maximize the potential of their businesses, create jobs and help strengthen the local economy."

The competition for PRIME grants was open to applicants in all 50 states and the US territories, and SBA received over 400 applications. SBA last year funded 35 grants in 12 states on a non-competitive basis.

SBA's PRIME grant funding is intended to establish management and technical assistance, access to capital and other forms of financial assistance, and business training and counseling through qualified organizations to small businesses with five or fewer employees who are economically disadvantaged, and businesses owned by low-income individuals, including those on Indian reservations and tribal lands.

The grant funding received will be used to provide training and technical assistance to disadvantaged microentrepreneurs, supply capacity building services to organizations that assist with microenterprise training and services, and aid in researching and developing best practices in the field of microenterprise development and technical assistance programs for disadvantaged micro-entrepreneurs.

This year's total program funding amounts to \$5 million with grants ranging in size up to \$250,000 with a 50% match required of the recipient. PRIME grants are open to

microentrepreneur training and technical assistance providers in all 50 states and US territories. They have a one-year performance period, with four 12-month options.

2009 PRIME grant recipients are at: <www.sba.gov/services/financialassistance/sbapartners/prime/index.html>

US-Italy Nuclear R&D Pact

Two important nuclear energy agreements that could lead to construction of new nuclear power plants and improved cooperation on advanced nuclear energy systems and fuel cycle technologies in both countries were signed by Energy Secretary Steven Chu and Italian Minister for Economic Development Claudio Scajola on Sept. 30.

The US-Italy Joint Declaration Concerning Industrial and Commercial Cooperation in the Nuclear Energy Sector, which was signed on behalf of the US by Energy Secretary Chu and Commerce Deputy Secretary Dennis Hightower, affirms the strong interest of the US and Italy to encourage their respective nuclear industries to seek opportunities for construction of new nuclear power plants.

“The agreements reached today reflect our vision for strong partnerships with nations around the world to help address our shared climate and energy challenges,” said Secretary Chu. “Nuclear power will play a key role in the production of low-carbon energy in the years and decades to come, and we look forward to working with Italy and the US private sector to advance these important technologies.”

“Clean and efficient energy technologies, including nuclear power, will be a cornerstone of a vibrant and prosperous 21st century economy,” added deputy secretary Hightower. “American companies can offer Italy world-class nuclear energy solutions while strengthening our own domestic industry.”

A bilateral Agreement on Cooperation in Civilian Nuclear Energy Research and Development was also signed by Energy Secretary Chu and Minister Scajola, which will facilitate cooperation between DOE and Italy's Ministry for Economic Development in advanced nuclear energy systems and associated fuel cycle technologies. Both nations will collaborate in r&d of advanced technologies to improve the cost, safety, and proliferation-resistance of nuclear power.

The agreement will also expand efforts to promote and maintain nuclear science and engineering infrastructure and

expertise in each country.

Italy will be a key partner in building international consensus and momentum on shared nuclear energy and nonproliferation agenda, and US energy officials look forward to working with their Italian counterparts at the Nuclear Security Summit in April 2010.

ARS Food Waste Project

Food scraps are collected every weekday from the Maryland Food Distribution Authority in Jessup, Md., and from small local food service and marketing establishments and trucked to the Agricultural Research Service (ARS) Henry Wallace Beltsville Agricultural Research Center (BARC) in Beltsville, Md.

Items not containing metal, glass, or plastic are then mixed with woodchips, leaves and other organic residuals, and several months later some of the finished compost is delivered to the National Mall in Washington DC to be used in gardens at the Department of Agriculture's (USDA) Jamie Whitten Federal Building.

This unusual operation is part of research by ARS microbiologist Patricia Millner with the BARC Environmental Microbial and Food Safety Lab on ways to reduce the release of methane from landfills by diverting food residuals and other organic materials to composting. She conducts this research with microbiologist Walter Mulbry of BARC's Environmental Management and Byproduct Utilization Lab.

This year they are also supplying compost to the inaugural People's Garden, part of a new program for creating a community garden at each USDA facility, as well as for landscaping at the US Botanic Garden and the Capitol.

Millner also makes compost available for other federal 'green' projects, including roof gardens, rain gardens and other landscaping designs, to retain water and reduce runoff at federal sites in the Washington DC metropolitan area.

As part of her efforts to help the federal government model ways to compost food scraps, Millner has a cooperative r&d agreement (CRADA) with RCM LLC of Maryland to capture ammonia in the final compost to boost its nitrogen content for fertilizer use. She is now comparing several types of insulated composting containers for greenhouse gas emission reduction and other cost-benefit characteristics.

About half of the carbon and nitrogen in composting materials is lost to the air, rather than being captured in the compost.

NIH 115 High-risk Awards

A total of 115 awards for \$348-million to encourage investigators to explore bold ideas with potential to catapult fields forward and accelerate the translation of research into improved health were announced by the National Institutes of Health (NIH).

“The appeal of the Pioneer, New Innovator, and now the T-R01 programs, is that investigators are encouraged to challenge the status quo with innovative ideas, while being given the necessary resources to test them,” NIH director Dr Francis Collins said Sept. 24. “The fact that we continue to receive such strong proposals for funding through the programs reflects the wealth of creative ideas in science today.”

The NIH High-Risk Research awards are granted under three research programs supported by its Common Fund Roadmap for Medical Research: the NIH director's Transformative RO1 (T-R01) awards, Pioneer awards, and New Innovator awards.

Enacted by Congress through the 2006 NIH Reform Act, the Common Fund supports cross-cutting, trans-NIH programs with a special emphasis on innovation and risk taking. Part of the New Innovator Awards (\$23-million) is supported by American Recovery and Reinvestment Act funding.

NIH this year is granting 42 T-R01 awards, 18 Pioneer awards, and 55 New Innovator awards for early-stage investigators, and expects to make competing awards of \$30-million to T-R01 awardees, \$13.5-million to Pioneer awardees, and about \$131-million to New Innovators in FY09. Total funding provided to this effort over a five-year period is estimated at \$348-million.

More details on the T-R01 award are at: <<http://nihroadmap.nih.gov/T-R01>>

Details of the Pioneer award are at: <<http://nihroadmap.nih.gov/pioneer>>

Information on the New Innovator award is at: <<http://nihroadmap.nih.gov/newinnovator>>

NHGRI, NIMH Grants

Grants expected to total \$45-million were announced last week by the National Human Genome Research Institute (NHGRI) and National Institute of Mental Health (NIMH) to establish new Centers of Excellence in Genomic Science in Wisconsin and

North Carolina, as well as to continue support of existing centers in Maryland and California.

“Our aim is to foster the formation of innovative research teams that will develop genomic tools and technologies that help to advance human health,” NHGRI acting director Dr Alan Guttmacher said Sept. 28. “Each of these centers is in a position to tackle some of the most challenging questions facing biology today.”

“NIMH is pleased to partner with NHGRI and to be able to support this innovative study with funding through the American Recovery and Reinvestment Act,” said NIMH director Dr Thomas Insel. “These sophisticated genetic models will provide new opportunities to accelerate the pace of scientific discovery and to make progress toward understanding how genes shape behavior.”

NHGRI and NIMH are both part of the National Institutes of Health (NIH). Launched in 2001 by NHGRI, the Centers of Excellence in Genomic Science program assembles interdisciplinary teams dedicated to making critical advances in genomic research.

The new center, to be co-led by Medical College of Wisconsin and Univ. of Wisconsin-Madison will receive about \$8-million over three years. The new center at Univ. of North Carolina, Chapel Hill will receive about \$8.6-million over five years. The existing center at Univ. of Southern California, Los Angeles will receive about \$12-million over five years and the existing center at Johns Hopkins Univ. in Baltimore will get about \$16.8-million over five years.

Funding to all four centers will be provided by NHGRI. The first two years of the Univ. of North Carolina center will be funded by NIMH, which will contribute about \$6-million through the American Recovery and Reinvestment Act (ARRA). In addition, NIMH will provide about \$1.7-million, in non-ARRA funds, of the total funding awarded to the Johns Hopkins center.

More information about the program is at: <www.genome.gov/14514219>

NSF Plans CPATH Survey

The National Science Foundation (NSF) plans a one-year data collection for its Revitalizing Computing Pathways (CPATH) in Undergraduate Education Program Evaluation.

Established by NSF's Computer & Information Science & Engineering (CISE) directorate, CPATH is aimed toward preparing a US workforce with computing competencies and

skills imperative to the nation's health, security, and prosperity in the 21st century. This workforce includes a cadre of computing professionals prepared to contribute to sustained US leadership in computing in a wide range of application domains and career fields, and a broader professional workforce with knowledge and understanding of critical computing concepts, methodologies, and techniques.

To achieve this vision, CPATH calls for colleges and universities to work together and with other stakeholders (industry, professional societies, and others) to formulate and implement plans to revitalize undergraduate computing education in the US. Full engagement of faculty and other individuals in CISE disciplines will be critical to success.

Successful CPATH projects will be systemic in nature, address a broad range of issues, and have significant potential to contribute to the transformation and revitalization of undergraduate computing education on a national-scale. Qualitative data collection of this program evaluation will document CPATH program strategies used in infusing computational thinking across different contexts and disciplines, examine development of communities of practitioners and dissemination of best practices around computational thinking, and analyze preliminary evidence for how the CPATH program is preparing students for career options in the STEM workforce.

Five major questions will guide this program evaluation: How is CPATH infusing computational thinking in a range of disciplines serving undergraduate education? What evidence is there that university and community college departments and faculty are integrating computational thinking into their courses? How are undergraduate students benefitting from their participation in CPATH projects? What evidence is there that CPATH is developing communities of practitioners that share best practices regularly across different contexts and disciplinary boundaries? How is CPATH promoting sustainable multi-sector partnerships that represent a broad range of stakeholders (e.g., industry, higher education, K12) and contribute to workforce development supporting continued US leadership in innovation?

NSF will seek answers to these questions through use of mixed evaluation methods including document analyses, site visit interviews, and telephone interviews with selected CPATH grant participants including principal investigators, staff, faculty, administrators, students, and external partners. Participation in program evaluations is mandatory for all CPATH awardees.

After considering public comment, NSF will request that OMB approve clearance of this one-time collection [OMB No. 3145-NEW] for no longer than one year.

NSF estimates about 200 respondents (individuals) will take part in the survey and take an average of 1 1/2-hours per response.

For more details, contact Suzanne Plimpton at (703) 292-7556; splimpto@nsf.gov.

CDC Awards Center Grants

Award of \$4.37-million in competitive grants to enhance health care information management and improve detection and response to emerging public health threats was announced Sept. 25 by the Centers for Disease Control and Prevention (CDC).

The CDC grants will fund four new Centers of Excellence in Public Health Informatics at Harvard Pilgrim Health Care, Indiana Univ., Univ. of Pittsburgh, and Univ. of Utah.

"These centers will advance the study and practice of public health informatics through collaborative efforts among academic public health experts, local and state public health departments, developing regional health information organizations, and other health and informatics professionals," said CDC's National Center for Public Health Informatics acting director Dr Stephen Thacker.

The overall purpose of the center of excellence initiative is to find strategies and tools that increase the ability of health departments, physicians and other health care providers to promote health and prevent diseases, injuries or disabilities. A common emphasis will be translation of results into measurable public health impacts.

Each center of excellence will conduct two new projects that support national priorities in informatics; and support real-time biosurveillance for potential health threats through immediate access to data from hospitals and health care systems in major metropolitan areas across the US.

The principal investigators, projects, and overall goals of the centers are:

--Harvard Pilgrim Health Care, Boston, Mass. (Dr Richard Platt & Dr Kenneth Mandl): Personally-controlled health records and social networks; and electronic support for public health: Diabetes Mellitus;

--Indiana Univ., Indianapolis (Dr Shaun Grannis): Bringing public health to the point of care: Overcoming digital barriers; and enhancing basic infrastructure capabilities

that support public health practice;

--Univ. of Pittsburgh (Dr Michael Wagner): Automatic case detection using clinical data; and Bayesian outbreak detection and characterization;

--Univ. of Utah, Salt Lake City (Dr Matthew Samore): Visual analytics & decision support for core public health missions; and just-in-time delivery of dynamically maintained public health knowledge.

Five previously-funded centers have become national leaders in public health informatics. According to CDC officials, their academic productivity has been impressive, generating over 85 peer reviewed publications, 153 presentations at national meetings, and more than 100 posters and abstracts. They have also made contributions to strategic national activities.

State R&D Activity Survey

The US Census Bureau plans to continue to conduct the Survey of State Research and Development Expenditures in order to measure r&d supported and performed by state governments in the US.

This survey, a joint effort between Census Bureau and the National Science Foundation (NSF), is sponsored by NSF, which has a statutory charge to provide a central clearinghouse for the collection, interpretation, and analysis of data on s&e resources, and to provide a source of information for policy formulation by other federal agencies.

Under this legislative mandate, NSF has sponsored surveys of r&d since 1953, including the Survey of Industrial Research and Development and the Survey of State Research and Development Expenditures.

The survey form includes items on r&d expenditures by source of funding, by performer (internal and external to state agencies), and by character (basic, applied, or developmental), and the final results produced by NSF contain state and national estimates useful for a variety of data users interested in r&d and development performance. These include the National Science Board, the Office of Management & Budget, and the Office of S&T Policy, as well as other science policy makers, institutional researchers and private organizations.

All data are collected electronically via a web-based form, and the 500 or so state government agencies surveyed will be assisted during the collection period by central state coordinators.

An estimated 52 state coordinators and 500 state agencies are expected to respond to the voluntary survey, with the time per response being four hours for every state coordinator and 1\1/2\ hours for every state agency.

Comments on the proposed data collection [Form No. SRD-1] must be submitted by Nov. 20 to Diana Hynek at dHynek@doc.gov.

For more information, contact Pamela Medwid at pamela.d.dutterer@census.gov.

Army's Top 10 Inventions

The US Army's Top Ten Greatest Inventions of 2008 were recognized during a Sept. 21 awards ceremony, attended by top Army s&t officials including Army Materiel Command (AMC) Commander Gen. Ann Dunwoody and Army Research, Development & Engineering Command (ARDEC) Commander Maj. Gen. Paul Izzo, in Arlington, Va.

The annual awards program, which gets nominations from across the Army's s&t community, aims to recognize the best technology solutions for soldiers. This year's awards recognized the following inventions fielded by the Army during 2008:

--1. XM153 Common Remotely Operated Weapon Station (CROWS) [Army Armament Research, Development & Engineering Center (AARDEC)]: Able to be mounted on a variety of vehicles, this system offers the ability to aim and fire remotely a suite of crew-served weapons from a stationary platform or while moving;

--2. Projectile Detection Cueing (PDCue)--CROWS Lightning [AARDEC]: This low-cost acoustic gunfire detection system is able to detect and locate the origin of incoming gunfire;

--3. Light machine gun & medium machine gun cradle [AARDEC]: This cradle provides a more stable and accurate firing platform and reliable, twist-free ammunition feeding regardless of weapon orientation;

--4. Overhead cover for objective gunner protection kit [AARDEC]: An integrated armor/ballistic glass system mounted onto the objective gunner protection kit of tactical and armored vehicles, it provides an enhanced 360 degree ballistic protection for gunners while retaining visibility for situational awareness;

--5. Enhanced mobile rapid aerostat initial deployment vehicle [Army Aviation and Missile Research, Development & Engineering Center]: This system combines multiple intelligence, surveillance, and reconnaissance capabilities

onto a single, integrated platform;

--6. Whisper [Army Communications--Electronics Research, Development & Engineering Center]: The system's passive detection capability can be used to detect enemy radio-controlled improvised explosive device (IED) threats;

--7. Combat gauze for treating hemorrhage in injured soldiers [Army Institute of Surgical Research]: Hemorrhages account for 50% of deaths among combat casualties and many of these deaths are potentially preventable with prompt and effective treatment. This large-sized flexible roll of non-woven medical gauze, impregnated with kaolin, a clotting agent, can be used to treat severe external bleeding, especially where a tourniquet can't be applied. It has also been proposed to treat deep bleeding at the end of a long wound tract;

--8. Mine-resistant ambush-protected armor weight reduction spiral program [Army Research Lab]: This program enabled Army to meet MRAP program protection requirements for a high priority, anti-armor, IED threat, and its goal was to introduce lightweight composites, new materials, and enhanced ballistic mechanisms to reduce the added weight of final armor packages.

--9. Mine-resistant ambush-protected expedient armor program add-on-armor kit [Army Tank Automotive Research, Development & Engineering Center (TARDEC)]: Developed to safeguard soldiers against lethal threats of IEDs and explosively formed penetrators, the armor uses armor physics, as opposed to armor mass, to defeat the threat. It has led to a 50% cut in weight, while increasing the armor protection on all MRAP vehicles without sacrificing vehicle performance or payload;

--10. One system remote video terminal A-kit [TARDEC]: An innovative modular video and data system enabling soldiers to receive remotely near-real-time surveillance image and geospatial data direct from tactical unmanned aerial vehicles and manned platforms.

AMC is the Army's premier provider of materiel readiness in the form of technology, acquisition support, materiel development, logistics, power projection and sustainment . .

Sen. Mikulski: The quote is as follows:

\$8 million has been awarded to 17 projects by the NSF under a joint NSF/Department of Defense solicitation. The competition, Social and Behavioral Dimensions of National Security, Conflict and Cooperation, is focused on basic

social and behavioral science of strategic importance to US national security policy.

So again, the competition is in the social science directorate. And the four topic areas the DOD thought it was important to contract out, through the NSF, are in the following areas, according to this article:

Authoritarian regimes, the strategic impact of religious and cultural change, terrorist organizations and ideologies, and new dimensions in national security.

They awarded these 17 grants, and let me read what some of them are. One is experimental analysis of alternative models of conflict bargaining. Now, you might say: Ho-hum. But you know what, maybe some idea out of that will help us crack how we can bring peace to the Middle East. Another is mapping terrorist organizations. Well, that is a pretty good idea. Maybe some of that research will help us get out of Afghanistan. How about predicting the nature of conflict? Well, we kind of know what that is, but do we really? Because if we understand the nature of conflict, maybe we can learn to defang conflict.

Let's look at another issue which I am very concerned about because of my worry about the planet--avoiding water wars: environmental security. These may be new threats to the United States.

I could read every one of these, but what I want to say is that DOD has partnered with NSF--to quote from this article--`to reach the broadest range of academic, social and behavioral science, and this collaboration combines the insights of DOD with the peer review expertise of NSF in support of the agencies' desire to promote basic social and behavioral research in areas that will benefit the United States."

"Federal Technology Watch" said it best. To take out \$9 million is really penny-wise and pound-foolish. I am going to oppose the amendment of the Senator on that issue. I will oppose the amendment of the Senator on taking money from much-needed Commerce Department renovations and putting it in IG because we do fund the president's request in IG.

I do, however, like the amendment of the Senator from Oklahoma on more transparency in government reports that are coming into the Commerce Department. I believe we could have passed that one by voice vote. I am sorry we have to go through the mechanics of a recorded vote. He is worried I would drop it in conference, but I could give him my word that we would maintain that amendment as best we could. But so be it, the Senator is entitled to that.

So, Mr. President, as we conclude our conversation this afternoon, I want to be very clear. We oppose two of the Coburn amendments. I accept one that you will see down at the desk where I stand.

I had hoped we could avoid a cloture vote. Senator Shelby and I have worked hard on a bipartisan bill, and I once again acknowledge the Senator from Alabama, my Republican colleague. We have an excellent bill that funds not only the Commerce Department but the Justice Department, and now we are facing the threat of a filibuster by amendment after amendment. I had hoped we could have reached some kind of

agreement on a limited number of amendments, but since we can't, it looks as if we are going to have to go to cloture.

I think we have had a good discussion, and I want to reiterate the three goals of the Commerce, Justice, Science Subcommittee. No. 1, we want to promote the security of the American people. We want to do it over there and we want to do it here. That is why we fund the Justice Department. We also want to promote innovation, and we have vigorous funding for our science agencies and innovation from the government that will also be on the side of those innovators. No. 3, where we do agree with the Senator from Oklahoma is on increased oversight, accountability, stewardship, and transparency.

Mr. President, I know we are about 5 minutes from the vote, so I will now reserve the remainder of my time.

Mr. President, I suggest the absence of a quorum.

Presiding Officer (Mr. Lautenberg): The clerk will call the roll. The assistant legislative clerk proceeded to call the roll.

Sen. Mikulski: Mr. President, I ask unanimous consent the order for the quorum call be rescinded.

Presiding Officer: Without objection, it is so ordered.