

“Granite Lady”, and for other purposes.

S. 1916

At the request of Mr. HAGEL, the names of the Senator from Illinois (Mr. OBAMA) and the Senator from Florida (Mr. MARTINEZ) were added as cosponsors of S. 1916, a bill to strengthen national security and United States borders, and for other purposes.

S. 1917

At the request of Mr. HAGEL, the names of the Senator from Illinois (Mr. OBAMA) and the Senator from Florida (Mr. MARTINEZ) were added as cosponsors of S. 1917, a bill to require employers to verify the employment eligibility of their employees, and for other purposes.

S. 1934

At the request of Mr. SPECTER, the name of the Senator from North Carolina (Mrs. DOLE) was added as a cosponsor of S. 1934, a bill to reauthorize the grant program of the Department of Justice for reentry of offenders into the community, to establish a task force on Federal programs and activities relating to the reentry of offenders into the community, and for other purposes.

S. 1974

At the request of Mr. NELSON of Florida, the name of the Senator from Illinois (Mr. DURBIN) was added as a cosponsor of S. 1974, a bill to provide States with the resources needed to rid our schools of performance-enhancing drug use.

S. 2038

At the request of Mr. BURNS, the name of the Senator from Wisconsin (Mr. FEINGOLD) was added as a cosponsor of S. 2038, a bill to amend the Agricultural Marketing Act of 1946 to restore the original deadline for mandatory country of origin.

S. 2079

At the request of Mr. SMITH, the name of the Senator from Idaho (Mr. CRAIG) was added as a cosponsor of S. 2079, a bill to improve the ability of the Secretary of Agriculture and the Secretary of the Interior to promptly implement recovery treatments in response to catastrophic events affecting the natural resources of Forest Service land and Bureau of Land Management Land, respectively, to support the recovery of non-Federal land damaged by catastrophic events, to assist impacted communities, to revitalize Forest Service experimental forests, and for other purposes.

S. 2081

At the request of Mr. COCHRAN, the name of the Senator from Alaska (Ms. MURKOWSKI) was added as a cosponsor of S. 2081, a bill to improve the safety of all-terrain vehicles in the United States, and for other purposes.

S. 2082

At the request of Mr. LEAHY, the name of the Senator from North Dakota (Mr. DORGAN) was added as a cosponsor of S. 2082, a bill to amend the

USA PATRIOT Act to extend the sunset of certain provisions of that Act and the lone wolf provision of the Intelligence Reform and Terrorism Prevention Act of 2004 to March 31, 2006.

At the request of Mr. SUNUNU, the name of the Senator from Minnesota (Mr. DAYTON) was added as a cosponsor of S. 2082, supra.

S. 2088

At the request of Mr. ALLARD, the name of the Senator from Louisiana (Mr. VITTER) was added as a cosponsor of S. 2088, a bill to assist low-income families, displaced from their residences in the States of Alabama, Louisiana, and Mississippi as a result of Hurricane Katrina, by establishing within the Department of Housing and Urban Development a homesteading initiative that offers displaced low-income families the opportunity to purchase a home owned by the Federal Government, and for other purposes.

S. 2096

At the request of Mr. COLEMAN, the names of the Senator from Nebraska (Mr. HAGEL) and the Senator from Wisconsin (Mr. FEINGOLD) were added as cosponsors of S. 2096, a bill to amend the Torture Victims Relief Act of 1998 to authorize appropriations to provide assistance for domestic and foreign programs and centers for the treatment of victims of torture, and for other purposes.

S. CON. RES. 16

At the request of Mr. BINGAMAN, the name of the Senator from New Mexico (Mr. DOMENICI) was added as a cosponsor of S. Con. Res. 16, a concurrent resolution conveying the sympathy of Congress to the families of the young women murdered in the State of Chihuahua, Mexico, and encouraging increased United States involvement in bringing an end to these crimes.

S. CON. RES. 54

At the request of Mr. SCHUMER, the name of the Senator from New York (Mrs. CLINTON) was added as a cosponsor of S. Con. Res. 54, a concurrent resolution expressing the sense of Congress regarding a commemorative postage stamp honoring Jasper Francis Cropsey, the famous Staten Island-born 19th Century Hudson River Painter.

S. CON. RES. 65

At the request of Mr. OBAMA, the name of the Senator from New Jersey (Mr. LAUTENBERG) was added as a cosponsor of S. Con. Res. 65, a concurrent resolution recognizing the benefits and importance of Federally-qualified health centers and their Medicaid prospective payment system.

S. RES. 320

At the request of Mr. ENSIGN, the names of the Senator from Rhode Island (Mr. CHAFEE), the Senator from Wisconsin (Mr. KOHL), the Senator from New Jersey (Mr. LAUTENBERG), the Senator from Michigan (Mr. LEVIN), the Senator from Rhode Island (Mr. REED), the Senator from Minnesota (Mr. COLEMAN) and the Senator from Maryland (Ms. MIKULSKI) were

added as cosponsors of S. Res. 320, a resolution calling the President to ensure that the foreign policy of the United States reflects appropriate understanding and sensitivity concerning issues related to human rights, ethnic cleansing, and genocide documented in the United States record relating to the Armenian Genocide.

AMENDMENT NO. 2646

At the request of Ms. MURKOWSKI, the name of the Senator from Alaska (Mr. STEVENS) was added as a cosponsor of amendment No. 2646 intended to be proposed to S. 2020, an original bill to provide for reconciliation pursuant to section 202(b) of the concurrent resolution on the budget for fiscal year 2006.

#### STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mrs. FEINSTEIN:

S. 2106. A bill to amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize the Secretary of the Interior to participate in the Prado Basin Natural Treatment System Project, to authorize the Secretary to carry out a program to assist agencies in projects to construct regional brine lines in California, to authorize the Secretary to participate in the Lower Chino Dairy Area desalination demonstration and reclamation project, and for other purposes; to the Committee on Energy and Natural Resources.

Mrs. FEINSTEIN. Mr. President, I rise today to introduce the Santa Ana River Water Supply Enhancement Act of 2005.

This legislation authorizes Federal assistance through Title XVI for projects developed by local communities to reduce their dependence on water from the Colorado River. It helps California develop safer and more reliable water supplies.

Congressman GARY MILLER along with Congressmen CALVERT, DREIER, ROYCE, COX and ROHRBACHER introduced similar legislation in the House. Their bill passed the House in October.

The projects in this bill will increase the region's water supply by 200,000 acre-feet annually and are prototypes for providing water supplies to new communities throughout the arid Western States.

The Orange County Water District's Groundwater Replenishment System is an innovative approach to reuse water resources within one of the most populated counties in the Nation. Seventy-two thousand acre feet of reclaimed water will be produced annually for indirect potable use. This is enough water to meet the needs of more than 300,000 people each year. This bill authorizes \$51.8 million for the groundwater replenishment system, just 10 percent of the actual cost of the project.

Another project in the bill expands desalination facilities in the Chino Basin, providing a fourfold increase in the ability to desalinate groundwater

supplies. The Chino Basin groundwater desalters will be the primary drinking water supply for 40,000 new homes in Riverside and San Bernardino Counties.

This legislation also authorizes \$40 million to construct regional brine sewer lines that will enable our communities to safely dispose of the brine generated from the "desalted" groundwater supplies.

In order to naturally treat the regions water and remove contamination from the Santa Anna River, I am also seeking Federal support for the construction of wetlands. This concept holds the promise of efficiently improving the quality of our groundwater supplies without costly control technologies.

The creation of a Center for Technological Advancement of Membrane Technology will foster research efforts to improve membrane design and testing. Research conducted at this facility will help develop technologies to increase the stability of our water supply.

I believe the ever-growing demand for water throughout Southern California can be satisfied through local supplies. Regional watershed plans, coordinating water use throughout multiple jurisdictions, are a critical tool to reach this goal. All of the projects in this legislation were developed on a regional basis and the Federal cost share of each project is less than 20 percent.

I am pleased to introduce this legislation as it holds the key to providing a roadmap for other communities' efforts to meet the challenges posed by a scarce potable water supply.

I ask unanimous consent that the text of the bill be printed in the RECORD.

There being no objection, the bill was ordered to be printed in the RECORD, as follows:

S. 2106

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "Santa Ana River Water Supply Enhancement Act of 2005".

#### SEC. 2. PRADO BASIN NATURAL TREATMENT SYSTEM PROJECT.

(a) IN GENERAL.—The Reclamation Water and Groundwater Study and Facilities Act (Public Law 102-575, title XVI; 43 U.S.C. 390h et seq.) is amended by adding at the end the following:

##### "SEC. 1636. PRADO BASIN NATURAL TREATMENT SYSTEM PROJECT.

"(a) IN GENERAL.—The Secretary, in cooperation with the Orange County Water District, shall participate in the planning, design, and construction of natural treatment systems and wetlands for the flows of the Santa Ana River, California, and its tributaries into the Prado Basin.

"(b) COST SHARING.—The Federal share of the cost of the project described in subsection (a) shall not exceed 25 percent of the total cost of the project.

"(c) LIMITATION.—Funds provided by the Secretary shall not be used for the operation and maintenance of the project described in subsection (a).

"(d) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section \$20,000,000.

"(e) SUNSET OF AUTHORITY.—This section shall have no effect after the date that is 10 years after the date of the enactment of this section."

(b) CONFORMING AMENDMENT.—The table of sections in section 2 of Public Law 102-575 is further amended by inserting after the item relating to section 1634 the following:

"Sec. 1636. Prado Basin Natural Treatment System Project".

#### SEC. 3. REGIONAL BRINE LINES.

(a) IN GENERAL.—The Reclamation Water and Groundwater Study and Facilities Act (Public Law 102-575, title XVI; 43 U.S.C. 390h et seq.) is further amended by adding at the end the following:

##### "SEC. 1637. REGIONAL BRINE LINES.

"(a) SOUTHERN CALIFORNIA.—The Secretary, under Federal reclamation laws and in cooperation with units of local government, may assist agencies in projects to construct regional brine lines to export the salinity imported from the Colorado River to the Pacific Ocean as identified in—

"(1) the Salinity Management Study prepared by the Bureau of Reclamation and the Metropolitan Water District of Southern California; and

"(2) the Southern California Comprehensive Water Reclamation and Reuse Study prepared by the Bureau of Reclamation.

"(b) AGREEMENTS AND REGULATIONS.—The Secretary may enter into such agreements and promulgate such regulations as are necessary to carry out this section.

"(c) COST SHARING.—The Federal share of the cost of a project to construct regional brine lines described in subsection (a) shall not exceed—

"(1) 25 percent of the total cost of the project; or

"(2) \$40,000,000.

"(d) LIMITATION.—Funds provided by the Secretary shall not be used for operation or maintenance of any project described in subsection (a).

"(e) SUNSET OF AUTHORITY.—This section shall have no effect after the date that is 10 years after the date of the enactment of this section."

(b) CONFORMING AMENDMENT.—The table of sections in section 2 of Public Law 102-575 is further amended by inserting after the item relating to section 1635 the following:

"Sec. 1637. Regional brine lines".

#### SEC. 4. LOWER CHINO DAIRY AREA DESALINATION DEMONSTRATION AND RECLAMATION PROJECT.

(a) IN GENERAL.—The Reclamation Water and Groundwater Study and Facilities Act (Public Law 102-575, title XVI; 43 U.S.C. 390h et seq.) is further amended by adding at the end the following:

##### "SEC. 1638. LOWER CHINO DAIRY AREA DESALINATION DEMONSTRATION AND RECLAMATION PROJECT.

"(a) IN GENERAL.—The Secretary, in cooperation with the Chino Basin Watermaster, the Inland Empire Utilities Agency, and the Santa Ana Watershed Project Authority and acting under the Federal reclamation laws, shall participate in the design, planning, and construction of the Lower Chino Dairy Area desalination demonstration and reclamation project.

"(b) COST SHARING.—The Federal share of the cost of the project described in subsection (a) shall not exceed—

"(1) 25 percent of the total cost of the project; or

"(2) \$50,000,000.

"(c) LIMITATION.—Funds provided by the Secretary shall not be used for operation or maintenance of the project described in subsection (a).

"(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as are necessary to carry out this section.

"(e) SUNSET OF AUTHORITY.—This section shall have no effect after the date that is 10 years after the date of the enactment of this section."

(b) CONFORMING AMENDMENT.—The table of sections in section 2 of Public Law 102-575 is further amended by inserting after the item relating to section 1636 the following:

"Sec. 1638. Lower Chino dairy area desalination demonstration and reclamation project".

#### SEC. 5. CEILING INCREASE ON FEDERAL SHARE OF WATER RECLAMATION PROJECT.

Section 1631(d) of the Reclamation Water and Groundwater Study and Facilities Act (43 U.S.C. 390h-13(d)) is amended—

(1) in paragraph (1) by striking "paragraph (2)" and inserting "paragraphs (2) and (3)"; and

(2) by adding at the end the following new paragraph:

"(3) The Federal share of the costs of the project authorized by section 1624 shall not exceed the following:

"(A) \$22,000,000 for fiscal year 2007.

"(B) \$24,200,000 for fiscal year 2008.

"(C) \$26,620,000 for fiscal year 2009.

"(D) \$29,282,000 for fiscal year 2010.

"(E) \$32,210,200 for fiscal year 2011.

"(F) \$35,431,220 for fiscal year 2012.

"(G) \$38,974,342 for fiscal year 2013.

"(H) \$42,871,776 for fiscal year 2014.

"(I) \$47,158,953 for fiscal year 2015.

"(J) \$51,874,849 for fiscal year 2016."

#### SEC. 6. CENTER FOR TECHNOLOGICAL ADVANCEMENT OF MEMBRANE TECHNOLOGY AND EDUCATION.

(a) IN GENERAL.—The Secretary of the Interior shall establish at the Orange County Water District located in Orange County, California, a center for the expressed purposes of providing—

(1) assistance in the development and advancement of membrane technologies; and

(2) educational support in the advancement of public understanding and acceptance of membrane produced water supplies.

(b) MANAGEMENT OF CENTER.—

(1) CONTRACTS.—In establishing the center, the Secretary shall enter into contracts with the Orange County Water District for purposes of managing such center.

(2) PLAN.—Not later than 90 days after the date of enactment of this section, the Secretary, in consultation with the Orange County Water District, shall jointly prepare a plan, updated annually, identifying the goals and objectives of the center.

(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to carry out subsections (a) and (b), \$2,000,000, for each of fiscal years 2006 through 2011. Such sums shall remain available until expended.

(d) REPORT.—Not later than one year after the date of enactment of this section and annually thereafter, the Secretary, in consultation with the Orange County Water District, shall provide a report to Congress on the status of the center and its accomplishments.

(e) SUNSET OF AUTHORITY.—This section shall have no effect after the date that is 10 years after the date of the enactment of this section.

By Mr. BAUCUS:

S. 2107. A bill to provide additional appropriations for the Low-Income Home Energy Assistance Act of 1981 for fiscal year 2006 and to amend the Internal Revenue Code of 1986 to provide a refundable tax credit for residential energy cost assistance, and for other purposes; to the Committee on Finance.

Mr. BAUCUS. Mr. President, today I am introducing legislation to help families bear the dramatic increase in cost for home heating bills this winter.

The bill, the Household Energy and Taxpayer Assistance Act of 2005, appropriates enough money to fully fund the Low Income Energy Assistance Program at its authorized level and provides for a tax credit up to \$300 per family to offset home heating bills.

I cannot overstate the urgency of this legislation. This week, natural gas prices hit record highs. On the New York Mercantile Exchange, January futures rose to \$15.78 per million BTUs. Prices have more than doubled since last year.

What does that mean for the consumer?

The Energy Information Administration predicts that the average household heating with natural gas this winter will pay \$281 more for fuel this winter than they did last winter. That is a 38 percent increase. Households using home heating oil can expect to pay \$255 more, and propane users could see a \$167 increase.

Those heating with electricity will likely see a \$46 increase in the cost to heat a home.

The bill that I am proposing includes two proposals that Congress should enact immediately to mitigate these price spikes for households.

First and foremost, my legislation fully funds the Federal Low Income Home Energy Assistance Program, or LIHEAP. Despite projections for astronomical energy costs, the conference agreement for the Labor, HHS, Education appropriations bill funds this essential home heating program at less than 50 percent of its authorized level.

And today the Senate will be considering that conference report. The current funding level for LIHEAP is unacceptable. As energy prices continue to skyrocket, we should not be short-changing this vital program.

In recent years, a growing need for help with home heating bills has consistently outstripped available funding, which has remained flat.

That is why Congress responded by increasing the authorization for the program to \$5.1 billion in the recently enacted energy bill. But Congress hasn't appropriated anywhere near as much for this program as it could.

Current appropriations legislation provides only about \$2.2 billion in 2006.

My bill would appropriate an additional \$2.9 billion for the LIHEAP program. Funding for heating assistance in my home State of Montana would be at least \$35 million, about \$20 million more than last year.

Montanans and other hard-working families should not have to choose between their home energy bills and affording other basic necessities.

Energy is a basic need, and without LIHEAP assistance, many Montanans wouldn't be able to heat their homes. That's why I'm working to help ease the burden of high heating costs.

In addition, this bill establishes a temporary tax credit to help all taxpayers to defray a portion of their heating bills this winter. That means families can add up their home energy bills, and when tax time comes around they can get 20 percent of that expense back, for heating fuel or utility costs. That credit will provide as much as \$200 for an individual or \$300 for a family.

The credit is also refundable. Low-income Americans who don't owe any Federal income taxes would still get that rebate against their heating bills.

Americans can't wait until spring for this assistance.

In its current edition, U.S. News & World Report introduces us to Mervalene Eastman, an unemployed woman on the Crow Indian Reservation. Month-to-month, \$100 jumps in her heating bills last year put her behind in her bills. Medical problems forced her to leave her job as an emergency dispatcher, and then she lost natural gas service.

Things are so tough she sometimes needed to use her electric oven for heat, especially on cold nights. I am deeply troubled by the thought that more Americans will go without heat this winter. I am concerned families will face a choice between food on their table or heat during the night. They should not have to make that decision. We should pass this legislation and give millions of families an early present this holiday.

Now is the time to act, and I urge my colleagues to join me helping to provide this much needed relief.

By Mr. ENSIGN (for himself, Mr. LIEBERMAN, Mr. LUGAR, Mr. DEWINE, Mr. ALLEN, Mr. BINGAMAN, Mr. ALEXANDER, Mr. CHAMBLISS, Mr. BAYH, Mr. NELSON of Florida, Mr. KOHL, Mr. CORNYN, Mr. ISAKSON, Mr. SMITH, Mr. LEAHY, and Mr. NELSON of Nebraska):

S. 2109. A bill to provide national innovation initiative; to the Committee on Finance.

Mr. ENSIGN. Mr. President, I rise today to discuss important new innovation legislation that will address concerns about our country and our ability to compete in the global marketplace. Today, Senator LIEBERMAN and I introduced the National Innovation bill with bipartisan support from Senator LUGAR, Senator DEWINE, Senator BINGAMAN, Senator ALLEN, Senator ALEXANDER, Senator CHAMBLISS, Senator BAYH, Senator BILL NELSON, Senator KOHL, Senator CORNYN, Senator ISAKSON, Senator BEN NELSON, Senator LEAHY and Senator SMITH as original cosponsors. We encourage all of our colleagues to join us in this important effort.

Today the World is becoming dramatically more interconnected and competitive. In order to remain globally competitive, the United States must continue to lead the world's inno-

vation. Innovation fosters the new ideas, technologies, and processes that lead to better jobs, higher wages, and a higher standard of living.

Unfortunately, in the disciplines that foster innovation in the 21st Century—science, technology, engineering, and mathematics—America is steadily losing its global edge:

The trouble signs are numerous:

Less than 6 percent of high school seniors plan to pursue engineering degrees, down from 36 percent from a decade ago.

In 2000, only 17 percent of undergraduate degrees earned in the United States were in the hard sciences.

In the same year 56 percent of China's undergraduate degrees were in the hard sciences.

Next year, China will likely produce six times the number of engineers that we will graduate in the United States.

We must address these long-term competitive challenges to America's economic vitality and national security now or risk losing our essential leadership position on innovation. The National Innovation Act will help America meet these interconnected challenges by addressing three primary areas of importance to maintaining and improving United States' innovation in the 21st Century: 1. increasing research investment 2. increasing science and technology talent, and 3. developing an innovation infrastructure.

I am a fiscal conservative, and current Federal budget constraints will require prioritization of spending. New programs must be funded through existing funds or through identifiable funding offsets whenever possible. I look forward to working with Senator LIEBERMAN and the other cosponsors in this effort.

Increased support of basic research through should be a national priority.

Our bill would increase the national commitment to basic research by nearly doubling research funding for the National Science Foundation (NSF) by FY 2011. The National Science Foundation plays a critical role in underwriting basic research at colleges, universities, and other institutions throughout our nation.

NSF supported basic research in chemistry, physics, nanotechnology, and semiconductor manufacturing has brought about some of the most significant innovations of the last 20 years. For example, the World Wide Web, magnetic resonance imaging and fiber optics technology all emerged through basic research projects that received NSF funding.

Because our nation's long-term future economic strength depends in large part on the support we give to basic research projects now, the National Innovation bill also establishes the Innovation Acceleration Grants Program, which encourages Federal agencies funding research in science, technology, engineering, and mathematics to allocate at least 3 percent of

their Research and Development (R&D) budgets to grants directed toward high-risk frontier research.

Three percent of overall R&D budgets from federal agencies may not seem like a lot, but this is an important starting point. Although our bill does not specifically require it, I encourage federal agencies engaged in R&D to dedicate an even greater percentage of their budgets to basic research.

Along with strategic investment in the innovation economy, the Federal Government also needs to examine various barriers that impede innovation in the United States.

Our bill instructs the National Academy of Sciences to study factors such as tort litigation that may impede American businesses from engaging in innovation risk-taking and provide recommendations on how best to address these issues. Litigation, taxation, and the substantial costs of regulatory compliance impact innovation and need to be addressed.

Innovation must be a major priority as the United States looks to retain and strengthen its economic leadership and national security in the 21st Century. The National Innovation Act will help ensure that the Federal Government does exactly that by increasing research investment, increasing science and technology talent, and developing an innovation infrastructure.

I ask unanimous consent that the text of the bill be printed in the RECORD.

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

S. 2109

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

#### SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “National Innovation Act of 2005”.

(b) TABLE OF CONTENTS.—

The table of contents for this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings and purposes.
- Sec. 3. Definitions.

#### TITLE I—INNOVATION PROMOTION

- Sec. 101. President’s Council on Innovation.
- Sec. 102. Innovation acceleration grants.
- Sec. 103. A national commitment to basic research.
- Sec. 104. Regional economic development.
- Sec. 105. Development of advanced manufacturing systems.
- Sec. 106. Study on service science.

#### TITLE II—MODERNIZATION OF SCIENCE, EDUCATION, AND HEALTHCARE PROGRAMS

##### Subtitle A—Science and Education

- Sec. 201. Graduate fellowships and graduate traineeships.
- Sec. 202. Professional science master’s degree programs.
- Sec. 203. Increased support for science education through the National Science Foundation.
- Sec. 204. Innovation-based experiential learning.

##### Subtitle B—21st Century Healthcare System

- Sec. 211. Sense of Congress regarding 21st century healthcare system.

#### TITLE III—INCENTIVES FOR ENCOURAGING INNOVATION

##### Subtitle A—Research Credits

- Sec. 301. Permanent extension of research credit.
- Sec. 302. Increase in rates of alternative incremental credit.
- Sec. 303. Alternative simplified credit for qualified research expenses.

##### Subtitle B—Health and Education

- Sec. 311. Study and report on catastrophic healthcare.
- Sec. 312. Lifelong learning accounts.

##### Subtitle C—Savings and Investments

- Sec. 321. Regulations relating to private foundation support of innovations in economic development.
- Sec. 322. Advisory group regarding valuation of intangibles.

#### TITLE IV—DEPARTMENT OF DEFENSE MATTERS

##### Subtitle A—Defense Research and Education

- Sec. 401. Revitalization of frontier and multidisciplinary research.
- Sec. 402. Enhancement of education.

##### Subtitle B—Defense Advanced Manufacturing

- Sec. 411. Manufacturing research and development.
- Sec. 412. Transition of transformational manufacturing processes and technologies to the defense manufacturing base.
- Sec. 413. Manufacturing technology strategies.
- Sec. 414. Planning for adoption of strategic innovation.
- Sec. 415. Report.
- Sec. 416. Authorization of appropriations.

#### TITLE V—JUDICIARY AND OTHER MATTERS

- Sec. 501. Sense of Congress on retaining high-tech talent in the United States.
- Sec. 502. Study on barriers to innovation.
- Sec. 503. Sense of Congress on patent reform.

#### SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—Congress makes the following findings:

(1) The United States is the most innovative Nation in the world. Since our Nation’s founding, exploration, opportunity, and discovery have remained essential to fulfilling our Nation’s strategic economic and political objectives.

(2) In the 21st century, a well-educated and trained workforce, investment in research and development, and a regulatory and physical infrastructure that supports innovators are essential to ensuring that the United States continues to lead the global economy on innovation.

(3) America’s future economic and national security will largely depend on the creativity and commitment of our Nation to unleash its innovation capacity.

(4) The world has become dramatically more interconnected and competitive. Cutting edge research, world-class education, and highly skilled labor pools are no longer within the sole purview of the United States.

(5) The United States investment in basic research is currently insufficient to meet the challenges we face.

(6) Federal support for basic research in the physical sciences has consistently lagged behind that given to the life sciences in recent years.

(7) Traditional measurements of innovation capacity focused solely on inputs, such as research and development spending, number of patents and value of physical infrastructure. The traditional measurements are

necessary but are not sufficient metrics for innovation in the 21st century’s knowledge economy.

(8) Current Federal budget constraints require prioritization of spending and new programs must be funded through existing funds or through identifiable funding offsets whenever possible.

(9) A national, private sector-led, and government supported plan is required if the United States is to adequately respond to the challenges of increased global competition and take advantage of the opportunities this changing global dynamic presents.

(b) PURPOSES.—The purposes of this Act are to—

(1) make innovation a fundamental economic priority for the United States;

(2) create the most fertile policy environment for innovation to occur;

(3) develop greater numbers of American scientists, mathematicians, and engineers;

(4) enhance the quality of math and science education at all levels;

(5) increase the Federal Government’s investment in basic research, especially in the physical sciences;

(6) direct greater funding toward multidisciplinary and frontier research where tomorrow’s innovations are most likely to occur;

(7) secure a strong advanced manufacturing base in the United States to ensure that as innovations occur, America is poised to reap the benefits via the creation of new jobs and investment; and

(8) examine both the incentives for, and barriers to, innovation to better understand what additional policy changes are warranted.

#### SEC. 3. DEFINITIONS.

In this Act:

(1) CONGRESSIONAL DEFENSE COMMITTEES.—The term “congressional defense committees” has the meaning given that term in section 101(a)(16) of title 10, United States Code.

(2) DEFENSE MANUFACTURING BASE.—The term “defense manufacturing base” includes any supplier of the Department of Defense, including a supplier of raw materials.

(3) EXECUTIVE AGENCY.—The term “Executive agency” has the meaning given that term in section 105 of title 5, United States Code.

(4) EXTENDED PRODUCTION ENTERPRISE.—The term “extended production enterprise” means a system in which key entities in the manufacturing chain, including entities engaged in product design and development, manufacturing, sourcing, distribution, and user entities, are linked together through information technology and other means to promote efficiency and productivity.

(5) INNOVATION.—The term “innovation” means the intersection of invention and insight leading to the creation of social and economic value, including through efforts meeting fundamental technology challenges and involving multidisciplinary work and a high degree of novelty.

(6) MANUFACTURING EXTENSION PARTNERSHIP PROGRAM.—The term “Manufacturing Extension Partnership Program” means the Manufacturing Extension Partnership Program of the Department of Commerce.

(7) MANUFACTURING TECHNOLOGY PROGRAM.—The term “Manufacturing Technology Program” means the Manufacturing Technology Program under section 2521 of title 10, United States Code.

(8) PROFESSIONAL SCIENCE MASTERS PROGRAM.—The term “professional science masters program” means a graduate degree program in science and mathematics that extends science training to strategic planning and business management and focuses on

multidisciplinary specialties such as business and information technology (IT), biology and IT (bioinformatics), and computational chemistry.

(9) REGIONAL INNOVATION HOT SPOTS DEFINED.—The term “regional innovation hot spots” means regions that are defined by a high degree of innovation and the availability of talent, investment, and infrastructure necessary to create and sustain such innovation.

(10) SERVICE SCIENCE.—The term “service science” means curriculums, research programs, and training regimens, including service sciences, management, and engineering (SSME) programs, that exist or that are being developed to teach individuals to apply technology, organizational process management, and industry-specific knowledge to solve complex problems.

(11) SMALL BUSINESS INNOVATION RESEARCH PROGRAM.—The term “Small Business Innovation Research Program” has the meaning given that term in section 2500(11) of title 10, United States Code.

(12) SMALL BUSINESS TECHNOLOGY TRANSFER PROGRAM.—The term “Small Business Technology Transfer Program” has the meaning given that term in section 2500(12) of title 10, United States Code.

(13) SSME.—The term “SSME” means the discipline known as service sciences, management, and engineering that—

(A) applies scientific, engineering and management disciplines to tasks that one organization performs beneficially for others, generally as part of the services sector of the economy; and

(B) integrates computer science, operations research, industrial engineering, business strategy, management sciences, and social and legal sciences, in order to encourage innovation in how organizations create value for customers and shareholders that could not be achieved through such disciplines working in isolation.

## TITLE I—INNOVATION PROMOTION

### SEC. 101. PRESIDENT'S COUNCIL ON INNOVATION.

(a) IN GENERAL.—The President shall establish a President's Council on Innovation (in this section referred to as the “Council”).

(b) DUTIES.—The Council's duties shall include—

(1) monitoring implementation of legislative proposals and initiatives for promoting innovation, including policies related to research funding, taxation, immigration, trade, and education that are proposed in this and other Acts;

(2) in consultation with the Director of the Office of Management and Budget, developing a process for using metrics to assess the impact of existing and proposed policies and rules that affect innovation capabilities in the United States;

(3) identifying opportunities and making recommendations for the heads of executive agencies to improve innovation, monitoring, and reporting on the implementation of such recommendations;

(4) developing metrics for measuring the progress of the Federal Government with respect to improving conditions for innovation, including through talent development, investment, and infrastructure improvements; and

(5) submitting an annual report to the President and Congress on such progress.

(c) MEMBERSHIP AND COORDINATION.—

(1) MEMBERSHIP.—The Council shall be composed of the Secretary or head of each of the following:

- (A) The Department of Commerce.
- (B) The Department of Defense.
- (C) The Department of Education.
- (D) The Department of Energy.

(E) The Department of Health and Human Services.

(F) The Department of Homeland Security.

(G) The Department of Labor.

(H) The Department of the Treasury.

(I) The National Aeronautics and Space Administration.

(J) The Securities and Exchange Commission.

(K) The National Science Foundation.

(L) The Office of the United States Trade Representative.

(M) The Office of Management and Budget.

(N) The Office of Science and Technology Policy.

(2) CHAIRPERSON.—The Secretary of Commerce shall serve as chairperson of the Council.

(3) COORDINATION.—The chairperson of the Council shall ensure appropriate coordination between the Council and the National Economic Council and the National Security Council.

(d) DEVELOPMENT OF INNOVATION AGENDA.—

(1) IN GENERAL.—The Council shall develop a comprehensive agenda for strengthening the innovation capabilities of the Federal Government and State governments, academia, and the private sector in the United States.

(2) CONSULTATION.—The comprehensive agenda required by paragraph (1) shall be developed in consultation with appropriate representatives of the private sector, scientific organizations, and academic organizations.

### SEC. 102. INNOVATION ACCELERATION GRANTS.

(a) GRANT PROGRAM.—The President shall establish a grant program, to be known as the “Innovation Acceleration Grants Program”, to support and promote innovation in the United States. Priority in the awarding of grants shall be given to projects that meet fundamental technology challenges and that involve multidisciplinary work and a high degree of novelty.

(b) AWARDING OF GRANTS THROUGH DEPARTMENTS AND AGENCIES.—

(1) FUNDING GOALS.—The President shall ensure that it is the goal of each Executive agency that finances research in science, mathematics, engineering, and technology to allocate at least 3 percent of the agency's total annual research and development budget to funding grants under the Innovation Acceleration Grants Program.

(2) ADMINISTRATION.—

(A) IN GENERAL.—Each head of an Executive agency awarding grants under paragraph (1) shall submit a plan for implementing the grant program within such Executive agency to the Director of the Office of Science and Technology Policy and the Director of the Office of Management and Budget. The implementation plan shall be submitted not later than 90 days after the date of enactment of this Act. The implementation plan may incorporate existing initiatives of the Executive agencies that promote research in innovation as described in subsection (a).

(B) REQUIRED METRICS.—The head of each Executive agency submitting an implementation plan pursuant to this section shall include metrics upon which grant funding decisions will be made and metrics for assessing the success of the grants awarded.

(C) GRANT DURATION AND RENEWALS.—

(i) IN GENERAL.—Any grants issued by an Executive agency under this section shall be for a period not to exceed 3 years.

(ii) EVALUATION.—Not later than 90 days prior to the expiration of a grant issued under this section, the Executive agency that approved the grant shall complete an evaluation of the effectiveness of the grant based on the metrics established pursuant to

subparagraph (B). In its evaluation, the Executive agency shall consider the extent to which the program funded by the grant met the goals of quality improvement and job creation.

(iii) PUBLICATION OF REVIEW.—The Executive agency shall publish and make available to the public the review of each grant approved pursuant to this section.

(iv) FAILURE TO MEET METRICS.—Any grant that the Executive agency awarding the grant determines has failed to satisfy any of the metrics developed pursuant to subparagraph (B), shall not be eligible for a renewal.

(v) RENEWAL.—A grant issued under this section that satisfies all of the metrics developed pursuant to subparagraph (B), may be renewed once for a period not to exceed 3 years. Additional renewals may be considered only if the head of the Executive agency makes a specific finding that the program being funded involves a significant technology advance that requires a longer timeframe to complete critical research, and the research satisfies all the metrics developed pursuant to subparagraph (B).

### SEC. 103. A NATIONAL COMMITMENT TO BASIC RESEARCH.

(a) PLAN FOR INCREASED RESEARCH.—Not later than 180 days after the date of the enactment of this Act, the Director of the National Science Foundation shall submit to Congress a comprehensive, multiyear plan that describes how the funds authorized in subsection (b) shall be used. Such plan shall be developed with a focus on utilizing basic research in physical science and engineering to optimize the United States economy as a global competitor and leader in productive innovation.

(b) INCREASED FUNDING FOR NATIONAL SCIENCE FOUNDATION.—There are authorized to be appropriated to the National Science Foundation for the purpose of doubling research funding the following amounts:

- (1) \$6,440,000,000 for fiscal year 2007.
- (2) \$7,280,000,000 for fiscal year 2008.
- (3) \$8,120,000,000 for fiscal year 2009.
- (4) \$8,960,000,000 for fiscal year 2010.
- (5) \$9,800,000,000 for fiscal year 2011.

(c) RECOMMENDATIONS FOR RESEARCH AND DEVELOPMENT FUNDING.—Not later than 1 year after the date of the enactment of this Act, the Director of the Office of Science and Technology Policy shall evaluate and, as appropriate, submit to Congress recommendations for an increase in funding for research and development in physical sciences and engineering in consultation with agencies and departments of the United States with significant research and development budgets.

### SEC. 104. REGIONAL ECONOMIC DEVELOPMENT.

(a) DEVELOPMENT OF FUNDING STRATEGY.—

(1) IN GENERAL.—The Assistant Secretary for Economic Development of the Department of Commerce shall review Federal programs that support local economic development and prepare and implement a strategy to focus funding on initiatives that improve the ability of communities to participate successfully in the modern economy through innovation. In preparing the strategy, priority should be given to projects that—

(A) emphasize private sector cooperation with State and local governments and non-profit organizations focused on regional economic development as the means of achieving specific objectives related to the support and promotion of innovation; and

(B) are the most successful in meeting the metrics established under subsection (b).

(2) COORDINATION.—The Assistant Secretary shall coordinate the development and implementation of the strategy with the activities carried out by the Under Secretary for Technology under subsection (d).

(b) EVALUATION OF PROGRAMS.—The Assistant Secretary for Economic Development of

the Department of Commerce shall develop metrics to measure the success of Federal programs in supporting and promoting innovation at the local community level while minimizing bureaucracy and overhead expenses.

(c) **PROMOTION OF ECONOMIC DEVELOPMENT OPPORTUNITIES.**—The Assistant Secretary for Economic Development of the Department of Commerce should work with organizations focused on economic development to highlight opportunities for such organizations to serve local communities through grants focused on economic development and investment in companies pursuing innovation.

(d) **REGIONAL INNOVATION HOT SPOTS.**—

(1) **PROMOTION OF REGIONAL INNOVATION HOT SPOTS.**—The Under Secretary for Technology of the Department of Commerce shall coordinate activities focused on promoting innovation through the development of regional innovation hot spots.

(2) **GUIDE TO DEVELOPING SUCCESSFUL REGIONAL INNOVATION HOT SPOTS.**—

(A) **IN GENERAL.**—Not later than 1 year after the date of enactment of this Act, the Secretary of Commerce, in consultation with representatives of regional innovation hot spots, shall publish a report, to be titled the “Guide to Developing Successful Regional Innovation Hot Spots”, that examines successful regional innovation hot spots and includes recommendations for establishing and fostering regional innovation hot spots.

(B) **CONTENT.**—The report required under subparagraph (A) shall—

(i) include information on the evaluation of human capital;

(ii) include information on the role of sponsoring institutions, such as universities, nonprofit organizations, and laboratories, in establishing and fostering regional innovation hot spots;

(iii) include information on the role of State and local government leaders, leaders in the research and business communities, and community organizations in establishing and fostering regional innovation hot spots;

(iv) discuss the importance of collaboration by public and private sector leaders;

(v) identify sources of funding for these activities within Federal, State, and local governments and the private sector; and

(vi) include recommendations for developing strategic plans to stimulate innovation, including recommendations relating to knowledge transfer and commercialization, the support of regional entrepreneurship and increased innovation within existing regional firms, and the linking of primary institutions engaged in the innovation process.

(3) **REGIONAL INNOVATION HOT SPOT METRICS.**—

(A) **DEVELOPMENT OF METRICS.**—In conjunction with publishing the report required under paragraph (2), the Secretary of Commerce shall develop the following sets of metrics:

(i) Metrics to be considered for identifying potential regional innovation hot spots (in this subsection referred to as “identifying metrics”).

(ii) Metrics to be considered for evaluating the impact and effectiveness of established regional innovation hot spots (in this subsection referred to as “evaluation metrics”).

(B) **USE OF METRICS.**—The Under Secretary of Commerce for Technology shall use the identifying metrics to conduct biannual assessments of potential regional clusters and shall use the evaluation metrics to assess the impact and effectiveness of established regional innovation hot spots in improving the regional economy and regional job market. The Under Secretary shall also assess the cost effectiveness of operating within each regional hot spot. The Under Secretary

shall report the biannual assessments to Congress.

**SEC. 105. DEVELOPMENT OF ADVANCED MANUFACTURING SYSTEMS.**

(a) **RESEARCH AND DEVELOPMENT.**—The Director of the National Institute of Standards and Technology shall support research and development in collaboration with entities and organizations from the industrial sector to supplement and support work in the private sector on advanced manufacturing systems designed to increase productivity and efficiency and to create competitive advantages for United States businesses. These research and development activities should focus on the following activities:

(1) Supporting industry efforts to develop innovative, state-of-the-art manufacturing processes, advanced technologies through interoperable standards, and related concepts, including—

(A) advanced distributed and desktop manufacturing linked to and made compatible with the extended production enterprise system described in paragraph (2);

(B) non-contact quality inspection processes linked to and made compatible with the extended production enterprise system;

(C) small lot manufacturing processes that are—

(i) as cost-effective as mass production processes; and

(ii) linked to and compatible with the extended production enterprise system; and

(D) the use of state-of-the-art materials and processes at the nanotechnological level.

(2) Supporting industry efforts to develop an extended production enterprise system that integrates key entities, including entities engaged in product design and development, manufacturing, sourcing, distribution, and user entities, including through the development of—

(A) interoperable software and standards designed to maximize the compatibility of the design, modeling, and manufacturing stages of the manufacturing process; and

(B) supply chain software.

(b) **COORDINATION OF ACTIVITIES.**—The Director of the National Institute of Standards and Technology shall coordinate activities under subsection (a) with activities under—

(1) the Small Business Innovation Research Program;

(2) the Small Business Technology Transfer Program; and

(3) the Manufacturing Technology Program of the Department of Defense.

(c) **TESTING.**—The Director of the National Institute of Standards and Technology shall support the work of entities and organizations from the industrial sector in developing prototypes and testing areas for testing and refining, in actual production conditions, the processes, technologies, and extended production enterprise system described in subsection (a)(2) in order to maximize productivity gains and cost efficiencies.

(d) **DEVELOPMENT OF STANDARDS.**—The Director of the National Institute of Standards and Technology, in coordination with entities and organizations from the industrial sector and the Manufacturing Technology Program, shall support standards to be used as manufacturing performance criteria to accelerate the adoption of improvements and innovative processes and protocols developed under subsection (a).

(e) **PILOT TEST BEDS OF EXCELLENCE.**—

(1) **ESTABLISHMENT.**—The Director of the National Institute of Standards and Technology shall, in collaboration with entities and organizations from the industrial sector, support not more than 3 pilot test beds of excellence in manufacturing fields important to advanced technologies developed under subsection (a), such as nanotechnology, to be used by the public and private sector. The

test beds of excellence shall focus on production development, particularly the invention, prototyping, and engineering development stages of the manufacturing process.

(2) **COMPETITION.**—The Secretary of Commerce shall conduct a competition to select the pilot test beds of excellence based on criteria and metrics established by the Secretary prior to the competition.

(3) **FUNDING.**—The Secretary of Commerce may provide the pilot test beds of excellence selected pursuant to the competition set forth in paragraph (2) with an appropriate level of funding if and only if the following conditions are satisfied:

(A) No more than 1/3 of the funding of each test bed of excellence is provided by the Federal Government.

(B) At least 1/3 of the cost of each test bed of excellence is provided by participants from the private sector.

(C) At least 1/3 of the cost of each test bed of excellence is provided by State or local governments.

(4) **REVIEW OF FUNDED TEST BEDS.**—Within 3 years of the start of Federal funding for any test bed of excellence pursuant to this section, the Secretary of Commerce shall use the metrics established pursuant to paragraph (2) and any additional review metrics that the Secretary determines appropriate to assess the performance of the federally funded test beds of excellence. Any test bed of excellence that fails to satisfy any of the performance metrics will be ineligible for additional Federal funding.

(5) **SUNSET PROVISION.**—Federal funding of any test bed of excellence shall cease 5 years after the date of enactment of this Act.

(f) **MANUFACTURING EXTENSION PARTNERSHIP FOCUS ON INNOVATION.**—The Director of the National Institute of Standards and Technology shall ensure that the Manufacturing Extension Partnership program develops a focus on innovation, including through technology diffusion, supply and distribution chain integration, and the dissemination of the processes, technologies, and extended production enterprise systems developed under this section.

(g) **AUTHORIZATION OF APPROPRIATIONS.**—There are authorized to be appropriated to the Department of Commerce for the purpose of carrying out activities under this section the following amounts:

(1) \$20,000,000 for fiscal year 2007.

(2) \$40,000,000 for fiscal year 2008.

(3) \$60,000,000 for fiscal year 2009.

(4) \$80,000,000 for fiscal year 2010.

(5) \$100,000,000 for fiscal year 2011.

**SEC. 106. STUDY ON SERVICE SCIENCE.**

(a) **SENSE OF CONGRESS.**—It is the sense of Congress that, in order to strengthen the competitiveness of United States enterprises and institutions and to prepare the people of the United States for high-wage, high-skill employment, the Federal Government should better understand and respond strategically to the emerging vocation and learning discipline known as service science.

(b) **STUDY.**—Not later than 270 days after the date of the enactment of this Act, the Director of the National Science Foundation shall conduct a study and report to Congress regarding how the Federal Government should support, through research, education, and training, the new discipline of service science.

(c) **OUTSIDE RESOURCES.**—In conducting the study under subsection (b), the Director of the National Science Foundation shall consult with leaders from 2- and 4-year institutions of higher education, as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001), leaders from corporations, and other relevant parties.

**TITLE II—MODERNIZATION OF SCIENCE, EDUCATION, AND HEALTHCARE PROGRAMS**

**Subtitle A—Science and Education**

**SEC. 201. GRADUATE FELLOWSHIPS AND GRADUATE TRAINEESHIPS.**

(a) GRADUATE RESEARCH FELLOWSHIP PROGRAM.—

(1) IN GENERAL.—During the 5-year period beginning on the date of the enactment of this Act, the Director of the National Science Foundation shall expand the Graduate Research Fellowship Program of the Foundation so that an additional 1250 fellowships are awarded to United States citizens under such Program during such period.

(2) EXTENSION OF FELLOWSHIP PERIOD.—The Director of the National Science Foundation is authorized to award fellowships under the Graduate Research Fellowship Program for a period of 5 years, subject to funds being made available for such purpose.

(3) AUTHORIZATION OF APPROPRIATIONS.—In addition to any other amounts authorized to be appropriated, there are authorized to be appropriated \$34,000,000 for each of the fiscal years 2007 through 2011 to provide an additional 250 fellowships under the Graduate Research Fellowship Program during each such fiscal year.

(b) INTEGRATIVE GRADUATE EDUCATION AND RESEARCH TRAINEESHIP PROGRAM.—

(1) IN GENERAL.—During the 5-year period beginning on the date of the enactment of this Act, the Director of the National Science Foundation shall expand the Integrative Graduate Education and Research Traineeship program of the Foundation so that an additional 1,250 United States citizens are awarded grants under such program during such period.

(2) AUTHORIZATION OF APPROPRIATIONS.—In addition to any other amounts authorized to be appropriated, there are authorized to be appropriated \$57,000,000 for each of the fiscal years 2007 through 2011 to provide grants to an additional 250 individuals under the Integrative Graduate Education and Research Traineeship program during each such fiscal year.

**SEC. 202. PROFESSIONAL SCIENCE MASTER'S DEGREE PROGRAMS.**

(a) DEFINITION OF INSTITUTION OF HIGHER EDUCATION.—In this section, the term “institution of higher education” has the meaning given the term in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a)).

(b) CLEARINGHOUSE.—

(1) DEVELOPMENT.—From amounts appropriated under subsection (d), the Director of the National Science Foundation shall establish a clearinghouse, in collaboration with 4-year institutions of higher learning, industries, and Federal agencies that employ science-trained personnel, to share program elements used in successful professional science master's degree programs.

(2) AVAILABILITY.—The Director of the National Science Foundation shall make the clearinghouse of program elements developed under paragraph (1) available to institutions of higher education that are developing professional science master's degree programs.

(c) PILOT PROGRAMS.—

(1) PROGRAM AUTHORIZED.—From amounts appropriated under subsection (d), the Director of the National Science Foundation shall award grants for pilot programs to 4-year institutions of higher education to facilitate the institutions' creation or improvement of professional science master's degree programs.

(2) APPLICATION.—A 4-year institution of higher education desiring a grant under this section shall submit an application at such time, in such manner, and accompanied by

such information as the Director of the National Science Foundation may require. The application shall include—

(A) a description of the professional science master's degree program that the institution of higher education will implement;

(B) the amount of funding from non-Federal sources, including from private industries, that the institution of higher education shall use to support the professional master's degree program; and

(C) an assurance that the institution of higher education shall encourage students in the professional science master's degree program to apply for all forms of Federal assistance available to such students, including applicable graduate fellowships and student financial assistance under title IV of the Higher Education Act of 1965 (20 U.S.C. 1070 et seq.).

(3) PREFERENCE FOR ALTERNATIVE FUNDING SOURCES.—The Director of the National Science Foundation shall give preference in making awards to 4-year institutions of higher education seeking Federal funding to support pilot professional science master's degree programs, to those applicants that secure more than ⅓ of the funding for such professional science master's degree programs from sources other than the Federal Government.

(4) NUMBER OF GRANTS; TIME PERIOD OF GRANTS.—

(A) NUMBER OF GRANTS.—Subject to the availability of appropriated funds, the Director of the National Science Foundation shall award grants under paragraph (1) to a maximum of 200 4-year institutions of higher education.

(B) TIME PERIOD OF GRANTS.—Grants awarded under this section shall be for one 3-year term. Grants may be renewed only once for a maximum of 2 additional years.

(5) EVALUATION AND REPORTS.—

(A) DEVELOPMENT OF PERFORMANCE BENCHMARKS.—Prior to the start of the grant program, the National Science Foundation, in collaboration with 4-year institutions of higher education, shall develop performance benchmarks to evaluate the pilot programs assisted by grants under this section.

(B) EVALUATION.—For each year of the grant period, the Director of the National Science Foundation, in consultation with 4-year institutions of higher education, industry, and Federal agencies that employ science-trained personnel, shall complete an evaluation of each pilot program assisted by grants under this section. Any pilot program that fails to satisfy the performance benchmarks developed under subparagraph (A) shall not be eligible for further funding.

(C) REPORT.—Not later than 180 days after the completion of an evaluation described in subparagraph (A), the Director of the National Science Foundation, in consultation with industries and Federal agencies that employ science-trained personnel, shall submit a report to Congress that includes—

(i) the results of the evaluation described in subparagraph (A); and

(ii) recommendations for administrative and legislative action that could optimize the effectiveness of the pilot programs, as the Director determines to be appropriate.

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section \$20,000,000 for fiscal year 2007 and such sums as may be necessary for each succeeding fiscal year.

**SEC. 203. INCREASED SUPPORT FOR SCIENCE EDUCATION THROUGH THE NATIONAL SCIENCE FOUNDATION.**

There are authorized to be appropriated to carry out the science, mathematics, engineering, and technology talent expansion program under section 8(7) of the National

Science Foundation Authorization Act of 2002 (Public Law 107-368, 116 Stat. 3042) the following amounts:

- (1) For fiscal year 2007, \$35,000,000.
- (2) For fiscal year 2008, \$50,000,000.
- (3) For fiscal year 2009, \$100,000,000.
- (4) For fiscal year 2010, \$150,000,000.

**SEC. 204. INNOVATION-BASED EXPERIENTIAL LEARNING.**

(a) PILOT PROGRAM.—

(1) PROGRAM AUTHORIZED.—The Director of the National Science Foundation shall award grants to local educational agencies to enable the local educational agencies to implement innovation-based experiential learning in a total of 500 secondary schools and 500 elementary or middle schools in the United States.

(2) APPLICATION.—A local educational agency desiring a grant under this section shall submit an application at such time, in such manner, and accompanied by such information as the Director of the National Science Foundation may require.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section \$10,000,000 for fiscal year 2007 and \$20,000,000 for each of the fiscal years 2008 and 2009.

**Subtitle B—21st Century Healthcare System**

**SEC. 211. SENSE OF CONGRESS REGARDING 21ST CENTURY HEALTHCARE SYSTEM.**

(a) SENSE OF CONGRESS.—It is the sense of Congress that, in order to improve the United States healthcare system for the 21st century, the Federal Government should encourage the widespread adoption of interoperable health information technology by—

(1) facilitating the creation of standards for interoperable electronic reporting of healthcare data; and

(2) after such standards have been created, each Federal agency or department that collects data for the purposes described in subsection (b) should collect such data in a manner that is consistent with such standards.

(b) PURPOSES DESCRIBED.—The purposes described in this subsection include quality reporting, surveillance, epidemiology, adverse event reporting, research, or for other purposes determined appropriate by the Secretary of Health and Human Services.

**TITLE III—INCENTIVES FOR ENCOURAGING INNOVATION**

**Subtitle A—Research Credits**

**SEC. 301. PERMANENT EXTENSION OF RESEARCH CREDIT.**

(a) IN GENERAL.—Section 41 of the Internal Revenue Code of 1986 (relating to credit for increasing research activities) is amended by striking subsection (h).

(b) CONFORMING AMENDMENT.—Section 45C(b)(1) of the Internal Revenue Code of 1986 is amended by striking subparagraph (D).

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to amounts paid or incurred after the date of the enactment of this Act.

**SEC. 302. INCREASE IN RATES OF ALTERNATIVE INCREMENTAL CREDIT.**

(a) IN GENERAL.—Subparagraph (A) of section 41(c)(4) of the Internal Revenue Code of 1986 (relating to election of alternative incremental credit) is amended—

(1) by striking “2.65 percent” and inserting “3 percent”;

(2) by striking “3.2 percent” and inserting “4 percent”;

(3) by striking “3.75 percent” and inserting “5 percent”.

(b) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act.

**SEC. 303. ALTERNATIVE SIMPLIFIED CREDIT FOR QUALIFIED RESEARCH EXPENSES.**

(a) IN GENERAL.—Subsection (c) of section 41 of the Internal Revenue Code of 1986 (relating to base amount) is amended by redesignating paragraphs (5) and (6) as paragraphs (6) and (7), respectively, and by inserting after paragraph (4) the following new paragraph:

“(5) ELECTION OF ALTERNATIVE SIMPLIFIED CREDIT.—

“(A) IN GENERAL.—At the election of the taxpayer, the credit determined under subsection (a)(1) shall be equal to 12 percent of so much of the qualified research expenses for the taxable year as exceeds 50 percent of the average qualified research expenses for the 3 taxable years preceding the taxable year for which the credit is being determined.

“(B) SPECIAL RULE IN CASE OF NO QUALIFIED RESEARCH EXPENSES IN ANY OF 3 PRECEDING TAXABLE YEARS.—

“(i) TAXPAYERS TO WHICH SUBPARAGRAPH APPLIES.—The credit under this paragraph shall be determined under this subparagraph if the taxpayer has no qualified research expenses in any 1 of the 3 taxable years preceding the taxable year for which the credit is being determined.

“(ii) CREDIT RATE.—The credit determined under this subparagraph shall be equal to 6 percent of the qualified research expenses for the taxable year.

“(C) ELECTION.—An election under this paragraph shall apply to the taxable year for which made and all succeeding taxable years unless revoked with the consent of the Secretary. An election under this paragraph may not be made for any taxable year to which an election under paragraph (4) applies.”

(b) COORDINATION WITH ELECTION OF ALTERNATIVE INCREMENTAL CREDIT.—

(1) IN GENERAL.—Section 41(c)(4)(B) of the Internal Revenue Code of 1986 (relating to election) is amended by adding at the end the following: “An election under this paragraph may not be made for any taxable year to which an election under paragraph (5) applies.”

(2) TRANSITION RULE.—In the case of an election under section 41(c)(4) of the Internal Revenue Code of 1986 which applies to the taxable year which includes the date of the enactment of this Act, such election shall be treated as revoked with the consent of the Secretary if the taxpayer makes an election under section 41(c)(5) of such Code (as added by subsection (a)) for such year.

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to taxable years ending after the date of the enactment of this Act.

**Subtitle B—Health and Education****SEC. 311. STUDY AND REPORT ON CATASTROPHIC HEALTHCARE.**

(a) STUDY.—The Secretary of Health and Human Services and the Secretary of Labor (in this subsection referred to as the “Secretaries”) jointly shall conduct a study to explore methods for managing costs associated with catastrophic healthcare events and costs associated with chronic disease. The Secretaries shall work with healthcare providers, pharmaceutical manufacturers, large and small employers, health plans, and other interested private and public sector entities to develop a consensus regarding potential innovative approaches for reducing the financial risks presented by such health problems and improving such outcomes. The study shall consider, among other factors, the role that best practices, health information technology, evidence-based medicine, quality incentives, and comparative clinical

effectiveness research can play in improving quality, value, and efficiency throughout the United States healthcare system.

(b) REPORT.—Not later than 1 year after the date of enactment of this Act, the Secretaries shall submit a report to Congress on the results of the study conducted under subsection (a), together with such recommendations for administrative and legislative action as the Secretaries determine to be appropriate.

**SEC. 312. LIFELONG LEARNING ACCOUNTS.**

(a) STUDY.—The Secretary of the Treasury, in collaboration with the Secretary of Labor and the Secretary of Education, shall conduct a study with recommendations for establishing lifelong learning accounts which would be exempt from taxation under the Internal Revenue Code of 1986 and from which funds could only be used for educational or training purposes. Such study shall consider whether individuals should be allowed to transfer to such an account, without incurring tax liability or penalties, funds which are—

(1) held in accounts established under a plan described in section 401(k), 403(b), or 457 of the Internal Revenue Code of 1986; and

(2) held in a qualified tuition program under section 529 of such Code.

(b) REPORT.—Not later than 1 year after the date of the enactment of this Act, the Secretary of the Treasury shall submit to Congress a report on the study conducted under subsection (a).

**Subtitle C—Savings and Investments****SEC. 321. REGULATIONS RELATING TO PRIVATE FOUNDATION SUPPORT OF INNOVATIONS IN ECONOMIC DEVELOPMENT.**

The Secretary of the Treasury or the Secretary's delegate shall as soon as practicable issue regulations under subchapter A of chapter 42 of the Internal Revenue Code of 1986 (relating to excise taxes on private foundations) which—

(1) clearly identify when distributions by private foundations for purposes of stimulating economic development will be treated as made for an exempt purpose described in section 170(c)(2)(B) of such Code; and

(2) clarify the circumstances under which private foundations may make program-related investments described in section 4944(c) of such Code in start-up ventures.

**SEC. 322. ADVISORY GROUP REGARDING VALUATION OF INTANGIBLES.**

(a) ESTABLISHMENT.—The Secretary of the Treasury shall establish an advisory group consisting of representatives of the public and private investment sector. The advisory group shall include representatives from the Department of Commerce, the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Board of Governors of the Federal Reserve System, the New York Stock Exchange, the National Association of Securities Dealers Automatic Quotation System, and significant industry sectors.

(b) DUTIES.—The advisory group established under subsection (a) shall—

(1) examine and make recommendations of best practices for valuation of intangibles in order to—

(A) provide investors with an improved method for assessing the impact intangibles have on the accuracy of a company's financial picture; and

(B) support industry trade associations in efforts to adopt guidelines for intangibles appropriate to particular industry sections; and

(2) submit to the Secretary of the Treasury a recommendation regarding whether a litigation safe harbor should be established for those companies that make good faith estimates regarding the value of intangibles

under the best practice standards developed under paragraph (1).

(c) RESEARCH NETWORK.—The Secretary of Commerce shall establish a research network of industry and academic expertise to study metrics and solutions for intangible disclosure, and provide such research results to the advisory group.

(d) ACCOUNTING STANDARDS.—The Secretary of the Treasury and the advisory group shall encourage the Financial Accounting Standards Board to reinstate its project on disclosure of information about intangible assets not recognized in financial statements and to move expeditiously toward issuance of a statement of financial accounting standards concerning valuation and disclosure of key intangible assets.

(e) REPORT.—Not later than 2 years after the date of the enactment of this Act, the advisory group shall submit to the Secretary of the Treasury the results of the examination under subsection (b)(1) and the recommendation under subsection (b)(2).

**TITLE IV—DEPARTMENT OF DEFENSE MATTERS****Subtitle A—Defense Research and Education****SEC. 401. REVITALIZATION OF FRONTIER AND MULTIDISCIPLINARY RESEARCH.**

It shall be the goal of the Department of Defense to allocate at least 3 percent of the total Department of Defense budget to science and technology. Of this amount, it shall be the goal of the Department of Defense to allocate at least 20 percent to basic research.

**SEC. 402. ENHANCEMENT OF EDUCATION.**

(a) SCIENCE, MATHEMATICS, AND RESEARCH FOR TRANSFORMATION (SMART) SCHOLARSHIPS.—

(1) EXTENSION OF PROGRAM.—Section 1105(a)(2) of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108-375; 118 Stat. 2074; 10 U.S.C. 2192 note) is amended by striking “for three years beginning on the date of the enactment of this Act” and inserting “through September 30, 2011”.

(2) EXPANSION OF PROGRAM.—The Secretary of Defense shall, utilizing amounts authorized to be appropriated by paragraph (3), increase the number of participants in the Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship Pilot Program under section 1105 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 in each of fiscal years 2007 through 2011—

(A) by an additional 160 participants pursuing doctoral degrees in each such fiscal year; and

(B) by an additional 60 participants pursuing masters degrees in each such fiscal year.

(3) AUTHORIZATION OF APPROPRIATIONS.—There is hereby authorized to be appropriated to the Department of Defense for each of fiscal years 2007 through 2011 the amount of \$41,300,000 for purposes of carrying out this subsection, of which—

(A) \$36,000,000 shall be available in each such fiscal year for additional participants in the Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship Pilot Program who are pursuing doctoral degrees under paragraph (2)(A); and

(A) \$5,300,000 shall be available in each such fiscal year for additional participants in the Science, Mathematics, and Research for Transformation (SMART) Defense Scholarship Pilot Program who are pursuing masters degrees under paragraph (2)(B).

(b) NATIONAL DEFENSE SCIENCE AND ENGINEERING GRADUATE FELLOWSHIPS.—

(1) **EXPANSION OF PROGRAM.**—The Secretary of Defense shall, utilizing amounts authorized to be appropriated by paragraph (2), increase the number of participants in the National Defense Science and Engineering Graduate (NDSEG) fellowship program in each of fiscal years 2007 through 2011 by an additional 200 participants in each such fiscal year.

(2) **AUTHORIZATION OF APPROPRIATIONS.**—There is hereby authorized to be appropriated to the Department of Defense for each of fiscal years 2007 through 2011 the amount of \$45,000,000 for purposes of carrying out this subsection.

(c) **INSTITUTION-BASED TRAINEESHIPS.**—

(1) **PROGRAM REQUIRED.**—The Secretary of Defense shall, utilizing amounts authorized to be appropriated by paragraph (4), carry out a program to award, on a competitive basis, traineeships to undergraduate and graduate students at institutions of higher education in order to permit such students to pursue studies in areas of importance to the Department of Defense in mathematics, science, or engineering in settings or programs that provide such students exposure to multidisciplinary studies, innovation-oriented studies, and academic, private-sector, or government laboratories and research. It shall be the goal of the traineeship program for a trainee to work for the Department of Defense for 10 years after completing his or her degree.

(2) **PARTICIPANTS.**—In each of fiscal years 2007 through 2011, the number of participants in the program required by paragraph (1) shall be as follows:

(A) Not more than 30 participants pursuing doctoral degrees.

(B) Not more than 30 participants pursuing masters degrees.

(C) Not more than 20 participants pursuing undergraduate degrees.

(3) **ANNUAL REPORTS.**—Not later than November 30 each year, the Secretary of Defense shall submit to the Committees on Armed Services of the Senate and the House of Representatives a report on the carrying out of the program required by paragraph (1) during the preceding fiscal year. The report shall describe the participants, and the studies pursued by such participants, in the program during the fiscal year covered by the report, and shall include an assessment of the benefits of the program to the Department of Defense.

(4) **AUTHORIZATION OF APPROPRIATIONS.**—There is hereby authorized to be appropriated to the Department of Defense for each of fiscal years 2007 through 2011 the amount of \$11,100,000 for purposes of carrying out the program required by this subsection, of which—

(A) \$7,000,000 shall be available in each such fiscal year for participants in the program who are pursuing doctoral degrees under paragraph (2)(A);

(B) \$2,600,000 shall be available in each such fiscal year for participants in the program who are pursuing masters degrees under paragraph (2)(B); and

(C) \$1,500,000 shall be available in each such fiscal year for participants in the program who are pursuing undergraduate degrees under paragraph (2)(C).

**Subtitle B—Defense Advanced Manufacturing**  
**SEC. 411. MANUFACTURING RESEARCH AND DEVELOPMENT.**

(a) **IDENTIFICATION OF ENHANCED PROCESSES AND TECHNOLOGIES.**—The Under Secretary of Defense for Acquisition, Technology, and Logistics, acting through the Director of Defense Research and Engineering, shall identify advanced manufacturing processes and technologies whose utilization will achieve significant productivity and efficiency gains in the defense manufacturing base.

(b) **RESEARCH AND DEVELOPMENT.**—The Under Secretary shall undertake research and development on processes and technologies identified under subsection (a) that addresses, in particular—

(1) innovative manufacturing processes and advanced technologies; and

(2) the creation of extended production enterprises using information technology and new business models.

(c) **DEFENSE PRIORITIES.**—In undertaking research and development under subsection (b), the Under Secretary shall consider defense priorities established in the most current Joint Warfighting Science and Technology Plan.

**SEC. 412. TRANSITION OF TRANSFORMATIONAL MANUFACTURING PROCESSES AND TECHNOLOGIES TO THE DEFENSE MANUFACTURING BASE.**

(a) **ACCELERATION OF TRANSITION FROM SCIENCE AND TECHNOLOGY.**—

(1) **IN GENERAL.**—The Under Secretary of Defense for Acquisition, Technology, and Logistics shall undertake appropriate actions to accelerate the transition of transformational manufacturing technologies and processes (including processes and technologies identified under section 411) from the research stage to utilization by manufacturers in the defense manufacturing base.

(2) **EXECUTION.**—The actions undertaken under paragraph (1) shall include a memorandum of understanding among the Director of Defense Research and Engineering, other appropriate elements of the Department of Defense, and the Joint Defense Manufacturing Technology Panel to accelerate the transition of technologies and processes as described in that paragraph.

(b) **PROTOTYPES AND TEST BEDS.**—

(1) **IN GENERAL.**—The Under Secretary shall, utilizing the Manufacturing Technology Program, undertake the development of prototypes and test beds to promote the purposes of this section.

(2) **COORDINATION OF ACTIVITIES.**—The Under Secretary shall coordinate activities under this subsection with activities under the Small Business Innovation Research Program and the Small Business Technology Transfer Program.

(c) **DEVELOPMENT OF IMPROVEMENT PROCESSES.**—The Under Secretary shall, in consultation with persons and organizations in the defense manufacturing base, develop and implement a program to continuously identify and utilize improvements and innovative processes in appropriate defense acquisition programs and by manufacturers in the defense manufacturing base.

(d) **DIFFUSION OF ENHANCEMENTS INTO DEFENSE MANUFACTURING BASE.**—The Under Secretary shall ensure the utilization in industry of enhancements in productivity and efficiency identified by reason of activities under this subtitle through the following:

(1) Research and development activities under the Manufacturing Technology Program, including the establishment of public-private partnerships.

(2) Outreach through the Manufacturing Extension Partnership Program under memoranda of agreement, cooperative programs, and other appropriate arrangements.

(3) Coordination with activities under such other current programs for the dissemination of manufacturing technology as the Under Secretary considers appropriate.

(4) Identification of incentives for contractors in the defense manufacturing base to incorporate and utilize manufacturing enhancements in manufacturing activities.

**SEC. 413. MANUFACTURING TECHNOLOGY STRATEGIES.**

(a) **IN GENERAL.**—The Under Secretary of Defense for Acquisition, Technology, and Logistics may—

(1) identify an area of technology where the development of industry-prepared roadmaps for new manufacturing and technology processes applicable to defense manufacturing requirements would be beneficial to the Department of Defense; and

(2) establish a task force, and act in cooperation with the private sector, to map the strategy for the development of manufacturing processes and technologies needed to support technology development in the area identified under paragraph (1).

(b) **COMMENCEMENT OF ROADMAPING.**—The Under Secretary shall commence any roadmapping identified pursuant to subsection (a)(1) not later than January 2007.

**SEC. 414. PLANNING FOR ADOPTION OF STRATEGIC INNOVATION.**

(a) **IN GENERAL.**—The Secretary of Defense, acting through the Under Secretary of Defense for Acquisition, Technology, and Logistics, shall ensure that each contract of a value of \$50,000,000 or more under a technology or logistics program of the Department of Defense includes requirements for planning by the contractor under such contract for the adoption of innovative technologies under such contract.

(b) **PARTICULAR REQUIREMENTS.**—The requirements included in a contract under subsection (a) shall include—

(1) requirements for plans for the identification, monitoring, and transition to the utilization under such contract of applicable emerging technologies from the private sector;

(2) requirements for plans for the identification, monitoring, and development under such contract of emerging research initiatives in academia; and

(3) a requirement to submit to the Under Secretary on an annual basis a report on the implementation of the planning carried out pursuant to the requirements included in such contract.

**SEC. 415. REPORT.**

(a) **IN GENERAL.**—Not later than December 31, 2008, the Under Secretary of Defense for Acquisition, Technology, and Logistics shall submit to the congressional defense committees a report on the actions undertaken by the Under Secretary under this subtitle during fiscal year 2007.

(b) **ELEMENTS.**—The report under subsection (a) shall include—

(1) a comprehensive description of the actions undertaken under this subtitle during fiscal year 2007;

(2) an assessment of effectiveness of such actions in enhancing research and development on manufacturing technologies and processes, and the implementation of such technologies and processes within the defense manufacturing base; and

(3) such recommendations as the Under Secretary considers appropriate for additional actions to be undertaken in order to increase the effectiveness of the actions undertaken under this subtitle in enhancing manufacturing activities within the defense manufacturing base.

**SEC. 416. AUTHORIZATION OF APPROPRIATIONS.**

Funds are hereby authorized to be appropriated for the Department of Defense for purposes of carrying out this subtitle for fiscal years as follows:

(1) For fiscal year 2007, \$20,000,000.

(2) For fiscal year 2008, \$40,000,000.

(3) For fiscal year 2009, \$60,000,000.

(4) For fiscal year 2010, \$80,000,000.

(5) For fiscal year 2011, \$100,000,000.

**TITLE V—JUDICIARY AND OTHER MATTERS**

**SEC. 501. SENSE OF CONGRESS ON RETAINING HIGH TECH TALENT IN THE UNITED STATES.**

It is the sense of Congress that comprehensive immigration reform should ensure that

the United States retains foreign-born high-tech talent educated in the United States and remains the leader in innovation and technological development in an emerging global marketplace. Such comprehensive reform should ensure—

(1) that the United States continues to retain foreign nationals who have received master's or higher degrees in the sciences, technology, engineering or mathematics from United States institutions of higher education under either—

(A) the H-1B visa program; or

(B) as employment-based immigrants;

(2) that the United States must take a forward looking approach with respect to any limitations on the H-1B visa program; and

(3) that immigration reform should also include systematic improvements to the Government's technology infrastructure in order to eliminate delays in processing immigration proceedings, including employment-based visa applications.

#### SEC. 502. STUDY ON BARRIERS TO INNOVATION.

(a) IN GENERAL.—The National Academy of Sciences shall conduct and complete a study to identify, and to review methods to mitigate, new forms of risk for businesses beyond conventional operational and financial risk that affect the ability to innovate, including studying and reviewing—

(1) incentive and compensation structures that could effectively encourage long-term value creation and innovation;

(2) methods of voluntary and supplemental disclosure by industry of intellectual capital, innovation performance, and indicators of future valuation;

(3) means by which government could work with industry to enhance the legal and regulatory framework to encourage the disclosures described in paragraph (2);

(4) practices that may be significant deterrents to United States businesses engaging in innovation risk-taking compared to foreign competitors, including tort litigation, the nature and extent of any resulting defensive management practices, and recommendations on practices to restore innovation risk-taking and to overcome defensive practices;

(5) means by which industry, trade associations, and universities could collaborate to support research on management practices and methodologies for assessing the value and risks of longer term innovation strategies; and

(6) means to encourage new, open, and collaborative dialogue between industry associations, regulatory authorities, management, shareholders, and other concerned interests to encourage appropriate approaches to innovation risk-taking.

(b) REPORT REQUIRED.—The National Academy of Sciences shall, not later than 1 year after the date of enactment of this Act, submit to Congress a report on the study conducted under subsection (a).

(c) AUTHORIZATIONS OF APPROPRIATIONS.—There are authorized to be appropriated to the National Academy of Sciences \$1,000,000 for fiscal year 2007 for the purpose of carrying out the study required under this section.

#### SEC. 503. SENSE OF CONGRESS ON PATENT REFORM.

It is the sense of Congress that—

(1) to bolster the United States economy and strengthen innovators in the United States, the patent system should be reformed to enhance the quality of patents, to leverage patent databases as innovation tools, and to create best practices for global collaborative standard setting; and

(2) to achieve the objectives described in paragraph (1), the Federal Government should—

(A) fully fund the Patent and Trademark Office and enable the Office to direct its fees to fund process improvements;

(B) improve compliance with existing patenting requirements and create incentives for improved search and disclosure of prior art;

(C) create new standards for searchability of patent applications and new patents;

(D) establish a fair and balanced post-grant patent review procedure for future patents and patent applications;

(E) invest in retroactively creating searchable keywords for a subset of the most highly cited historical patents;

(F) secure reciprocal access to foreign patent databases; and

(G) set best practices and processes for standards bodies to align incentives for collaborative standard setting, and to encourage broad participation.

Mr. LIEBERMAN. Mr. President, today I rise with my colleague Senator ENSIGN to introduce the National Innovation Act, S. 2105. This Act is about building a new century of progress and prosperity for our Nation by spurring a new wave of American innovation—better known around the world as “American ingenuity.”

Our Nation was founded by innovators. Washington, Jefferson, Franklin and many of our other Founding Fathers not only created a new republic, but in their spare time were inveterate experimenters and inventors, as well, who believed that innovation would be important to the growth and security of their new nation.

The generations that followed took up the call. Whitney, Bell, Edison, Fulton, Morse, Ford, Colt, the Wrights—I don't even have to say their first names and you know who they are and what they did.

Now we face a new century with new challenges—a global age where competition can come as easily from across an ocean as from across the street. We got a wake up call earlier this week about how tough the challenge is when it was announced that China had overtaken the United States as the world's largest exporter of high-tech products. According to statistics released by the Organization for Economic Cooperation and Development (OECD), China shipped \$180 billion worth of such goods worldwide last year, exceeding U.S. exports valued at \$149 billion. Even more significant, however, is the fact that the historical paradigm, one that has fueled much of our economic growth in the technology sector in this country, is quickly changing. China now imports far fewer components for tech goods, choosing instead to produce them itself. The OECD noted that between 2000 and 2004, the U.S. and EU shares of China's total imports in such components dropped from 27 to 12 percent. Instead of relying solely on its lower labor and production costs to assemble high-tech goods from components produced in places like the United States and Europe, China increasingly does it all itself now. Chinese scientists now develop many of the newest technologies. Their engineers now design the latest cutting-

edge products, and their factories continue to assemble and spit out the goods, all the while steadily lowering costs. Many of the people involved are educated here or in Europe, though even that is changing, in part due to our restrictive immigration policies and technology transfer rules. If this continues unabated, the highest-end and best-paying jobs, key to the innovation-driven economy, could be found in Shanghai and not in American tech centers.

In May of 2004, I released a White Paper on the topic of outsourcing. When I issued that White Paper, I stated that the first thing we should do was to stop blaming others and face the hard facts ourselves. Since that time, there are even more hard facts we need to face, including the statistics I just mentioned, all of which point to the urgent need for action if the American economy is going to adapt to the fundamental changes and growing competition in the global economy. Forrester Research Inc., a Cambridge, MA research firm that has been studying this issue, has estimated that by 2015, 3.3 million high-tech and service industry jobs will move overseas. Deloitte Consulting has estimated that approximately 2 million jobs in the financial services sector, which signifies nearly 15 percent of the industry's total, could move overseas in the next five years. But even more importantly, we are not just losing jobs. I fear we are beginning to lose critical pieces of our innovation infrastructure, and with them, our competitive edge in the global marketplace. What we always believed was our nation's ultimate competitive advantage—our high-end R&D and technological prowess—is increasingly under siege. I said in 2004, the outsourcing of jobs is just the tip of an economic iceberg that America is sailing towards. If the most recent statistics tell us anything, it's that we are even closer to that iceberg than ever before.

Luckily, these developments have not gone unnoticed. Earlier this year, the Council on Competitiveness—drawing on the insights of many experts from industry and academia, and led by Sam Palmisano of IBM and Wayne Clough of Georgia Tech University—circulated a report with detailed recommendations on how to reinvigorate our innovation economy. The National Innovation Act, which Senator ENSIGN and I are introducing today, is based on the Council's recommendations. This is a strongly bipartisan bill, cosponsored by 16 of our colleagues in the Senate. Further, this bill is wholeheartedly supported by members of the business and academic communities in this country, many of whom are eager to see a reinvigoration of American ingenuity. A few examples of these supportive statements include the following: George Scalise, President, Semiconductor Industry Association: “U.S. leadership in technology has been the cornerstone of America's

strategies for driving economic growth and ensuring national security. U.S. leadership is being challenged as never before. The National Innovation Act of 2005 addresses a number of the most critical issues involving technology leadership, especially those related to federal support for basic research. . . . We are especially pleased to support a bipartisan approach to ensuring U.S. technology leadership. The issues at stake—national security and our standard of living in the 21st century—are far too important to become entangled in partisan politics.”

Nicholas M. Donofrio, Executive Vice President, IBM Corporation: “IBM applauds the introduction of the National Innovation Act of 2005 . . . Innovation underpins American economic growth and national security. In today’s era of global opportunity and change, the rewards flow to those who innovate and turn disruptive shifts to their advantage. America has a long, proud history of recognizing when change is required and rising to the challenge. We are at such an inflection point today. The National Innovation Act of 2005 will create synergies among America’s academic, business and government communities to ensure the future growth of the United States. I urge all Senators to support this legislation.”

Deborah L. Wince-Smith, President, Council on Competitiveness: “On behalf of the Council’s 180 CEOs, university presidents and labor leaders, I applaud the Senators’ efforts and desire to ensure the United States remains the most competitive economic power in the world. We must, as a nation, innovate to compete and to prosper. This legislation is a critical step forward towards that goal.”

Dave McCurdy, CEO, Electronic Industries Association: “EIA is thrilled by today’s introduction of the National Innovation Act of 2005 (NIA), which includes so many measures that can help the U.S. remain an economic leader in the global high-tech economy. It is an ambitious piece of legislation that spans the policy spectrum, but with the commitment and support of policymakers from both sides of the aisle, we hope to see these important provisions quickly begin to take effect and fuel the U.S. innovation engine.”

John J. Castellani, President, Business Roundtable: “On behalf of Business Roundtable, an association of 160 chief executive officers of America’s leading companies, I applaud Senator Ensign and Senator Lieberman for their leadership on this critical issue. Maintaining our competitive edge in today’s world economy is a top priority of the business community, and the National Innovation Act of 2005 is an important step in the right direction.”

The list of organizations and companies that have already endorsed this bill includes many of the major players in the field, companies and organizations working to keep America at the cutting edge of technology development, including the following: American Chemical Society, American Mathematical Society, ASTRA (Alliance for Science & Technology Research in America), Athena Alliance,

Bell South, Business Roundtable, Center for Accelerating Innovation, Computing Research Association, Council on Competitiveness, Council of Scientific Society Presidents, Electronic Industries Alliance, Federation of American Scientists, IBM, IEEE-USA, Progressive Policy Institute, Semiconductor Industry Association, SEMI North America, and TechNet. In addition, many academic institutions and organizations support our bill because they recognize the importance of expanding education in science, math, and engineering. We have received strong indications of support from the academic community, including the Association of American Universities (AAU), the Council of Graduate Schools (CGS) and Georgia Institute of Technology.

While I won’t describe every provision of this far-reaching bill today, a section-by-section summary accompanies this statement in the RECORD, I will say that the National Innovation Act addresses three broad categories—talent, investment, and infrastructure—all of which are key to America’s regaining our competitive position among our trading partners.

Number one, Talent: Innovation requires the incubation of curious minds. That means we absolutely must educate and train our science and engineering talent base that is essential to our continued global economic leadership.

The number of jobs that require technical training is increasing at five times the rate of other occupations. To encourage more students to enter these technical professions, our legislation increases Federal support for graduate fellowships and trainee programs in science, math, and engineering by more than \$800 million over 5 years. Specifically, the legislation expands the National Science Foundation’s (NSF) Graduate Research Fellowship Program by 1,250 fellowships and extends the length of each fellowship from 3 to 5 years. These fellowships are portable fellowships which afford students the greatest flexibility in choosing graduate programs that fit their needs and interests. The legislation also expands the NSF Integrated Graduate Education and Research Traineeship (IGERT) program by 1,250 new traineeships. In the IGERT program, grants are awarded to universities to develop cross-disciplinary training programs for students in areas including science, math, engineering, and policy.

The legislation also expands upon existing Department of Defense efforts and creates new programs in order to encourage more students to enter the fields of science, math, and engineering. Specifically, provisions are included to expand the Defense Department Science, Mathematics, and Research for Transformation (SMART) scholarship program by \$41.3 million per year over five years and to expand the National Defense Science and Engineering Graduate Fellowship program by \$45 million per year over five years. A new competitive traineeship program, which will initially include 80 students, is created to provide inter-

disciplinary training in science and engineering to students who are encouraged to work for at least ten years in the Department of Defense after graduation.

This legislation also supports new and existing Professional Science Master’s degree programs. These Master’s programs typically try to provide cross-disciplinary training within the science, math, and engineering disciplines, and also to couple traditional technical disciplines with business, entrepreneurial, and business law training. Graduates of these programs will comprise a cadre of technical professionals with broad skills in both business and science that will give our industry an edge.

If we are to develop talent at the graduate levels, we must also emphasize science, math, and engineering at the K-12 and undergraduate levels. The results from the International Student Assessment of 2003 showed that U.S. 15-year-olds performed below the international average in math and science literacy. In order to bolster our highly-skilled science and engineering workforce, we must improve performance in our elementary, middle, and high schools.

Recognizing that new approaches must be realized, this legislation establishes a grant program of \$10 million in 2007 and \$20 million in 2008 and 2009 to help primary and secondary schools develop new experientially-based teaching techniques in math and science. It further addresses the issue of improving talent in scientific disciplines by expanding the existing Technology Talent program to the scope originally intended. The Technology Talent program provides competitive grants to undergraduate universities to develop new methods of increasing the number of students earning degrees in science, math, and engineering. It is essential that we increase the number of college graduates with the skills to contribute to the science and technology workforce, yet this program has never been fully funded.

Number two, Investment: Great ideas need research money if they are to move from imagination to market. But, federal R&D spending as a percentage of GDP has been in steady decline since the mid-1960s. It is less than half of what it was then. This bill bolsters the mission of the National Science Foundation (NSF) by more than doubling its research budget from \$4.8 billion in 2004 to nearly \$10 billion in 2011. Support for NSF is essential as it funds the full range of scientific disciplines and it encourages multidisciplinary approaches to problem solving. When it was created in 1950, Congress envisioned NSF as one of the primary catalysts for research “to promote the progress of science; to advance the national health, prosperity, and welfare; [and] to secure the national defense.” In order for NSF to continue to meet our tremendous needs in all these areas, which notably remain as vital today as they did back then, it needs more funding. At the same time, we must recognize that we, as a country,

face difficult choices in how we allocate our resources. Hard choices may have to be made, but we cannot avoid the reality that an investment such as the increase in NSF's research budget that our bill calls for today, is absolutely necessary if we are to generate the talent base we need to remain competitive. It is my belief that this investment will pay vast dividends in the long run for the American people and for the American economy. I also believe we will pay dearly if this investment is not made soon.

Congress is making steady progress toward finding reasonable ways to accommodate the needs of our five major research agencies. Our bill concentrates on two agencies: we double the authorization for NSF and we ask the Department of Defense (DOD) to spend 3 percent of its budget on science and technology, DOD's 6.1, 6.2, and 6.3, programs consistent with Defense Science Board recommendations. The research budget for life sciences at the National Institutes of Health (NIH) has been doubled in recent years and this legislation attempts to bring research in the physical sciences up to the same high level of funding. A major increase for NASA science research is now under consideration in conference and the Congress passed a significant increase in the authorization for Energy Department Science research as part of the energy bill this summer. So, our bill addresses the remaining top R&D agencies—NSF and DOD.

Our bill also creates an "Innovation Acceleration Grants" program to stimulate high-risk research by urging federal research agencies to allocate at least 3 percent of their current R&D budget to breakthrough research—the kind of research that gave us fiber optics, the Internet and countless other technologies relied on every day in this country and around the world. We anticipate this funding would be used for "grand challenges," for what is sometimes referred to as "connected" or "translational" research, which moves from fundamental discoveries through the development and procurement stages. We also anticipate that agencies would step outside the peer review approach, which can be too cautious, and empower talented program managers to drive novel and promising ideas forward. While it doesn't mandate that these agencies spend at least 3 percent of their budgets on high-risk frontier research projects, this provision sets a realistic and reasonable strategic goal. It is our hope and expectation that agencies will view the 3 percent allocation as a starting point and will take the initiative to expand from there. The Innovation Acceleration Grants program is designed to be a streamlined mechanism to support those grants that are making progress and not support those that are floundering. The program has built-in and specially-designed metrics to ensure that granting agencies closely monitor the projects they support, renewing

those with strong performance and phasing out those that don't show enough real promise for the types of cutting-edge advancements that are truly innovative. It is important that it is designed in this manner because a cautious approach to these issues cannot work. In order to face the challenge, we need to take risks and be patient. However, in an environment of increasingly tight fiscal pressures, we also must recognize that risk taking can, and often does, lead to dead ends. While many high-risk projects may fail, those that succeed can bring tremendous benefit. The urgency of the threats we face today warrants a balanced approach. We must continue to encourage the groundbreaking experimentation, tinkering and longer-term outlook that made this country great. But we also must continue to take stock of our progress and make sure we are heading toward the ultimate goal of reestablishing the foundational elements of our tremendous successes over the last 50 years, and more.

Switching gears briefly, I think it is also important to note that the government cannot do this alone. The private sector in this country needs to continue to lead the charge. Private sector investment in research in this country, after a sharp rise in the 90's, has been eroding in recent years in part because companies have moved some R&D operations outside the United States. About \$17 billion a year in R&D now flows overseas to nations like China and India. And as that research money leaves our shores, the high-skilled 21st century jobs we need to compete sail away with them.

Our bill tries to help stem the tide by making the current Research and Experimentation (R&E) tax credit permanent and extending it to a greater number of enterprises; the same provision that appears in the Invest in America Act of 2005, sponsored by Senators HATCH and BAUCUS with 44 bipartisan cosponsors. These two Senators deserve the credit on this. We are simply trying to emphasize their efforts. Making the credit permanent allows our private entrepreneurial spirit to continue to drive the economic growth of this great nation and at the same time ensures that other countries like China do not lure away our talent and investment, and ultimately the innovation that comes from them. It gives our companies a powerful and reliable long-term incentive to include domestic R&D as a significant component of their strategic plans. Since the original enactment of the research credit in 1981, a public-private partnership has developed, through which the federal government has worked with businesses of all sizes to ensure that research expenditures continue to be made here in the United States. The reward has been the creation of many innovative technologies, well-paying jobs, and an increased growth rate in our economy. The importance of this effort cannot be understated.

At the same time that firms are investing more money in R&D, they must improve their ability to manage the technological innovations that result from this research. The emerging area of "service science" refers to both research and training regimens that are now starting to develop and to teach individuals how to apply technology to solving complex problems in the service and industrial sector. Eighty percent of our economy is service-based, yet we do very little R&D in this area. We now face intense service competition from countries like India, taking advantage of global IT systems. If we don't improve our services productivity, increasingly we won't be able to compete. This legislation asks the Director of the National Science Foundation to conduct a study for Congress on how the federal government should best support service science through research, education, and training.

Number three, Infrastructure: Once we have helped assure the education foundation to give people the basic skills they need to use their creativity, and the resources they need to support their experimentation, we must then reinvent and transform our manufacturing processes and technologies so that we can secure the gains from the fruits of all this labor. In this era of tough international competition, if we don't manufacture the goods we innovate here in the U.S., we will forfeit our global economic leadership and our children's prosperity to other nations who can. To help facilitate this important goal, our legislation takes several steps.

First, the bill authorizes creates federally-funded and complementary advanced manufacturing programs at the Departments of Commerce and Defense. The development and implementation of state-of-the-art advanced manufacturing systems does not happen overnight, nor can it be done alone. The goal of this new program is to, again, establish a public-private R&D partnership which enables risk taking and creativity to generate new processes and technologies. These new processes and technologies will give us the productivity breakthroughs we need to maintain our manufacturing competitiveness. I continue to believe in the spirit of American ingenuity—if given the chance and the tools to succeed, we will. This legislation also creates the Test Beds of Excellence program, which is designed test and refine these new processes and technologies in a real manufacturing setting once they have been developed. Then, we ask the Manufacturing Extension Program to help disseminate this new innovative knowledge throughout to manufacturing base, including to the many small and mid-sized companies that will be key to our growth. The Test Beds program is a competitive one and, as in the case of the Innovation Acceleration Grants program and other important features of this legislation, it

is designed to self-scrutinize and adapt to the constantly changing needs of our manufacturing sector.

In addition to the effort at the Department of Commerce, our bill asks the Department of Defense to work with the private sector to identify and accelerate the transition of advanced manufacturing technologies and processes that will enable us to maintain our technological edge on the battlefield. The Department of Defense relies on innovation, and the bill seeks to expand the Department's traditional manufacturing sector work in this area. An additional motivating factor within the Department of Defense is the inherent security risk associated with using certain overseas suppliers. American manufacturing must remain competitive in order to meet the needs of our military in a timely fashion.

These steps will go a long way toward revitalizing our manufacturing system into a system that is seamlessly integrated with our other efforts to boost American innovation through education and research.

Our bill goes further, recognizing that innovation fundamentally occurs not at the national level, but at the local and regional levels. Certainly there are many lessons to be learned from the rise of Silicon Valley and other similar regions that have sprung up all over this country as centers for high-tech growth. Our competitors, China, India, Israel and many others, have already begun to emulate the success we have achieved in this way. These clusters have developed in areas of the country where educational and research institutions, together with creative elements of the private sector, have partnered to create an environment conducive to innovation. Our bill encourages the development of more regional clusters ("hot spots") of technology innovation throughout the United States. These hot spots spur growth in local economies and also contribute to progress on a national scale. We don't try to impose these from above, from the national level. These must start at the local level to work. But, the federal government can help local communities identify successful models and the right metrics. The Secretary of Commerce will publish a "Guide to Developing Successful Regional Innovation Hot Spots" in order to share successful strategies in the formation and development of regional clusters.

Finally, it is imperative that the executive branch take a strong role in leading and coordinating the broad initiative outlined in this legislation. To help guide progress in all three of the important areas I have outlined, this bill creates a President's Council on Innovation. The goal of the President's Council is to develop a comprehensive national innovation agenda and coordinate all federal efforts related to this agenda. In consultation with the Office of Management and Budget, this Council would develop and use metrics to

assess the impact of existing and proposed laws that affect innovation in the United States. In addition, the Council would help to coordinate the various federal efforts that must be spread among many agencies that support innovation, and it would submit an annual report to the President and to the Congress on how the Federal Government can best support innovation. This effort cries out for much better coordination and collaboration than exist now. Why the White House? These issues must be addressed at the highest levels and in a decisive and organized way to achieve success.

The National Innovation Act is organized into five titles, intentionally reflecting the Senate committees of jurisdiction in the subject areas of each title. Title I, "Innovation Promotion" falls within the purview of the Commerce Committee. Title II, dealing with science, education and healthcare programs, covers subjects within the jurisdiction of the Health Education Labor and Pensions Committee. Title III, providing tax incentives to promote innovation, comes within the Finance Committee jurisdiction. Title IV covers Department of Defense programs and would fall within the Armed Services Committee jurisdiction. Title V, which touches on immigration, patent reform, and possible barriers to innovation, would be within the Judiciary Committee purview. The issues of immigration, health care information technology, and patent reform are reflected in this bill as Sense of Congress provisions, because we recognize that the committees of jurisdiction are already working on and moving in these areas and we don't want to get in their way. However, the bill cites these moving issues to mark the importance of considering how legislation on these issues may affect our economy's ability to remain competitive. The provision for an objective National Academy study on barriers to innovation would allow Congress to understand how legal and numerous other structural aspects of the U.S. economy may affect our ability to be innovative.

From the 18th century Franklin stove to the 20th century personal computer, the United States has long been the leader in the technology and innovation that created jobs, wealth, and an ever-increasing standard of living for our people. We call it American ingenuity. It's time to take that native ingenuity and build a new century of progress for America.

I ask unanimous consent that a section-by-section analysis of the National Innovation Act, a short summary of the legislation, and statements of support for this legislation be printed in the RECORD.

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

NATIONAL INNOVATION ACT OF 2005 SECTION-BY-SECTION ANALYSIS

TITLE I—INNOVATION PROMOTION

*Sec. 101. President's Council on Innovation*

The President shall create a Council on Innovation comprised of heads of various executive agencies including Commerce, Defense, Education, Energy, and others. The Council, which will be chaired by the Secretary of Commerce, will have oversight over legislative proposals and executive branch initiatives for promoting innovation. Specifically, the Council will develop a process for using metrics to evaluate existing and proposed innovation policies and make recommendations to heads of executive agencies on improvements to innovation policies. In addition, the Council shall develop a comprehensive agenda for strengthening innovation among the Federal Government, states, academia, and the private sector. The Council will submit an annual report to the President and the Congress on its activities.

*Sec. 102. Innovation Acceleration Grants*

The President will establish the "Innovation Acceleration Grants Program" to promote and accelerate innovation in the United States. Each executive agency that currently funds research and development (R&D) in science, mathematics, engineering, and technology shall have a goal to commit at least 3% of its existing annual R&D budget to this program. Each such executive agency will also submit detailed plans for the implementation and evaluation of the program within the agency. The plans shall include metrics upon which grant funding decisions will be made and upon which the success of the grants awarded will be assessed. Grants shall be issued for a maximum period of three years (with possibility of renewal for another three years) and shall be awarded to projects that propose a novel approach to address fundamental technological challenges. The agency head may grant further renewals to programs requiring an extended timeframe to complete critical research to the extent they satisfy metrics developed to ensure their ongoing usefulness. Granting agencies are responsible for evaluation of all projects sponsored and for publishing such reviews.

*Sec. 103. A national commitment to basic research*

Authorizations are provided to nearly double NSF research funding from Fiscal Year 2007 through Fiscal Year 2011. Within 180 days of enactment, the Director of the National Science Foundation shall submit to Congress a detailed plan for the use of these funds. The plan shall focus on means by which basic research in science and engineering will optimize the United States economy for global competition and leadership in productive innovation. In addition, within one year of enactment, the director of the Office of Science and Technology Policy shall evaluate funding needs for R&D in physical sciences and engineering in consultation with the relevant agencies and departments. As appropriate, recommendations for increases in such funding should be submitted to Congress.

*Sec. 104. Regional economic development*

The Assistant Secretary for Economic Development of the Department of Commerce shall review federal programs that support local economic development and devise a strategy to foster innovation within communities. The Assistant Secretary is directed to develop metrics to evaluate existing programs and, consistent with the strategy to foster innovation in local communities, focus funding on projects that satisfy the metrics developed and that best emphasize

cooperation between the public and private sector to promote innovation.

In addition, within 1 year of enactment, the Secretary of Commerce shall publish a "Guide to Developing Successful Regional Innovation Hot Spots." The Guide shall be compiled by the Secretary of Commerce in consultation with representatives of successful regional innovation hot spots to identify features of such hot spots and recommend mechanisms for forming new successful regional collaborations. The Department of Commerce will also be responsible for developing metrics to evaluate the efficacy of the regional innovation hot spots and for providing Congress with a biannual assessment of such programs. The Undersecretary for Technology of the Department of Commerce shall coordinate this review of hot spots.

*Sec. 105. Development of advanced manufacturing systems*

The Director of the National Institute of Standards and Technology (NIST) shall support R&D efforts in the industrial sector to develop innovative, state-of-the-art manufacturing practices. Targeted activities include improving advanced distributed and desktop manufacturing capabilities, developing small lot manufacturing processes that are compatible with extended production systems, and applying nanotechnology to manufacturing. The Director of NIST shall coordinate these activities with activities under the Small Business Innovation Research Program, the Small Business Technology Transfer Program, and DoD's Manufacturing Technology Program.

The NIST Director will support the development of prototypes for new technologies, the testing of these prototypes, and the adoption of standards to accelerate the applicability of these new technologies. NIST will hold a competition to select up to 3 Pilot Test Beds of Excellence to execute these tasks. The Federal Government will provide no more than 1/3 of the funding for each Test Bed. Private sector participants and corresponding state or local governments must each provide at least 1/3 of the funding for each Test Bed. All Test Beds are subject to review and none will receive federal funds for longer than five years.

The NIST Director shall ensure that the Manufacturing Extension Partnership (MEP) develops a focus on innovation.

The bill would authorize a total of \$300 million between FY 2007 and FY 2011 to execute the programs in section 105.

*Sec. 106. Study on service science*

"Service science" refers to training regimens that are being developed to teach individuals how to apply technology to solving complex problems in the industrial sector. It is the sense of the Congress that the Federal Government should develop a better understanding of service science as a learning discipline in order to strengthen the competitiveness of U.S. institutions and enterprises. The Director of the National Science Foundation (NSF) shall conduct a study for Congress on how the Federal Government should best support service science through research, education and training. During the course of this study, the Director will consult with leaders from institutions of higher education and from the private sector.

**TITLE II—MODERNIZATION OF SCIENCE, EDUCATION, AND HEALTHCARE PROGRAMS**

**Subtitle A—Science and Education**

*Sec. 201. Graduate fellowships and graduate traineeships*

This section authorizes funding for fellowship and traineeship programs that encourage students to pursue graduate studies in the sciences, technology, engineering and

mathematics. The Director of NSF will expand the agency's Graduate Research Fellowship Program by 250 fellowships per year and extend the length of each fellowship to five years. The bill authorizes \$34 million/year for FY 2007–FY 2011 to support these additional fellowships. In addition, funding in the amount of \$57 million/year is authorized for a similar expansion of the Integrated Graduate Education and Research Traineeship program by 250 new traineeships per year over five years.

*Sec. 202. Professional Science Master's Degree programs*

This section encourages universities to develop Professional Science Master's Degree Programs as a means of increasing the number of highly skilled graduates entering the science and technology workforce. The Director of NSF shall establish a clearinghouse in collaboration with institutions of higher learning, industries, and Federal agencies in order to document successful program elements used in existing Professional Science Master's Degree Programs. The clearinghouse will provide an essential database of information for emerging programs.

In addition, the Director of NSF will grant awards to 4-year institutions of higher education for the creation or improvement of Professional Science Master's Degree Programs. Funds may be awarded to a maximum of 200 institutions for a three year term (with possibility of renewal for 2 additional years), and preference will be given to applicants that are able to secure more than 2/3 of their funding from sources outside the Federal Government. NSF will develop performance benchmarks and will report to Congress within 180 days of this process with an evaluation of all funded programs. The bill authorizes \$20 million for FY 2007 and such sums as may be necessary to carry out the programs established in Section 202 for each succeeding fiscal year.

*Sec. 203. Increased support for science education through the National Science Foundation*

This section supports an increased commitment to science education through the Science, Mathematics, Engineering, and Technology Talent expansion program authorized under section 8(7) of the National Science Foundation Authorization Act of 2002. The Tech Talent expansion program encourages American universities to increase the number of graduates with degrees in mathematics and science. The bill authorizes \$335 million from Fiscal Year 2007 to Fiscal Year 2010 for continued support of this program.

*Sec. 204. Innovation-based experiential learning*

The Director of NSF shall award grants to local educational agencies to implement innovation-based experiential learning in 500 secondary schools and 500 elementary or middle schools. Funds are authorized at levels of \$10 million for Fiscal Year 2007 and at \$20 million/year for Fiscal Year 2008 and Fiscal Year 2009.

**Subtitle B—21st Century Healthcare System**

*Sec. 211. Sense of the Congress regarding 21st Century Healthcare System*

It is the sense of the Congress that the Federal Government should encourage the adoption of interoperable health information technology by facilitating the creation of standards for activities such as quality reporting, surveillance, epidemiology, or adverse event reporting. Federal agencies or departments performing such activities are urged to collect data in a manner consistent with devised standards.

**TITLE III—INCENTIVES FOR ENCOURAGING INNOVATION**

**Subtitle A—Research Credits**

*Sec. 301. Permanent extension of research credit*

This provision makes the research credit set forth in Section 41(a) of the Internal Revenue Code permanent. The credit, originally enacted in 1981, has been extended 11 times and is scheduled to expire on December 31, 2005. The permanent tax credit should allow companies to engage more easily in long-term research projects.

*Sec. 302. Increase in rates of alternative incremental credit*

This section modifies the means for calculation of the elective alternative incremental research credit to increase the rates applicable to such an election. The bill restores the rates to range between 3% and 5%.

*Sec. 303. Alternative simplified credit for qualified research expenses*

This section creates a new elective alternative simplified credit for qualified research expenses to increase the number of companies that can benefit from the incentive. Taxpayers will be able to elect a new alternative simplified credit equal to 12% of qualified research expenses for the taxable year in excess of 50% of the average qualified research expenses for the 3 prior taxable years.

Firms may only select one of the two alternative credits described in sections 302 and 303.

The language in this subtitle is identical to the provisions of S. 627 introduced by Senators Hatch and Baucus.

**Subtitle B—Health and Education**

*Sec. 311. Study and report on catastrophic healthcare*

This provision requires the Secretary of Health and Human Services and the Secretary of Labor to jointly conduct a study and submit a report to Congress regarding costs associated with catastrophic healthcare events and chronic disease. The goal of the study is to develop innovative public and private sector approaches for dealing with such events and the report should discuss approaches and recommendations for administrative and legislative action to minimize the financial risks associated with these events.

*Sec. 312. Lifelong learning accounts*

This provision requires the Secretary of the Treasury, in collaboration with the Secretaries of Labor and Education, to conduct a study and submit a report to Congress regarding the potential establishment of lifelong learning accounts to be used for education or training purposes, and which would be exempt from personal income taxation. The study should include analysis and recommendations regarding whether individuals should be allowed to transfer funds in certain existing retirement or education-related accounts into a lifelong learning account without incurring tax liability or other penalties.

**Subtitle C—Savings and Investments**

*Sec. 321. Regulations relating to private foundation support of innovations in economic development*

This provision requires the Secretary of the Treasury to issue regulations that clearly identify when distributions by private foundations for purposes of economic development will be treated as charitable contributions pursuant to the Internal Revenue Code. This provision also requires the Secretary of the Treasury to issue regulations to clarify the circumstances under which foundations may make investments in start-up ventures without triggering the five percent excise tax applicable to investments

which jeopardize the carrying out of any of the Foundation's exempt purposes.

*Sec. 322. Advisory group regarding valuation of intangibles*

This provision requires the Secretary of the Treasury to establish an advisory group to examine issues related to proper valuation of intangible assets, including R&D, business processes and software, brand enhancement, and employee training. The advisory group consists of representatives from the Department of Commerce, the Securities and Exchange Commission, the Commodity Futures Trading Commission, the Board of Governors of the Federal Reserve System, the New York Stock Exchange, the National Association of Securities Dealers Automatic Quotation System and other significant industry sectors. Based on its research, as well as communications with industry and academic experts, the advisory group is required to submit a report to the Secretary of the Treasury within 24 months of enactment, including discussion of best practices for valuation of intangibles and metrics or other solutions for disclosure of intangibles.

TITLE IV—DEPARTMENT OF DEFENSE MATTERS

Subtitle A—Defense Research and Education

*Sec. 401. Revitalization of frontier and multidisciplinary research*

U.S. Government investment in frontier and multidisciplinary research is key to the further application and development of innovative technologies. This section establishes as a goal that the Department of Defense allocate at least 3% of its total budget toward science and technology research. This provision also urges the allocation of at least 20 percent of this amount toward basic research in such fields.

*Sec. 402. Enhancement of education*

This section extends the Department of Defense's Science, Mathematics, and Research for Transformation (SMART) Scholarships program through September 30, 2011, and authorizes \$41.3 million/year over 5 years for the SMART program to support additional participants pursuing doctoral degrees and master's degrees in relevant fields. This section also authorizes \$45 million/year over 5 years to be appropriated to the Department of Defense through 2011 to support the expansion of the National Defense Science and Engineering Graduate Fellowship program to additional participants.

This section also authorizes the creation of a new Department of Defense competitive traineeship program for students in the areas of mathematics, science, and engineering with specific focus on innovation-oriented studies, multidisciplinary studies and laboratory research. This section authorizes \$11.1 million/year over 5 years to sponsor up to 30 doctoral candidates, 30 master's candidates, and 20 undergraduates under this program. Program graduates will be encouraged to work for at least 10 years for the Department of Defense. The Secretary of Defense shall submit an annual report to the House and Senate Armed Services Committees describing the work done by all sponsored students and the benefit of this work to the Department of Defense.

Subtitle B—Defense Advanced Manufacturing

*Sec. 411. Manufacturing research and development*

This section requires the Under Secretary of Defense for Acquisition, Technology, and Logistics to identify innovative manufacturing processes and advanced technologies that could enhance the efficiency and productivity of the defense manufacturing base. Once identified, the Under Secretary is fur-

ther required to commission research and development of such innovative processes and technologies, and is encouraged to make use of information technology and new business models in the development of extended production enterprises. The Under Secretary shall consider defense priorities established in the most recent Joint Warfighting Science and Technology Plan when undertaking the aforementioned research and development.

*Sec. 412. Transition of transformational manufacturing processes and technologies to the defense manufacturing base*

This section requires the Under Secretary of Defense for Acquisition, Technology, and Logistics to take certain actions, including the execution of a memorandum of understanding among appropriate elements in the Department of Defense, to accelerate the transition by manufacturers in the defense manufacturing base to transformational manufacturing processes and technologies, including processes and technologies identified or created pursuant to Section 411. The Under Secretary is also required to utilize the existing Manufacturing Technology Program to develop prototypes and test beds for such processes and technologies, and to implement a program for the defense manufacturing base to continuously identify and utilize improvements in such processes and technologies. In order to ensure increases in productivity and efficiency, the Under Secretary will promote research and development under the Manufacturing Technology Program and outreach through the Manufacturing Extension Partnership Program.

*Sec. 413. Manufacturing technology strategies*

The Under Secretary of Defense for Acquisition, Technology, and Logistics is authorized to identify and investigate innovative areas of technology that could be beneficial to the Department of Defense in carrying out its defense manufacturing requirements. Once identified, the Under Secretary may establish a task force with the private sector to map a strategy for the development of such technologies and related manufacturing processes. The roadmapping process shall begin no later than January, 2007.

*Sec. 414. Planning for adoption of strategic innovation*

This section requires the Secretary of Defense to ensure that contracts valued at \$50,000,000 or more under a technology or logistics program at the Department of Defense include requirements for planning by the contractor under such contract for the adoption of innovative technologies under that contract. Specifically, contracts must include requirements directed toward identifying and implementing innovative technologies developed in the private sector or academia. Further, such contractors must also report annually on the implementation of such technologies.

*Sec. 415. Report*

This section requires the Under Secretary to submit a report to Congress describing all activities taken pursuant to this Subtitle during Fiscal Year 2007. The report should include an assessment of the effectiveness of each action taken in enhancing the research and development of innovative technologies and processes in the defense manufacturing area, as well as any recommendations for additional actions to be taken consistent with the requirements of this Subtitle.

*Sec. 416. Authorization of appropriations*

This section authorizes \$300,000,000 of funding between Fiscal Year 2007 and Fiscal Year 2011 to the Department of Defense for the purposes of carrying out this subtitle.

TITLE V—JUDICIARY AND OTHER MATTERS

*Sec. 501. Sense of the Congress on retaining American-educated high tech talent in the United States*

This section states that it is the sense of Congress that U.S. immigration laws should be reformed to accommodate the need to retain in the United States those foreign nationals graduating from U.S. universities with master's or higher degrees in the sciences, technology, engineering or mathematics.

*Sec. 502. Study on barriers to innovation*

This section requires the National Academy of Sciences to conduct a study to identify forms of risk that create potential barriers to private sector innovation. The study is intended to support research on the long-term value of innovation to the business community and to identify means to mitigate legal or practical risks presently associated with such innovation activities. This section authorizes \$1,000,000 for the purposes of carrying out this study and requires the National Academy to submit a report to Congress on its findings within one year of enactment.

*Sec. 503. Sense of the Congress on patent reform*

It is the sense of the Congress that the United States patent law system should be reformed to enhance the quality of patents, to leverage patent databases as innovation tools, and to create best practices for global collaborative standard-setting. This section further states that the Federal Government should fully fund the Patent and Trademark Office, improve compliance with existing patenting requirements, establish a fair post-grant patent review procedure, and secure reciprocal access to foreign patent databases.

SUMMARY OF THE "NATIONAL INNOVATION ACT OF 2005"

This legislation responds to the recommendations contained in the National Innovation Initiative Report published by the Council on Competitiveness. In responding to the report, this legislation focuses on three primary areas of importance to maintaining and improving United States' innovation in the 21st Century: (1) research investment, (2) increasing science and technology talent, and (3) developing an innovation infrastructure. This bill: Establishes the President's Council on Innovation to develop a comprehensive agenda to promote innovation in the public and private sectors. In consultation with the Office of Management and Budget, this Council would develop and use metrics to assess the impact of existing and proposed laws that affect innovation in the United States. In addition, the Council would help to coordinate the various federal efforts that support innovation, and use metrics to assess the performance of the federal innovation programs located in different administrative agencies, and submit an annual report to the President and to the Congress on how the Federal Government can best support innovation.

RESEARCH INVESTMENT

Establishes the Innovation Acceleration Grants Program which encourages federal agencies funding research in science and technology to allocate 3% of their Research and Development (R&D) budgets to grants directed toward high-risk frontier research. Although this provision sets 3% of R&D budgets as a strategic goal for allocation to high-risk frontier research projects, it does not mandate that the agencies spend at least 3% of their budgets in this manner. All grants provided to this program will be assessed with metrics and no grants will be renewed unless the agency distributing the

grant determines that all metrics have been satisfied.

Increases the national commitment to basic research by nearly doubling research funding for the National Science Foundation (NSF) by FY 2011.

Makes permanent the Research and Experimentation (R&E) tax credit with modifications expanding eligibility for incentives to a greater number of firms.

#### SCIENCE AND TECHNOLOGY TALENT

Expands existing educational programs in the physical sciences and engineering by increasing funding for NSF graduate research fellowship programs as well as Department of Defense science and engineering scholarship programs. These fellowships provide an incentive for more American students to pursue post-graduate degrees in the sciences, technology, engineering, or mathematics.

Authorizes the Department of Defense to create a competitive traineeship program for undergraduate and graduate students in defense science and engineering that focuses on multidisciplinary learning and innovation-oriented studies.

Authorizes funding for new and existing Professional Science Master's Degree Programs to increase the number of qualified scientists and engineers entering the workforce.

#### INNOVATION INFRASTRUCTURE

Authorizes the Department of Commerce to promote the development and implementation of state-of-the-art advanced manufacturing systems and to support up to three Pilot Test Beds of Excellence for such systems. The Secretary of Commerce will conduct a competition to select the Pilot Test Beds based on objective criteria and metrics.

Encourages the development of regional clusters ("hot spots") of technology innovation throughout the United States.

Empowers the Department of Defense to identify and accelerate the transition of advanced manufacturing technologies and processes that will improve productivity of the defense manufacturing base.

#### MAJOR ORGANIZATIONS SUPPORT THE NIA

"U.S. leadership in technology has been the cornerstone of America's strategies for driving economic growth and ensuring national security. U.S. leadership is being challenged as never before. The National Innovation Act of 2005 addresses a number of the most critical issues involving technology leadership, especially those related to federal support for basic research. . . . We are especially pleased to support a bipartisan approach to ensuring U.S. technology leadership. The issues at stake—national security and our standard of living in the 21st century—are far too important to become entangled in partisan politics."—George Scalise, President, Semiconductor Industry Association.

"Nothing can do more for the U.S. economy and to help ensure America's global competitiveness than an enhanced focus on innovation and research by the public and private sectors. Senators Ensign and Lieberman are to be commended for bringing bi-partisan leadership to this most critical legislation designed to assure the United States' continued leadership in innovation in the 21st Century."—F. Duane Ackerman, Chairman and Chief Executive Officer—BellSouth Corporation and Chairman of the Council on Competitiveness.

"On behalf of the Council's 180 CEOs, university presidents and labor leaders, I applaud the Senators' efforts and desire to ensure the United States remains the most competitive economic power in the world. We must, as a nation, innovate to compete

and to prosper. This legislation is a critical step forward towards that goal."—Deborah L. Wince-Smith, President, Council on Competitiveness.

"America's constant advance on 'endless frontier' of scientific discovery and engineering innovation has paid enormous dividends for generations. But there is no room for complacency in a world where ideas spread around the globe at the speed of light. The National Innovation Act of 2005 ensures that America will continue to focus on the future by supporting essential investments in high risk research and education—investments that will pay dividends far into the future."—Henry Kelly, President of the Federation of American Scientists.

"In response to new competitive threats in the 1980s, Congress enacted important legislation to help American companies successfully meet that challenge. Twenty years later, as America once again faces competitiveness challenges, the National Innovation Act of 2005 proposes critically important policies and programs to foster innovation and help American companies and workers prosper in the new global economy of the 21st century."—Dr. Robert Atkinson, Vice President, Progressive Policy Institute, Washington, DC.

"IBM applauds the introduction of the National Innovation Act of 2005 . . . Innovation underpins American economic growth and national security. In today's era of global opportunity and change, the rewards flow to those who innovate and turn disruptive shifts to their advantage. America has a long, proud history of recognizing when change is required and rising to the challenge. We are at such an inflection point today. The National Innovation Act of 2005 will create synergies among America's academic, business and government communities to ensure the future growth of the United States. I urge all Senators to support this legislation."—Nicholas M. Donofrio, Executive Vice President, IBM Corporation.

"The new bipartisan Innovation Bill represents an important, multifaceted strategic and systemic approach to one of the most important problem sets facing the long term American future."—Martin Apple, President, Council of Scientific Society Presidents.

"EIA is thrilled by today's introduction of the National Innovation Act of 2005 (NIA), which includes so many measures that can help the U.S. remain an economic leader in the global high-tech economy. It is an ambitious piece of legislation that spans the policy spectrum, but with the commitment and support of policymakers from both sides of the aisle, we hope to see these important provisions quickly begin to take effect and fuel the U.S. innovation engine."—Dave McCurdy, CEO, Electronic Industries Association.

"We are writing to express our support for the National Innovation Act of 2005. Athena Alliance is research institute focused on understanding the emerging Information, Innovation and Intangibles (I-Cubed) Economy . . . The United States faces a critical challenge in coping with this new I-Cubed Economy. Athena Alliance believes that the National Innovation Act of 2005 is a step forward in addressing this challenge."—Richard Cohon, Chairman; Kenan Jarboe, President; Athena Alliance.

"The U.S. government is an important partner in fostering innovation, but together we must do more. The country is facing great competitive challenges and now is the time to demonstrate real leadership. The National Innovation Act lays out a solid plan and I urge the Congress to support it."—Victoria Hadfield, President of SEMI North America.

"I truly believe that our nation's future economic and technological leadership are at

risk if we do not act soon to strengthen American competitiveness. Senators Ensign and Lieberman are leading the way by proposing comprehensive legislation that will substantially increase our commitment to basic research, take decisive steps to grow the S&T talent pool, and provide meaningful incentives to encourage innovation."—Dr. Ann Nalley, President of the American Chemical Society.

"IEEE-USA applauds Senators John Ensign and Joseph Lieberman and their staff for their tireless efforts in crafting legislation designed to enhance and preserve U.S. competitiveness and innovation. This bill represents a huge step forward in promoting policies that will sustain U.S. technological leadership and encourage the development of the skilled, creative and competitive workforce critical for U.S. prosperity . . . We urge Congress to deal with this legislation expeditiously."—Gerard A. Alphonse, President, IEEE-USA.

"ASTRA, The Alliance for Science & Technology Research in America, strongly supports the National Innovation Initiative and the National Innovation Act of 2005. ASTRA's Board of Directors has identified enactment of the National Innovation Act of 2005 as its top legislative priority for 2006. In many ways, The Act represents the culmination of nearly five years of concerted effort by ASTRA and its members to raise this issue to a national level of discussion and we are very gratified by this initiative."—Robert S. Boege, Executive Director, ASTRA.

"There is no more important public policy priority than creating an environment in which innovation will flourish and fuel continued U.S. economic growth and global leadership. The National Innovation Act embodies this goal and rightly calls for our nation to focus our attention on the critical areas of research and development, economic incentives and investments in education in order to maintain our edge. TechNet applauds Senators Ensign and Lieberman on this important measure that will help America remain the global technology and scientific leader."—Lezlee Westine, President and CEO of TechNet.

"The National Innovation Act of 2005 . . . is a significant bi-partisan response to the challenges the U.S. faces in the hypercompetitive, networked global economy . . . The legislation is properly aimed at reversing adverse trends in research and human capital by augmenting funding for multidisciplinary research, accelerating innovation in manufacturing and the service sectors and investing more resources in the next generation scientists, engineers, workers and entrepreneurs."—Egils Milbergs, President, Center for Accelerating Innovation.

TECHNET,  
December 14, 2005.

Hon. JOHN ENSIGN,  
U.S. Senate,  
Washington, DC.

Hon. JOSEPH LIEBERMAN,  
U.S. Senate,  
Washington, DC.

DEAR SENATORS ENSIGN AND LIEBERMAN: As TechNet members and chief executives of the Nation's leading technology companies, we are writing to express our strong support for the National Innovation Act (NIA) of 2005. We commend your leadership in developing the NIA and look forward to working with you to support enactment of this important legislation.

Our Nation has reached a critical juncture unprecedented in our history. While our Nation continues to be the world's leader in many technological and scientific discoveries and breakthroughs, other nations are

working to create their own innovation infrastructure. These efforts range from tax incentives to attract new research and development to increased investments in math and science education. In short, with so many countries recognizing R&D's economic development potential, the U.S. can no longer take its current leading position for granted, nor accept the status quo as sufficient to stay competitive.

Not surprisingly, these were the same observations and conclusions reached by those leaders in business and academia who came together to produce Innovate America, the National Innovation Initiative Report, which was released this year by the Council on Competitiveness. This report produced a series of recommendations that collectively represent landmarks on a roadmap leading toward a nation better equipped and educated to both innovate and compete in a global economy.

We are pleased to see a substantial number of these recommendations embodied in the NIA. Your legislation clearly recognizes that changes are needed in a wide range of areas: reforms in tax policy; federal investments in elementary and secondary education; scholarship and grant availability for university graduate and undergraduate students; federal research priorities; intellectual property protection; and critical areas in our innovation infrastructure, including health care and our armed forces.

The depth and diversity of the issues covered in the NIA demonstrate the complexity and the enormity of the fundamental challenge that confronts us: the economic security and competitiveness of our Nation.

We stand ready to work with you to move this important legislation forward and thank you for your shared commitment to the Nation's future innovative capacity and capability.

Sincerely,

Jim Barksdale, Partner, Barksdale Management Corporation, Co-Founder, TechNet; John Chambers, President & CEO, Cisco Systems, Inc., Co-Founder, TechNet; John Doerr, Partner, Kleiner Perkins Caufield & Byers, Co-Founder, TechNet; James Breyer, Managing Partner, Accel Partners; Ronald Conway, Founder & General Partner, Angel Investors, LP; Carol Bartz, Chairman, President & CEO, Autodesk, Inc.; Jesse Devitte, Managing Director, Borealis Ventures; Henry Samuelli, Chairman & CTO, Broadcom Corporation; Gary Lauer, Chairman & CEO, eHealthInsurance; Craig R. Barrett, Chairman, Intel Corporation; Brian Keane, President & CEO, Keane, Inc.; Ralph Folz, CEO, Molecular, Inc.; Safra Catz, President & CFO, Oracle Corporation; Phillip Dunkelberger, President & CEO, PGP Corporation; Norman S. Wolfe, President & CEO, Quantum Leaders, Inc.; Lezlee Westine, President & CEO, TechNet; Nancy Heinen, Sr. Vice President & General Counsel, Apple; Tod Loofbourrow, President & CEO, Authoria; Dwight W. Decker, Chairman & CEO, Conexant Systems, Inc.; Donald B. Means, Founder & Principal, Digital Village Associates; Meg Whitman, President & CEO, eBay Inc.; Christopher Greene, President & CEO, Greene Engineers; Brad Smith, Sr. Vice President & General Counsel, Microsoft Corporation; Raouf Y. Halim, CEO, Mindspeed Technologies, Inc.; Harry W. Kellogg, Jr., Vice Chairman, Silicon Valley Bank; Chuck Moran, President & CEO, SkillSoft; Robert Farnsworth, CEO, Sonnet Technologies, Inc.; John S. Chen, Chairman, President & CEO, Sybase, Inc.; John Thompson, Chairman & CEO, Symantec Corporation; Aart de Geus, Chairman and CEO,

Synopsys, Inc.; Willem Roelandts, CEO, Xilinx; Robin L. Curle, President, CEO & Chairman, Zebra Imaging, Inc.

[From the Association of American Universities]

STATEMENT ON THE NATIONAL INNOVATION ACT OF 2005

The Association of American Universities applauds Senators Ensign and Lieberman for their introduction of the National Innovation Act of 2005. This legislation responds directly to the outstanding set of recommendations made by the Council on Competitiveness for much needed improvements in our Nation's ability to innovate and compete globally.

The Council's report, like subsequent reports by the National Academies and a host of business and academic organizations, makes a powerful case that the Nation's ability to compete effectively in the 21st century is under serious threat. That threat is posed largely by continuing underinvestment in fundamental research and our growing weakness in producing scientists, engineers, and others with the technological skills needed for the workforce of the future.

The proposals contained in the National Innovation Act represent a critical step toward strengthening the Nation's innovation infrastructure for the 21st century. Among other things, the measure would create a Presidential Council on Innovation, authorize doubling research funding at the National Science Foundation by FY 2011, expand graduate fellowships and traineeships, and encourage federal research agencies to devote three percent of their research and development budgets to "high-risk frontier research."

The legislation not only addresses the Council's recommendations but also reflects what has become a consensus among the nation's business and academic communities concerning actions we must take to ensure our future global competitiveness and our national security. It is the hope of AAU and the 60 leading U.S. research universities that comprise its membership that Congress will begin acting on these proposals at the earliest possible date.

COUNCIL OF GRADUATE SCHOOLS,

Washington, DC, December 14, 2005.

Hon. JOSEPH LIEBERMAN,  
Hart SOB,  
Washington, DC.

DEAR SENATOR LIEBERMAN: I am writing to commend you for supporting U.S. competitiveness, innovation, and research and development through the introduction of the National Innovation Act. The Council of Graduate Schools (CGS) and its 450 plus member institutions are very grateful for your leadership in addressing the important issue of strengthening American competitiveness and for your recognition of the role of graduate education in this process.

We are especially supportive of the National Innovation Act's provisions related to science and technology talent and the strong emphasis on graduate education contained in Sections 201, 202, 203 and 402 of the bill. We are specifically supportive of the following provisions:

Increased funding for the NSF Graduate Research Fellowship and Integrative Graduate Education and Research Traineeship program;

Authorization of funds for new and existing Professional Science Master's Degree programs to increase the number of qualified scientists and engineers entering the workforce and;

Authorization of a competitive traineeship program for undergraduate and graduate students in defense science and engineering focusing on multidisciplinary learning and innovation-oriented studies, and extension of

the SMART program supporting additional participants pursuing doctoral and master's degrees in key fields.

Supporting graduate education is critical to achieving the highly skilled workforce needed for the U.S. to compete effectively in the 21st century global economy. Thank you for your leadership in this important policy matter. The Council of Graduate Schools looks forward to working with you to implement this important legislation.

Sincerely,

DEBRA W. STEWART.

By Mr. CRAPO (for himself, Mrs. LINCOLN, Mr. THOMAS, and Mr. ALLARD):

S. 2110. A bill to amend the Endangered Species Act of 1973 to enhance the role of States in the recovery of endangered species and threatened species, to implement a species conservation recovery system, to establish certain recovery programs, to provide Federal financial assistance and a system of incentives to promote the recovery of species, and for other purposes; to the Committee on Finance.

Mr. CRAPO. Mr. President, I rise today to introduce the Collaboration for the Recovery of the Endangered Species Act, or CRESA. Over the years, this body and the Nation as a whole have fiercely debated the merits of the Endangered Species Act. But there is one fundamental concept on which we all agree—saving endangered species is essential.

We have 30 years of experience with the laws that govern species management. We know the original intent. We have witnessed the strengths of the Act and its capability and commitment to save species from extinction. We know about the endless litigation. We have seen disappointingly few species recover. We have lost farms and valuable ranch land, putting families out of business. Ironically, the biggest losers are the very species we are attempting to recover.

However, we have also seen amazing things happen in Idaho, in Arkansas, Wyoming and in California to name just a few. We have seen landowners, conservationists, local, state and Federal agencies come together, figure out a workable plan and set about to do the business of recovering species. These plans are tried and true—they work, and they need to have the strength of the law behind them.

Some ask why the Endangered Species Act needs to be improved. The answer is short—we must apply lessons learned, the most important one being that collaboration works. Collaboration allows the process to move forward. By its very nature, litigation sets one group against another—making them rivals, not partners. Too often we work against each other, rather than with and for each other. We need to encourage what works in order to create the results we all want.

The next logical step and what is needed now is a way to facilitate the

ESA in its methods of promoting ongoing species recovery—something that requires collaboration by all—from the marble halls of Federal agencies here in Washington to rangeland in rural Idaho and forests of Arkansas. So, too, in every other state. This is not just a Western problem; the entire country is searching for effective ways to accomplish the goals of the ESA. The good news is that many of these valuable partnerships are in place, functioning very effectively all across our country.

Take one example from my home State of Idaho, that of sage grouse recovery. Landowners and conservation groups came together to establish strong conservation programs that respected landowners' rights and satisfied environmental concerns. This collaborative, cooperative effort, utilizing the wisdom of those who live and work on the land, the expertise of specialists and those with knowledge of government rules and regulations, has been a magnificently successful alternative to the perils and dead end road of litigation.

Collaboration means more voices. More voices mean more solutions. More solutions mean more options. More options create the best solutions and also bring ownership by all members of the group. Applying this method to species recovery and the ESA means that more people will become involved and concerned about recovering species, especially those who bear the direct burden of compliance with the law. More voices means greater innovation in the field of species recovery. Collaboration decreases conflict, and conflict, as we in this body know all too well, usually puts us nowhere.

Collaboration works. Our bill codifies these proven solutions to protect them from the dead-end often found in litigation.

Why do we need to make a change? It is time to build on lessons learned with regard to species recovery, and our bill will put these lessons into concrete, effective action.

CRESA accomplishes the goal of species recovery by building on the successes of the ESA and by applying valuable lessons learned over the past 3 decades.

It promotes species restoration and recovery by rewarding landowners for their recovery efforts. Private property rights are guaranteed to us by our laws. Cost burdens can be onerous, and landowners should be rewarded for recovery efforts under the Endangered Species Act.

Laws must first positively reinforce public values and penalize only as a last resort. We have had it backward for many years and littered in the wake of this travesty are lost family farms and ranches. The old adage about the danger of burning bridges is relevant here: much of the action driven by existing ESA rules and regulations burns bridges—bridges that left intact could bring species across the chasm of extinction to recovery.

CRESA also promotes flexibility. One lesson learned in the course of creating and implementing the successful species management partnerships that I have mentioned today is that it is vital to work at the point of recovery—on the ground, as we tend to say. Working at the point of recovery realizes the benefits of fine-tuning individual solutions to meet specific challenges, but with the greater and broader goal of species recovery. This is flexibility and it cannot be achieved 2,500 miles from where a species needs restoration. It is on the ground that our resources should be applied.

CRESA promotes a freedom of process which encourages flexibility. I cannot emphasize how many times I have spoken with Idaho farmers and ranchers who tell me that, "that solution might work in the halls of Congress—it doesn't work here on my land." It is ludicrous to believe that one-size-fits-all in the arena of species recovery. No two species, topography, environment or human natural resource use are the same, not even in the same county. There are multiple considerations that must be addressed in a cooperative, collaborative manner in order to achieve any kind of effectiveness.

Private property rights are not the enemy of conservation. Rather, the law can encourage landowners to involve themselves in the process. Landowners have a great deal of respect for species. Many of them are the first ones to tell you about the bear they caught sight of in the dim light of evening or the early morning grazing of deer in their fields. If landowners, especially ranchers and farmers, didn't like animals, they likely wouldn't do what they do. It doesn't make sense.

In the same way, environmentalists don't hate people. They, too, live on land somewhere, and many use the products that large landowners produce for our country: meat, wood, leather, and mining products, to name a few. Put in that perspective, it is obvious that working against one another is futile and counterproductive for people and species. We have innovative solutions that work for both species and people, and we need laws that facilitate this critical flexibility.

It is time to come together, sit down at the table and get down to the real matter at hand. We have to, in the words of a good friend who knows this issue well, "concentrate on problem-solving rather than ideologies." While there are great ideological divides on this issue, the ideas for how to solve conservation challenges are not polarized. There is a consensus that there are conservation solutions that can benefit people and species.

We have a tremendous responsibility with regard to our valuable natural resources. Growing up and living in Idaho, I cannot fully convey to those who have never seen it the absolute wonder of my State's wildlife and land. It is farfetched to imagine that I or anyone else who lives and works this

breathhtaking setting would want to destroy it. Clearly, this is not just an Idaho issue. There are endangered species and wonderful lands in all 50 States and landowners nationwide are instrumental to solving the challenge of species recovery and restoration.

The Collaboration for the Recovery of Endangered Species Act facilitates this tried and true method of species recovery—species recovery not just for today or next week or next year, but for our children and grandchildren. I look forward to this bipartisan, progressive approach to species recovery and encourage all of my colleagues to give very careful consideration to this important legislation that we are introducing today.

I yield the floor.

Mr. THOMAS. Mr. President, I join with my friend from Idaho as a cosponsor to this bill on endangered species. He and I and others have worked on this for a good long time. Both of us have been on the Committee on Environment and Public Works. We are no longer there, but we started working there. We certainly are excited about the opportunity to bring to the floor some ideas that would deal with this whole notion of endangered species.

As the Senator has mentioned, all of us support the idea of continuing to have a program to protect endangered species. That concept is a good one. All of us support that. What we are talking about is a program that would be modernized and reorganized to be able to do that in a more efficient way.

We have good evidence that the program as it is, is not working. In a very simple way, what we have had is nearly 1,500 species listed. We have had less than a dozen delisted or put back where we want them. The emphasis has been on the listing, the emphasis has been on lawsuits, and the emphasis has been on disagreements. We should do what we can do to bring together the people who are interested. Whether they are environmentalists, whether they are landowners, whether they are naturalists, whatever, we all have the notion that we want to continue to make this program work, and we believe we have some ways to make it work better.

As was mentioned, the law is about 30 years old, so it is time to be updated. I agree with the Senator from Oklahoma, we need to review programs as time goes by. What we have learned as they have been in operation is we can make them much more effective.

There are two things that concern me. One is that there needs to be a substantial amount and a necessary amount of scientific data and science required for the listing. We have had some experience in Wyoming with having species listed, and it turns out they were not endangered at all. They were not identified properly and, therefore, we went through all of this debate and all of this discussion only to discover that they were not, in fact, endangered species. So we need to have more

science and get into what is necessary to identify an animal or a plant as an endangered species.

Second, the other challenge is to have a plan for recovery, to have a plan for getting cooperation between the landowners and the users and all the people who are interested in a way to lead us to recovery.

One of our latest experiences in Wyoming and in the western part of the country where we are has been with grizzly bears. Grizzly bears were listed, nearly 20 years ago, as endangered species. The numbers that were set forth in the plan for recovery were reached 15 years ago, and we are just now in the process of actually having the recovery and the delisting take place. So we have really lost sight of the goals of recovering species.

This is bipartisan language. We will have supporters from both sides of the aisle, and there is also an Endangered Species Revision Act that passed in the House. So we will have an opportunity when this is passed to come together with the House program to put together something that will be amenable and acceptable to both the House and Senate. It is bipartisan legislation, as indeed it should be.

I am sure we will have hearings, as we should, because there is a lot of interest in this issue. As the Senator pointed out, you have them on the east coast and you have them on the west coast and the situations are different. This bipartisan language would require recovery goals to be published at the time the species is listed. So there is a plan, and we do not go through this endless proposition. It would make it easier to delist them as soon as recovery goals are met, and that should be the purpose of the program.

It increases the State's role. This is very important. Many on the side of animals as opposed to plants, you have Fish and Wildlife Service, you have Park Service, you have Forest Service, you have State game and fish, you have State land agencies, so there needs to be a good deal of cooperation.

There also, of course, needs to be involvement with landowners who are impacted and affected by the plan for listing and the existence of those critics. So that needs to be there.

We need to provide incentives for working together. Much of this can be done without a lot of rules and regulations. The sage grouse was mentioned. There is a good deal of progress being made there in the private sector with groups coming together. We can do that.

I will not take any more time. I look forward to working with my colleagues. It is going to be in the Finance Committee. We hope we can have hearings soon and get this bill on the floor, work with the House, and be able to have a successful program put into place so we can continue to protect endangered species.

By Mr. BAYH:

S. 2111. A bill to amend the Internal Revenue Code of 1986 to provide a credit for small business employee training expenses, to increase the exclusion of capital gains from small business stocks, to extend expensing for small businesses, and for other purposes; to the Committee on Finance.

Mr. BAYH. Mr. President, I rise today to introduce the Small Business Growth Initiative of 2005, which is critical to expanding opportunities for our small businesses to excel in the U.S. economy and compete with larger businesses at home and abroad. Our Nation's competitiveness hinges on our ability to cultivate the entrepreneurial spirit and provide a policy environment that helps our Nation's job creators start or expand small businesses. Since I joined the Small Business Committee in 2003, I have redoubled my efforts to help small businesses, and this bill represents my latest ideas and work to provide additional assistance to the small business community.

In my home State of Indiana, small businesses employ nearly 1.3 million Hoosiers and make up 97.5 percent of all Indiana companies. Nationwide, small businesses have created between 60 and 80 percent of net new jobs over the last decade. Despite this success, small businesses are confronted with unique challenges. To understand what small business owners must overcome to build a successful enterprise, one need only know that one-third of small businesses fail in the first 2 years, and about half fail in the first 4 years. To help more small businesses succeed, my bill is designed to help small businesses train their employees, increase access to capital, encourage long-term investments in new technologies and equipment, expand opportunities to conduct research and development for the Federal Government, and finally, offer employee retirement plans.

The global economy requires that successful small businesses continually update workers' skills to remain competitive. To meet this requirement, the first section of the bill provides a \$1,000 tax credit for training costs per employee for up to five employees. This tax credit can be used for employees to, among other activities, obtain a new job certification, attend a community college course, or attend a 1-day seminar. Statistics indicate that the U.S. faces a growing skills gap in its workforce. With technology playing a critical role in the economy, it is vital that we continually educate workers so that they are able to meet the challenges of new and innovative tasks. Companies are often reluctant to invest in worker training due to the fear that workers will take their new training to new jobs. This tax credit reduces the cost to the employer and provides much-needed support for employers to develop a skilled workforce.

Access to capital is critical for emerging small businesses as they seek to innovate, create jobs, and create wealth. The second provision in this

bill provides a significant incentive to individuals and companies to invest in emerging small businesses, thereby increasing the amount of capital available to small businesses. Specifically, this bill provides a zero capital gains rate for long-term individual and corporate investments in small business stock. A 2004 report by the Council on Competitiveness highlighted small businesses' difficulty in trying to access venture capital. The study found: "Recently, (the funding gap) has been widening as Venture Capital firms are shifting investments to focus on more mature firms with larger capital needs. Entrepreneurs report difficulty in raising money between \$2 million and \$5 million."

The third section of my bill extends a critical incentive that small businesses have used to invest in new technologies, expand their operations, and most important, create jobs. Under current law, small businesses can expense—rather than depreciate—up to \$100,000 in new qualifying machinery or equipment in each year through 2007. My bill extends this tax provision through the end of 2010. This will allow small businesses to enjoy a 5-year planning horizon for new investment. It is difficult for small businesses to make significant investments when the tax code is riddled with "here today, gone tomorrow" provisions. This provision will provide tax savings to small businesses and reduce the amount of time that small businesses would otherwise be forced to spend complying with complex depreciation rules.

The fourth section of my bill would expand research and development opportunities for small businesses by increasing the amount of federal R&D opportunities available through the Small Business Innovation Research Program, SBIR, and the Small Business Technology Transfer Program, STTR. Small businesses produce 13 to 14 times more patents per employee than large firms. Small business patents are twice as likely as large firm patents to be among the 1 percent most cited patents. These programs are critical to expand opportunities for small businesses to enter the Federal marketplace and in so doing, develop new products that can be commercialized and create new jobs. They play a major role in helping the government advance cutting-edge research. According to the Small Business Administration, approximately 1 in 4 SBIR projects will result in the sale of new commercial products or processes.

The fifth and final section of my bill is designed to help small businesses offer employee retirement plans. Too many workers at small companies do not have the opportunity to contribute to their retirement security. Only 31 percent of small businesses with 10 to 24 employees provide retirement plans to their employees. By comparison, 72 percent of large firms with 1,000 or more employees provide retirement plan options to their employees. As we

consider ways to help small businesses grow and be competitive, it is important to provide incentives that allow them to recruit and retain qualified employees and better compete with larger businesses at home and abroad that provide retirement plans for their employees.

The problem for small businesses stems, in part, from the administrative costs of starting a retirement plan. To address this problem, my bill doubles the existing tax credit to offset start-up costs associated with setting up new retirement plans. Under this bill, small companies would be eligible to take a 50 percent credit on the first \$2,000 in approved costs incurred in each of the first 3 years of a qualified pension plan's existence.

In conclusion, small businesses are the engine of our economy and we need to focus attention on advancing policies that help small businesses grow and prosper. I look forward to working with my colleagues on these and other proposals to help our Nation's entrepreneurs continue to lead the world in innovation and compete effectively with large companies both here and abroad in the global economy.

By Ms. STABENOW (for herself, Mr. SMITH, Mr. LAUTENBERG, Mrs. MURRAY, Mr. MCCAIN, Mr. COLEMAN, and Mr. DAYTON):

S. 2115. A bill to amend the Public Health Service Act to improve provisions relating to Parkinson's disease research; to the Committee on Health, Education, Labor, and Pensions.

Ms. STABENOW. Mr. President, today I rise to introduce the Morris K. Udall Parkinson's Disease Research Act Amendments of 2005. I am pleased to be joined in this endeavor by my colleague, Senator SMITH, who co-chairs the Senate Parkinson's Caucus with me, as well as Senators Murray, Lautenberg, McCain, and Coleman as co-sponsors.

Monday, December 12, marked the anniversary of the death of Mo Udall of Arizona, an amazing congressman and champion of the environment who passed away from Parkinson's in 1998. In recognition of Congressman UDALL, Senators Wellstone and MCCAIN introduced the Morris K. Udall Parkinson's Research Act of 1997, which expanded basic and clinical research by establishing Udall Centers of Excellence around the nation to further scientific advances against Parkinson's.

In the United States, an estimated 60,000 new cases are diagnosed each year, joining the 1.5 million Americans who currently have Parkinson's disease. I know first-hand the anguish that a family goes through when a loved one is struck with this horrible disease as my grandmother had Parkinson's.

Top scientists say that Parkinson's is one of the first neurological diseases that could be cured but only if the resources are there. The legislation I am introducing today will help give sci-

entists the tools they need by building on the original Parkinson's Research Act. The Udall Act Amendments Act does not call for additional spending. Rather, my bill makes targeted, process-oriented changes to maximize the federal dollars already spent on Parkinson's research.

I am also pleased to have the support of the entire Parkinson's patient community, including the Parkinson's Action Network, Michael J. Fox Foundation for Parkinson's Research, Parkinson's Disease Foundation, National Parkinson Foundation, Parkinson Alliance, and American Parkinson Disease Association.

Additionally, I am pleased to have the support of Henry Ford Health System. Michigan universities and research institutions are leading the Nation in cutting-edge research into health care, and Henry Ford is doing amazing work in Parkinson's research and epidemiology. The William T. Gossett Parkinson's Disease Center at Henry Ford provides comprehensive, experienced, and individualized diagnostic and therapeutic services to patients with Parkinson's disease and other movement disorders. State-of-the-art clinical programs are provided at Henry Ford Hospital, the Henry Ford Medical Center in West Bloomfield, and the Allen Park Neurology Center.

I ask unanimous consent that the text of the bill and the support letters be printed in the RECORD.

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

S. 2115

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLE.**

This Act may be cited as the "Morris K. Udall Parkinson's Disease Research Act Amendments of 2005".

**SEC. 2. MORRIS K. UDALL PARKINSON'S DISEASE RESEARCH ACT OF 1997.**

(a) FINDINGS.—Subsection (b) of section 603 of the Morris K. Udall Parkinson's Disease Research Act of 1977 (42 U.S.C. 284f note) is amended by striking paragraph (1) and inserting the following:

"(1) FINDING.—Congress finds that, to take full advantage of the tremendous potential for finding a cure or effective treatment, the Federal investment in Parkinson's must be expanded, as well as the coordination strengthened among the National Institutes of Health research institutes."

(b) PUBLIC HEALTH SERVICE ACT.—Section 409B of the Public Health Service Act (42 U.S.C. 284f) is amended—

(1) in subsection (b), by striking paragraph (2) and inserting the following:

"(2) CONFERENCE.—

"(A) IN GENERAL.—The Director of NIH shall convene a coordinating and planning conference every 2 years with relevant institutes and non-governmental organizations to conduct a thorough investigation of all Parkinson's research that is funded in whole or in part by the National Institutes of Health and to identify shortcomings and opportunities for more effective treatments and a cure for Parkinson's disease. The Director shall report to Congress on the coordination among the institutes in carrying out such research.

"(B) RESEARCH INVESTMENT PLAN.—

"(i) IN GENERAL.—The results of each conference convened under subparagraph (A) shall be included in a research investment plan that provides for measurable results with the goals of better treatments and a cure for Parkinson's disease being the determining factors in the allocation of Parkinson's disease research dollars. The plan shall include an outline of the manner in which to fully utilize the Udall Center program to ensure the continuation of a particular focus on translational research, including a clinical component.

"(ii) BUDGET AND IMPLEMENTATION STRATEGY.—The plan submitted under clause (i) shall include a budget (that includes both programmatic and dollar line items) and implementation strategy (that incorporates the use of special initiatives such as Requests for Applications, Program Announcements with set-asides or similar directed research mechanisms) together with results to be reported back to Congress. The budget shall include

"(C) SUBMISSIONS TO CONGRESS.—The plan under subparagraph (B) (including the budget and implementation strategy) and the expected results of plan implementation shall be submitted to Congress not later than 3 months after the conference is convened under subparagraph (A). Reports on the outcomes of the plan, including actual spending and actual results, shall be submitted to Congress on an annual basis.

"(D) FUNDING.—The Secretary shall ensure that adequate funding is available under this section to carry out the activities described in the investment plan under subparagraph (B).";

(2) in subsection (c)—

(A) in paragraph (1)—

(i) by striking "not more than 10"; and

(ii) by adding at the end the following:

"The Director shall ensure that an additional center shall be funded under this paragraph to serve as the coordinating center to coordinate the activities conducted by each of the centers funded under this paragraph to further focus and manage the interdisciplinary efforts of such centers.";

(B) in paragraph (2)(A)(ii), by striking "conduct basic and clinical research" and inserting "in carrying out research, ensure that a significant clinical component is provided for in addition to ongoing basic research"; and

(C) by adding at the end the following:

"(5) REVIEW PROCESS.—The Director of NIH shall establish a review process with respect to applications received for grants under paragraph (1). Such process shall provide for the evaluation of applicants in a manner that recognizes the unique aspects of the clinical, coordination, and multidisciplinary components of the applicants.";

(3) in subsection (d)—

(A) by striking "is authorized to establish a grant program" and inserting "shall award grants"; and

(B) by inserting before the period at the end the following: "and shall be awarded in a manner consistent with the research investment plan under subsection (b)(2)(B)"; and

(4) by striking subsection (e) and inserting the following:

"(e) REPORT.—The Director of NIH, in consultation with the Director of the Centers for Disease Control and Prevention, shall conduct an investigation, and prepare and submit to the appropriate committees of Congress a report, on the incidence of Parkinson's disease, including age, occupation, and geographic population clusters, and related environmental factors relating to such disease.

“(f) AUTHORIZATION OF APPROPRIATIONS.— For the purposes of carrying out this section, section 301, and this title with respect to research focused on Parkinson’s disease, there are authorized to be appropriated not to exceed such sums as may be necessary for each of fiscal years 2007 through 2012.”.

HENRY FORD HEALTH SYSTEM,

*Detroit, MI, December 12, 2005.*

Re Morris K. Udall Parkinson’s Disease Research Act Amendments of 2005.

Hon. DEBBIE STABENOW,  
U.S. Senate,  
Washington, DC.

DEAR SENATOR STABENOW: The Henry Ford Health System strongly supports your legislation which would reauthorize the Morris K. Udall Parkinson’s Disease Research Centers and allow an expansion of this important research to other states, including Michigan.

The Henry Ford Health System has been engaged in significant Parkinson’s Disease research for many years, with published research on linkages between Parkinson’s Disease and occupational exposure to lead, copper and agricultural pesticides, as well as life-style going back to 1993. The etiology of Parkinson’s Disease is considered to have a strong environmental component, but relatively few studies have investigated the potential association between occupation and the disease. The HFHS research is enriched by our strong clinical and research programs in Neurology, Biostatistics, and Research Epidemiology at the HFHS Health Sciences Center, as well as our formal affiliation with Wayne State University and the National Institute of Environmental Health Sciences Center in Molecular and Cellular Toxicology with Human Applications at WSU.

Henry Ford Health System provides healthcare to more than 1 million patients, including approximately 25% of residents in the greater Southeast Michigan region, as well as many patients from virtually every state in the nation. Patients are drawn to Henry Ford Health System because of important advancements in diagnostics and treatment that may not be readily available elsewhere. Because of our ability to combine research with our strong clinical programs, HFHS offers an ideal setting for the kinds of changes called for in this legislation. We believe the intent to focus more of the National Institutes of Health Parkinson’s dollars on translational research and therapies will bring a strong return on investment and lead to better treatments for more than one million Americans fighting Parkinson’s disease.

Thank you for your leadership on this important health care issue. We appreciate your dedication and support for funding the research that can eventually lead to a cure for Parkinson’s Disease. We look forward to working with you on this legislation and offer our assistance in achieving the positive changes called for in the Udall Act Amendments.

Sincerely,

NANCY M. SCHLICHTING,  
*President & CEO.*

PARKINSON’S ACTION NETWORK,  
*Washington, DC, November 1, 2005.*

Hon. DEBBIE STABENOW,  
U.S. Senate,  
Washington, DC.  
Hon. GORDON SMITH,  
U.S. Senate,  
Washington, DC.

DEAR SENATOR STABENOW AND SENATOR SMITH: The Parkinson’s community strongly supports your legislation, the Morris K. Udall Parkinson’s Disease Research Act Amendments of 2005.

Recognizing the need to accelerate the pace of Parkinson’s disease research, Congress passed the Morris K. Udall Parkinson’s Research Act of 1997 (Udall Act) and it was signed into law. The Udall Act Amendments builds on the historic 1997 Udall Act to strengthen and focus critical Parkinson’s disease research.

Your legislation will ensure that NIH-funded research will hasten discovery of better treatments and a cure for Parkinson’s disease. We believe the positive changes called for in the Udall Act Amendments will require the NIH to focus more of its Parkinson’s dollars on translational research and therapies, recognize the unique aspects of the Udall Centers, and give us a stronger understanding of who is impacted by this devastating disease and why. We are confident that the Udall Act Amendments will ensure that federally-funded Parkinson’s disease research brings the strongest return on investment possible and will ultimately lead to better treatments and a cure for the more than one million Americans fighting Parkinson’s disease.

The Parkinson’s community applauds your legislation and looks forward to working with you to ease the burden and find a cure for Parkinson’s disease. We thank you for your leadership and dedicated efforts on behalf of the entire Parkinson’s community.

Sincerely,

JOEL GERSTEL,  
*American Parkinson  
Disease Association.*

AMY COMSTOCK,  
*Parkinson’s Action  
Network.*

DEBI BROOKS,  
*The Michael J. Fox  
Foundation for Par-  
kinson’s Research.*

JOSE GARCIA-PEDROSA,  
*National Parkinson  
Foundation.*

ROBIN ELLIOTT,  
*Parkinson’s Disease  
Foundation.*

CAROL WALTON,  
*The Parkinson Alli-  
ance.*

#### SUBMITTED RESOLUTIONS

#### SENATE RESOLUTION 334—RELATIVE TO THE DEATH OF WILLIAM PROXMIRE, FORMER UNITED STATES SENATOR FROM THE STATE OF WISCONSIN

Mr. FRIST (for himself, Mr. REID, Mr. KOHL, Mr. FEINGOLD, Mr. AKAKA, Mr. ALEXANDER, Mr. ALLARD, Mr. ALLEN, Mr. BAUCUS, Mr. BAYH, Mr. BENNETT, Mr. BIDEN, Mr. BINGAMAN, Mr. BOND, Mrs. BOXER, Mr. BROWNBACK, Mr. BUNNING, Mr. BURNS, Mr. BURR, Mr. BYRD, Ms. CANTWELL, Mr. CARPER, Mr. CHAFEE, Mr. CHAMBLISS, Mrs. CLINTON, Mr. COBURN, Mr. COCHRAN, Mr. COLEMAN, Ms. COLLINS, Mr. CONRAD, Mr. CORNYN, Mr. CORZINE, Mr. CRAIG, Mr. CRAPO, Mr. DAYTON, Mr. DEMINT, Mr. DEWINE, Mr. DODD, Mrs. DOLE, Mr. DOMENICI, Mr. DORGAN, Mr. DURBIN, Mr. ENSIGN, Mr. ENZI, Mrs. FEINSTEIN, Mr. GRAHAM, Mr. GRASSLEY, Mr. GREGG, Mr. HAGEL, Mr. HARKIN, Mr. HATCH, Mrs. HUTCHISON, Mr. INHOFE, Mr. INOUE, Mr. ISAKSON, Mr. JEFFORDS, Mr. JOHNSON, Mr. KENNEDY, Mr. KERRY, Mr. KYL, Ms. LANDRIEU, Mr. LAUTEN-

BERG, Mr. LEAHY, Mr. LEVIN, Mr. LIEBERMAN, Mrs. LINCOLN, Mr. LOTT, Mr. LUGAR, Mr. MARTINEZ, Mr. MCCAIN, Mr. MCCONNELL, Ms. MIKULSKI, Ms. MURKOWSKI, Mrs. MURRAY, Mr. NELSON of Florida, Mr. NELSON of Nebraska, Mr. OBAMA, Mr. PRYOR, Mr. REED, Mr. ROBERTS, Mr. ROCKEFELLER, Mr. SALAZAR, Mr. SANTORUM, Mr. SARBANES, Mr. SCHUMER, Mr. SESSIONS, Mr. SHELBY, Mr. SMITH, Ms. SNOWE, Mr. SPECTER, Ms. STABENOW, Mr. STEVENS, Mr. SUNUNU, Mr. TALENT, Mr. THOMAS, Mr. THUNE, Mr. VITTER, Mr. VOINOVICH, Mr. WARNER, and Mr. WYDEN) submitted the following resolution; which was considered and agreed to:

S. RES. 334

Whereas William Proxmire served in the Military Intelligence Service of the United States Army from 1941 to 1946;

Whereas William Proxmire served the people of Wisconsin with distinction from 1957 to 1989 in the United States Senate;

Whereas William Proxmire served the Senate as Chairman of the Committee on Banking, Housing, and Urban Affairs in the ninety-fourth to ninety-sixth and one hundredth Congresses;

Whereas William Proxmire held the longest unbroken record for rollcall votes in the Senate;

Whereas William Proxmire tirelessly fought government waste, issuing monthly “Golden Fleece” awards beginning in 1975 for the “biggest or most ridiculous or most ironic example of government waste;”

Whereas William Proxmire worked endlessly to eradicate the world of genocide, culminating in the ratification by the Senate of an international treaty outlawing genocide;

*Resolved*, That the Senate has heard with profound sorrow and deep regret the announcement of the death of the Honorable William Proxmire, former member of the United States Senate.

*Resolved*, That the Secretary of the Senate communicate these resolutions to the House of Representatives and transmit an enrolled copy thereof to the family of the deceased.

*Resolved*, That when the Senate adjourns today, it stand adjourned as a further mark of respect to the memory of the Honorable William Proxmire.

#### SENATE CONCURRENT RESOLUTION 70—URGING THE GOVERNMENT OF THE RUSSIAN FEDERATION TO WITHDRAW THE FIRST DRAFT OF THE PROPOSED LEGISLATION AS PASSED IN ITS FIRST READING THE STATE DUMA THAT WOULD HAVE THE EFFECT OF SEVERELY RESTRICTING THE ESTABLISHMENT, OPERATIONS, AND ACTIVITIES OF DOMESTIC, INTERNATIONAL, AND FOREIGN NON-GOVERNMENTAL ORGANIZATIONS IN THE RUSSIAN FEDERATION, OR TO MODIFY THE PROPOSED LEGISLATION TO ENTIRELY REMOVE THESE RESTRICTIONS

Mr. MCCAIN (for himself, Mr. BIDEN, and Mr. LIEBERMAN) submitted the following concurrent resolution, which was referred to the Committee on Foreign Relations: