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Senate

The Senate met at 12 noon and was called to order by the Honorable ROBERT F. BENNETT, a Senator from the State of Utah.

PRAYER

The Chaplain, Dr. Barry C. Black, offered the following prayer:

Eternal Lord God, our hope for years to come, make us today a channel through which Your love and grace may flow. Empower us to live exemplary lives that will compel others to glorify You. When we confront adversaries, give us love and forbearance. Strengthen us to go beyond the minimum in service to others.

Inspire our Senators with Your presence. Teach them to press their weaknesses close to Your strength, that they may find light in darkness, courage for life's battles, and endurance for life's pains.

We pray in Your holy Name. Amen.

PLEDGE OF ALLEGIANCE

The Honorable ROBERT F. BENNETT led the Pledge of Allegiance, as follows:

I pledge allegiance to the Flag of the United States of America, and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore (Mr. STEVENS).

The assistant legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, DC, July 17, 2006.

To the Senate:

Under the provisions of rule I, paragraph 3, of the Standing Rules of the Senate, I hereby appoint the Honorable ROBERT F. BENNETT, a Senator from the State of Utah, to perform the duties of the Chair.

TED STEVENS,
President pro tempore.

Mr. BENNETT thereupon assumed the chair as Acting President pro tempore.

RESERVATION OF LEADER TIME

The ACTING PRESIDENT pro tempore. Under the previous order, the leadership time is reserved.

MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Under the previous order, there will now be a period for the transaction of morning business until 12:30 p.m., with the time equally divided.

RECOGNITION OF THE MAJORITY LEADER

The ACTING PRESIDENT pro tempore. The majority leader is recognized.

SCHEDULE

Mr. FRIST. Mr. President, today the Senate will conduct a period of morning business with the time equally divided until 12:30. At 12:30, we will begin the debate on the three bills related to stem cell research, and we will have debate throughout the day and tomorrow, with the time alternating between the majority and minority in 30-minute increments, and then proceed to stacked votes tomorrow afternoon at 3:45. Each of these votes will require 60 votes for passage. The votes on Tuesday will be the first votes of the week.

On Friday, we were able to reach an agreement on the Water Resources Development Act, and Chairman INHOFE will be managing the floor consideration of that bill on Tuesday and Wednesday.

STEM CELL RESEARCH

Mr. FRIST. Mr. President, over the next 2 days we will be discussing the issues surrounding stem cell research and discussing a total of three bills over the course of 48 hours. Our discussion over the next 2 days will focus on science and on ethics and how science and ethics interplay.

Science: We are in a remarkable era of exciting and rapidly accelerating advances in developmental biology. New doors of exploration have been thrown wide open by the Human Genome Project and by our new knowledge and our new understanding of molecular and cellular mechanisms. Some have called this 21st century the century of cells—a century that will explode with regenerative medicine so that heart surgeon BILL FRIST will no longer have to cut out a diseased heart and replace that diseased heart with a healthy heart but would rather treat a patient with cells requiring no surgery.

We are going to be discussing ethics. Although not easy, we do have to confront head-on the difficult issues around life's beginnings, all of which have large scientific, moral, and religious implications. The rapidly advancing science has taken us to today's debate.

As we will see in our discussions on the floor of the Senate, it is safe to say that no scientific issue is more divisive today than this discussion surrounding stem cells. As others have said, you can't do an end run around all of these ethical challenges. They are before us, and they are going to come with increasing frequency with advancing science. Our responsibility as policymakers is, through deliberation and through dialog and through debate, to frame those moral principles which protect and defend human dignity and promote scientific advances and medical applications that will lead to healing.

In the last century, we faced ethical controversies over organ transplantation, my field: Who would receive a scarce organ? What are the criteria to determine brain death? We had ethical

● This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

discussions and ethical controversies over blood transfusions: Who receives blood transfusions? What are the indications? We also faced ethical dilemmas over genetic therapy.

Well, the 21st century, the current century, brings even more profound ethical questions, and they are going to come with increasing frequency. How we and humanity handle our gathering control over these mysteries of cell development and embryo development will reflect who we are as a people and where we are going.

Today, the Senate will begin debate on these three important pieces of legislation: the Alternative Pluripotent Stem Cell Therapies Enhancement Act, from Senators SANTORUM and SPECTER; the Fetus Farming Prohibition Act of 2006, Senators SANTORUM and BROWNBACK; and the Stem Cell Research Enhancement Act, the so-called—in the House—Castle-DeGette bill, and in the Senate, the Specter-Hatch bill.

Many of my colleagues have, like me, spent hours grappling with these issues: the future of stem cell research, how we balance pro-life positions with the potential for new life and health offered by stem cell research. There is, perhaps, an inclination to avoid such difficult issues, to ignore them and to let others debate, but I have come to realize we must participate in defining research surrounding the culture of life. If not, it will define us.

Five years ago, on July 18, 2001, I came to the Chamber and laid out a comprehensive proposal to promote stem cell research within an ethical framework. I proposed 10 specific interdependent principles. I also said that policymakers and the public must reassess on an ongoing basis the research and the circumstances under which it is conducted because science will continue to advance. As the 21st century progresses and as science—developmental biology—advances, we will continually face moral and ethical challenges. It is our responsibility, as individuals and as a body politic, to reassess the constructs governing biomedical research. It will define us. That is why I brought cord legislation to the floor earlier in the year, and it was passed.

As I said then and as I believe now, we must also do all we can to pursue other alternative strategies that will hold potential for developing pluripotent stem cell lines without damaging or destroying nascent human life. That is why, in the package before us today, I have asked the Senate to consider legislation to enhance support for alternatives to embryonic stem cell research. I am extremely pleased that Senator SANTORUM and Senator SPECTER worked together to craft the Alternative Pluripotent Stem Cell Therapies Enhancement Act. Their bill is similar to legislation I worked on with Senator ISAKSON and others of our colleagues last year, and I encourage every Senator to support it.

This bill would fund alternative methods of potentially deriving pluripotent stem cells, including extracting from embryos that are no longer living, nonlethal and nonharmful extraction from embryos; extraction from artificially created organisms that are not embryos but are embryo-like; and reprogramming adult cells to a pluripotent state through fusion with embryonic cell lines. There is no reason this legislation shouldn't gather the support of every Member of this body. It should unify us.

The second bill we will consider is the Fetus Farming Prohibition Act of 2006. Specifically, the bill prohibits the implantation and gestation of an embryo in a human or animal for the purpose of aborting for research—the manufacture of human life for experimental purposes. Senators BROWNBACK and SANTORUM have proposed legislation that would draw a clear line which should not be crossed. This is a forward-leaning pro-life bill, a moral guardrail in place before any inducement exists to promote it.

Shortly after I originally outlined my principles 5 years ago, President Bush announced his policy on embryonic stem cell research. It federally funded embryonic stem cell research for the first time. It did so within an ethical framework, and it showed respect for human life.

President Bush and I do not differ about the need for strong guidelines governing stem cell research. His policy was generally consistent with the principles I set forth a month before his announcement back in 2001. However, as science has progressed over the last 5 years, we have learned that fewer than the anticipated number of cell lines have proved suitable for research, and I think the limit on cell lines available for federally funded research is too restrictive.

H.R. 810, the Stem Cell Research Enhancement Act, addresses this restriction in our current policy. It has many shortcomings, but it is clearly consistent with my fifth principle on stem cell research: ''Provide funding for embryonic stem cell research only from blastocysts that would otherwise be discarded.'' In fact, the bill applies what I proposed in 2001 verbatim. It allows Federal funding for research using only those embryonic stem cells derived from blastocysts that are left over after in vitro fertilization and would otherwise be discarded.

Mr. President, in closing, all three of the bills the Senate will address beginning at 12:30 today will raise profound ethical questions that are challenging. They merit serious dialogue, and they merit serious debate. That is why I am pleased that on an issue of this magnitude, Senators will have the opportunity over the next 2 days to have their ideas considered and voted on separately and cleanly.

Mr. President, I yield the floor.

Mr. KYL. Mr. President, am I correct that we are now in a period of morning business?

The ACTING PRESIDENT pro tempore. The Senator is correct.

Mr. KYL. Mr. President, I ask unanimous consent to speak for 3 minutes.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

ISRAEL

Mr. KYL. Mr. President, I rise again today to discuss the situation in the Middle East where our Israeli allies are fighting unprovoked aggression by a terrorist army on their border. To date, over 1,000 rockets and missiles have been fired into Israel, killing more than a dozen civilians. It was especially disturbing to hear that the missile which collapsed a three-story building in Haifa earlier today was a Syrian model, loaded with ball bearings to cause maximum civilian casualties.

At a time when one of our closest allies is threatened by indiscriminate attacks on its population centers and our President and Secretary of State are overseas, it is incumbent on this body to remain united in standing behind Israel. I am pleased that the leadership is drafting a resolution expressing bipartisan condemnation of Hezbollah's attacks and in support of Israel's right to respond in the name of self-defense.

I am pleased that our allies, too, understand the grave nature of this crisis and its origins. The joint statement released over the weekend by the G8 states unequivocally that this violence:

> Results from efforts by extremist forces to destabilize the region and to frustrate the aspirations of the Palestinian, Israeli, and Lebanese people for democracy and peace. These extremist elements and those that support them cannot be allowed to plunge the Middle East into chaos, and a wider conflict.

Even some Arab governments, including Saudi Arabia, Egypt, and Jordan, took the commendable step of chastising Hezbollah for its ''unexpected, inappropriate, and irresponsible acts.''

In light of the chaos being precipitated by Hezbollah's rocket and missile capability—a capability being provided directly to Hezbollah by the governments of Syria and Iran—I thought it would be appropriate to take a moment today to talk about how that threat can be addressed. The estimated 13,000 missiles currently in Hezbollah's arsenal are hidden throughout Southern Lebanon, in private homes, caves, and factories. At present, the only way to destroy these systems is to search them out on foot—a risky and potentially provocative solution. Alternatively, Israeli forces can strike at missile launchers after they have fired, meaning that at least one salvo will already be en route. It would be a vast improvement if Israel had the option of neutralizing the Hezbollah threat through defensive, rather than offensive means.

Israel currently has access to Patriot and Arrow missile defense technologies, great systems which are critical for defending against longer-range missiles, but poorly suited to defend Israeli territory from the types of rockets and missiles currently being fired by Hezbollah.

It is for this reason that I support the U.S. Missile Defense Agency efforts—in cooperation with the Israeli Missile Defense Organization—to develop a system for short-range missile defense. Aimed at projectiles with a range of less than 200 kilometers, this system would provide Israel with another way to defend itself, rather than having to rely exclusively on offensive action. It is propitious that the Defense Appropriations Committee is marking up its bill this week. For more than a year, I have worked with Senators STEVENS and INOUYE to support the short-range missile defense program. Under their leadership, I believe that the committee will provide the investment necessary to accelerate fielding of the system. Unfortunately, the need for a redoubled effort is now clearer than ever.

We still do not know how the current crisis is going to end. What we can and should say, however, is that Israel has the full support of this body in its ongoing efforts to fight terrorists, protect its citizens, and create the circumstances for peaceful coexistence with Lebanon, and all of its neighbors.

ORDER FOR STAR PRINT—H.R. 5672

Mr. KYL. Mr. President, I ask unanimous consent that H.R. 5672 be star printed.

The ACTING PRESIDING pro tempore. Without objection, it is so ordered.

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

The ACTING PRESIDING pro tempore. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. SPECTER. Mr. President, I ask unanimous consent that the order for the quorum call be dispensed with.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

CONCLUSION OF MORNING BUSINESS

The ACTING PRESIDENT pro tempore. Morning business is closed.

FETUS FARMING PROHIBITION ACT OF 2006

ALTERNATIVE PLURIPOTENT STEM CELL THERAPIES ENHANCEMENT ACT

STEM CELL RESEARCH ENHANCEMENT ACT OF 2005

The ACTING PRESIDENT pro tempore. Under the previous order, the hour of 12:30 having arrived, the Senate will proceed to the consideration of S. 3504, S. 2754, and H.R. 810, en bloc, which the clerk will report.

The legislative clerk read as follows:

A bill (H.R. 810) to amend the Public Health Service Act to provide for human embryonic stem cell research.

A bill (S. 3504) to amend the Public Health Service Act to prohibit the solicitation or acceptance of tissue from fetuses gestated for research purposes, and for other purposes.

A bill (S. 2754) to derive human pluripotent stem cell lines using techniques that do not knowingly harm embryos.

Mr. SPECTER. Mr. President, I ask unanimous consent that I may use this hourglass during the course of the debate.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. SPECTER. Mr. President, it is difficult to characterize the importance of the debate which the Senate is now beginning because the most fundamental aspect of human life is our health. Without our health, there is nothing we can do. Medical research has performed wonders, and stem cells, which came upon the scene in November of 1998, have the most remarkable potential of any scientific discovery ever made with respect to human health. These stem cells have the capacity to regenerate disease cells in the human body and have the capacity to cure maladies of all sorts, including cancer, heart disease, Parkinson's, Alzheimer's, spinal cord—the long litany of maladies which confront mankind.

The stem cell debate began with the hearings conducted by the Appropriations Subcommittee on Labor, Health and Human Services, which I chair and on which Senator TOM HARKIN is ranking member. We began those hearings within days of the November 1998 announcement and have had some 18 hearings on stem cells to explore all ramifications of the potential of stem cells.

There is now an avalanche of evidence that the use of stem cells in scientific research has boundless potential. The state of the law is that federal funding may only be used for a limited number of obsolete stem cell lines.

The bill which is the fundamental issue before the Senate today is H.R. 810, which Senator HARKIN and I introduced as a Senate bill with some 42 cosponsors, which would allow research on embryonic stem cells.

There are two other bills at issue. One is S. 2754 which Senator SANTORUM and I have introduced which relates to long-range research not involving the embryos, but it is totally separate and distinct from H.R. 810 in that it does not have the potential that the embryonic stem cells have and it is long range.

The third bill is S. 3504 which relates to fetus farming prohibition, and I believe there will be little controversy about this bill. The bill would deal with two unethical activities—the solicitation or acceptance of human fetal tissue knowing that a pregnancy was deliberately initiated to provide such tissue and the solicitation or acceptance of tissues or cells from a human embryo or fetus that was gestated in the uterus of a nonhuman animal. I believe there will be no contest about that.

I expect relatively little contest about S. 2754, which does not in any way relate to the importance of research on embryonic stem cells.

The embryonic stem cells are used from many embryos which have been created for in vitro fertilization. Customarily, a dozen or so are created, maybe three or four are used, and the others are then frozen and ultimately will be discarded. There are some 400,000 of those embryos which are frozen today, and the likelihood of their being used is nil.

Senator HARKIN and I introduced legislation to provide for Federal funding to encourage adoption of these embryos. If they could be used to create human life, I would not in the remotest way contend that they ought to be used for scientific research. But the fact is that they will either be used for scientific research or thrown away.

When the issue of adoption was raised, as I say, we took the lead in the Labor, Health and Human Services, and Education Subcommittee in the year 2002 and appropriated $1 million and since then have appropriated more in succeeding years.

As of May 31, 2006, the Snow Flake Organization, one of the Department of Health and Human Services' embryonic adoption grantees, had a news conference announcing that there had been 100 births since 1997. As of May 31, 2006, the National Embryo Donation Center had a total of 28 deliveries or ongoing pregnancies. Out of the 400,000, even with Federal funding available to encourage adoption, the number is 128, which makes it conclusive that these 400,000 embryos will either be used for scientific research or thrown away.

The bill which Senator HARKIN and I have introduced is very carefully structured to be sure that it satisfies the strictest ethical scrutiny.

This is the essence of the bill: first, that the stem cells were originally created for fertility treatment purposes; second, are in excess of the clinical need; third, the individual seeking fertility treatments for whom the embryos were created has determined that the embryos will not be implanted in a woman; fourth, they will be otherwise discarded; and fifth, the individual for whom embryos were created has provided written consent for embryo adoption.

This bill does not allow Federal funds to be used for the derogation of stem cell lines, a step in the process where the embryo is destroyed—the lines are created and the embryos are destroyed before they are subjected to research which is funded by the Federal Government under the bill which Senator HARKIN and I are promoting.

The evidence of the utility of these embryonic stem cells is unquestioned, and the need for more stem cell lines similarly is unquestioned.

On August 9, 2001, President Bush made an Executive determination to allow Federal research on some 60 existing stem cell lines. It was later determined that there might be as many as 70 lines. It has since been determined that there are no more than 20 lines, and perhaps even fewer. These existing lines are tainted with mouse feeder cells, which is a technical consideration that they can't be used.

The experts in the field: Dr. Nabel, Director of the National Institutes of Health (NIH) Heart, Lung, and Blood Institute, focused on the unavailability of stem cells for research, noting that only four stem cell lines are currently in common use.

The enormous advantages of stem cells were outlined in some detail by the various Directors of the NIH.

Dr. Zerhouni, Director, NIH, said:

Embryonic stem cell research holds great promise for treating, curing, and improving our understanding of disease, as well as revealing important basic mechanisms involved in cell differentiation and development.

Dr. Fauci, Director of the National Institute of Allergy and Infectious Diseases, said:

NIAID believes that embryonic stem cell research could be advanced by the availability of additional cell lines. Individual stem cell lines have unique properties. Thus, we may be limiting our ability to achieve the full range of potential therapeutic applications of embryonic stem cells by restricting research to the relatively small number of lines currently available.

Dr. Battey, Director of the Deafness Institute, said:

The more stem cell lines available for study the more likely a cell line will be maximally useful for a given research, and potentially clinical, application . . . the scientific community would be best served by having a greater number of human embryonic stem cell lines available for study.

Dr. Nabel, the director of the Heart, Lung, and Blood Institute, said:

. . . we recognize that the limitations of existing cell lines are hindering scientific progress among a community that is very eager to move forward in this promising area. We support the creation of dissemination of newer stem cell lines in the expectation that it will advance this field and hasten progress in basic and clinical research.

Similar opinions were articulated by Dr. Tabak, director of the Dental Institute; by Dr. Volkow, director of the National Institute of Drug Abuse; by Dr. Collins of the Human Genome Institute; by Dr. Neiderhuber, director of the Cancer Institute; by Dr. Rodgers, acting director of the Diabetes and Digestive Disease Institute; by Dr. Landis, director of the Neurology Institute; by Dr. Berg, director of the General Medical Sciences Institute; by Dr. Alexander, director of the Child Health Institute; by Dr. Sieving, director of the Eye Institute; by Dr. Schwartz, director of the Environmental Health Institute; by Dr. Hodes, director of the Aging Institute; by Dr. Li, director of the Alcohol Abuse Institute; by Dr. Alving, acting director of the Center for Research Resources. All concur with the need for additional stem cell lines for research in dealing with the maladies in their own particular area.

By way of a strictly personal note, I had a little root canal work done this morning. The dentist asked me what was going on in the Senate today. I told him about stem cell research. He said: I hope you win your case because it will help us on root canal work. The embryonic stem cells can be injected into the canal with the diseased tissue, and you can have a third set of teeth.

Wherever I turn, people in the medical research field—and I regret I have had a lot contacts—extol the enormous virtues of stem cells—that they have the capacity to replace diseased cells. If you deal with a heart problem and you have a diseased area, the stem cells can be injected. These embryonic stem cells have remarkable flexibility and capacity to provide a healthy cell to replace the diseased cell.

We have had remarkable articulation of support from Members of the Senate, as well as Members of the U.S. House of Representatives. The House bill was passed with a comfortable margin, with some 50 Republicans crossing party lines. In the Senate, we have many Senators who are most actively known in the pro-life community, and while they would not make a woman's right to choose available, they do actively support stem cell research. It is important to focus on the difference that being against a woman's right to choose has nothing to do with the issue of stem cell research. They are entirely separate.

Authors of the June 4, 2004, letter to the President on stem cell research include some of the strongest pro-life Senators in our body, including Senator ORRIN HATCH, Senator GORDON SMITH, Senator LAMAR ALEXANDER, Senator THAD COCHRAN, Senator KAY BAILEY HUTCHISON, Senator TRENT LOTT, Senator JOHN MCCAIN, and Senator JOHN WARNER. There is every expectation there will be more Senators from the strong pro-life community who will be supporting embryonic stem cell research.

We have support from two of our colleagues who were very active on the pro-life side, former Senator John Danforth and former Senator Ben Nighthorse Campbell.

On the strictly personal level, I have noted the declaration by President Nixon in 1970 when he declared war on cancer. Had that war been pursued with the same diligence we pursue other wars, I believe cancer would long ago have been cured. Without unduly dwelling on my own situation with Hodgkin's, a year of chemotherapy, I think had the research been fulfilled, I would have been spared that malady.

The maladies such as heart disease, cancer, Parkinson's, and Alzheimer's disease strike approximately 110 million Americans a year. We all know people close to us who have been stricken with cancer or heart failure. My own chief of staff, Carey Lackman, a beautiful young woman of 48, was stricken with breast cancer and died 2 years ago. My son's law partner, Paula Klein, a beautiful woman with two young children, age 55, died of breast cancer. A Federal judge, Edward R. Becker, well known to the Senate for his active work for more than 2 years on asbestos legislation, died in May 2006 from prostate cancer which had metastasized. Those are anecdotal, typical of tens of thousands, hundreds of thousands of people who have died or are incapacitated from diseases which could be cured with stem cell research. It is not only the individuals who contract the maladies, it is their families. It is their loved ones.

President Reagan's wife, Mrs. Nancy Reagan, who is a very nonpublic retiring person, has taken a public stand in support of embryonic stem cell research because of the understanding and impact on her life when President Reagan had Alzheimer's and she had to care for and watch her husband suffer from that malady. We have had very extensive indicators, evidence, that stem cell research could delay the onset of Alzheimer's and, perhaps, cure it entirely.

The conflict which we have on this issue between ideology and science is one which mankind has faced repeatedly in the course of our historical experience. A century from now, people will look back at this debate on stem cell research and wonder how we cannot possibly utilize all of the benefits of science to stop people from dying, to stop people from suffering, when we have these embryos which are either going to be thrown away or used. They are not going to create living people. If they were, no one would be suggesting they be used for scientific research.

There are a number of striking examples of rejection of scientific knowledge at various stages in our human history which, in retrospect, are absurd. For example, in 1486, a committee of the Spanish Government concluded that the voyage proposed by Christopher Columbus should not be funded because ''the Western Ocean is infinite and perhaps unnavigable . . . [and] . . . so many centuries after the Creation, it was unlikely anyone could find hitherto unknown lands of any value.''

Fortunately, Queen Isabella, disagreed.

Galileo was imprisoned for his support of Copernicus' theory that the planets revolved around the Sun. This allowed the acceptance of a theory upon which all of modern astronomy and space travel are based and what we know from our own experience in the solar system.

Michael Servetus has research on human anatomy. Pope Boniface VII banned the practice of cadaver dissection in the 1200s. This stopped the practice for over 300 years and greatly

slowed the accumulation of education regarding human anatomy. Finally, in the 1500s, Michael Servetus used cadaver dissection to study blood circulation. He was tried and imprisoned by the Catholic Church.

Anesthesia for women in labor was founded by James Simpson in 1848. Reporting his discovery that anesthesia could be used to lessen pain during child birth, the Scottish Calvinist Church objected to the use of anesthesia during labor because ''pain of child birth was God's will.'' The Scottish Calvinist Church stifled anesthesia use by refusing to baptize any children who were born while a person was anesthetized.

Thomas Edison, who brought electricity to us, had a similar experience. The Committee on Lighting by Electricity in the British House of Commons did not believe that electricity was practical, saying:

> There is not the slightest chance of [electricity] competing, in any general way, with gas. There are defects about the electric light which, unless essential changes take place, must entirely prevent its application to ordinary lighting purposes.

Fortunately, that view did not prevail. Fortunately, since it is 102 degrees today and we have an air-conditioned Senate Chamber.

Vaccines, in 1772, in response to the new science of vaccination, Rev. Edward Massey declared:

> Diseases are sent by Providence for the punishment of sin, and the proposed attempt to prevent them is a diabolical operation.

Had vaccines been outlawed, millions of lives would have been lost.

In the 1820s, Dr. Dionysus Lardner, Professor of Natural Philosophy and Astronomy at University College, London, stated, referring to rail travel:

> Rail travel at high speed is not possible because passengers, unable to breathe, would die of asphyxia.

If it were true, I would not be here today. I would have had to find another way than rail travel to come from Philadelphia to arrive in time for this debate.

I go through this list, and it is only an abbreviation of a much longer list to show how attitudes at different times in retrospect look foolish, look absolutely ridiculous.

When we see in our everyday existence the enormous suffering from so many maladies, there is just no sensible, logical reason why we should not make use of stem cell research.

When I joined the Subcommittee on Health and Human Services in 1981, the budget for the National Institutes of Health (NIH) was a little over $3 billion. With the leadership of that subcommittee, those funds have now been increased to almost $29 billion annually. We are being outstripped by other countries which are undertaking embryonic stem cell research. They are taking our scientists. We have the capacity with the NIH and the Federal funding to make enormous additional progress on medical research to save lives, to save pain and suffering. We ought to do so. We ought to pass the Specter-Harkin bill—the Senate's version of the House-passed bill—and seek to persuade the President of the United States that this is a bill which ought to be signed into law.

I know my 30 minutes is up, so I yield to my distinguished colleague from Iowa, Senator TOM HARKIN.

The PRESIDING OFFICER (Mr. BURR). The Senator from Iowa.

Mr. HARKIN. Mr. President, first, I congratulate Senator SPECTER on an exemplary opening statement on this 2-day debate we will be engaged in and also thank him, as I will in my formal statement, for his leadership over the past several years on so many issues of health care, and this one in particular. I am proud to join him in this effort, as I have for the last year, to try to get H.R. 810 to come up.

Mr. President, we have waited a long time for this day to come, I think too long. We could have and should have voted on H.R. 810 more than a year ago after it passed in the House with a strong bipartisan majority. So we have lost some valuable time. But more to the point, America's best medical researchers have lost valuable time. But be that as it may, H.R. 810 has finally come to the Senate floor, and we will vote on it tomorrow afternoon.

I thank majority leader BILL FRIST for brokering the agreement to make this vote possible. It took courage for him to announce last summer that he supports the bill. And it took courage for him to schedule this vote. I have already commended him privately, and I commend him publicly as well.

Again, I thank Senator SPECTER for leading the effort to promote stem cell research for so many years. He chaired the very first hearing in Congress on embryonic stem cells, as he said in his remarks, in December of 1998. And, again, just repeating what Senator SPECTER had said—but for the sake of emphasis—our Labor, Health, and Human Services Appropriations Subcommittee has held 18 hearings on this research since then.

Senator SPECTER and I also introduced the very first bill in Congress on stem cell research in January of 2000. So Senator SPECTER and I have traveled a long road together, and I thank him for being such an extraordinary leader and partner in this effort.

I also thank the other Senate leaders on stem cell research: Senator HATCH, Senator FEINSTEIN, Senator SMITH, and Senator KENNEDY. Counting Senator SPECTER and myself, there are three Republicans and three Democrats on the list who have led the effort to bring up H.R. 810 and pass it, and it has been a truly bipartisan effort all the way.

Most of all, I thank the hundreds of thousands of families and patients who never gave up, who kept up the pressure to bring this bill to the floor, and who are so eager to see H.R. 810 sent to the President's desk for his signature. They have kept the faith. Now it is our job to see they are not disappointed.

Under the UC agreement, we will debate and vote on three bills. But make no mistake, the only one that really matters is H.R. 810, the Stem Cell Research Enhancement Act. This is the one bill that, at long last, will unleash some of the most exciting and promising research of modern times.

So, as we begin this debate, it is a good time to step back and ask: Why is there so much support for H.R. 810? Hundreds of patient advocacy groups have endorsed the bill; so have dozens of Nobel Prize winning scientists, dozens of research universities, and, I might add, so has the American public. Polls now show that 72 percent of Americans support embryonic stem cell research—72 percent—compared with 24 percent who oppose it. That is a 3-to-1 margin. So the American people—three out of four—are in favor of embryonic stem cell research.

Why? Well, the answer is very simple. Embryonic stem cell research offers real hope—real hope—for people with Lou Gehrig's disease, real hope for people with Parkinson's, real hope for people with spinal cord injuries, real hope for people with heart disease, real hope for people with diabetes, real hope for people with cancer, real hope for people who suffer from autoimmune diseases such as lupus. All told, more than 100 million Americans have diseases that one day could be treated or cured with embryonic stem cell research. Here is just a brief list of them: cardiovascular disease, autoimmune disease, Alzheimer's, Parkinson's, spinal cord injuries, birth defects, severe burns—millions of Americans who could be cured or helped with stem cell research.

But it is not just Members of Congress who are saying it; we have asked top scientists. Senator SPECTER and I sent letters to the National Institutes of Health last week. Senator SPECTER referred to that in his remarks. We asked their top scientists for their thoughts on stem cell research. Every single one of them said embryonic stem cell research offers enormous potential. We asked 19 NIH scientists—heads of the different individual institutes—and all 19 agreed.

Here is what Dr. Zerhouni, the NIH director, wrote to us:

> Embryonic stem cell research holds great promise for treating, curing, and improving our understanding of disease.

This is from Dr. Elizabeth Nabel, the director of the Heart, Lung, and Blood Institute. She wrote:

> Embryonic stem cell research has vast potential for addressing critical health [care] needs.

And it is not just NIH scientists who believe this way. In a letter from Dr. J. Michael Bishop, who won the Nobel Prize in medicine in 1989, he writes:

> The vast majority of the biomedical research community believes that human embryonic stem cells are likely to be the source of key discoveries related to many debilitating diseases.

I could go on and on, but I think you get the picture. Scientists agree: embryonic stem cell research offers enormous hope—real hope—for easing human suffering.

Now, some may ask: I thought the Federal Government already supports embryonic stem cell research. What about the speech the President gave 5 years ago?

Well, let me try to explain the President's policy as was enunciated 5 years ago. He gave the speech on August 9, 2001. I remember it well. I was listening to it. I was on the road. I was listening to it on the radio.

The President, at that time, said that federally funded scientists could conduct research on embryonic stem cells only if the stem cells had been derived prior to 9 p.m., August 9, 2001. Well, I thought to myself at the time—and I have thought since—that is rather odd. It is morally OK to do research on stem cells derived before 9 p.m., but it is not morally acceptable to do research on stem cells derived after 9 p.m.? Well, I thought to myself, why not 9:05? What about 9:15 p.m. or 9:30 or midnight? Why was 9 p.m. the magic cutoff hour on August 9, 2001?

Well, clearly it was totally arbitrary. That just happened to be when the President gave his speech. But for whatever reason, the President said only those lines derived by 9 p.m. August 9, 2001, were eligible for federally funded research.

At the time, after I checked into it, some of us were hopeful that the policy would work. But it has not, and here is why. When President Bush announced his policy, he said 78 stem cell lines were available. Many people thought 78 stem cell lines might be enough, might have enough genetic diversity to actually do the kind of research we needed. But as the years progressed, we found that only 21—only 21—of the approved lines are actually available for study; not 78, only 21.

We found out something else I did not know at the time. All 21 of these lines are contaminated by mouse cells. In other words, the embryonic stem cells were grown on mouse cells, so they are contaminated, making it highly unlikely ever to be used for any kind of human therapy. I ask: Would any of you want to have stem cells used for your illness if they were contaminated with mouse cells? I do not think so, and neither do the scientists. And the other thing we found out is that now many of the 21 lines are too unhealthy to use. They have actually become sick.

Dr. Nabel of the NIH Heart, Lung, and Blood Institute wrote to me that only four of these lines are in common use—four. Dr. Jeremy Berg, another NIH director, director of the general medical sciences, said there are about six lines in common use.

So what is happening now is that these policy restrictions are making our scientists work with one arm tied behind their back. It is having a chilling impact on scientists thinking about entering the field.

Dr. Nora Volkow, director of the NIH Drug Abuse Institute, said it is stifling interest in research. She said:

> Despite general interest and enthusiasm in the scientific community for embryonic stem cell research, the limited number of available lines has translated into a general lack of research proposals.

Well, if you are a research scientist at one of our hundreds of universities around the country, and you are eligible for NIH funding, would you want to do research on only four lines that may not lead to anything? Would you put in a proposal to do that? You could be one of our budding genius researchers. You might want to put your efforts and endeavors into something else rather than a dead-end policy.

So I submit that the President's policy is not a way forward, it is a dead-end street. It offers only false hope—false hope; not real hope, false hope—to the millions of people across America and the world who are suffering from diseases that could be cured or treated through embryonic stem cell research.

Meanwhile, hundreds of new stem cell lines have been derived since the President's arbitrary deadline of August 9, 2001. These lines are uncontaminated. They are healthy. But they are totally off limits to federally funded scientists. I do not mean just scientists who work at NIH; I am talking about all the scientists who work in all of our universities and research institutions across America. They are off limits—off limits. They cannot use it. It is really a shame.

I was listening to Senator SPECTER earlier talk about some of the earlier pronouncements, some by the Catholic Church, back in the Middle Ages, some by—he mentioned another Calvinist Church—I don't know who all he mentioned—but the views at that time and how we look back and say: How could they have been so blind to prohibit certain activities, such as using cadavers for scientific experimentation to learn how the body works so we could perhaps cure illnesses and diseases?

I was listening to that, and I thought: We have new stem cell lines, uncontaminated with mouse feeder cells, healthy, ready to go. Scientists cannot use them. And I thought: We do not require astronomers today to explore the skies with 19th century telescopes. We do not tell our geologists to study the Earth with a tape measure. If we are serious about realizing the promise of stem cell research, our scientists need access to the best stem cell lines available.

And, again, I would not want anyone to take just my word for it. I think Dr. James Battey knows more about stem cell research than anyone at the National Institutes of Health. He runs the stem cell task force there, and this is what he wrote when I asked him whether it would help our scientists to have access to more stem cell lines. Here is his direct quote:

> The more cell lines available for study, the more likely a cell line will be maximally useful for a given research, and potentially clinical, application. For this reason, the scientific community would be best served by having a greater number of human embryonic stem cell lines available for study.

That is from a letter to me from Dr. James Battey, chair of the NIH Stem Cell Task Force, dated July 13, 2006.

Dr. Volkow of the Drug Abuse Institute was even more blunt. She wrote:

> Access to a wider array of embryonic stem cell lines would definitely increase scientific opportunity and the chances of breakthrough discoveries.

I should note that scientists in many other countries around the world do not face these kinds of arbitrary restrictions. When you talk to researchers in England, for example, our policy makes no sense to them. They cannot understand why stem cell lines derived on one date are fine to use, but if they are derived on another date they are off limits. They do not have arbitrary barriers like that in England, and that is a big reason so many of the major advances in stem cell research are happening there rather than in the United States.

So we need a stem cell policy in this country that offers real, meaningful hope to patients and their loved ones. That is what H.R. 810 would provide.

Under this bill, federally funded researchers could study any stem cell line regardless of the date it was derived as long as strict ethical guidelines are met. I think it is important to run through some of those ethical guidelines.

First, the only way a stem cell line could be eligible for federally funded research is if it were derived from an embryo that was otherwise going to be discarded. As Senator SPECTER pointed out, there are more than 400,000 embryos in the United States left over from fertility treatments that are currently sitting frozen in storage. The moms and dads have had all the children they want; they no longer need any more of these embryos, and most of them will be discarded. It happens every single day at fertility clinics around the country. People have used in vitro fertilization, had their children, and they don't want any more. Rather than continue to pay the facility to store them and freeze them, they call up and say we don't want them anymore. The facility discards them. It happens every day.

All we are saying is, instead of discarding them as leftover embryos, let's allow couples, if they wish, to donate them to create stem cell lines that can cure diseases and save lives. The choice is this: Throw them away or use them to ease suffering and, hopefully, cure diseases.

It is the second choice that I believe is truly moral and truly respectful of human life. Again, I have to emphasize, as I will today and tomorrow time and time again, H.R. 810 does not create any new embryos. Not one new embryo will be created under H.R. 810—only

those left over in in vitro fertilization clinics, and only if the moms and dads give their written consent.

As I said, the second ethical requirement requires them to provide informed written consent. Again, a lot of people don't realize this, but the President's policy is a little fuzzy on the matter of informed and written consent. Some of the 21 federally approved lines—especially those coming from other countries—don't meet that requirement. So we need to pass H.R. 810 to tighten the ethical guidelines on stem cell research, so there is no question that the embryos were donated voluntarily.

Finally, H.R. 810 prohibits anyone from being paid to donate embryos. There is no chance under this bill that women could be exploited to go through the donation process against their will. So no money can change hands. The three ethical guidelines, to repeat, are: One, we can only use excess embryos in in vitro fertilization clinics; second, there must be informed written consent for the donation of those embryos; and third, no money can exchange hands to pay for any of these.

Let me address one more issue, and that is the matter of the so-called alternative ways of deriving stem cells. Some opponents of this will speak today and tomorrow and argue that we don't need to pass H.R. 810. Instead, they say, we should put our current stem cell research on hold in hopes that some new way of deriving stem cells will pan out some time, hopefully, in the future.

That would be a tragic mistake. I support any ethical means to improve the lives of human beings who are suffering. In fact, Senator SPECTER and I included language in our appropriations bill last year urging NIH to support research on alternative ways of deriving stem cells. But not one of these so-called alternative methods has ever succeeded in producing a stem cell line. Right now, they are just theories. Maybe one day, 5 years or 7 years or 10 years or 15 years from now, one of these methods will pan out. But maybe not.

I think this chart tells the story. The NIH estimates that there are about 400 stem cell lines worldwide, almost all of which were derived after the President's arbitrary cutoff date of August 9, 2001. Every one of these lines was derived the same way, using embryos that were left over from infertility treatments that would otherwise have been discarded. So you see on the chart ''stem cell lines derived using current method,'' and we have about 400 stem cell lines worldwide. Now, how many lines were derived using unproven alternative methods? Zero. It is 400 to zero.

Yet we will hear today and, I think, tomorrow from some who say we should pass other bills. We should not use the proven method we have, but we should go to alternative methodologies. We know right now that zero stem cell lines have been derived from using those alternative methodologies.

Again, should we pursue these alternative methods? Of course. This is no prohibition against that. We should open every door we can in the ethical pursuit to cures. But meanwhile, people we love are dying from Parkinson's and ALS, and children are suffering from juvenile diabetes. Should we say wait another 5, 7, or 10 years and see if we can derive stem cells from these alternative methods? Maybe we can, maybe we cannot. If we cannot, what do we do then? Say the doors are all closed? Meanwhile, we have many stem cell lines derived from leftover embryos in in vitro fertilization clinics.

Another point about the alternatives bill. Even if Congress were to pass it and the President signs it, it has absolutely no impact on the progress of stem cell research. That is because the other bills we are voting on here don't authorize anything NIH cannot do already. We had a hearing. Senator SANTORUM, the author of that bill, was at the hearing. We had people from NIH. Senator DURBIN was there and he asked the question:

Can you tell me whether S. 2754—

which is another one of the companion bills we will be voting on tomorrow—

authorizes research on stem cells at the NIH that currently is not permissible or legal?

Dr. James F. Battey at NIH said:

No, it does not.

That was on June 27 of this year. So the alternatives bill, S. 2754, might not do any harm, but it doesn't do any good either. It just says, NIH, you can do what you can already do. Well, that is fine with me; I have no problem with that. But don't be fooled into thinking that S. 2754 somehow takes the place of H.R. 810. It doesn't.

That is one more reason we need to focus on H.R. 810.

In closing, my nephew Kelly is one of the millions of Americans whose hopes depend on stem cell research. He has been a quadriplegic for about 27 years since suffering a spinal cord injury in a terrible accident while he was in the U.S. Navy and serving on an aircraft carrier. Kelly's hope has been that sometime scientists will finally find a way to mend his spinal cord so he can walk again. He has been following very closely the whole issue of embryonic stem cell research. His hope, like the hope of Christopher Reeve's, was—we all remember him, our first ''Superman''; he fought so hard for embryonic stem cell research before he passed away. They both hoped embryonic stem cell research would lead to a breakthrough that would allow them to walk again. Kelly asks all the time: When is the Senate going to vote on H.R. 810?

You know, we have seen the videos of mice whose spinal cords have been damaged so they could not walk and were treated with stem cells from other mice and they are now walking again. As Christopher Reeve once said after reviewing the video of one of these white rats that could not walk but was given stem cells and now was walking, ''Oh, to be a rat.''

Well, after more than a year of prayers and pressure, my nephew Kelly and millions of other Americans suffering from disease and paralysis will get their wish. I am optimistic that we have the 60 votes necessary to pass H.R. 810 tomorrow and send it immediately to the President's desk. There are a lot of stories. I am sure we all have family stories such as my nephew's.

Here is a letter from the ALS Association—the Amyotrophic Lateral Sclerosis Association, also called Lou Gehrig's Disease. It says, in part:

The advancement of stem cell research is vital for people such as Roger Gould from Ames, IA. ALS has steadily eroded Roger's ability to control muscle movement, limiting his ability to speak, walk, move his arms, and lead the type of life most all of us take for granted. Ultimately, the disease will take his life. Stem cell research provides promise to people such as Roger and his wife Cindy that one day an effective treatment for ALS will be found. It also gives hope to thousands of others that ALS no longer will mean death in an average of 2 to 5 years after diagnosis; that one day we may be able to prevent ALS from taking the lives of people such as Rob Borsellino, a nationally recognized columnist from Des Moines, IA, who lost his battle against ALS last month, a year after his diagnosis.

I ask unanimous consent that this letter be printed in the RECORD following my statement.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. HARKIN. Mr. President, my time is up. Again, this is going to be a good debate, a good airing of the issues. Tomorrow we will vote on this bill and send it to the President. I am hopeful that the President, after reviewing it and looking at what happened in the past—the new things that have come to light because of the mouse feeder cells and the contamination of those lines—will sign the bill and give real hope to millions of Americans.

I yield the floor.

EXHIBIT 1

THE AMYOTROPHIC LATERAL SCLEROSIS ASSOCIATION,
Washington, DC, July 12, 2006.

U.S. Senate,
Washington, DC.

DEAR SENATORS: The ALS Association (ALSA) strongly supports the Senate's consideration of legislation to advance stem cell research. We are grateful for the bipartisan efforts of Senators to bring this important issue up for a vote before the August Congressional recess and are particularly appreciative of the leadership on this issue demonstrated by Majority Leader Bill Frist (R–TN) and Senator Tom Harkin (D–IA).

We understand that the Senate will consider three different stem cell initiatives during the week of July 17. We strongly urge the Senate to pass all three proposals, including H.R. 810, the Stem Cell Research Enhancement Act. These initiatives, and H.R. 810 in particular, provide our nation with the best opportunity to fully explore the promise

of stem cell research and the hope that it may lead to a treatment and cure for ALS.

The ALS Association is the only national voluntary health association dedicated solely to the fight against Amyotrophic Lateral Sclerosis (ALS), more commonly known as Lou Gehrig's disease. Our mission is to improve the quality of life for those living with ALS and to discover a treatment and cure for this deadly disease.

ALSA supports the ethical expansion of the Administration's stem cell policy as provided for in H.R. 810, permitting the use of embryos originally created for fertility treatment upon the consent of those individuals for whom the embryos were created. Importantly, the bill would arm researchers and scientists with the tools and resources they need to determine the potential embryonic stem cell research has to prevent, treat and cure countless diseases. This is especially important for people with ALS, for there is no cure for the disease and although there is one drug available to treat ALS, it only prolongs life by a few months.

The advancement of stem cell research is vital for people like Roger Gould from Ames Iowa. ALS has steadily eroded Roger's ability to control muscle movement, limiting his ability to speak, walk, move his arms and lead the type of life most all of us take for granted. Ultimately, the disease will take his life. Stem cell research provides promise to people like Roger and his wife Cindy that one day an effective treatment for ALS will be found. It also gives hope to thousands of others that ALS no longer will mean death in an average of two to five years after diagnosis; that one day we may be able to prevent ALS from taking the lives of people like Rob Borsellino, a nationally recognized columnist from Des Moines, IA who lost his battle against ALS last month, just a year after his diagnosis.

Through our innovative TREAT ALS program, The ALS Association is pursuing an aggressive strategy to advance the development of new treatments for ALS, bringing innovations from the lab to the bedside faster than ever before. Exploring the potential of stem cells is an important component of this effort. In fact, recent research funded by ALSA and published in the Annals of Neurology just this month, shows that stem cell therapy can partially restore motor function—function which ALS destroys. Other research in stem cells also show promise for ALS. While translating the promise of stem cell research into treatments and a cure for the disease continues to be a hope for the future, it is important that we explore all potential avenues for treating this horrific disease. An expansion of the current federal policy on stem cell research can only benefit the search for a treatment and cure for ALS.

Therefore, we urge the Senate to pass H.R. 810 and help ensure that people with ALS can benefit as quickly as possible from the very best that science and technology has to offer, including the potential innovations that can result from embryonic stem cell research.

Sincerely,

STEVE GIBSON,
Vice President, Government Relations and Public Affairs.

The PRESIDING OFFICER. Under the previous order, the majority controls the next 30 minutes.

The Senator from Oklahoma is recognized.

Mr. COBURN. Mr. President, I wish to take 5 minutes of my allotted 15 minutes to answer some of the questions raised by Senator HARKIN and Senator SPECTER.

I think it is very important that the American public understands what this debate is. We have heard a lot of statements this morning that there are no cures other than fetal stem cell research, and that could not be further from the truth. I am a practicing physician. I deliver babies. I have read almost every article published in the last 12 months on stem cells, both embryonic and nonembryonic adult. The fact is there is not one cure in this country today from embryonic stem cells.

We talked about 21 lines, but what they don't say is there is no limitation in this country at all on private research from any of the 400 lines Senator HARKIN mentioned. There also is a statement by the caretaker and many scientists that the lines are not contaminated. As a matter of fact, they are not contaminated. The question is, do we want to do what is best to get us further down the road to treat people? I am a two-time cancer survivor; I had cancer of the colon and melanoma. With the treatments that are available—I desire the treatments that can come out of stem cell research, there is no question. But every disease Senator HARKIN listed—every disease save ALS—has an adult stem cell or cord blood stem cell cure that has already been proven in humans, without using embryonic stem cells. What is the science behind it? What is the science that tells us we are going to have trouble with embryonic but not with the other? It is called the mitochondria. If you study physiology at all, what you know is every cytoplasm of every cell has mitochondria in it.

The only way to use an embryonic stem cell line and to use it effectively without falling into the trap of contamination or cross-immunization—in other words, allergy to the treatment—is to somehow quiet mitochondria. They are the energy source for cells. They have DNA. So none of the problems that are seen with your own adult stem cells or cord blood from your own child will be existing in a treatment from your own stem cells.

The reason we should spend more money on our own stem cell lines today is because there will not be complications from them as is noted in every study that has thus far been done on embryonic stem cells.

The Senator mentioned the rats. The only study that shows neurologic improvement is when the rats were sacrificed at 8 weeks. Every other study, when they let the rats live to 12 weeks, show teratoma or tumor formation, which is the problem with embryonic stem cells.

I hope the American people will listen. It is not about not getting where we want to go, but there is false hope, tremendous false hope in what we are about to do when, in fact, if we would redouble our efforts on the other areas of stem cells.

One final point and then I will yield. There is a germ cell line, stem cell line, which goes against everything Senator HARKIN says. It has been proven in this country; it has been proven in Germany. It comes from ovarian tissue and testicular tissue. It is, without a doubt, the greatest thing on the horizon for us because it has none of the problems associated—I am not talking the ethical problems, I am talking the scientific problems associated with embryonic stem cells. There are none of the problems with it.

I have seen beating heart tissue from germ cell lines. It can create every area. There are three tissues, endoderm, ectoderm and mesoderm. That is the important reason why embryonic is thought to be so important.

One final point on dedifferentiation, the ability to take a cell that is in your body today and make it go backward. That has been accomplished. We now see multiple lines of pluripotent cells from our own bodies.

The choice is not destroy embryos, and if we don't, we will not get good research; the choice is go where the money is leading us, and the money is leading us into adult stem cells, germ cell lines, and other lines that have none of the problems of embryonic stem cells.

The PRESIDING OFFICER. The Senator from Kansas.

Mr. BROWNBACK. Mr. President, I thank my colleague from Oklahoma for his short, clear statement. I have some charts that will back him up.

I am delighted we are having this debate. It is time. We last debated this issue on the Senate floor in 1998. A lot has developed since then. As my colleague from Oklahoma pointed out, much of the science has passed by the embryonic stem cell and the need for embryonic stem cells, as the science has gone to adult stem cells and cord blood, and that is where the treatments are. I will show pictures of patients in that area and what is taking place.

I am delighted to be debating my colleagues. We have been debating this issue for some time. I think it is time we have a vote and look at this issue.

When I was a young Congressman first running for Congress in Chanute, KS, a young man approached me. He knew me and knew I was running for office. He said: Can you answer one question for me?

I said: I will try. I was anxious to be of help. I was anxious to prove I knew policy issues, I knew right from wrong, and I would be a good Congressman for him.

He asked me: Why is it we will fine somebody up to half a million dollars for destroying a bald eagle's egg, and yet we will fund the destruction of young humans? Why is it Federal law, both cases at that point in time, as far as the funding of abortion—I don't remember when that was changed, although now we are talking about the destruction of young human life again.

He said: Why is that?

I thought for a while. I thought: That is a good question. I don't know why that is.

I have a picture which may seem an odd place to start this debate, but it will tie in, and I will show how. I have a picture of a bald eagle's egg and a bald eagle. If I asked my 8-year-old children what happens if I destroy this egg, will I get this eagle? they will say: No, you don't get the eagle if you destroy the egg.

Why not? That egg is not an eagle.

I know, but the egg is the eagle because the eagle comes out of the egg.

Well, he doesn't look like him.

I know it is an eagle in the egg, and if you destroy the egg, you don't get the eagle. That is why we say in the Endangered Species Act, if you destroy this bald eagle's egg, you can have a maximum fine of up to half a million dollars.

I want to show some other eggs, if I can. These are human embryos, fertilized eggs. They are fertilized eggs such as this bald eagle's egg is. This one, Mother Teresa once was a human embryo. JFK was once a human embryo. Martin Luther King was once a human embryo. Ronald Reagan was once a human embryo.

Again, I think if we ask ourselves a simple question: If I destroy this, do I destroy this in the same way? Does it happen? If I destroy this human embryo—everybody on the Earth was a human embryo at some time—if I destroy that human embryo, do I somehow go ahead and get to be here anyway?

The answer, of course, again, if you ask my 8-year-old children, is: No, you don't get to be here because you destroyed the very start of your life, you destroyed the beginning of it, you destroyed that biological entity you were because the same genetic material that was there was in Ronald Reagan, and it was a unique set of genetic material, unique to him. The same for Martin Luther King, JFK, or Mother Teresa, and the billions of people around the world. We all started as a human embryo, and if you destroy the embryo, you destroy the person.

It is a unique set of genetic material right after the fertilization takes place. It doesn't matter where the fertilization takes place. It can take place in an IVF clinic or the old-fashioned way or it can take place by cloning. You still have this. You can have this, or you can destroy this and never get that. That is pretty direct, straightforward, nobody argues it. And we are not talking theology, as people try to drag this into the debate. We are talking basic biology. This is basic biology 101. If you destroy the embryo, you don't get the full-scale person. This is a genetic person, entity, special, unique, sacred, and so is this person.

My point one of this is, if we use taxpayers' dollars to fund the expansion of embryonic stem cell research, you have to inherently destroy young humans to do this, and do we want to do that? What was previously said in Dickey-Wicker was: No, we will not use taxpayers' dollars to destroy young human life. Here we would change that and say: Yes, we do; it is for a special purpose, a special reason; these are unique; these are something we are really going to get cures for. And that is my second point, cures.

The other side has talked about cures for a long period of time, and I want cures, and we are getting cures to take place. If we had taken the half a billion dollars, $500 million that we have invested in embryonic stem cell research in animals and humans and invested that instead in adult stem cell research and cord blood research, we would probably have a lot more people in clinical trials today. We would have a lot more people, I believe, being treated and alive today if we had taken the half a billion dollars that we put, in the last 5 years, into these areas of embryonic stem cell research and put them in adult stem cells and cord blood, we would have more people alive today, walking around, experiencing treatments and I believe cures. Let me show some faces of these people.

This is a beautiful lady, Jacki Rabon. She was involved in a traffic accident. She is a paraplegic. She had to go to Portugal to get a treatment with her own adult stem cells. They are olfactory stem cells from the base of the nose. They take them out, grow them, and put them back in the spinal cord injury area. She had no feeling, no mobility, nothing below the waist. She is now getting feeling in her hips through this treatment, adult stem cells, her own stem cells. She is getting feeling in the hips and walking with the use of braces, but she had to go to Portugal to do this. Why isn't this being done in America? Why aren't we having people treated here? We are not adequately funding this area. She wants to walk and I want her to walk and she could, but we are taking money and putting them into these speculative areas when we have cures that are working. We have to go to Portugal to get them.

Let's look at this next picture. This is an amazing story. This young man is named Ryan Schneider. I hosted him at a press conference 2 hours ago. He is 3 years old, a young man with cerebral palsy. His mother saved his cord blood.

At 2 years of age, she started noticing that he was not growing and that his arms were retracting. She took him to the doctors and they said: Yes, CP; he has CP. The mother was devastated, but she would not give up.

The morning after the diagnosis, she was lying in bed and she had this a-ha moment. She said: I saved his cord blood and let's use the cord blood and treat him with the cord blood because I think that can work and get him moving again.

She called all around the country and couldn't find anybody willing to do this procedure. She was pleading with these doctors: It is simply his own cord blood, taking his own cord blood and putting it back in; this isn't going to hurt him.

They said: We can't do it, not sure, we don't have FDA protocol.

Finally, she finds a researcher at Duke University, whom we had in to testify, who said: Yes, we will do it, and the worst thing that can happen is nothing because nothing will happen, it is his own cord blood; it is not going to hurt him.

She goes down to Duke University, takes his own cord blood, and they inject it in him. This is when he was 2. He was at a press conference today. There is no retraction taking place in the arms. He has full mobility. The thing he likes to do the most is bug his 8-year-old sister, which is what his mother said today: We like that, too, that he wants to do that. He has a word vocabulary that is normal for the age range. She said: Why isn't this an FDA-approved situation? Why are we not doing more research? Why aren't more people storing and saving cord blood so when this happens people can get cures?

Well, we haven't put enough funding into it. If we had put the half a billion more dollars into this area instead of embryonic, we might have a bunch of kids treated for CP who are not getting treated and be like Ryan running around and bugging his sister instead of having CP.

Here is a real interesting story, too, Keone Penn. We had him in to testify. He has sickle-cell anemia. He was dying. It is a real difficulty. Sickle cell is a very difficult problem to face, very painful problem for a child to face. He went through the New York Cord Blood Center, got treatment there, got a match. They had enough of a genetic match that it works for him. There are no indicators of sickle-cell anemia today. None. He isn't in Washington today, but we have had him in to testify.

We need a lot more cord blood stored. We need a lot more diversity of cord blood stored. We could use that half a billion dollars to store more cord blood and have more ethnic diversity so more people can get treated, so more people such as him will live, not die; so more people will not have to suffer what he went through. There could be real treatments with these dollars to help them.

No. 1, why are we destroying young human life? We fine people for destroying life in other forms that we want to preserve, such as the bald eagle. No. 2, why would we take this money away from current areas where we can really treat people and especially in the areas where we are not getting any treatments, we are having all the problems with tumor formation, as Dr. COBURN noted. Why are we doing that? So that fewer people are getting treatments and people are having to go overseas to get these treatments? Why? And why would we ask to do more of it now? That is what this bill is basically asking to do: That we would change Federal law so you could destroy human life with Federal taxpayer dollars. No. 2, that we would use this money, and more of it, to fund speculative areas

that even their set of scientists are saying are a minimum of a decade or two away from treatments which we are not getting, and we have taken away from Keone Penn, and treatments that he could get. Why? What sense does that make?

In 1943, C.S. Lewis delivered a series of lectures—this is the gentleman who did the Narnia series that has been made into a movie that a lot of young people have seen and read the Narnia series books, along with a lot of other pieces—a brilliant writer and a brave man. He did a lecture series called ''The Abolition Of Man'' in 1943, a very forward-looking series, and he noted at one point: ''If man chooses to treat himself as raw material, raw material he will be.'' It echoes themes of what we are hearing today. I don't give anybody over to a bad heart. I think everybody wants cures. I want cures. I see a way we can get treatments and hopefully cures. I want things done ethically. I don't give anybody over to a bad heart. But what we are doing is treating man as raw material—raw material to feed into a system that we hope will produce some results.

Unfortunately, it is not the first time we have in human history that we have treated people as raw material. We have frequently, in the past, subjected the weaker to the will of the stronger, and we have always regretted it afterwards. We shouldn't do that today. It shouldn't have happened then, and we don't need to do it now. We are talking about the embryo, the young human life.

I want to go through a couple of these points about what it is we are talking about. President Clinton's bioethics board defined young human life—and I want to give their definition for it. The National Bioethics Advisory Commission says that an embryo is: ''The developing organism from the time of fertilization''—the time of fertilization—''until significant differentiation has occurred, when the organism then becomes known as a fetus.'' So it is an embryo by that Presidential advisory bioethics analysis.

And here is a definition taken from a textbook, the Human Embryology textbook states:

> Although life is a continuous process, fertilization is a critical landmark because, under ordinary circumstances, a new, genetically distinct human organism is thereby formed. The combination of 23 chromosomes present in each pronucleus results in 46 chromosomes in the zygote.
>
> Thus the diploid number is restored and the embryonic genome is formed. The embryo now exists as a genetic unity.

That isn't SAM BROWNBACK saying this, this is Human Embryology, Third Edition, saying that.

We have a distinct genetic entity once it is formed. It doesn't matter the location. It can be the old-fashioned way, as I noted at the outset, via the human body; in vitro fertilization; it can be what some refer to as somatic cell nuclear transfer, SCNT, or what most refer to as human cloning. It is a separate entity.

Pioneer stem cell researcher Jamie Thompson goes further. He says of human cloning: ''By any reasonable definition, you're creating an embryo. If you try to define it away, you're being disingenuous.'' Jamie Thompson. So we are talking about a human embryo.

Now, some would say it is not big enough to be human life. Here I want to make a point, on this chart, if I could. My colleagues made the point that the human embryo is about this big; very small at its beginning of life. Therefore, because it is small and is fragile and it can't do anything on its own, you know, it is really not human life. And we should be able to destroy it, for a good purpose. We are doing this for a good purpose. This isn't us being malicious; we are doing this for a good purpose. Well, the interesting thing about that, as I said at the outset—of course, when you destroy this, you never get the full human at any point in time. This is a separate genetic entity, even at this point in time. Also, the point was made to me one time that if the Big Bang theory is correct, then at one point in time, this is the size of the universe. Then it is all condensed down, this much matter is condensed down to that infinitesimal, small size before it blows. So I guess if you destroy it then, it doesn't become the universe, but that doesn't matter. It is too small to be seen as significant, and it can't do anything on its own. It sits in a frozen state, and because it can't take care of itself, because it can't grow, because it can't breathe in this situation, then it is not human—because it can't care for itself, because it is too fragile. It doesn't breathe. It doesn't do some of the things that we give over to the presence of life.

I want to give some examples, real quick, of young people—let's use this one. This is Isaiah Sullivan Royal, born to Hannah and Jed Royal. Hannah works in my office. Isaiah was born significantly premature. As you can see, he is a fighter. He is a tough little guy. He has been through a lot—more medical treatments than most people would have gone through in their lifetime already. Without human intervention, without help, he doesn't survive and make it. Yet he is a young human, and he is beautiful. Talk to his parents about him. So the idea that just because of smallness, you can't take care of yourself doesn't make you human, is completely false. Do we want to say that because you are young and small and weak, you are worthless or helpless or you are not human, which would be even worse? That just doesn't stand. That doesn't stand to reason. Yes, human life is fragile, but it is of infinite worth and it is of infinite value.

I want to now look at the overall issue of where we are with adult stem cell work. Dr. COBURN hit on this area, and I want to put some more points to it. We have, by peer review articles, 72 different areas, different human maladies being treated with adult stem cells or with cord blood—72. There was recently an article in one of the magazines saying: Well, we don't think the number is actually 72, it may be 68, it may be this or that.

We can wait a day or two and it will be up to 72 because there are more coming out in all of the areas. Some people are quibbling and saying: Well, these are not in FDA treatment trials. That is true, a number of them are not because we don't have sufficient funding. A half a billion dollars would really help us to move that along to get these in FDA treatment trials. These are in human clinical applications, where there are human beings treated for 72 different maladies by adult stem cells or cord blood—72, and for embryonic, we have zero.

We have known about embryonic stem cells in mice for 25 years. We have not been able to get them to work in this situation. They form tumors and they are rapid growing. With adult stem cells we know what they are about, we know what they are doing, and they are working, and people are being treated: 72 adult stem cell treatments to zero embryonic treatments. Again, you can quibble that they are not in FDA trials, not available to everybody. That is true. A lot of people are having to go overseas for treatments in some cases, and in some cases they are actually treatments that were developed in the United States, but because of FDA approval processes being long, they are having to get treatment overseas, even though the process was developed here.

I want to show you the specific areas, and this is—I am breaking the rules on charts because this one has—this one is too busy, but it is the only way I can get it all on one chart: 72 current human clinical applications using adult stem cells.

As I said, we could wait a week or 2 weeks, it will be more. Here are some of the amazing ones: Bladder diseases, they are developing, actually growing bladders with your own stem cells for people who have had bladder cancer or something of that nature, they are able to actually form a shell structure and the cells grow around it. The ones I like the best are in the heart areas, the cardiovascular. I had David Foege speaking at a press conference we had, he could hardly walk, advanced stroke, because of his heart problem, no infracturing rate. The physicians—I am sure I am butchering the words—I am a lawyer. I apologize for that. But he got this treatment, and he went first to a place in the United States, and they said: Look, you are just too advanced in your problematic stage. We are not going to treat you here because we want to treat early on and we only have so much money and we could use more, but we only have so much.

So the guy goes to Thailand for the treatment—it may have been developed in the United States. I am not certain that it was developed in the United States, but it is used here but only on

people with great opportunity to make it through. He goes to Thailand, gets this treatment. His indicators of what happened to him in the stroke are diminishing. He is out walking. He spoke at the press conference that we had, and this man has got life again. Otherwise, he would, in all probability, be dead today. And how many people are like him, that because we have slowed the development of the adult field down by putting so many of our resources in the nonproductive embryonic area, and we are getting interesting science, but with adult we are talking about real people now. We are talking about real lives of individuals. How many more of them can get treated, and how many people can afford to fly to Bangkok to get this treatment? How many are able to do that? Yet they could go somewhere in the United States. I mean, my goodness, I hope we start thinking about the people involved in this and seeing the success in so many various and different fields. I think it is important we would do that.

Mr. President, I want to point out we will have, as my colleagues know, three votes that will be taking place. I do hope people will support the fetal farming ban. We shouldn't be growing young fetuses and using them for research, period. Some people are wanting to grow them further, cells differentiate and use it then. What we are talking about is an actual ban on that. I am hoping my colleagues will support that because we should not be doing that. I hope everybody would see that there is a huge moral dilemma with doing that. It is a bill that will be put forward. There is an alternative bill coming up with these pluripotent cells that I am hoping my colleagues can support.

The focal point is this, do we use taxpayer dollars, Federal taxpayer dollars, to destroy young human life for research purposes? I would hope it is seen that we could develop and put forward a very clear argument and rationale as to why you shouldn't do that. It is illegal. The Dickey-Wicker appropriations language, to start off with, that is the law we previously passed. It is immoral. We shouldn't use a weaker person for the benefit of a stronger person. And it is unnecessary. That is actually the beauty of it. We are presenting false choices to people. The choice that works has no ethical problem, and we can get broad-based support for it. Then, we can have more Jacki Rabons, Ryan Schneiders, and Keone Penns who are getting treatments now, and their lives are being saved, people staying in the United States for treatment rather than going overseas for the treatment, and we have got a lot of people being successfully treated and hopefully cured.

I may use that term ''cured'' too loosely because these are at the early stages. These are treatments that are showing enormous promise, but we can't—they are not, many of them are not in any sort of FDA-approved trial, so we can't use that term ''cure.'' But we have a lot of successes.

The other road that is being talked about is the use of human life as raw material, and if we do that, raw material we will be. We will cheapen life. And we cheapen life any time we use it for anything other than the sacredness that life is. I hope, at the end of the day, that would be the thing we grab onto. Clearly, embryonic stem cell research is unnecessary. We don't want to cheapen human life.

Mr. COBURN. Mr. President, would the Senator yield for a question?

Mr. BROWNBACK. I am happy to yield.

Mr. COBURN. Is there any prohibition in the United States today for private money to fund any type of fetal research, embryonic stem cell research?

Mr. BROWNBACK. Reclaiming my time, no, there is not. There is no limitation today on State dollars, private dollars, foreign dollars, whatever you want to call it.

Mr. COBURN. As a matter of fact, California passed, I think, Proposition 71: $500 million over the next 10 years in fetal stem cell research?

Mr. BROWNBACK. I think actually the number is $3 billion.

Mr. COBURN. Three billion dollars. So there is no limitation at the present time.

Mr. BROWNBACK. None whatsoever.

Mr. COBURN. Is the Senator aware of the private investment dollars that are presently—the private investment dollars—not Government dollars, not State dollars—that are now going into embryonic stem cell research versus adult stem cell and germ line stem cell and cord blood, the ratio is about 100 to 1?

Mr. BROWNBACK. Mr. President, reclaiming my time, it is, and it is a very interesting feature that where the private money is going, where people have to show production coming out of it, it is all going into the adult cord blood because people know the science. And that is why I want to conclude with what I started with.

In many respects, the science has passed this debate by. The science is saying: Do the adult, do the cord blood. The embryonic is not working, and you have enormous ethical problems with doing that, and we don't need to go that way. That is where the private dollars then are going, which I would hope my colleagues would look at as well.

Mr. President, I yield the floor.

The PRESIDING OFFICER. Under the previous order, the minority controls debate for the next 30 minutes.

Mr. LEVIN. Mr. President, I don't know if there is a fixed order for the minority. If not, I will yield myself 15 minutes.

The PRESIDING OFFICER. The Senator from Michigan is recognized.

Mr. LEVIN. We stand at the threshold of a new era of medical discovery. We can already glimpse the dramatic lifegiving advances in regenerative medicine that lie ahead, but we remain mired down at this point with breakthroughs on the horizon but not within reach unless we change the President's policy on stem cell research.

Embryonic stem cell research could hold the key to curing diseases that no other research can cure. As best we know now, an embryonic stem cell is unique in nature. It and it alone can develop into any other type of cell in the body. An embryonic stem cell and an embryonic stem cell alone can become a nerve cell, a muscle cell, or any of the more than 200 types of cells in the body. The research into directing the creation and use of these cells may be extraordinarily difficult, but it is easy to understand how creating healthy cells could replace diseased cells and could save an untold number of lives.

One example of the possibilities of stem cell research is the hope that it offers for those suffering from Parkinson's disease. Parkinson's disease is a motor system disorder that results from a loss of brain cells that produce dopamine. Individuals with Parkinson's disease often experience a trembling in the hands or arms or face and impaired balance and coordination. As the disease develops, it can become difficult to walk, talk, and complete other basic tasks. With research, scientists may be able to coax embryonic stem cells into becoming healthy neurons that produce the desperately needed dopamine. And if those neurons can be successfully transplanted into a patient with Parkinson's disease, that person could be cured.

The list of other diseases ripe for stem cell research is long. Lou Gehrig's diseased is a progressive neuromuscular disease characterized by a degeneration of the nerve cells of the brain and spinal cord. Juvenile diabetes is an autoimmune disease in which the immune system attacks the pancreas, destroying insulin-producing cells.

Alzheimer's disease is a form of dementia that afflicts the part of the brain that controls memory, language, and thought. Spinal cord injuries interrupt the sensory pathway between the brain and the rest of the body.

Now, imagine if embryonic stem cell research could produce replacements for the nerve cells ravaged by Lou Gehrig's disease, for the insulin-producing cells destroyed by diabetes, for the brain cells washed away by Alzheimer's, for the neural pathways severed by spinal cord injuries. Stem cell research could offer the millions of Americans suffering from these and other diseases not just hopes but cures. It could give them and their families—who are often physically, financially, and emotionally exhausted—their lives back.

Many technical hurdles stand in the way of that day. These discoveries will not be easy. But it is wrong to throw additional and unnecessary obstacles

in front of our doctors, researchers, and scientists. That is precisely, however, what the President's policy has done.

On August 21, 2001, President Bush issued an Executive order that the Federal Government would only fund embryonic stem cell research on stem cell lines created before that date. ''Stem cell line'' is the name given to constantly dividing cells that continue to be derived from a single embryo. Most independent experts estimated at the time of the President's Executive order that only 80 stem cell lines, a totally inadequate amount, would be available for Federal research. Even worse, most of those 80 lines were determined to be polluted and unusable, leaving only about 20 stem cell lines actually available to scientists. That number is far too small to tap the vast potential of this research.

The President did not question the legitimacy of the science being used in stem cell research but the ethics of using embryos, scientifically known as blastocysts, until implanted through in vitro fertilization. A blastocyst consists of around 150 cells, which is smaller than the point of a pin. While the blastocyst is destroyed during the process of extracting embryonic stem cells, the key fact is that any that are used for stem cell research would have been discarded and destroyed anyway. That is a fact that opponents refuse to deal with.

These blastocysts are created by in vitro fertilization clinics and, for a variety of reasons, will not be used for implantation and will, therefore, eventually be discarded.

Last month, the Detroit News editorialized against a Michigan law restricting embryonic stem cell research and used words that equally apply to the President's policy. The News wrote:

> The justification for this law is to protect human embryos, but the fact that fertility clinics can simply discard them means that the research ban is pointless.

The logic of some embryonic stem cell research opponents is totally befuddling. They are apparently willing to ignore the discarding of the embryos by fertility clinics, but they label as morally objectionable the lifegiving use of embryos which would otherwise be discarded. I believe that embryonic stem cell research is truly a lifegiving, not a life-destroying, process because of the extraordinary potential for healing living, breathing human beings who have names and faces and loved ones.

While the President is fighting against research in America, other countries are pressing ahead. America has always been at the forefront of scientific innovation, and we could do this research faster, more efficiently, and more ethically than most other countries. We also have an obligation to speed its potential benefits to the American people and to people around the world.

The President's policy, however, has stifled private-public partnerships and has hindered our potential impact in this area. Today, other countries are poised to reap the lifegiving rewards of stem cell research while we fall further behind.

Over a year ago, the House took a significant step toward overcoming Presidential opposition by passing the Stem Cell Research and Enhancement Act, H.R. 810, which would remove the President's arbitrary prohibition against using stem cells created after August 21, 2001. That is another fact that opponents refuse to deal with. The President's date of August 21, 2001, is breathtakingly illogical. How can the President argue that it is OK to use embryos created before that date for research, even though in his view it was the taking of a life but that after that date it is unethical to do so?

H.R. 810 would pave the way for hundreds or thousands of additional stem lines to be made available. It is bipartisan legislation, and it passed overwhelmingly in the House.

Shortly after the House made its strong statement in favor of exploring the medical potential of embryonic stem cell research, the Senate majority leader committed to bringing that bill up for floor consideration. Senator FRIST understands how great the life-enhancing possibilities are, and he has chosen to side with his fellow physicians and with the future in supporting this research.

This bill has the strong support of the American Medical Association, the Coalition for the Advancement of Medical Research, the Association of American Universities, the Christopher Reeve Foundation, the Juvenile Diabetes Research Foundation, the Leukemia and Lymphoma Society, the Parkinson's Action Network, and more than 200 additional organizations. More important, it has the overwhelming support of the American people. If the President vetoes this bill, I hope we will resoundingly override his veto.

As part of the unanimous consent agreement to consider this legislation, we are considering two additional bills as well. The bill put forward by Senators SANTORUM and SPECTER would emphasize the use of adult stem cells instead of embryonic stem cells. Adult stem cells may have some potential, but they do not have the critically essential ability of the embryonic stem cell to become any other type of cell.

Dr. Sean Morrison, the director of the University of Michigan's Center for Stem Cell Biology, and one of the top stem cell researchers in the country, wrote recently in the Detroit Free Press about another alternative to embryonic stem cells being touted, adult stem cells from umbilical cords. Dr. Morrison wrote:

> Umbilical cord cells are used clinically only to replace blood-forming cells. There is no compelling evidence that these cells could ever be used to replace cells in other tissues. These cells are not an alternative to embryonic stem cells, which can replace any cell type in the body. . . .That is why there is near universal agreement among respected scientists and patient advocacy groups that current restrictions [against embryonic stem cell research] should be relaxed.

We may be on the cusp of one of the greatest miracles in the history of medicine. The door of possibility is ajar, inviting us to enter. But we cannot make these great strides if our researchers continue to be hampered by President Bush's overly restrictive policy. We owe it to everybody suffering from—or who may in the future be afflicted by—these dread diseases to move boldly toward a brighter future.

I yield the floor.

The PRESIDING OFFICER. The Senator from South Dakota is recognized.

Mr. JOHNSON. Mr. President, today I speak in support of legislation this Chamber has been waiting to consider for more than a year. I am pleased that wait is finally over. I encourage my colleagues to join me in voting to give hope to millions of Americans living with diseases for which embryonic stem cell research offers their only real hope of a cure. These patients are often desperate and have been waiting for their Congress to take action for nearly 5 years, since August 9, 2001, when the President defied common sense and stifled the promise and the hope offered by stem cell research.

This essential legislation has already passed the House of Representatives by an overwhelmingly large bipartisan majority. Today, I want to briefly share my thoughts on why the current policy on stem cell research is unsustainable and woefully inadequate, clarify some misconceptions about the Stem Cell Research Enhancement Act, and share the stories of some South Dakotans who will enormously benefit from the passage of this bill.

Current law allows federally funded research on only those stem cells derived as of August 9, 2001. At the time, there were more than 65 stem cell lines available worldwide. While this number represented marvelous progress from the first derivation of an embryonic stem cell in 1998, we know now that it was just the tip of the iceberg of possibility.

Today we know only 22 of those first 65 lines are viable for research, and virtually none will produce medical therapies permitted for use in humans. This is because at the time the only way to maintain stem cell lines was to use mouse cells to help them grow. Since then, scientists working with private funds—and no thanks to the Federal Government—have developed stronger and more robust stem cell lines that are not dependent on mouse cells and could lead to therapies for actual use in humans.

We must open these new lines to research supported by Federal funding. The United States is home to the world's largest and most distinguished organizations dedicated to maintaining and improving health through medical science. The National Institutes of Health and the Centers for Disease Control and Prevention conduct research that is critical to understanding

human disease and its treatment. These centers rely on Government funding to continue their work, and if we do not fund their research on embryonic stem cell lines, the United States will fall behind the rest of the world in scientific and medical advancement. If the Stem Cell Research Enhancement Act does not become law, we not only risk the futures of Americans living with currently incurable diseases, we also risk our national reputation as the home of the world's most innovative and distinguished scientists working to improve the health.

This is not just a matter of international medical research prestige; it directly goes to the millions of families around the world who will at last have hope that we can conquer the planet's most awful diseases and injuries.

The Stem Cell Research Enhancement Act creates a closely monitored and controlled stem cell research effort. The bill will allow vital, life-giving research to progress using frozen fertilized embryos that would otherwise be incinerated as medical waste. The choice is simple: life-giving research or incineration of excess cells.

Stem cell research is conducted with egg cells fertilized in a laboratory for the sole purpose of assisting childless couples who wish to have a baby. After choosing embryos for implantation in the mother, the remainder are routinely destroyed as medical waste. I believe these cells, of which hundreds of thousands are now stored at fertility clinics, would be better used to advance medical research that holds great promise for curing or preventing some of the world's worst diseases, as well as for repairing spinal cord and other injuries. I believe choosing research over incineration is a moral choice.

My South Dakota values, my religious faith, and my commitment to South Dakota families tell me we must choose life-giving research over incineration of these cells.

The Stem Cell Research Enhancement Act imposes tighter ethical rules than exist under current law. Any donated embryos must be created solely for fertility treatment and must be in excess of the clinical need of those seeking fertility treatment. Furthermore, the bill requires written consent from those who wish to donate the embryonic cells and prohibits financial incentives for donation.

Stem cells in umbilical cord blood have provided effective therapies for diseases such as leukemia and sickle cell anemia. However, there are many other diseases, including type 1 diabetes, Alzheimer's, and Parkinson's, which doctors cannot treat or cure with cord blood stem cells. Because of this fact, we must advance research in other areas, including embryonic stem cell research, to access all available options for curing the debilitating diseases plaguing so many of our fellow Americans.

Earlier, I mentioned that this bill gives hope to millions of Americans living with diseases for which embryonic stem cell research offers the only hope for a cure. I have been honored to meet many of these individuals in my home State of South Dakota.

This bill gives hope to 3-year-old Alexander Sohl from Brandon, SD. His parents, Terry and Laurie, told me little Alexander's very first words were not ''mommy'' or ''daddy'' but ''no shot''—his insulin treatments began when he was just a baby. And it is stem cell research that gives his family hope that the daily inflicted pain and the threat to the very life of this small child can at last end.

This bill gives hope to Bonnie Younkin. Bonnie lives in Huron, SD, and was diagnosed with Parkinson's disease in 2002 when she was in her early 50s. Though living with her disease is a daily battle, Bonnie also serves as an advocate for awareness of the disease and increased funding for Parkinson's research as the State's action coordinator. It can run in families; Bonnie is the fourth female in her family diagnosed with Parkinson's, and she lives in fear that her three daughters and one granddaughter may have a similar diagnosis in their future. Bonnie called my office last week, to touch base in advance of this debate. Upon hearing that I remained committed to supporting this bill, she had just two words, ''Bless you.''

South Dakota families are desperate for this research to commence—and to proceed.

Choosing research over incineration is a moral choice. I have prayed about this issue, and my deeply held religious faith tells me that respect for human life, respect for God's children, requires this life-saving research to proceed rather than the continued incineration of frozen excess embryo cells that are sitting in fertility clinics classified as medical waste.

Let there be no mistake: There are three bills being considered by the Senate this week. But unless a Senator votes for H.R. 810, the Stem Cell Research Enhancement Act, he or she will not have voted for this meaningful life-giving research.

I urge my colleagues to join me in affirming that respect—that respect for life—by voting for the Stem Cell Research Enhancement Act. Choose research and life over incineration.

I yield the floor.

The PRESIDING OFFICER. Under the previous order, the minority is recognized.

Mr. HARKIN. Mr. President, I have a letter from a number of different groups endorsing H.R. 810. It is patient advocacy groups, health organizations, research universities, scientific institutes, religious groups, and others. There are 205 groups listed here. I will not go through all of them, obviously, but I think it is important that all of these groups be laid upon the RECORD. I ask unanimous consent that the letter be printed in the RECORD.

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

JULY 14, 2006.

U.S. Senate,
Washington, DC.

DEAR SENATOR: We, the undersigned patient advocacy groups, health organizations, research universities, scientific societies, religious groups and other interested institutions and associations, representing millions of patients, scientists, health care providers and advocates, write you with our strong and unified support for H.R. 810, the Stem Cell Research Enhancement Act. We urge your vote in favor of H.R. 810 when the Senate considers the measure next week.

Of the bills being considered simultaneously, only H.R. 810 will move stem cell research forward in our country. This is the bill which holds promise for expanding medical breakthroughs. The other two bills—the Alternative Pluripotent Stem Cell Therapies Enhancement Act (S. 2754) and the Fetus Farming Prohibition Act (S. 3504)—are NOT substitutes for a YES vote on H.R. 810.

H.R. 810 is the pro-patient and pro-research bill. A vote in support of H.R. 810 will be considered a vote in support of more than 100 million patients in the U.S. and substantial progress for research. Please work to pass H.R. 810 immediately.

Sincerely,

Accelerated Cure Project for Multiple Sclerosis; Affymetrix, Inc.; Alliance for Aging Research; Alliance for Stem Cell Research; Alpha-1 Foundation; ALS Association; Ambulatory Pediatric Association; American Academy of Neurology; American Academy of Pediatrics; American Association for Cancer Research; American Association for Dental Research; American Association for the Advancement of Science; American Association of Neurological Surgeons/Congress of Neurological Surgeons; American Autoimmune Related Disease Association; American Brain Coalition; American College of Neuropsychopharmacology; American College of Obstetricians and Gynecologists; American Council on Education; American Council on Science and Health; American Dental Education Association.

American Diabetes Association; American Gastroenterological Association; American Medical Association; American Medical Women's Association; American Pain Foundation; American Parkinson's Disease Association (Arizona Chapter); American Parkinson's Disease Association; American Pediatric Society; American Physiological Society; American Society of Clinical Oncology; American Society for Biochemistry and Molecular Biology; American Society for Cell Biology; American Society for Clinical Pharmacology and Therapeutics; American Society for Microbiology; American Society for Neural Transplantation and Repair; American Society for Reproductive Medicine; American Society of Critical Care Anesthesiologists; American Society of Hematology; American Surgical Association; American Surgical Association Foundation.

American Thyroid Association; A O North America; Association for Prevention Teaching and Research; Association of Academic Chairs of Emergency Medicine; Association of Academic Departments of Otolaryngology; Association of Academic Physiatrists;

Association of American Medical Colleges; Association of American Universities; Association of Anatomy, Cell Biology and Neurobiology Chairs; Association of Independent Research Institutes; Association of Medical School Microbiology and Immunology Chairs; Association of Medical School Pediatric Department Chairs; Association of Medical School Pharmacology Chairs; Association of Professors of Medicine; Association of Reproductive Health Professionals; Association of Specialty Professors;

University Anesthesiologists; Axion Research Foundation; Biotechnology Industry Organization; B'nai B'rith International.

Broadened Horizons, LLC; The Burnham Institute; California Institute of Technology; California Institute for Regenerative Medicine; Californians for Cures; Campaign for Medical Research; Cancer Research and Prevention Foundation; C3: Colorectal Cancer Coalition; Cedars-Sinai Health System; Central Conference of American Rabbis; Childrens Hospital Boston; Children's Tumor Foundation; Children's Neurobiological Solutions Foundation; Christopher Reeve Foundation; The CJD Foundation; Columbia University Medical Center; Cornell University; CuresNow; Cure Paralysis Now; David Geffen School of Medicine at UCLA.

Duke University Medical Center; Elizabeth Glaser Pediatric AIDS Foundation; Emory University; The Endocrine Society; The FAIR Foundation; FasterCures; FD Hope Foundation; Federation of American Societies for Experimental Biology (FASEB); Fertile Hope; Fox Chase Cancer Center; Friends of Cancer Research; Genetics Policy Institute; The Gerontological Society of America; Hadassah; Harvard University; Hereditary Disease Foundation; Huntington's Disease Society of America; Institute for African American Health, Inc.; International Foundation for Anticancer Drug Discovery (IFADD); International Longevity Center—USA.

International Society for Stem Cell Research; Iraq Veterans for Cures; Jeffrey Modell Foundation; Johns Hopkins; Joint Steering Committee for Public Policy; Juvenile Diabetes Research Foundation; Lance Armstrong Foundation; Leukemia and Lymphoma Society; Lung Cancer Alliance; Lupus Research Institute; Malecare Prostate Cancer Support; Marshalltown [IA] Cancer Resource Center; Massachusetts Biotechnology Council; Memorial Sloan-Kettering Cancer Center; The Michael J. Fox Foundation for Parkinson's Research; Mount Sinai School of Medicine; National Alliance for Eye and Vision Research; National Alliance on Mental Illness; National Association for Biomedical Research; National Caucus of Basic Biomedical Science Chairs.

National Coalition for Cancer Research; National Coalition for Cancer Survivorship; National Coalition for Women with Heart Disease; National Council of Jewish Women; National Council on Spinal Cord Injury; National Health Council; National Hemophilia Foundation; National Medical Association; National Partnership for Women and Families; National Prostate Cancer Coalition; National Spinal Cord Injury Association; National Venture Capital Association; New Jersey Association for Biomedical Research; New York Stem Cell Foundation;

versity School of Medicine; North American Brain Tumor Coalition; Northwest Association for Biomedical Research; Northwestern University; Paralyzed Veterans of America; Parkinson's Action Network.

The Parkinson Alliance and Unity Walk; Parkinson's Disease Foundation; Pittsburgh Development Center; Project A.L.S.; Pseudoxanthoma Elasticum International Quest for the Cure; Research!America; Resolve: The National Infertility Association; RetireSafe; Rett Syndrome Research Foundation; Rice University Robert Packard Center for ALS Research at Johns Hopkins Rutgers University; Secular Coalition for America; Society of General Internal Medicine; Society of Gynecologic Oncologists; Society of Reproductive Surgeons; Society of University Otolaryngologists; Society for Assisted Reproductive Technology; Society for Education in Anesthesia.

Society for Male Reproduction and Urology; Society for Neuroscience; Society for Pediatric Research; Society for Reproductive Endocrinology and Infertility; Society for Women's Health Research; Stanford University; Stem Cell Action Network; Stem Cell Research Foundation; Steven and Michele Kirsch Foundation; Stony Brook University, State University of New York; Student Society for Stem Cell Research; Take Charge! Cure Parkinson's, Inc.; Texans for Advancement of Medical Research; Texas Medical Center; The Forsyth Institute; Tourette Syndrome Association; Travis Roy Foundation; Tulane University; Union for Reformed Judaism; Unitarian Universalist Association of Congregations.

University of California, Berkeley; University of California, Davis; University of California, Irvine; University of California, Los Angeles; University of California, San Diego; University of California, San Francisco; University of California, Santa Cruz; University of California System; University of Chicago; University of Illinois; University of Iowa; University of Michigan; University of Minnesota; University of North Carolina at Chapel Hill; University of North Dakota; University of Oregon; University of Pennsylvania School of Medicine; University of Rochester Medical Center; University of Southern California; University of Washington.

University of Wisconsin-Madison; Vanderbilt University and Medical Center; Washington University in St. Louis, WE MOVE, WiCell Research Institution, Wisconsin Alumni Research Foundation; Wisconsin Association for Biomedical Research and Education; Woodruff Health Sciences Center at Emory University; Yale University.

Mr. HARKIN. Mr. President, I have a letter from the American Society for Cell Biology. The letter was sent to Senator HATCH, dated July 17. It says:

The Senate will shortly be considering legislation to permit the National Institutes of Health (NIH) to fund research with additional and new and existing human embryonic stem cell (hESC) lines. As staunch supporters of biomedical research and particularly research with hESCs, we trust that you will exert your influence to ensure passage of H.R. 810. Scientists engaged in ESC research are counting on you and like-minded Senate colleagues to assure its passage.

The President must also be persuaded not veto this legislation for if we continue on the path he set five years ago, United States investigators will be out of the running in coverting embryonic stem cells into important new therapies. It is especially frustrating and demeaning that American scientists are prohibited from using their NIH grant funds for research with the hundreds of hESC lines generated outside the United States or generated in this country with private funding.

I note there are 27 leading scientists on this letter, 17 of them having received the Nobel Prize for medicine in one form or another.

I ask unanimous consent that this letter be printed in the RECORD.

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

THE AMERICAN SOCIETY FOR CELL BIOLOGY,
Bethesda, MD, July 17, 2006.

Hon. ORRIN HATCH,
U.S. Senate,
Washington, DC.

DEAR SENATOR HATCH: The Senate will shortly be considering legislation to permit the National Institutes of Health (NIH) to fund research with additional and new and existing human embryonic stem cell (hESC) lines. As staunch supporters of biomedical research and particularly research with hESCs, we trust that you will exert your influence to ensure passage of H.R. 810. Scientists engaged in ESC research are counting on you and like-minded Senate colleagues to assure its passage.

The President must also be persuaded not to veto this legislation for if we continue on the path he set 5 years ago, United States investigators will be out of the running in converting embryonic stem cells into important new therapies. It is especially frustrating and demeaning that American scientists are prohibited from using their NIH grant funds for research with the hundreds of hESC lines generated outside the United States or generated in this country with private funding.

Also, S. 2754, the ''Alternative Pluripotent Stem Cell Therapies Enhancement Act,'' sponsored by Senators SPECTER and SANTORUM, seems to us, superfluous. Ostensibly, it is intended to authorize research ''to derive human pluripotent stem cell lines using techniques that do not harm embryos.'' However, at present, such research is currently permissible and, therefore, does not require congressional legislation; indeed, the National Institutes of Health may currently be funding such efforts.

Moreover, all the alternative procedures advanced in the report by the President's Council on Bioethics and other alternative methods that have been suggested encounter equally vexing ethical concerns. Hence, S. 2754 is unneeded and if passed would deflect from the current urgent need for generating new stem cell lines from excess IVF-derived blastocysts.

Sincerely,

Peter Agre, M.D., Vice Chancellor for Science and Technology, James B. Duke Professor of Cell Biology, Duke University School of Medicine, Nobel Prize in Chemistry, 2003.

Bruce Alberts, Professor of Biochemistry and Biophysics, University of California, San Francisco, President Emeritus, National Academy of Sciences.

Mary C. Beckerle, Ph.D., Ralph E. and Willia T. Main Presidential Professor, University of Utah, President, American Society for Cell Biology.

David Baltimore, President, California Institute of Technology, Nobel Prize in Physiology or Medicine, 1975.

Paul Berg, Cahill Professor of Biochemistry, Emeritus, Stanford University, Nobel Prize in Chemistry, 1980.

J. Michael Bishop, Nobel Prize in Physiology or Medicine, 1989.

Helen M. Blau, Ph.D., Donald E. and Delia B. Baxter Professor, Director, Baxter Laboratory in Genetic Pharmacology, Stanford University School of Medicine.

Michael S. Brown, M.D., Nobel Prize in Physiology or Medicine, 1985.

Linda Buck, Ph.D., Howard Hughes Medical Institute, Division of Basic Sciences, Fred Hutchinson Cancer Research Center, Nobel Prize in Physiology or Medicine, 2004.

Johann Deisenhofer, Regental Professor, Investigator, Howard Hughes Medical Institute, The University of Texas Southwestern Medical Center, Nobel Prize in Chemistry, 1988.

Joseph L. Goldstein, M.D., Regental Professor of Molecular Genetics and Internal Medicine, University of Texas Southwestern Medical Center at Dallas, Nobel Prize in Physiology or Medicine, 1985.

Larry Goldstein, Investigator, Howard Hughes Medical Institute, Department of Cellular and Molecular Medicine, University of California, San Diego School of Medicine.

Alfred G. Gilman, M.D., Ph.D., Dallas, Texas, Nobel Prize in Physiology or Medicine, 1994.

Paul Greengard, Professor, The Rockefeller University, Nobel Prize in Physiology or Medicine, 2000.

Lee Hartwell, Ph.D., President and Director, Fred Hutchinson Cancer Research Center, Nobel Prize in Physiology or Medicine, 2001.

Dudley Herschbach, Baird Research Professor of Science, Harvard University, Nobel Prize in Chemistry, 1986.

H. Robert Horvitz, Professor of Biology, Massachusetts Institute of Technology, Nobel Prize in Physiology or Medicine, 2002.

Douglas Koshland, Carnegie Institution, Investigator, Howard Hughes Medical Institute.

Paul C. Lauterbur, Center for Advanced Study Professor of Chemistry and Distinguished Professor of Medical Information Sciences, University of Illinois, Nobel Prize for Physiology or Medicine, 2003.

Sean J. Morrison, Investigator, Howard Hughes Medical Institute, Director, Center for Stem Cell Biology, University of Michigan.

Eric N. Olson, Department of Molecular Biology, University of Texas, Southwestern Medical Center at Dallas.

Thomas D. Pollard, M.D., Sterling Professor and Chair, Molecular Cellular and Developmental Biology, Yale University.

Randy Schekman, HHMI Investigator, Dept. of Molecular and Cell Biology, University of California, Berkeley.

Phillip A. Sharp, Institute Professor and Center for Cancer Research, Massachusetts Institute of Technology, Nobel Prize in Physiology or Medicine, 1993.

Maxine F. Singer, A.B., Ph.D., D.Sc., President Emerita, Carnegie Institution of Washington.

Harold Varmus, M.D., President, Memorial Sloan-Kettering Cancer Center, Chair, Joint Steering Committee for Public Policy, Former Director, National Institutes of Health, Nobel Laureate in Medicine or Physiology, 1989.

Eric Wieschaus, Department of Molecular Biology, Princeton University, Nobel Prize in Physiology or Medicine, 1995.

Mr. COBURN. Mr. President, will the Senator yield for a question?

Mr. HARKIN. Yes.

Mr. COBURN. Is the Senator aware of the research that has been done on juvenile diabetes thus far in terms of embryonic stem cell research and adult stem cell research?

Mr. HARKIN. I am not intimately knowledgeable of all of the nuances in research that is being done. We had hearings, and we have the information in our hearing record on a lot of that. Standing here now, I don't know all of that.

Mr. COBURN. Is the Senator aware that the only successful treatments for juvenile diabetes to come from stem cells have come from adult stem cells, and in fact that the embryonic stem cells have one-fiftieth the amount of insulin, were not effective, and ended after about 80 days after transplantation? Is the Senator aware of that?

Mr. HARKIN. Will the Senator repeat that? I was reading something.

Mr. COBURN. Is the Senator aware that of the human studies which have thus far been done on juvenile diabetes in fact the successful one was adult stem cells and the unsuccessful one was embryonic stem cell? Is the Senator aware of that fact?

Mr. HARKIN. Let me respond this way: First, I note that the Juvenile Diabetes Research Foundation, which represents families all over America who are affected with juvenile diabetes, is in support of H.R. 810. I want that on the record. In fact, they have been one of the strongest supporters.

Second, the transplantation of insulin-producing pancreatic cells is already known to reverse the most damaging symptoms of type 1 diabetes. The problem with that is the limited number of organ donors out there who donate pancreases. That seems to be the problem.

Could I ask the Senator, are there enough pancreas donors out there to take care of everyone with juvenile diabetes?

Mr. COBURN. It is not required. Actually, today the science shows that ductal cells from the patient's own pancreas can be induced to become stem cells that then produce insulin-producing cells. There is no transplantation needed. In fact, these ductal cells have been proven and demonstrated to produce the same eyelet cells that the patient did initially when they were grown as an embryo.

Mr. HARKIN. I have heard this argument before. I am not a scientist. I don't know all of the nuances, I would be the first to admit. I do know, however, that every time that has come up, the Juvenile Diabetes Research Association disagrees that this is a viable pathway toward curing all of those with juvenile diabetes.

Mr. COBURN. They cannot disagree. It has only been done for 3 months, and it is successful. There have been no successful embryonic cells taken from the duct of the pancreas of children with diabetes, converted into cells, and have in fact cured their diabetes.

Mr. HARKIN. How many people have been cured of juvenile diabetes with this?

Mr. COBURN. For 3 months is all we know. I don't know the numbers. I think it is eight or nine. This protocol is being done in Europe at the present time.

Mr. HARKIN. Is it not being done in the United States?

Mr. COBURN. No, it is not being done in the United States.

Mr. HARKIN. Have any of these findings been published?

Mr. COBURN. They have been published in peer-reviewed articles. I would be happy to submit them for the RECORD.

Mr. HARKIN. I would appreciate that.

Mr. COBURN. I thank the Senator for allowing me to ask those questions.

Mr. HARKIN. I thank the Senator. There is a good colloquy.

I would further ask the Senator from Oklahoma—this has been done for 3 months—do we have any data to show that this does cure juvenile diabetes? Does it abate it somewhat? I don't know what the outcomes have been for these eight or nine people.

Mr. COBURN. Here is the key point that needs to be made in this debate: If you use your own cells, you will not have tumors, you will not have teratomas, and you will not have rejection. If you use embryonic stem cells, you will have tumors, you will have teratomas, and you will have rejection.

That is what we know. That is why I, as a scientist, have not raised the life issue here once, but I am adamantly pro-life. I believe the science is so far ahead of this debate. When everyone knows what is really going on in terms of research, they are going to want the dollars put into the stem cells, both in terms of dedifferentiation—we know we can differentiate cells backward to make them pluripotent—and also to isolate cells from our own human body to use back on us. That is an important part of the debate.

Mr. HARKIN. I thank the Senator.

I again say that all the Nobel scientists, all of the leading scientists in America simply do not agree with the Senator from Oklahoma. These are the people involved in cell biology and that kind of research.

The Senator says embryonic stem cells will produce tumors. We do not know that is true. We do not have any real long-term data to know anything about how embryonic stem cells will work later on.

The PRESIDING OFFICER. The time of the Senator has expired.

Under the previous order, the majority is recognized for the next 30 minutes.

Mr. COBURN. I inquire of the Chair, under the previous order, if the majority is not here, who assumes control of the time?

The PRESIDING OFFICER. The time is reserved for the majority to be recognized.

Mr. COBURN. Mr. President, it is my understanding that Senator FRIST has this time. He has advised me I can use the time until he arrives.

The PRESIDING OFFICER. The Senator from Oklahoma.

Mr. COBURN. I will spend a few minutes. This is a very emotional debate for every family in this country. Every family in this country has someone who, in fact, has a disease that will be impacted in the future by research that is ongoing in terms of stem cell research.

I make a couple of points. We have heard today a couple of very strong statements that are highly inaccurate.

One is that the only way you will cure this is with embryonic stem cells. No one knows that. As a matter of fact, most of the cures in science have come not by what we thought was going to happen but by what happened that surprised us. That is not true.

No. 2, there is no ban at the present time on research in this country on embryonic stem cells. What there is a ban on is using additional Federal funds to create additional stem cells, but additional stem cells can be created outside of the Government.

The Senator from South Dakota created a false choice. The false choice is not incineration. There are 400,000 embryos that are frozen in this country today; 93 percent of those the parents want to save for themselves. So that leaves us a smaller portion. If you look at the numbers, when you thaw embryos, you have a 50-percent wastage, you lose 50 percent of them. The false choice Senator JOHNSON put forward was this: they either get burned up or they get used for embryonic stem cell research. This last week, the 108th baby was born through this Operation Snowflake—which is adopted embryos—so that is not the only choice.

The other thing is, if everyone will recognize, in the fertility community in this country, that in Europe, they do not have a problem with excess embryos. We overdo it in this country in terms of creating embryos for fertility clinics. We create about four times as many obstetrician and fertility specialists as the rest of the world. The choice is not incinerate or use for embryonic stem cell research.

The majority leader has arrived. I yield my time.

The PRESIDING OFFICER. The majority leader.

Mr. FRIST. Mr. President, I thank both of my colleagues for the superb comments thus far over the last 30 minutes but, indeed, since we started at 12:30 today.

As I opened this morning, I made it clear that this debate would be the first of the 21st-century dilemmas that involve ethical considerations and considerations around science, probably the first of many. I say the first; obviously, we have dealt with some other ethical issues in medicine over the last 5 years, but much of the discussion will focus around science and ethics and that nexus, that crossing of those two, and the interplay.

It is important that we debate this and that all concerns are put on the table, ultimately. These three bills give that opportunity.

Let me add that this probably will be the first of many debates like this in the Senate. I know there are a lot of my colleagues who asked: Why are we bringing this up now? Why are we talking about these tough issues which do force us to address issues about the distinctions of life, the early days of life and also the hope and the promise of science as it goes forward and that interplay? This Senate will have to get used to it.

This Senate will have to focus on those issues as we move forward because science, where it used to be growing at a small clip, is now growing at leaps and bounds, not exponentially but close to exponentially, and will continue to do so.

Less than a century ago, we did not have antibiotics, we did not have vaccines. We had measles, mumps, smallpox, polio—all diseases that ravaged our populations, in this country and around the world. Because of science, because of public health initiatives, they have essentially been eradicated. We will see forward momentum. That momentum will be accelerated in biomedical research.

I mentioned earlier today in opening the debate that when people look back at the 21st century, I would say maybe the next decade is the decade of the cells. Much of our discussion is about developmental biology. That has built upon the foundation of the shoulders of new knowledge regarding molecular and cellular development, coupled with the new understanding that is a product of a sequencing of the human genome from a decade of the last century.

What is important is that the rules, regulations, guidelines, and the framework must be defined and in large part must be defined by this Senate. That is our responsibility as Senators, as representatives of the American people, their attitude, their thought, their philosophies. They are our constituents.

A second point I made when I first started talking about stem cell research 5 years ago is we will have to continually assess and then reassess in light of advancing science certain rules, guidelines, and regulations we put in place. In part, that is why we are here today.

We have three bills before the Senate. My colleagues have talked about those three bills: the Fetus Farming Prohibition Act, the Alternative Pluripotent Stem Cell Therapies Enhancement Act, and the Stem Cell Research Enhancement Act. Each addresses a different facet of the issues raised by advancing research, advancing developmental biology, advancing stem cell research. Each one of them demands thoughtful consideration and deliberation which will play out over the course of today and tomorrow.

I spent my entire professional career as a transplant surgeon, a professional who specializes in moving living tissue from one person to another person—say an organ or a heart. Take out a heart, put in a heart. Take out a lung, put in a lung. Thus, my interest before coming to this Senate focused on many of the same issues that come before the Senate today: advancing science, how do we define ''brain death,'' something we did in the 1960s, to make transplantation of the human heart possible.

Thus, it was a little over 5 years ago—on July 18, 2001—that I laid out a comprehensive proposal, a framework at that time, which I believed would both promote stem cell research but also provide an ethical framework through which such research could be conducted. That was 2001, about 2½ years after embryonic stem cells had just been discovered by James Thomson at the University of Wisconsin, or the human embryonic stem cells.

At that time, 5 years ago, I laid out 10 specific interdependent principles. The principles dealt with all types of stem cell research—the adult stem cells, the germ stem cells, embryonic stem cells. They have helped to guide my assessment of stem cell research over the last 5 years, and they have provided a framework I have used and consistently gone back and adopted as I looked at various pieces of legislation on stem cells before this Senate. I will read those 10 principles because of their inclusiveness and their interdependence:

No. 1, ban embryo creation for research.

No. 2, continue funding the ban on the derivation.

No. 3, ban human cloning.

No. 4, increase adult stem cell research.

No. 5, provide funding for embryonic stem cell research only from blastocysts that would otherwise be discarded.

No. 6, require a rigorous informed-consent process.

No. 7, limit the number of stem cell lines.

No. 8, establish a strong public research oversight system.

No. 9, require ongoing independent scientific and ethical review.

No. 10, strengthen and harmonize fetal tissue research restrictions.

The principles are meant to stand the test of time even when applied to a field as rapidly changing as stem cell research.

Yes, I do believe both embryonic and adult stem cell research should be Federally funded but should only be done so within a carefully regulated, fully transparent, fully accountable framework, ensuring the highest level of respect for that moral significance of the human embryo. But we should fund research when it comes to embryonic stem cell research only if those embryos, only if those stem cell lines were derived from blastocysts that, with 100 percent certainty, are not going to be frozen forever, are not going to be adopted but with 100 percent certainty and with appropriate consent would be discarded, would be thrown away.

Today, we do debate science, developmental biology, and we debate ethics. We are called upon to confront the distinctions around life's early goings when we do so. As my colleagues know, I am pro-life. I do believe human life begins at conception. It is at this moment, at conception, that the organism is complete—immature, yes, but complete. It is genetically distinct, it is biologically human, living. Development is a gradual process, it is a continual process. All of us in this Senate were at one time an embryo. It represents human life at its earliest stage of development. It is a continuum, coming all the way through. That is the science. That is not religion. That is not faith. That is the science. Thus, I believe strongly that an embryo does have moral significance. It needs to be treated with the utmost dignity and respect.

We have three bills before the Senate. The Fetus Farming Prohibition Act of 2006, the implantation and gestation of the human embryo into either a human or an animal for the purpose of aborting for research—that prohibition is what the discussion is about. Clearly, that would fall far short of ''utmost dignity and respect.''

The bill before the Senate ensures this practice is never employed in human research in the United States. That purposeful development of a human embryo, the manufacturing of human life for experimentation and its ultimate destruction is morally reprehensible. It offends the conscience, degrades the value of human life, and, of course, is not medically necessary. Yet it is a practice that some in the field of developmental biology just might be inclined to pursue if those guidelines, if those regulations, are not out there. Why? To look at the later stages beyond the embryo in terms of development and how cells function, or it might be, as we have heard argued before, that the cells have a different nature after the embryo stage but before delivery of the fetus itself and have more stability or more differentiation. This particular legislation preempts, it stops that possibility.

Not only would this be a flagrant lack of respect for nascent human life, but it would also create powerful incentives for women to undergo an intense regimen of superovulation drugs and surgery with potentially devastating side effects. It could exploit women, the most likely targets of egg harvesting or fetal farming. Under no circumstances could human fetus farming be labeled ''medical advancement.'' It is the exact opposite, an unconscionable regression of the mores that define our culture, a culture that upholds respect for life and health.

As a transplant surgeon, I have had that opportunity to see firsthand how new medical discoveries and technologies can save lives and make life more fulfilling for others. In fact, my entire professional career was spent on these newer therapies, these newer technologies, in order to give others a better life. But at the same time, whether it is in the laboratory, where I spent a lot of time, or at the bedside, I have been able to also witness how fear can also delay scientific advances that are out there before us.

So before us today is that challenge to bridge this divide. And we should reject an outright fear of all technological advance. We have to work together to allow science to advance and to promote those medical advances, whether it is in developmental biology or the human genome project, in order to give a healthier life or more life to others. But we have to do so. That is why we bring these bills to the floor, within an ethical and moral framework, in this pursuit.

Even while we reject a fear of scientific and technological advancement, we still have to—we must; it is our responsibility—live within limits. Limits do not hamper human advances but, rather, allow us to preserve them and to promote them. That is why we can reject this practice of fetus farming while still embracing the hope that is offered by stem cell research. Senators BROWNBACK and SANTORUM worked hard to bring this important legislation to the floor, and I hope my colleagues will join me in supporting it.

The second bill, the Alternative Pluripotent Stem Cell Therapies Enhancement Act, put forth by Senators SANTORUM and SPECTER, is a very important bill, the purpose of which is to step back from and to remove the ethical considerations that surround the unique potential that these pluripotent stem cells have.

Five years ago, when I came to the floor in 2001, I said the following:

> We should not let the potential of this research drive the moral considerations themselves. . . . We do not know what the next great discovery is going to be 6 months from now. . . . So the oversight process has to be responsive, has to be ongoing. It has to recognize that science moves very quickly.

That is why we are here. We recognize that science cannot be practiced in a vacuum. We need to promote and accelerate these medical advances. But we also need to ensure that research practices are channeled along lines that respect human life and dignity.

What seemed impossible even 5 years ago now seems possible. Exciting techniques are beginning to emerge that just may make it unnecessary to have to destroy that embryo, to disaggregate or dismember that embryo, in order to obtain cells that have the pluripotent properties that are either exactly like or very similar to the embryonic stem cells. And we have talked about it a little bit earlier today, and in the past, as to the unique property these embryonic stem cells have, which is this pluripotentiality, which has two concepts to it: No. 1 is that they can become any tissue—theoretically, they can become any tissue—and that is in the differentiation; and, secondly, this overall process of self-renewal, that they can renew and replicate themselves again and again and again.

An adult stem cell might be reprogrammable. You might be able to directly reprogram that cell to an earlier stage to make it more pliable, to take it back to an earlier or closer to an embryonic phase. Adult stem cells can be what we call multipotential, and that means they can differentiate, and you can back them down to differentiate into certain tissues. The embryonic stem cell is pluripotential, and the range of tissues it can differentiate to are much greater.

But this reprogramming, coming back earlier to the adult stem cell, earlier and earlier along its chronological development, gives the opportunity to send that adult stem cell into various regions; thus, this direct reprogramming concept opens up great potential. To me, and I would hope to every Member of this body, this type of research—research that stops short of having to destroy an embryo—to obtain pluripotent cells through alternative ways should be supported, and I hope can be supported, by everybody in this body.

In May of last year, 2005, the President's Council on Bioethics issued a report bringing these alternative sources attention. At that time, I asked and worked with several of my colleagues to put together a piece of legislation for which we could say Federal funding will go in that direction to derive these alternative means of developing these pluripotential cells. With more Federal support, and with more emphasis, these newer methods may pay off hugely in terms of scientific advantage and clinical advantage.

They may be the way to bridge these moral and ethical differences among people who hold wildly different and broadly different views, which we will actually hear on the floor over the course of today and tomorrow on stem cell research. Why? Because they avoid any destruction of the human embryo. The alternative methods of potentially deriving pluripotent cells, that were spelled out in the Council on Bioethics report of May of last year, include: extraction from embryos that are no longer living; a second proposal was blastomere extraction, which involves a nonlethal and nonharmful extraction of the blastomeres from embryos—and, indeed, several researchers over the course of the last year, since that proposal was initially made, have reported success in that regard—thirdly, extraction from artificially created organisms that are not embryos, but embryolike—this was initially proposed by Bill Hurlbut at Stanford and subsequently demonstrated by Dr. Rudolf Jaenisch and others at MIT—fourthly, the direct reprogramming of adult or somatic cells to a pluripotent state through fusion with embryonic cell lines.

We are already driving and promoting ethical alternatives such as

adult stem cell research and therapies and cord cell research, both of which have been important to date in the treatment, as well as other types of therapy.

Today, adult stem cell research is the only type of stem cell research that has resulted in proven treatments for human patients. At the Multiorgan Transplant Center that I established and directed at Vanderbilt, we did bone marrow transplants, which are commonly done for treatment of many types of cancers now; at that point, for many types of blood disease. We have had bone marrow transplants done in this country for, oh, about 40 years. The first bone marrow transplant was done in 1968.

Stem cells taken from cord blood have shown great promise in treating the myeloproliferative disorders, the leukemias, congenital immune system disorders.

Recently, cord blood cells have shown some ability to become natural cells, which could lead to treatments for more heart disease and Parkinson's disease. The first cord blood transplant was done about 20 years ago in 1988.

So every day we unlock more of the mysteries of human life, more ways to promote and enhance our health. This compels the profound questions we address, moral questions with which we understandably struggle. Transplantation itself posed a question similar to those we face with stem cell research, a little bit different in that organs were transplanted principally, when I got started, at the end stage of life. People without a heart would be dying 4 to 6 months later. We had to define, as I mentioned earlier, what is brain death. We had ethical considerations about how to allocate a very few number of organs to the many people who waited, which literally meant some people would die waiting for that scarce organ—all ethical considerations.

If we can devise a moral and ethical framework, then it is my belief we will have the chance to save many lives and make many countless other lives more fulfilling. That is why it is imperative we get our stem cell policy right scientifically, morally, and ethically.

A lot of diseases have been mentioned on the floor, and I guess over the next 2 days I will have the opportunity to come back and talk about some of those particular diseases. Adult stem cells, we know, are so powerful. They have effectively treated so many diseases today. I mentioned bone marrow transplantation. But the list will be coming to the floor, and they have come to the floor, about the number of therapies with bone marrow transplantation and other adult stem cells. Embryonic stem cells, however, do have this unique capacity of self-replication, self-renewal over time, and greater potential to differentiate into other types of tissues. Unlike other stem cells, these embryonic stem cells are pluripotent, where adult stem cells tend to be multipotent. That means the embryonic stem cells have the capacity to become a greater range of types of tissues. They are capable of renewing themselves and replicating themselves over and over again indefinitely.

A number of people have brought up what the current administration policy is. As we all know, on August 9, 2001, President Bush laid out his principles and put in place a policy, which I supported, that for the first time allowed Federal funding for embryonic stem cell research. The President's policy was consistent with my initial principles—my seventh principle: to limit the number of stem cell lines. In order to accomplish that limiting the number of lines, the President used a date: August 9, 2001.

The President's policy also says: Let's support stem cell lines that have been derived from blastocysts that were going to be thrown away or discarded. His policy is the same in that regard. The cell lines we federally support today all came from blastocysts that were left over by in vitro fertilization that were going to be discarded. The President basically said it was OK to do that before August 9, but after August 9 that will not be allowed anymore, and we will only fund those cell lines.

I thought it was very important that Congress continue oversight. Remember, 5 years ago or 6 years ago, I said we are going to be coming back to this again and again and again. I think that oversight absolutely is critical.

This third bill, the Stem Cell Research Enhancement Act, which is the House-passed bill, the Specter-Hatch, the Castle-DeGette bill, is the bill most people will be spending most of their time on over the next day and a half.

Over the last 5 years—while it was widely believed when the President put forth his policy that there would be 78 embryonic stem cell lines available for Federal funding—we have learned, through science, that has not been the case. In fact, of the initial anticipated 78 lines, there are, right now, about 22 lines that are eligible. There is some concern that these lines are becoming less and less stable and less replicative than initially thought.

While we know that this embryonic stem cell research is at a very early stage—remember, these embryonic stem cells were discovered, first, just in 1998; unlike adult stem cells, where we have 40 years of research history—we do know that the embryonic stem cell research is moving fast and moving quickly.

The question is: Are there a sufficient number of cell lines to keep that research going? I believe right now that the current policy unduly restricts the number of cell lines. As I have said, I am going to be supporting and voting for H.R. 810, the Stem Cell Research Enhancement Act. I do not think it is an ideal piece of legislation. It has a few essential shortcomings as written. It restricts funding to blastocysts left over after IVF that would otherwise be discarded. And that is consistent with my fifth principle. But the shortcomings do have to be addressed somewhere.

First, it lacks a strong ethical and scientific oversight mechanism. Second, the bill does not prohibit financial or other incentives between scientists and fertility clinics. Third, the bill does not specify whether the patients or clinic staff or anyone else has the final say about whether an embryo will be implanted or will be discarded.

And were circumstances different and had the House not acted so quickly and sent the bill over—I think we should have had the opportunity to have a thorough examination and rewrite of that bill. However, even with those reservations, I do support the Stem Cell Research Enhancement Act. As I said, it is completely consistent with my principles from 5 years ago.

Many of my colleagues, such as I, have spent countless hours grappling with this issue—the future of stem cell research. How do we balance pro-life positions with the potential for new life and health offered by stem cell research? There is, perhaps, an inclination to avoid such difficult issues, to ignore them and let others debate. But I believe and feel strongly that we must participate in defining research surrounding the culture of life.

If we don't do that, it will define us. Finally, I thank all of my colleagues. I know we will have a good debate over the next day. We will have those votes at 2:45 tomorrow. I hope those votes will show there are areas of consensus among us and that where differences exist we can respectfully articulate and vote our conscience.

The PRESIDING OFFICER. Under the previous order, the minority is in control of time for the next 30 minutes.

The Senator from Iowa is recognized.

Mr. HARKIN. Mr. President, I know that one of the cosponsors of the bill, one of the great leaders in the Senate on stem cell research, has arrived on the floor to speak. I know the Chair will be recognizing her shortly.

I wanted, again, to just take a moment to sort of repeat for emphasis sake what has been said before. I think the distinguished majority leader referred to that also. It is just that here we have an instance where so many leading scientists around, U.S. Nobel Prize winners, and all the disease groups—I submitted a compendium of about 205, and I think that may soar to 500 or 600 by the end of the day—are supporting H.R. 810.

Lest one thinks that, A, either they have all been hoodwinked into thinking this bill is something it is not or, B, that these are malevolent people who want to just destroy embryos without any thought about the morality or the ethics of it, they are simply mistaken. First of all, none of these people have been hoodwinked, and most of these scientists are as ethical

and moral a people as you could find anywhere. They are saying let's use these blastocysts, embryos, or however you want to define them to enhance life, cure disease and illness, rather than having them be discarded, and to do it in a very ethical manner. That is what this bill provides.

With that, I yield the floor.

The PRESIDING OFFICER. The Senator from California is recognized.

Mrs. FEINSTEIN. Mr. President, I rise to support the Stem Cell Research Enhancement Act. Passage of this legislation will finally allow scientists to fully pursue the promise of stem cell research. It will offer hope to millions of our people. Mr. President, we have waited a long time for this day. Earlier, Senator HARKIN spoke to the fact that it was in 1998 when he and Senator SPECTER introduced the first bill dealing with stem cell research. I recall that year I introduced one of the first bills dealing with ethical standards surrounding stem cell research. So it has been 8 years.

Now, finally, the House of Representatives overwhelmingly approved bipartisan legislation. In the intervening time, we have all heard from patients, survivors, and scientists who are desperate to pursue this research that one day could lead to treatments and cures for diabetes, cancer and, yes, even spinal cord injury. Forty Nobel laureates have weighed in with their support, as did former First Lady Nancy Reagan.

While we were waiting, we lost Christopher and Dana Reeve, tireless advocates of stem cell research, and an inspiration for all of us. Millions more American families experienced firsthand the devastation wrought by catastrophic illnesses.

My colleagues and I, Senators SPECTER, HARKIN, KENNEDY, HATCH, and SMITH, worked tirelessly to bring this to a vote. We pushed privately, we wrote letters, we gave speeches, and we held press conferences to highlight the plight of patients who are living with illnesses day in and day out.

Finally, after all of this pleading and delay, the Senate is acting.

I thank my colleagues for their longstanding leadership on this issue, and I am also very grateful to the majority leader, Senator FRIST, for his support for stem cell research and his work with his caucus to reach this agreement that has made this debate possible.

For all of the controversy that it is generating, the Castle-DeGette Stem Cell Research Enhancement Act is remarkably simple. It reverses the failed policy announced by President Bush in 2001 when he restricted Federal funding to stem cell lines already in existence.

At the time, the President himself recognized the great promise of stem cell research. He sought to find middle ground, announcing a policy that provided Federal funding for more than 60 preexisting genetically diverse stem cell lines. This was morally acceptable, he said, because the life-or-death decision for these stem cell lines had already been made.

Unfortunately, the policy did not work out as promised. These available lines are all contaminated with mouse feeder cells and, therefore, are useless for human research purposes. They don't have the diverse genetic makeup that may be necessary to find cures to benefit all Americans. Researchers cannot use them to examine rare and deadly genetic diseases.

Castle-DeGette states that embryos to be discarded from in vitro fertilization clinics may be used in federally funded stem cell research no matter when they were created.

While opponents have suggested that this bill will lead us down a slippery slope, the parameters created by the bill are actually numerous and they are very strict:

The embryos must be left over following fertility treatment.

It must be clear that the embryos will be discarded.

The people donating the embryos must provide written consent.

These donors may not be compensated for their donation.

These restrictions mean that over 400,000 embryos could become available, all while ensuring that researchers meet the highest of ethical standards.

Let us be clear. We are talking about embryos that will be destroyed whether or not this bill becomes law. It is an indisputable fact that these embryos have no future.

We should not confuse the research permitted under this bill with the activities described under the two other bills currently before us. I am going to support these bills. Yet it is important to realize that their passage will do nothing to change the status quo.

The Fetus Farming Prohibition Act bans activities that occur in horror movies, not in our research labs. We should not allow these farfetched and frightening techniques, which no respected scientist anywhere endorses, to distract from the plight of millions of Americans seeking cures from devastating diseases.

This debate is also not about the myriad research approaches envisioned in the Alternative Pluripotent Stem Cell Therapies Enhancement Act, as introduced by my colleagues, Senators SPECTER and SANTORUM. This research can already be funded with Federal dollars. Respected scientists are examining a variety of ways to create these multipurpose cells and, of course, this work should continue.

We simply don't know which research approaches will prove fruitful and which will fail. Alternative techniques may lead eventually to cures for serious afflictions, or they may not. Scientists, not Senators, should determine what research to pursue.

Supporting only the Specter-Santorum alternative is not an endorsement of stem cell research. It is an affirmation of a policy that is leaving American researchers far behind in one of the most important fields of scientific discovery, and I want to spend a moment on that.

Because of President Bush's restrictions, some of our best and brightest scientists are leaving the United States to work overseas in countries that have embraced the promise of comprehensive stem cell research. This brain drain has hit my State particularly hard. Let me give you a few examples.

Roger Peterson, a renowned scientist, left the University of California Medical Center in San Francisco in 2001, citing the unfriendly research climate in the United States. He is now conducting human stem cell research at Cambridge University in the United Kingdom. He and his UK team are exploring the biology behind pluripotent, or multipurpose stem cells, and are looking for ways to use them for treatment. He would not have had Federal funding to do this work in the United States, so he left.

Dr. Judith Swain, from the University of California San Diego, will leave for Singapore in September, where she will work at Singapore's state-funded research institute called Biopolis. Her husband, Dr. Edward Holmes, also of the University of California at San Diego, is a ranking official in California's stem cell agency. He is also leaving for Singapore.

NIH researchers, Neal Copeland and Nancy Jenkins, turned down offers to join Stanford University's stem cell department. They, too, are moving to Singapore. Copeland has said that he selected Singapore because of its ''unfettered support of human embryonic stem cell research.''

These are but a few examples of the costs of this President's policy.

Researchers are attracted by the federal funding provided in at least 10 other nations—Germany, Finland, France, Sweden, United Kingdom, South Korea, Singapore, Israel, China, and Australia. These investments total hundreds of millions of dollars that are already producing tangible progress.

Sweden funds, with federal funds, 400 researchers today. South Korea and China are each funding an additional 300. Australia has pledged $90 million through 2011. This investment has already paid off, as Australian researchers have discovered a way to manipulate stem cells into lung cells. This technology could one day be used to treat cystic fibrosis.

Scientists from around the world have come to Singapore's Institute of Bioengineering and Nanotechnology. There, they are using stem cells to produce artificial kidneys. This could one day free people from the burden of kidney dialysis.

Researchers in other countries now author an increasing proportion of stem cell papers than those in the United States.

Foreign researchers have derived almost three-quarters of the world's new

stem cell lines, moving quickly ahead of our country, the United States.

Other nations have the money, the researchers, the facilities, and the new stem cell lines they need to move forward. They are learning more about stem cells every day and laying the foundation for groundbreaking cures.

American scientists, on the other hand, cannot obtain Federal funding to do this work. These Federal funding restrictions have a real world impact on ongoing research.

American scientists are making great strides with work on mouse stem cells. They are showing what could be possible if there is Federal funding to extend this work into humans.

Researchers at Stanford University have recently turned cells derived from mouse embryos into one of the building blocks of blood vessels. This advance means they may eventually be able to grow entirely new blood vessels, offering great promise to patients suffering from heart disease. But without Federal funds, it is unlikely they can get the stem cell lines to be able to do the human research.

A research team at Johns Hopkins used cells from mouse embryos to regenerate nerves in paralyzed rats. After treatment, many of the rats regained enough strength to walk and bear weight on their previously paralyzed hind legs.

Mr. President, do you know what this means? This means it might—just might—be possible to do something science said could never be done, and that is to regenerate a severed spinal column, to regenerate the nerves which scientists always thought never again could be regenerated.

We would never have thought discoveries such as this were possible even a few years ago. So think of what it means for every paraplegic or quadriplegic to know that there is hope out there, that the first rat tests have shown it works?

The next step is the human stem cell lines, to be able to carry out that research on humans, and that is exactly what we are talking about today.

Scientists now must work to translate these promising advances into cures for humans. Such a feat will almost certainly require access to viable lines of human stem cells, and unless we pass Castle-DeGette and unless the President signs Castle-DeGette, these lines will not be available in the United States to regenerate a severed spinal column, to regenerate blood vessels, or to do anything else.

Mike Armstrong, an old friend and chairman of the Johns Hopkins board of trustees, made this very point in a letter he wrote stating news of this advance. Here is what he said:

> Treatments not only for paralysis, but for ALS, for multiple sclerosis, and similar diseases of the brain now seem possible. The exact timeframe is impossible to predict, but it will almost certainly depend on the availability of Federal funding.

It will depend on the availability of Federal funding, and that is what is at stake in this debate. He goes on to say:

> The level of funding that will ultimately be required to advance this field of science to human trials, however, suggests that Federal funding will be necessary. Yet, under current Federal policy, the only stem cell lines eligible for Federal funding were created using mouse feeder cells and could never be used in clinical trials with humans.

Could never be used in clinical trials for humans.

I am particularly proud of the commitment demonstrated by California scientists and activists in the face of these restrictions. In 2004, California voters approved a proposition, proposition 71. That proposition created and funded the California Institute of Regenerative Medicine. It funded it with $3 billion of taxpayers' dollars over 10 years, and it supported promising research conducted in my State. This work will be done with careful ethical oversight. It also bans human reproductive cloning, something we all agree is immoral and unethical.

This investment, hopefully, once it gets past the court tests, will make California a leader in this industry and in finding cures that will change the lives of suffering patients.

Other States are making similar investments. Connecticut, Illinois, New Jersey, Maryland, and others are considering after 5 years of delay because of the restriction on Federal funding—they are taking steps to move this important work forward on a State basis. But—and here is the but—a patchwork, State-by-State approach is no way to run science policy. States have many other responsibilities, such as funding education, building infrastructure, and so on, and we shouldn't expect them to solely carry the burden of funding one of the most promising fields of science.

There is a reason we invest so much in the National Institutes of Health and the biomedical research they conduct. The NIH can then set national standards and ensure that research is not being duplicated and to see that it is carried out under ethical standards. This is something everyone should want. You should want that Federal oversight of NIH over all research funding that is funded with Federal dollars.

It is also important to remember that this debate is about real people whose lives are impacted by illness every single day, day in, day out. I have heard from so many Californians who have been personally impacted by diseases that could one day be cured with stem cell research. I want to tell a few of those stories.

Leslie Bishop Franco from Oakland, CA, wrote to me to say she supports stem cell research because her mother was diagnosed with Alzheimer's at the age of 57. Her mother quickly became unable to work and then unable to care for herself. Leslie and her sisters and brothers cared not only for their own young children but also for their mother. This is something many families know all too well.

Leslie writes that even if stem cell research does not ''lead to a cure for Alzheimer's as it has the potential in other diseases like Parkinson's and diabetes, it will provide crucial insights into the disease and the usefulness of new drugs.''

Mark Siegel from Los Angeles has suffered from Parkinson's for 8 years. For over half the time he has been ill, the President's policies have slowed stem cell research. Mark was diagnosed when he was 36 years old. One of my sons-in-law was just diagnosed, and he is 44 years old.

What happens is Parkinson's slowly erodes one's motor control. Mark Siegel's condition had forced him to change jobs, and he is afraid we are losing the race against time to find a cure and save his life.

Jennifer Heumann from Huntington Beach, CA, has been living with juvenile diabetes since she was 2 years old, and she is now 16. She says diabetes hasn't stopped her from playing varsity tennis or going to high school dances, but she knows her disease can cause serious complications. Without a cure, she has a 65-percent chance of dying from heart disease or stroke and a 60-percent chance of developing nervous system damage.

Jennifer writes:

> These are the cold, hard facts, but I am not content to admit they are my destiny. I believe that a cure is in sight, and that embryonic stem cell research may be the key to finding this cure. If this is the case, how can we justify passing up this opportunity?

We all should ask that question. This impressive young woman is hard to argue with. She makes a very eloquent point, and until we know what kinds of research could lead to cures for these catastrophic diseases, we should support scientists and we should push ahead every possible lead.

These patients and family members represent only a few of the tens of thousands of Californians I have heard from who support stem cell research. As a matter of fact, by the latest poll, 72 percent of Americans support stem cell research.

We don't want to spread false hope. There is still much we don't understand about stem cells. Some of the cures may never come to fruition, but unless we allow our scientists to continue their work, we will never, ever know. How can any of us tell a patient suffering from juvenile diabetes, a cancer victim, or a young man with heart disease, that the Senate decided not to allow researchers to pursue all the scientific leads that may one day offer them a cure? How can we say that? How can we say we know better? How can we say because of a small proportion of people's beliefs we are going to stop all Federal research in the United States of America?

Last week, Karl Rove declared that the President is emphatic about vetoing this legislation. I hope not. The President himself acknowledged the great promise of stem cells back in 2001, and with the health of millions of Americans at stake, it is my hope that if and when this bill tomorrow afternoon passes the Senate and if and when

it goes to the President of the United States, he will reconsider his veto threat. Too many lives depend upon the advances which may well be possible.

Either you are for stem cell research or you are not. It is that simple. True support for stem cells means lifting the restrictions from hampering some of the most promising research, and only Castle-DeGette, only H.R. 810 will do that. No matter what the President decides on other legislation we are considering today, rejecting H.R. 810 is a rejection of science. It is a rejection of the hopes of millions of patients. This vote and the President's reaction to it should not be about assuaging a small but vocal minority with views far from the mainstream of 72 percent of the American people. Patients and their families deserve more than the President's first veto. How would you like it if you were President of the United States and the first veto of your political career were a veto of the one thing that offers hope for millions of Americans suffering from catastrophic disease? The one thing out there.

I want to assure these patients that my colleagues and I will not stop fighting for this. We will continue to push in every way possible. Patients suffering from these catastrophic illnesses have already waited too long. American scientists have already fallen behind their international counterparts, and the time has come to finally pass Castle-DeGette on a sweeping bipartisan basis, just as the House of Representatives did 13 months ago.

Thank you very much. I yield the floor.

The PRESIDING OFFICER. Under the previous order, the next 30 minutes will be controlled by the majority.

Mr. COBURN. Mr. President, Senator BROWNBACK has graciously allowed me to take 10 minutes of his time. I would like to do that at this time.

First of all, I would like to set the record straight: the United States remains the world's leader of published stem cell articles and human embryonic stem cell articles. Specifically, it was April 6 of this year when that statement was made. From 1998 through the end of 2005, the United States published 46 percent of all papers published worldwide—by far the single largest proportion. The remaining 54 percent was divided among 17 other countries.

Mr. President, I ask unanimous consent to have printed in the RECORD the latest peer review articles that have been brought up to date for this year. This is about 15 pages long, and it has multiple entries. For every disease that has been mentioned on the Senate floor by those supporting the embryonic stem cell research, there are treatments ongoing today using adult stem cells.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. COBURN. Mr. President, the other thing I think we ought to make sure of—and I just want to go back. The Senator from California claims 72 percent of Americans favor stem cell research. That is true. That is true, if you ask it that way. But if you ask it: Should your tax dollars be used to destroy embryos to then create a research mechanism, it falls to 38 percent. So there is a difference between the ethical dilemma. I understand people can honorably disagree on the ethical dilemma, but we ought to be truthful about what the polling actually says. If you specifically say what we are doing, you get a much different answer.

I want to talk for a minute about something the majority leader discussed. He is a transplant surgeon. There are two problems transplant surgeons face. One is enough organs, which is a difficult problem in our country today, but the second problem is rejection. Nobody is talking about the long-term consequences of where we go.

Let's assume everything that everyone says about embryonic stem cell research is right. I am highly skeptical of that, but let's assume that it is. You still have this little problem called histocompatibility; in other words, rejection. Whatever you do with it, you are going to have a problem with rejection. And the thing that is so exciting about germ cell—and I want to explain that for a minute. Germ cells—pluripotent stem cells—just as powerful as embryonic, they can do everything that embryonic can. They don't have that problem. No. 1, they are pluripotent; No. 2, they continue to reproduce pluripotent cells just like embryonic. That is new research. That is 6 months old. It was discovered here first. It was duplicated in Germany last month. So that is a brand new study.

The point is, you don't have rejection because you are taking your own cells to create a pluripotent cell, and that is the wonderful thing about adult stem cells, about cord blood stem cells, about germ cells, is that they create a pluripotent cell. There is no rejection. So when you hear all the talk about embryonic stem cell research, the thing to remember is when you get the treatment, you are going to have the side effects like everybody else who has the transplant—if it works—and that is immune-suppressive drugs. You are going to have to have them. The only way not to have that is to do fetal farming or human cloning, where you clone yourself and then take part of what you have cloned back, which we already know is illegal and is banned. So it is important for the debate to focus on that.

Everybody in this country wants cures. Everybody wants to do the thing that will get us there the fastest with the least complications, and we want to invest our dollars in what will be most successful.

One of the things my dad taught me is to look around the world, and if you want to see what is happening, follow the money. If you look around the world today, the world as a whole, and you look at where the money is being spent, it is not being spent on embryonic stem cells. It is being spent on stem cells from us, just like we had the debate a moment ago. We now know ductal cells from somebody's pancreas can create new insulin-producing cells. We know now the mucosa, the lining of your mouth, can create cells to make you a new cornea. You don't have to have a cornea transplant in the future because your own cells are going to be able to create a new cornea. We also know that we have stem cells in our body that can take away cystoid macular edema, this aging process where we as seniors start to lose our vision—the cloudiness—the macular area of the retina starts to fall away. All of these wonderful things that we are doing versus nothing that has been accomplished.

I also would refer to the reference of the Senator from California to the renal success. It wasn't done with an embryonic stem cell, it was done with an adult stem cell. That research was all adult stem cells. So we end up tending to confuse what has really happened.

The fact is, all the success in treatment, all the success in terms of who is willing to invest private capital, where they are putting it, they are not putting it in embryonic. There is a reason for it. It is because in the long term it won't be the best treatment. It is fun science. As a doctor, I will tell you there could be no more fun or rewarding or interesting science than embryonic stem cell because you can turn things on and turn things off. There is no question about it. But what we are finding out is you can actually do that with our own cells, our own stem cells.

This idea of de-differentiation—and I want to explain that for a minute because we are going to hear a lot about it in the next 10 years—we take one of your stem cells, one of your multipotent—not totipotent, not pluri potent, but multi—and reverse its mechanism where we make it pluripotent. We are doing that in several stem cells now with an enzyme called reversa, where they are reversing the cell structure and making it revert back to what it was; in other words, grow in reverse to become pluripotent.

So I hope everybody will remember, this isn't a choice about cures or no cures. We are getting cures like crazy right now with adult stem cells and cord blood. We are going to be doing tons more when this germ cell comes forward. There is no question the scientific community is extremely excited about germ cell pluripotent stem cells because it has all the potential that an embryonic stem cell has and none of the problems.

With that, I yield back my remaining time, and I thank the Senator from Kansas.

EXHIBIT 1

PEER-REVIEWED REFERENCES SHOWING APPLICATIONS OF ADULT STEM CELLS THAT PRODUCE THERAPEUTIC BENEFIT OR HUMAN PATIENTS (NOT A COMPLETE LISTING, SAMPLE REFERENCES)

ADULT STEM CELLS—HEMATOPOIETIC REPLACEMENT

CANCERS

Brain tumors—medulloblastoma and glioma

Dunkel, IJ; ''High-dose chemotherapy with autologous stem cell rescue for malignant brain tumors''; Cancer Invest. 18, 492–493; 2000

Abrey, LE et al.; ''High dose chemotherapy with autologous stem cell rescue in adults with malignant primary brain tumors''; J. Neurooncol. 44, 147–153; Sept. 1999

Finlay, JL; ''The role of high-dose chemotherapy and stem cell rescue in the treatment of malignant brain tumors: a reappraisal''; Pediatr. Transplant 3 Suppl. 1, 87–95; 1999

Retinoblastoma

Hertzberg H et al.; ''Recurrent disseminated retinoblastoma in a 7-year-old girl treated successfully by high-dose chemotherapy and CD34-selected autologous peripheral blood stem cell transplantation''; Bone Marrow Transplant 27(6), 653–655; March 2001

Dunkel IJ et al.; ''Successful treatment of metastatic retinoblastoma''; Cancer 89, 2117–2121; Nov. 15, 2000

Ovarian cancer

Stiff PJ et al.; ''High-dose chemotherapy and autologous stem-cell transplantation for ovarian cancer: An autologous blood and marrow transplant registry report''; Ann. Intern. Med. 133, 504–515; Oct. 3, 2000

Schilder, RJ and Shea, TC; ''Multiple cycles of high-dose chemotherapy for ovarian cancer''; Semin. Oncol. 25, 349–355; June 1998

Merkel cell carcinoma

Waldmann V et al.; ''Transient complete remission of metastasized merkel cell carcinoma by high-dose polychemotherapy and autologous peripheral blood stem cell transplantation''; Br. J. Dermatol. 143, 837–839; Oct. 2000

Testicular cancer

Bhatia S et al.; ''High-dose chemotherapy as initial salvage chemotherapy in patients with relapsed testicular cancer''; J. Clin. Oncol. 18, 3346–3351; Oct. 19, 2000

Lymphoma

Tabata M et al.; ''Peripheral blood stem cell transplantation in patients over 65 years old with malignant lymphoma—possibility of early completion of chemotherapy and improvement of performance status''; Intern Med 40, 471–474; June 2001

Josting, A; ''Treatment of Primary Progressive Hodgkin's and Aggressive Non-Hodgkin's Lymphoma: Is There a Chance for Cure?''; J Clin Oncol 18, 332–339; 2000

Koizumi M et al.; ''Successful treatment of intravascular malignant lymphomatosis with high-dose chemotherapy and autologous peripheral blood stem cell transplantation''; Bone Marrow Transplant 27, 1101–1103; May 2001

Non-hodgkin's lymphoma

Buadi FK et al., Autologous hematopoietic stem cell transplantation for older patients with relapsed non-Hodgkin's lymphoma, Bone Marrow Transplant 37, 1017–1022, June 2006

Tabata M et al.; ''Peripheral blood stem cell transplantation in patients over 65 years old with malignant lymphoma—possibility of early completion of chemotherapy and improvement of performance status''; Intern Med 40, 471–474; June 2001

Josting, A; ''Treatment of Primary Progressive Hodgkin's and Aggressive Non-Hodgkin's Lymphoma: Is There a Chance for Cure?''; J Clin Oncol 18, 332–339; 2000

Kirita T et al.; ''Primary non-Hodgkin's lymphoma of the mandible treated with radiotherapy, chemotherapy, and autologous peripheral blood stem cell transplantation''; Oral Surg Oral Med Oral Pathol Oral Radiol Endod. 90, 450–455; Oct. 2000

Hodgkin's lymphoma

Peggs KS et al., ''Clinical evidence of a graft-versus-Hodgkin's-lymphoma effect after reduced-intensity allogeneic transplantion'', Lancet 365, 193–1941 ,4 June 2005

Josting, A; ''Treatment of Primary Progressive Hodgkin's and Aggressive Non-Hodgkin's Lymphoma: Is There a Chance for Cure?''; J Clin Oncol 18, 332–339; 2000

Acute lymphoblastic leukemia

Laughlin MJ et al.; ''Hematopoietic engraftment and survival in adult recipients of umbilical-cord blood from unrelated donors'', New England Journal of Medicine 344, 1815–1822; June 14, 2001

Ohnuma K et al.; ''Cord blood transplantation from HLA-mismatched unrelated donors as a treatment for children with haematological malignancies''; Br J Haematol 112(4), 981–987; March 2001

Marco F et al.; ''High Survival Rate in Infant Acute Leukemia Treated With Early High-Dose Chemotherapy and Stem-Cell Support''; J Clin Oncol 18, 3256–3261; Sept. 15 2000

Acute myelogenous leukemia

Laughlin MJ et al.; ''Hematopoietic engraftment and survival in adult recipients of umbilical-cord blood from unrelated donors'', New England Journal of Medicine 344, 1815–1822; June 14, 2001

Ohnuma K et al.; ''Cord blood transplantation from HLA-mismatched unrelated donors as a treatment for children with haematological malignancies''; Br J Haematol 112(4), 981–987; March 2001

Gorin NC et al.; ''Feasibility and recent improvement of autologous stem cell transplantation for acute myelocytic leukaemia in patients over 60 years of age: importance of the source of stem cells''; Br. J. Haematol. 110, 887–893; Sept 2000

Bruserud O et al.; ''New strategies in the treatment of acute myelogenous leukemia: mobilization and transplantation of autologous peripheral blood stem cells in adult patients''; Stem Cells 18, 343–351; 2000

Chronic myelogenous leukemia

Laughlin MJ et al.; ''Hematopoietic engraftment survival in adult recipients of umbilical-cord blood from unrelated donors'', New England Journal of Medicine 344, 1815–1822; June 14, 2001

Ohnuma K et al.; ''Cord blood transplantation from HLA-mismatched unrelated donors as a treatment for children with haematological malignancies''; Br J Haematol 112(4), 981–987; March 2001

Juvenile myelomonocytic leukemia

Ohnuma K et al.; ''Cord blood transplantation from HLA-mismatched unrelated donors as a treatment for children with haematological malignancies''; Br J Haematol 112(4), 981–987; March 2001

Chronic myelomonocytic leukemia

Elliott MA et al., Allogeneic stem cell transplantation and donor lymphocyte infusions for chronic myelomonocytic leukemia, Bone Marrow Transplantation 37, 1003–1008, 2006

Angioimmunoblastic lymphadenopaihy with dysproteinemia

Lindahl J et al.; ''High-dose chemotherapy and APSCT as a potential cure for relapsing hemolysing AILD''; Leuk Res 25(3), 267–270; March 2001

Multiple myeloma

Aviles A et at., Biological modifiers as cytoreductive therapy before stem cell transplant in previously untreated patients with multiple myeloma, Annals of Oncology 16, 219–221, 2005

Vesole, DH et al.; ''High-Dose Melphalan With Autotransplantation for Refractory Multiple Myeloma: Results of a Southwest Oncology Group Phase II Trial''; J Clin Oncol 17, 2173–2179; July 1999.

Myelodysplasia

Ohnuma K et al.; ''Cord blood transplantation from HLA-mismatched unrelated donors as a treatment for children with haematological malignancies''; Br J Haematol 112(4), 981–987; March 2001

Bensinger WI et at.; ''Transplantation of bone marrow as compared with peripheral-blood cells from HLA-identical relatives in patients with hematologic cancers''; New England Journal of Medicine 344, 175–181; Jan 18 2001

Breast cancer

Damon LE et al.; ''High-dose chemotherapy and hematopoietic stem cell rescue for breast cancer: experience in California''; Biol. Blood Marrow Transplant 6, 496–505; 2000

Paquette, RL et al., ''Ex vivo expanded unselected peripheral blood: progenitor cells reduce post-transplantation neutropenia, thrombocytopenia, and anemia in patients with breast cancer'', Blood 96, 2385–2390; October, 2000.

Stiff P et al.; ''Autologous transplantation of ex vivo expanded bone marrow cells grown from small aliquots after high-dose chemotherapy for breast cancer''; Blood 95, 2169–2174; March 15, 2000

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ADULT STEM CELLS—IMMUNE SYSTEM REPLACEMENT

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IMMUNODEFICIENCIES

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ADULT STEM CELLS—REPAIR/REPLACMENT OF SOLID TISSUES

METABOLIC DISORDERS

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OCULAR

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Tsubota K et al.; ''Treatment of severe ocular-surface disorders with corneal epithelial stem-cell transplantation''; New England Journal of Medicine 340, 1697–1703; June 3, 1999

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Skull bone repair

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HEART DAMAGE

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NEURAL DEGENERATIVE DISEASES & INJURIES

Stroke

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Spinal cord injury

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LIVER DISEASE

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Liver cirrhosis

Terai S et al., Improved liver function in liver cirrhosis patients after autologous bone marrow cell fusion therapy, Stem Cells published online 15 June 2006; DOI: 10.1634/stemcells.2005–0542

BLADDER DISEASE

End-stage bladder disease

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Mr. BROWNBACK. Mr. President, I want to thank my colleague from Oklahoma. He is learned. He has spent the time to study these issues as a doctor. He has worked on these issues and he cares a great deal about them, and I appreciate his time and his focus on this issue.

I want to discuss a few additional things in response to the comments that have been made thus far. I want to get back to what we are talking about. We are talking about destroying young human life for research purposes. I will show a picture of that so people will get the idea—and I know people do—but it is important to remember we all started out looking like this. Even the Presiding Officer, as handsome as he is, looked like this at one point in time. Just a clump of cells—that was him.

This is a particular young person by the name of Hannah with whom I just met a few hours ago. This is when she was adopted as a frozen embryo, and this shows her development taking place. If you destroy her here, we don't get her here. That is the key. She was called a snowflake: an adopted frozen embryo.

I hope some people who are maybe watching or hear about this, if they have frozen human embryos, they consider putting them up for adoption because a number of people want to adopt them.

A couple of people adopted Hannah. They had fertility problems themselves, could not conceive. They used IVF, and so adopted her as a snowflake, as a frozen embryo. She was implanted, and now we have Hannah. Hannah is quite—I guess you would say out of the mouths of babes, children, comes great wisdom.

This is a chart she did last year when she was in Washington. When the House was considering legislation—this same legislation—she did this chart, this letter that kids write, my kids write—I love them. She said—this is

Hannah—snowflake: We're kids, I love you. Then she draws three pictures here below. This is her smiling because she got adopted, and she is here. Here is another frozen embryo—these are embryos—that is sad because he is still sitting in a frozen state, and then here is one that, as she explains, is saying: What, are you going to kill me? This was her explanation to her mother who just gave this chart to me.

I hope people really would think about that. This is not just a clump of tissue. This is not just a group of a few cells. This is not a hair follicle. This is not a fingernail. This is Hannah. And, if nurtured, she grows to be just this beautiful child. We have a lot of them, frozen embryos, and I hope people will consider putting them up for adoption because there are a lot of people who want to adopt them.

My colleagues talked about cures. I want cures. I have talked a lot about cures here on the floor. I have talked about it for a lot of years. There are 72 clinical human trials using adult cord research. If we want the people Senator FEINSTEIN and others talked about to get cures now, the certain way to do this is to not fund embryonic stem cell research. The people she is talking about are not going to be cured any time soon.

I want to read some quotes from scientists talking about cures from embryonic stem cell research. I want to lay my hands on this real quick so that people can hear what the scientists are saying about this particular area. Let me get to that in a second, as soon as we can pull that out from the notebook.

I want to hit a second point on this and then print this for the RECORD. Mr. President, I will ask unanimous consent that this be printed in the RECORD at the end of my statement.

Mr. President, this is a series of one-page—a cover article on stem cells, embryonic stem cells forming tumors. We have talked about this being a problem. This has been a problem on fetal tissue research, about 15 years ago. This stack is of the front pages of peer-reviewed articles citing embryonic stem cells creating tumors when implanted in other animals. Let me just read a few of these summations. This is just the front cover, and people can look up the whole article if they want.

More than 70 percent of the mice that received embryonic stem cells derived neuro processors—or precursor cells developed teratomas, 70 percent teratomas, tumors. That was a 2006 article.

Rats grafted with embryonic stem cells de-differentiated in vitro for 16 days developed severe teratomas—tumors. This is an article for publication, March of 2006. I am just reading the front page of these.

Here is another article, a 2005 article. We conclude that pluripotent cell types used in this study are unsuitable for achieving safe engraftment in a Guinea pig brain. Why? Creation of teratomas—tumors.

Unlimited self-renewal and high differentiated potential poses the risk of tumor induction after engraftment. This is just the front page of another article, December of 2004.

Here is another article. Conclusions: the cells will, however, form a tumor if they leak into an improper space such as the thoracic cavity. This is an article from 2003.

Then I have three more articles. These are just summations of peer-reviewed articles. They form tumors. That is the problem with embryonic stem cells.

So the Senators from California, Michigan, Iowa, and Pennsylvania and other places saying we want cures—I want cures. The research is saying embryonic stem cells form tumors. You put them into individuals, they form tumors. And while we hope at some point in time something positive happens, the problem is, they form tumors. This isn't working. So if we want treatments and cures, the answer isn't embryonic stem cells, it is adult stem cells, cord blood, where we don't have a tumor formation problem and where we are getting all of these initial successes that are taking place

We are also going to consider legislation—and I will come back to another point here—we are going to consider legislation on fetus farming. There are three bills that are up and one of the bills is to ban fetal farming—fetus farming. I want to speak on that bill. I am a cosponsor of the bill. It would prohibit a gruesome procedure known as fetus farming. I am hopeful this passes with broad bipartisan support.

What this prevents is growing young humans to a certain stage, then harvesting their parts like an organ donor—parts. You grow a cloned human to a certain stage, let the cells differentiate and then harvest the parts. The Fetus Farming Prohibition Act is intended to prevent the exploitation of women for the purpose of harvesting spare organs, bodies parts, and tissue. In an ideal world we wouldn't need this type of legislation, yet we have already seen four scientific papers published on proof of concept of where they clone an animal to harvest the tissue to put into another animal to see if there was a rejection issue. Such proof of concept or proof of principle is simply the first case you take before actually moving to doing it in humans. That is why we seek to ban this particular procedure.

Some of my colleagues are saying of course nobody would think about doing this. I remember at the outset of this debate 8 years ago, everybody said of course we are not going to clone human beings. That is not necessary; that is abhorrent, and we wouldn't do that. The same people who were saying that are now saying it is essential we clone human beings, so the distance from ''of course we would never'' to ''of course we must'' seems to only take a matter of years and that is why we are seeking to ban this particular area of using human beings. Human beings, as I said at the outset, are ends in themselves. They should not be used for somebody else's purposes. It is beneath human dignity to turn humans into commodities—that is organ factories—and that would be the case with fetus farming. That is what this act does; it prohibits it. I am hopeful my colleagues can strongly support this ban on fetal farming that is going to come before this body and I hope will pass the House and be sent to the President for signature.

I want to talk about an area that perhaps we all pretty easily fall into. That is, we get contacted by individuals who have a particular malady or disease or genetic problem and we tell them we want to give them a cure.

We do want to give them a cure. Everyone in this body wants to give them a cure. But then false hope can be held out or people can start down a road that doesn't produce. That is where we have been going. That is where we are going with the embryonic stem cells. This is a route into which we put half a billion Federal taxpayer dollars and it hasn't produced. It is time to move somewhere else. We have tried this route before.

I want to quote one of my colleagues on fetal tissue research. Some of my colleagues remember 10 or 15 years ago we were debating fetal tissue research. The promises sound strangely familiar, what people said.

> There is substantial evidence that fetal tissue research will offer a new hope of prolonged life, greater quality of life, and perhaps one day even a cure for many of these diseases at a tremendous economic and social cost-saving to the country.

Then people frequently would list different areas that would be covered, such as Alzheimer's and Parkinson's disease and the like.

We funded fetal tissue research. The reason I mentioned this is it is quite a bit like fetal farming. In fetal tissue research the fetus is aborted and then body parts harvested for use in somebody else, and that was going to cure everybody. We were going to get rid of Alzheimer's and Parkinson's and Lou Gehrig's and cancer and all these areas with great promise. Yet we saw what happened on the fetal tissue research.

> Parkinson's research is set back by failure of fetal cell grants—disastrous side effect—absolutely devastating—it was tragic, catastrophic, it's a real nightmare. And we can't selectively turn it off.

That was what the researchers said when they took fetal tissue and put it in somebody to deal with Parkinson's disease. What we are trying to prohibit with the Fetal Farming Act is this from backing up even further, or doing it in a clone state, and inserting cancerous tumors into individuals. You can't selectively turn it off. That is why we want to ban this. That is why it is the wrong thing to do. It was the wrong thing to do then, using fetal tissue in that particular case.

It is also the wrong thing to promise people these cures when we look at the

science of this and you know pretty likely this is not going to work—from all the scientific evidence. Let me read from some of the eminent scientists. By the way, the material I had printed for the RECORD on tumor formation, I believe every one of these scientists, at least most of the scientists published in these articles, are pro embryonic stem cell research. They support embryonic stem cell research. They want it to work. The problem is, tumor formation, just as we saw with fetal tissue research. The cell grows fast, undifferentiated, but it can get in the brain and in some cases formed fingernails or hair follicles instead of brain tissue.

What are some of the scientists who are strong embryonic stem cell supporters saying about the likelihood of human treatments using embryonic stem cells? Here I am quoting from people who support this research. Lord Winston, a British stem cell expert, has warned his colleagues over the political hype in support of human embryonic stem cells:

One of the problems is that in order to persuade the public that we must do this work, we often go rather too far in promising what we might achieve. This is a real issue for the scientists. am not entirely convinced that embryonic stem cells will, in my lifetime, and possibly anybody's lifetime for that matter, be holding quite the promise that we desperately hope they will.

This was in a lecture he gave in 2005. If we want to cure people, as different colleagues are talking about and giving different human examples, people examples—this is a clear route here, adult and cord blood. Put the money there if we want to cure people. If we want to do the scientific research, that is another thing, but if we want to cure people, we have an answer and it has no ethical problem to it. But we should not overhype the embryonic stem cells when the lead scientist say he thinks it is unlikely any time soon, if ever, to work, as I just quoted to you there.

Let me give another quote from the journal ''Science.'' It carried a piece last summer in which supporters of embryonic—destructive human embryonic stem cell research admitted:

It is necessary that prospective donors of human eggs recognize the large gap between research and therapy. This is particularly important in frontier areas of research where therapeutic impact in humans is unproven.

Also, it is nearly certain that the clinical benefits of the research are years or maybe decades away. This is a message that desperate families and patients will not want to hear.

If we are talking cures, we have an answer here. But it is not embryonic stem cell research. Otherwise we should not be talking about cures. We should be talking maybe about research on embryos, research on embryonic stem cells. We are interested in how they work, but we should not be talking cures because the cures are coming in the adult and cord blood route.

I will have the ''Science'' article printed. I ask unanimous consent all these be printed in the RECORD at the end of my presentation.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. BROWNBACK. This is an op-ed piece in the Washington Post. David Shaywitz put it in, in 2005.

While stem cell advocates have helped voters connect stem cell research with compelling images of patients who might one day benefit from treatments, such therapies are unlikely to emerge soon enough to benefit most current proponents. . . .

. . . scientists must do a better job of articulating the limitations of our existing knowledge, taking care to emphasize not only the ultimate therapeutic potential of these cells, but also how far we are from achieving such therapies.

That is from scientists who support embryonic stem cell research. Let's be clear what we are talking about in this particular field.

Now I want to talk about the pluripotent nature of adult stem cells. Here, Dr. COBURN, Dr. FRIST, and others would be better qualified, obviously, than I could ever dream of being about this topic, but this has been raised for some period of time. The theory has gone, embryonic stem cells are pluripotent, they can form any type of cells. Adult stem cells cannot. Their plasticity is insufficient for them to be able to form other types of cells.

I simply point to this chart, listing 16 peer-reviewed studies showing alternative sources of pluripotent stem cells other than embryonic stem cells, and almost all of these are out of adult stem cells—pluripotency.

I urge my colleagues, the science has moved quite rapidly on this. I hope we can get up to speed with where the science is on this. There is pluripotency in other stem cells. There is pluripotency in cells other than the embryonic stem cells. We have the alternative bill, the Santorum-Specter bill, looking at other alternative sources of embryonic-type like stem cells that you do not have to destroy an embryo to get to. Look at those fields and those areas, these adult stem cells and this research, rather than saying the only source is embryonic, because it is not. That is not the only source because the science continues to move on through this and find other areas of pluripotency in adult stem cells as they are created.

Because I have a little bit of time—I ask the Chair, how much time is remaining?

The PRESIDING OFFICER. The Senator has 4½ minutes.

Mr. BROWNBACK. Fantastic. I have a picture I want to show, then, because this is a real hope. It is also a bit of a tragedy. Here is a gentleman I hosted at a hearing about Parkinson's disease. He suffers from Parkinson's disease. He had an adult stem cell treatment. We got him in to testify. It is adult stem cells put back in his own part of the brain, it is his own cells, so there is not a rejection problem. He was Parkinson's free for 5 years. We had trouble getting him in to testify. He was out doing African safaris and things. We couldn't get him to come in.

I say that because that is the beauty of it. The tragedy of it is some of the Parkinson's traits are coming back. He would love to have another treatment for Parkinson's with his own adult stem cells. Yet we have so few clinical trials going on, we are so short in the funding of this, that he is not able to get additional treatments or other Parkinson's patients aren't able to get this.

I ask my colleagues, if we want to treat, let's take the half a billion dollars and let's put it into research for a guy such as this, where we have a real promising start. He was Parkinson's free of things here for 5 years, and then it started coming back.

My final comment I have in the time I have left is: What a beautiful time. What an opportunity we have for people to live longer and better lives. This is a glorious time for us to make a step forward.

Senator FEINSTEIN from California and I cochair the cancer caucus. We are setting an objective of ending deaths by cancer in 10 years. It is going to have to be aggressive to be able to do this. We are going to have to do some work on these adult and cord blood stem cell areas. What a beautiful time. Let's invest wisely. Let's not check our morals at the door—our values. Let's treat every single human as a sacred, beautiful child of the living God and we are going to be here 10 years from now with amazing stories of things that have happened, and a happy heart, and a clear conscience at the same time—that we did it, we did it the right way, that more people are alive today, not dead, we didn't sacrifice other human beings in the process, and people are cured. People with spinal cord injuries are walking. People with Parkinson's no longer have it.

We have people in whom this is taking place today. We didn't give them cancer in the process of trying to cure them—where we are having the troubles with the embryonic stem cells.

This can happen if we will go the right way, ban the fetal farming, not expand and use taxpayer dollars to fund destructive human embryonic research where you destroy a human, and look at these alternatives. It can and it will happen. And that—that is going to be a beautiful day.

I believe my time has expired and I yield the floor

EXHIBIT 1

STEM-CELL REALITY: ''ESC TREATMENTS DECADES AWAY''

''Similarly, it is important not to use the term 'therapy' when what is meant is 'research' and not to refer to human embryonic stem cell research as 'therapeutic cloning.' There is currently no such thing as 'therapeutic cloning' and this is not 'therapeutic cloning research,' nor can we say with any certainty that ''cell therapy'' is in the near future.''

(Source: Magnus & Cho, ''Issues in Oocyte Donation for Stem Cell Research,'' Science Vol. 308, 1747–1748, June 17, 2005.)

Last summer, the prestigious journal Science carried a piece, in which supporters of destructive human embryonic stem cell research admit:

''It is necessary that prospective donors [of human eggs] recognize the large gap between research and therapy. This is particularly important in frontier areas of research where therapeutic impact in humans is unproven.

''Also, it is nearly certain that the clinical benefits of the research are years or maybe decades away. This is a message that desperate families and patients will not want to hear.

STEM-CELL REALITY: OVER-HYPED ESC'S

British Stem Cell Expert Lord Winston

Lord Winston, a British stem cell expert, has warned his colleague over the political hype in support of human embryonic stem cells:

''One of the problems is that in order to persuade the public that we must do this work, we often go rather too far in promising what we might achieve.

This is a real issue for the scientists. I am not entirely convinced that embryonic stem cells will, in my lifetime, and possibly anybody's lifetime for that matter, be holding quite the promise that we desperately hope they will.''

(Source: ''Should We Trust the Scientists?'' Gresham College Lecture, June 20, 2005)

STEM-CELL REALITY: ''ESC THERAPIES UNLIKELY SOON''

Harvard stem cell researcher—and proponent of destructive human embryonic stem cell research—David Shaywitz writes in an op-ed carried by the Washington Post:

''While stem cell advocates have helped voters connect embryonic stem cell research with compelling images of patients who might one day benefit from treatment, such therapies are unlikely to emerge soon enough to benefit most current proponents . . .

''. . . scientists must do a better job of articulating the limitations of our existing knowledge, taking care to emphasize not only the ultimate therapeutic potential of these cells, but also how far we are from achieving such therapies.''

(Source: David Shaywitz, ''Stem Cell Reality,'' The Washington Post, April 29, 2005.)

[From the New York Times, Mar. 8, 2001]

PARKINSON'S RESEARCH IS SET BACK BY FAILURE OF FETAL CELL IMPLANTS

(By Gina Kolata)

A carefully controlled study that tried to treat Parkinson's disease by implanting cells from aborted fetuses into patients' brains not only failed to show an overall benefit but also revealed a disastrous side effect, scientists report.

In about 15 percent of patients, the cells apparently grew too well, churning out so much of a chemical that controls movement that the patients writhed and jerked uncontrollably.

The researchers say that while some patients have similar effects from taking too high a dose of their Parkinson's drug, in this case the drugs did not cause the symptoms and there is no way to remove or deactivate the transplanted cells.

On the researchers' advice, six patients who enrolled in the study but who had not yet had the implantation operation have decided to forgo it.

The results, reported today in The New England Journal of Medicine, are a severe blow to what has been considered a highly promising avenue of research for treating Parkinson's disease, Alzheimer's disease and other neurological ailments. The study indicates that the simple solution of injecting fetal cells into a patient's brain may not be enough to treat complex diseases involving nerve cells and connections that are poorly understood. Some say it is time to go back to the laboratory and to animals before doing any more operations on humans.

The findings may also fuel the debate over whether it is appropriate to use tissue from aborted fetuses to treat diseases. Despite their disappointment, some researchers said they hoped that the results would not bring fetal cell research to an abrupt halt. The research has been controversial because the fetal cells were obtained from abortion clinics.

''This is still our one great hope for a cure,'' said Dr. J. William Langston, who is scientific director and chief executive officer at The Parkinson's Institute in Sunnyvale, Calif.

Parkinson's disease occurs when cells of the substantia nigra region in the base of the brain die, for unknown reasons. The hope was that fetal substantia nigra cells might take over for them. But, the study showed, in older patients the operation had no benefit and in some younger patients, the transplants brought on nightmarish side effects.

Although the paper depicts the patients with the side effects in impassive clinical terms, doctors who have seen them paint a very different picture.

Dr. Paul E. Greene, a neurologist at the Columbia University College of Physicians and Surgeons and a researcher in the study, said the uncontrollable movements some patients suffered were ''absolutely devastating.''

''They chew constantly, their fingers go up and down, their wrists flex and distend,'' Dr. Greene said. And the patients writhe and twist, jerk their heads, fling their arms about.

''It was tragic, catastrophic,'' he said. ''It's a real nightmare. And we can't selectively turn it off.''

One man was so badly affected that he could no longer eat and had to use a feeding tube, Dr. Greene said. In another, the condition came and went unpredictably throughout the day, and when it occurred, the man's speech was unintelligible.

For now, Dr. Greene said, his position is clear: ''No more fetal transplants. We are absolutely and adamantly convinced that this should be considered for research only. And whether it should be research in people is an open question.''

Dr. Gerald D. Fischbach, who was director of the National Institute of Neurological Disorders and Stroke, which sponsored the study, said that while the operation had been promoted by some neurosurgeons as miraculous, this was the first time it was rigorously evaluated. It used sham surgery as a comparison, a controversial and rarely used strategy but one that researchers felt was necessary to understand the true effects of the operation.

Dr. Fischbach, who is now dean of the faculty of medicine at the Columbia University College of Physicians and Surgeons, was the director of the institute only at the end of the study.

''Ad hoc reports of spectacular results can always occur,'' Dr. Fischbach said. ''But if you do these studies systematically, this is the result you get.''

The surgery, he added, ''is not the final solution that people would have hoped going into it.''

In the study, researchers, led by Dr. Curt R. Reed of the University of Colorado Health Sciences Center in Denver and Dr. Stanley Fahn of the Columbia University College of Physicians and Surgeons, recruited 40 patients, ages 34 to 75, who had had Parkinson's disease for an average of 14 years. The patients were randomly assigned to have substantia nigra cells from four fetuses implanted in their brains or to have sham surgery, for comparison.

The surgery took place in Colorado and the patients were evaluated in New York. The fetal cell surgery involved drilling four small holes in the patient's forehead and then inserting long needles through the holes into the brain and injecting fetal cells. The sham surgery involved drilling the holes but not injecting needles into the brain. After a year, the patients were told whether they had the fetal cell surgery and, if not, they were offered it if they wanted it.

The study's primary measure of success was whether the patients themselves noticed that they were better, as determined by a survey that they mailed in a year later but before they knew whether they had had fetal cell implants or a sham operation. The study found no difference between the two groups—neither those who had had the fetal cell operation nor those who had had the sham surgery notice an improvement in their symptoms.

Other tests, like neurologists' assessments of the patients while they were taking their medication and the patients' assessments of their condition in diaries they kept also showed no effect of the surgery. And there was no difference between the two groups in the doses of drugs needed to control the disease.

The one glimmer of hope came from assessments by neurologists before the patients had had their first dose of medication in the morning. By that measure, the 10 patients under age 60 who had had the fetal cell implants seemed better than those who had had sham surgery, with less rigidity, although their tremor was just as bad.

Dr. Freed hailed that result, saying, ''It was clear-cut improvement.''

And, he added, the fetal cells survived in most patients' brains.

''I would be disappointed if people used a strict clinical trial approach,'' Dr. Freed said. ''This study is about multiple phenomena.''

Others were less enthusiastic, pointing out that finding subgroups after the fact who may have benefited suggests a hypothesis for future studies, not evidence of an effect.

''We try to teach everybody that you have to identify beforehand what's the primary outcome,'' said Dr. William Weiner, the director of the Maryland Parkinson's Disease and Movement Disorder Center and a professor of neurology at the University of Maryland School of Medicine in Baltimore, referring to the measure of success determined before the study began. ''In this case, they picked a subjective assessment by the patients themselves, which I think is a very good one.''

And so, Dr. Weiner said, when the patients noticed no improvement, ''the study was negative.''

In addition, Dr. Langston said, even if a Subsequent study confirmed that the surgery had an effect on the condition in younger patients before they took their medicine in the morning, and even if there was a way of preventing the terrible side effect, the operation would still hardly be a breakthrough. Parkinson's disease is almost always a disease of the elderly, he noted, adding that well under 10 percent of patients who would be candidates for the surgery are younger than 60.

The wiggling and writhing movements first emerged a year after the operation, showing up in five of the younger patients who had at first appeared to benefit from fetal cell surgery—three who had the operation in the initial phase of the study and two who had it a

year later, when they learned that they had originalIy had a sham surgery. While doctors sometimes see such effects in Parkinson's patients, it is caused by giving too much of drugs that act like dopamine in the brain. And it can be controlled by reducing the drugs.

In this case, however, drugs were not the culprit. Even when doctors took away the drugs, the symptoms persisted.

The fetal implant study had been controversial from the start, both because it included sham surgery and because it used fetal tissue from abortions. But many Parkinson's disease experts said it had to be done because doctors were already offering the surgery to patients, and charging them for it, at costs of $40,000 or more, with no evidence that they were helping them. Yet patients, facing a disease in which brain cells slowly and inexorably die and in which even the drugs that once controlled their symptoms of tremor and rigidity would inevitably fail, took their chances with the operation, thinking they had little to lose.

Dr. Freed said he was the first in the United States to offer the treatment, starting in 1988 with a 52-year-old man, who is still alive although, of course, he also still has Parkinson's disease.

Dr. Freed continued to offer it to paying patients while he was treating those who were part of the federal study and whose procedures were paid for by the study. He said he considered these other operations research because he experimented with different amounts and placements of fetal cells. He has given fetal cell implants to 27 patients, he said, with the most recent operation last October.

Dr. Freed said his group was now implanting less fetal tissue and putting the tissue in a different area of the brain, hoping to avoid the devastating side effects. But, he said it would be a mistake to stop doing the surgery altogether.

''To say that you can't do or shouldn't do human research because the research has uncertain outcome, I think would be a bad decision,'' Dr. Freed said.

Meanwhile, a second federally financed study of the operation is winding to a close, and some researchers say it is time to go back to animal studies and learn more about the complex roles of the brain cells involved in Parkinson's disease.

Dr. Weiner said that if a patient came to him today seeking advice, he would say: ''The bottom line for patients is that human fetal cell transplants are not currently the best way to go. If you are willing to pay for them, you can still have them done. But my advice is you ought not to do this.''

[From Stem Cells Express, Feb. 2, 2006]

EMBRYONIC STEM CELL-DERIVED NEURONALLY COMMITTED PRECURSOR CELLS WITH REDUCED TERATOMA FORMATION AFTER TRANSPLANTATION INTO THE LESIONED ADULT MOUSE BRAIN

(By Marcel Dihné)

ABSTRACT

The therapeutic potential of embryonic stem (ES) cells in neurodegenerative disorders has been widely recognized, and methods are being developed to optimize culture conditions for enriching the cells of interest and to improve graft stability and safety after transplantation. Whereas teratoma formation rarely occurs in xenogeneic transplantation paradigms of ES cell-derived neural progeny, more than 70% of mice that received murine ES cell-derived neural precursor cells develop teratomas, thus posing a major safety problem for allogeneic and syngeneic transplantation paradigms. Here we introduce a new differentiation protocol based on the generation of substrate-adherent ES cell-derived neural aggregates (SENAs) that consist predominantly of neuronally committed precursor cells. Purified SENAs that were differentiated into immature but postmitotic neurons did not form tumors up to four months after syngeneic transplantation into the acutely degenerated striatum and showed robust survival.

[From Stem Cells Express, Mar. 23, 2006]

TRANSPLANTATION OF HUMAN EMBRYONIC STEM CELL-DERIVED CELLS TO A RAT MODEL OF PARKINSON'S DISEASE: EFFECT OF IN VITRO DIFFERENTIATION ON GRAFT SURVIVAL AND TERATOMA FORMATION

(By Anke Brederlau)

ABSTRACT

Human embryonic stem cells (hESCs) have been proposed as a source of dopamine (DA) neurons for transplantation in Parkinson's disease (PD). We have investigated the effect of in vitro predifferentiation on in vivo survival and differentiation of hESCs implanted into the 6–OHDA (6–hydroxydopamine)-lesion rat model of PD. The hESCs were cocultured with PA6 cells for 16, 20, or 23 days, leading to the in vitro differentiation into DA neurons. Grafted hESC-derived cells survived well and expressed neuronal markers. However, very few exhibited a DA neuron phenotype. Reversal of lesion-induced motor deficits was not observed. Rats grafted with hESCs preadifferentiated in vitro for 16 days developed severe teratomas, whereas most rats grafted with hESCs predifferentiated for 20 and 23 days remained healthy until the end of the experiment. This indicates that prolonged in vitro differentiation of hESCDs is essential for preventing formation of teratomas.

[From Neuroscience Research, 2005]

SURVIVAL AND ENGRAFTMENT OF MOUSE EMBRYONIC STEM CELL-DERIVED IMPLANTS IN THE GUINEA PIG BRAIN

(By A.J. Robinson)

ABSTRACT

α-Mannosidosis is a lysosomal storage disease resulting from a deficiency of the enzyme α-D-mannosidase. A major feature of α-mannosidosis is progressive neurological decline, for which there is no safe and effective treatment available. We have a guinea pig model of α-mannosidosis that models the human condition. This study investigates the feasibility of implanting differentiated mouse embryonic stem cells in the neonatal guinea pig brain in order to provide a source of α-mannosidase to the affected central nervous system.

Cells implanted at a low dose (1.5 10^3 cells per hemisphere) at 1 week of age were found to survive in very low numbers in some immunosuppressed animals out to 8 weeks. Four weeks post-implantation, cells implanted in high numbers (10^5 cells per hemisphere) formed teratomas in the majority of the animals implanted. Although implanted cells were found to migrate extensively within the brain and differentiate into mature cells of neural (and other) lineages, the safety issue related to uncontrolled cell proliferation precluded the use of this cell type for longer-term implantation studies. We conclude that the pluripotent cell type used in this study is unsuitable for achieving safe engraftment in the guinea pig brain.

[From Investigative Ophthalmology & Visual Science, Dec. 2004]

NEURALLY SELECTED EMBRYONIC STEM CELLS INDUCE TUMOR FORMATION AFTER LONG-TERM SURVIVAL FOLLOWING ENGRAFTMENT INTO THE SUBRETINAL SPACE

(By Stefan Arnbold, Helmut Klein, Irina Semkova, Klaus Addicks, and Ulrich Schraermeyer)

Purpose. To determine whether transplantation of embryonic stem (ES) cells into the subretinal space of rhodopsin-knockout mice has a tumorigenic effect.

Methods. Mouse ES-cell-derived neural precursor cells carrying the sequence for the green fluorescent protein (GFP) gene were grafted subretinally into the eyes of rhodopsin$^{-/-}$ mice, whereas control animals underwent sham surgery. Eyes were retrieved after 2, 4, and 8 weeks after cell injection or sham surgery for histologic analysis.

Results. Gross morphologic, histologic, and immunohistochemical analysis of eyes at 2 and 4 weeks after engraftment exhibited no morphologic alterations, whereas neoplasia formation was detected in 50% of the eyes evaluated at 8 weeks after engraftment. Because the neoplasias expressed differentiation characteristics of the different germ layers, they were considered to be teratomas. The resultant tumor formation affected almost all layers of the eye, including the retina, the vitreous, and the choroid.

Conclusions. Although ES cells may provide treatment for degenerative disease in the future, their unlimited self-renewal and high differentiation potential poses the risk of tumor induction after engraftment. Thus, more care must be taken before using ES cell transportation as a therapeutic option for patients with degenerative disease.

[From Transplantations, Oct. 15, 2003]

ENGRAFTMENT AND TUMOR FORMATION AFTER ALLOGENEIC IN UTERO TRANSPLANTATION OF PRIMATE EMBRYONIC STEM CELLS

(By Takayuki Asano)

Background. To achieve human embryonic stem (ES) cell-based transplantation therapies, allogeneic transplantation models of nonhuman primates would be useful. We have prepared cynomolgus ES cells genetically marked with the green fluorescent protein (GFP), The cells were transplanted into the allogeneic fetus, taking advantage of the fact that the fetus is so immunologically immature as not to induce immune responses to transplanted cells and that fetal tissue compartments are rapidly expanding and thus providing space for the engraftment.

Methods. Cynomolgus ES cells were genetically modified to express the GFP gene using a simian immunodeficiency viral vector or electroporation, These cells were transplanted in utero with ultrasound guidance into the cynomolgus fetus in the abdominal cavity (n=2) or liver (n=2) at the end of the first trimester. Three fetuses were delivered 1 month after transplantation, and the other, 3 months after transplantation Fetal tissues were examined for transplanted cell progeny by quantitative polymerase chain reaction and in situ polymerase chain reaction of the GFP sequence.

Results. A fluorescent tumor, obviously derived from transplanted ES cells, was found in the thoracic cavity at 3 months after transplantation in one fetus. However, transplanted cell progeny were also detected (~1%) without teratomas in multiple fetal tissues. The cells were solitary and indistinguishable from surrounding host cells

Conclusions. Transplanted cynomolgus ES cells can be engrafted in allogeneic fetuses. The cells will, however, form a tumor if they ''leak'' into an improper space such as the thoracic cavity.

[From the American Journal of Pathology, June 2005]

STEM CELLS, TISSUE ENGINEERING AND HEMATOPOIETIC ELEMENTS: TERATOMA FORMATION LEADS TO FAILURE OF TREATMENT FOR TYPE I DIABETES USING EMBRYONIC STEM CELL-DERIVED INSULIN-PRODUCING CELLS

(By Takahisa Fujikawa)

Embryonic stem (ES) cells have been proposed to be a powerful tool in the study of pancreatic disease, as well as a potential source for cell replacement therapy in the treatment of diabetes. However, data dem onstrating the feasibility of using pancreatic islet-like cells differentiated from ES cells remain controversial. In this study we characterized ES cell-derived insulin-expressing cells and assessed their suitability for the treatment of type I diabetes. ES cell-derived insulin-stained cell clusters expressed insulin mRNA and transcription factors associated with pancreatic development. The majority of insulin-positive cells the clusters also showed immunoreactivity for C-peptide. Insulin was stored in the cytoplasm and released into the culture medium in a glucose-dependent manner. When the cultured cells were transplanted into diabetic mice, they reversed the hyperglycemic state for ~3 weeks, but the rescue failed due to immature teratoma formation. Our studies demonstrate that reversal of hyperglycemia by transplantation of ES cell-derived insulin-producing cells is possible. However, the risk of teratoma formation would need to be eliminated before ES cell-based therapies for the treatment of Diabetes are considered.

[From Somatosensory and Motor Research, Mar./June 2005]

TRANSPORTATION OF APOPTOSIS-RESISTANT EMBRYONIC STEM CELLS INTO THE INJURED RAT SPINAL CORD

(By Michael J. Howard)

ABSTRACT

Murine embryonic stem cells were induced to differentiate into neural lineage cells by exposure to retinoic acid. Approximately one million cells were transplanted into the lesion site in the spinal cords of adult rats which had received moderate contusion injuries 9 days previously. One group received transplants of cells genetically modified to over-express bel-2, which codes for an anti-apoptotic protein. A second group received transplants of the wild-type ES cells from which the bcl-2 line was developed. In the untransplanted control group, only medium was injected. Locomotor abilities were assessed using the Basso, Beattie and Bresnahan (BBB) rating scale for 6 weeks. There was no incremental locomotor improvement in either transplant group when compared to control over the survival period. Morbidity and mortality were significantly more prevalent in the transplant groups than in controls. At the conclusion of the 6-week survival period, the spinal cords were examined. Two of six cords from the bc-2 group and one of 12 cords from the wild-type group showed gross evidence of abnormal growths at the site of transplantation. No similar growth was seen in the control. Pathological examination of the abnormal cords showed very large numbers of undifferentiated cells proliferating the injection site and extending up to 1.5 cm rostrally and caudally. These results suggest that transplanting KD3 ES cells, or apoptosisresistant cells derived from KD3 line, into the injured spinal cord does not improve locomotor recovery and can lead to tumor-like growth of cells, accompanied by increased debilitation, morbidity and morality.

[From Diabetologia, Feb. 14, 2004]

INSULIN EXPRESSING CELLS FROM DIFFERENTIATED EMBRYONIC STEM CELLS ARE NOT BETA CELLS

(By S. Sipione)

ABSTRACT

Aim/hypothesis. Embryonic stem (ES) cells have beer proposed as a potential source of tissue for transplantation for the treatment of Type 1 diabetes. However studies showing differentiation of beta cells from ES cells are controversial. The aim of this study was to characterise the insulin-expressing cells differentiated in vitro from ES cells and to assess their suitability for the treatment of diabetes.

Methods. ES cell-derived insulin-expressing cells were characterised by means of immunocytochemistry, RT–PCR and functional analyses. Activation of the Insulin I promoter during ES-cell differentiation was assessed in ES cell lines transfected with a reporter gene. ES cell-derived cultures were transplanted into STZ-treated SCID-beige mice and blood glucos concentrations of diabetic mice were monitored for 3 weeks.

Results. Insulin-stained cells differentiated from E cells were devoid of typical beta-cell granules, rarely showed immunoreactivity for C-peptide and were mostly apoptotic. The main producers of proinsulin/insulin in these cultures were neurons and neuronal precursors and a reporter gene under the control of the insulin I promoter was activated in cells with a neuronal phenotype. Insulin was released into the incubation medium but the secretion was not glucose-dependent. When the cultures were transplanted in diabetic mice they formed teratomas and did not reverse the hyperglyceamic state.

Conclusions/Interpretation. Our studies show that insulin-positive cells in vitro-differentiated from ES cells are not beta cells and suggest that alternative protocols, based on enrichment of ES cell-derived cultures with cells of the endodermal lineage, should be developed to generate true beta cells for the treatment of diabetes.

The PRESIDING OFFICER. Under the previous order, the minority is in control of the next 30 minutes.

Mr. HARKIN. Mr. President, I was going to ask the Senator from Kansas—I will even do it on my time. I guess our next speaker is not here right now. If the Senator from Kansas would perhaps engage me in a colloquy, I would ask about the gentleman whose picture he has up there. How is he doing now? I understand that, frankly, while his Parkinson's was relieved for a while, it has reverted and he is back in his previous state. Does the Senator know about that?

Mr. BROWNBACK. Yes. If you caught my comments on the floor, I stated that is part of the tragedy here. He had 5 years Parkinson's free, wants an additional treatment using the same adult stem cell procedure he had before that worked, and can't get it. We don't have sufficient funding to move that on forward.

Mr. HARKIN. I say to my friend, I don't understand that. I have a chart here that shows stem cell funding, embryonic stem cell funding, is $38.3 million last year and adult stem cell funding is $200 million. You are telling me out of $200 million they can't help one individual?

Plus, I ask my friend from Kansas, if this is so promising, why is the entire Parkinson's network that represents all the people with Parkinson's disease 100 percent behind H.R. 810? Why are they so supportive of H.R. 810 and not this approach?

Mr. BROWNBACK. If I could answer on both of those, I would have printed in the RECORD the funding over the past 4 years for both embryonic and adult and cord blood stem cells. We put about half a billion in embryonic, both animal and human, over the past 5 years. I ask unanimous consent to have this printed in the RECORD, to point to the level of funding we have put in both of those

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

U.S. FEDERAL TAXPAYER FUNDING, TOTAL NIH STEM CELL RESEARCH, FY 2002–2006

[Dollars in millions] [1]

	FY 2002 actual			FY 2003 actual			FY 2004 actual			FY 2005 actual			Combined total		
	Non-embryonic	Embryonic	Total	Non-embryonic	Embryonic	Total	Non-embryonic	Embryonic	Total	Non-embryonic	Embryonic	Total	Non-embryonic	Embryonic	Total
Human, Subtotal	170.9	10.1	181.0	190.7	20.3	211.0	203.2	24.3	227.5	199.4	39.6	239.0	764.2	94.3	858.5
Nonhuman Subtotal	134.1	71.5	205.5	192.1	[2] 113.5	305.6	235.7	[2] 89.3	325.0	273.2	97.0	370.2	835.1	371.3	1206.3
NIH, Total	305.0	81.6	386.6	382.9	[2] 133.8	516.6	439.0	[2] 113.6	552.5	472.5	136.7	609.2	1599.4	465.7	2064.9

[1] Numbers may not add due to rounding.
[2] Decrease from FY03 to FY04 is the result of a change in methodology used to collect nonhuman embryonic funding figures. This methodology change also contributed to an increase in nonhuman non-embryonic.

Mr. BROWNBACK. Second, I would point out on Parkinson's, I don't know why the Parkinson's advocacy community would support that. I find it hard to believe they would oppose us doing more work in this field. I would simply ask you, or others, if we have a place that is working and we have another place that is producing tumors, why wouldn't you put more in a place that is working?

Mr. HARKIN. I say to my friend from Kansas—and I see Senator NELSON is here to speak. He had previously been

scheduled to do so—first, I didn't see all the figures the Senator sent to the desk. I would like to see those. I heard him talk about a half billion dollars. Frankly, what the Senator from Kansas is talking about is animal embryonic. We are talking about human—human experiments here, not animal.

Mr. BROWNBACK. If I could respond?

Mr. HARKIN. I am more interested in the human than I am about human and animal.

Second, on cancer and tumors, it is my understanding—I am not a scientist, but in talking with the scientists—the fact that an undifferentiated stem cell causes cancer is exactly what they are looking for. It is the gold standard. I thought it was the gold standard for determining whether you have an embryonic stem cell.

Let me see if I can repeat it as told to me. If you derive a stem cell line from an embryo, you don't really know if you have stem cells. So the scientists take the undifferentiated cells and put them in a mouse to see if it causes cancer. That is the gold standard—to see whether there is a stem cell line.

No one is talking about putting undifferentiated cells into your body or mine or anyone else's. We are talking about undifferentiated cells and then finding how they make nerve cells, how they make heart cells, how they make tissue cells, how they make brain cells. Only after they are differentiated would they then be put into a person, not undifferentiated.

I hear all about the terms. I heard that earlier this morning. I thought I would check up on it. That is what I found out.

I would be glad to engage in a colloquy.

Mr. COBURN. Mr. President, let me clarify for the record. I think it is very important. There is a difference between cancer and teratoma. They use the formation of teratomas to make a differentiation of whether this is a part of the cell. That is not a cancer. Teratomas are not necessarily cancer. They are tumors but not necessarily cancer.

Mr. HARKIN. They are tumors. That is what I heard the Senator say.

Mr. COBURN. If you do not have a tumor, I would just as soon have a teratoma as cancer.

Mr. HARKIN. I don't know. I am a little confused. Is the Senator saying, if a stem cell has been introduced and is undifferentiated, it causes cancer or teratoma?

Mr. COBURN. No. The Senator alluded to the fact that there is a gold standard of whether an embryonic stem cell is pluripotent or whether it produces a teratoma. That means it has components of the three layers of an embryo—exoderm, endoderm, and mesoderm—which create all the other tissues.

Mr. HARKIN. But the fact is the inference from some of the statements, I think, is that thus far stem cells, when introduced, cause cancer. That is not so. That has not been proven. That has not been proven at all.

Mr. COBURN. It has. Most of the time teratoma.

Mr. BROWNBACK. Mr. President, I submitted for the RECORD seven peer-reviewed articles on the creation of tumors.

Mr. HARKIN. Tumors but not cancer.

Mr. BROWNBACK. We have been down this road before. We tried this on the fetal tissue research. Remember that debate of 10 to 15 years ago. They had fast-growing cells, Parkinson's, and heart disease. When we inserted them into actual human patients, here is what it did. It created disastrous results because they formed all sorts of tissues along with cancer. We have been here before, as the Senator knows, on trying to get these sort of different cells from other bodies into one.

Mr. HARKIN. We have gone down a lot of blind alleys in medical research in the past. I have often said that one of the reasons for basic research is that you have 11 doors that are closed. The answer to the problem and the answer to your endeavor may be behind one of those doors. When you have enough funding to open one door, you know what the odds are against you finding it. Or if you have funding for half, then you know what the odds are against you opening the right door. A lot of doors don't lead to anything. A lot of basic research goes down the path, and they find out that is not the answer. So they have to shift to something else. That happens all the time. That is what basic research is all about.

I do not know the specific thing. I am not surprised that many things in the past that scientists have gone down the road on have not led to something curative or therapeutic or something like that which helps us.

That doesn't mean that we have tried something before with devastating effects which doesn't say that we can't then do embryonic stem cell research.

I get back to the point that when you have almost every disease group in this country supporting the bill that is before us, H.R. 810, you have Nobel laureates, scientists, doctors, and you have 19 Directors of NIH saying that thi has great potential, then I say, again, to my friends that you have to make either one of two assumptions. Either all of these people have been hoodwinked and they do not know what they are talking about or they have no care or concern about ethics or morals or anything else. I think both assumptions are wrong. I think these people know. They are informed. They may not know every little thing medical doctors might know, but they know the potential.

Second, I think they are vastly ethical and moral people.

I hope we will have some further colloquies on this later.

Mr. BROWNBACK. I would love to respond with a quick response. I think a third option is people are kind of interested in what these cells will do. I quoted from Lord Winston, a British stem cell researcher, saying it is an interesting area, but it is not going to produce any likely cures in my lifetime. But they are curious. They are looking at it and saying it is an interesting area of research. If we are going to cure people, let us cure people and let us talk about that kind of research.

The Senator has been very kind to let me speak.

Mr. HARKIN. The Senator has been very kind. I think we can engage at some other point.

I yield the floor.

The PRESIDING OFFICER. The Senator from Florida.

Mr. NELSON of Florida. Mr. President, we just heard a great deal of discussion and disagreement. My bottom line on this whole issue of stem cell research is that a vast majority of the medical and scientific community feels that this is a process which would lead to medical breakthroughs in the fight against disease. To this Senator, that is worth exploring.

There is hardly a Senator here whose life has not been touched by disease, in one way or another, through their family. In this particular Senator's life, my family has been touched by disease, and we don't know the cause of it. Amyotrophic lateral sclerosis, or ALS, otherwise known as Lou Gehrig's disease. It took down the great baseball player, Lou Gehrig. For years, the researchers have looked and looked and researched and researched and have not found a cure. The ALS community, along with many other communities, is concerned about the treatment and cure of diseases on which stem cell research might offer a clue.

Researchers believe that stem cells may have the potential to treat over 100 million Americans who suffer from a variety of conditions, many of which you heard already discussed on the floor of the Senate today.

There is a T-shirt that I jogged in this morning. It was given to me by the Miami Project. One of the most graphic symbols on this T-shirt is the international symbol of a wheelchair-bound person, and that international symbol suddenly starts to become upright and walks. The Miami Project was put together after the tragedy of a spinal cord injury to the son of Nick Buoniconti, the all-pro linebacker of the great Miami Dolphins team, the undefeated team of 1972. When his son was at a Citadel football game, he suffered that injury. Now the son and the father are both behind Miami Project, trying to find a cure for spinal cord injuries. And all the medical researchers feel that stem cell research is very promising for Alzheimer's, Parkinson's, cardiovascular disease, cancer, and I already mentioned ALS and diabetes.

If that occurred, think what that would mean as we grapple with the Federal budget that is going out of control because of the accelerating cost of Medicare. If we were able to

treat and cure some of these diseases, think about how much cost savings that would create. And clearly, in this Senator's mind, a secondary consideration is the fact of eliminating, almost miraculously, the plague of these diseases by the stem cells that have the ability to reproduce themselves and potentially develop into different kinds of cells in the human body.

Of course, you have already heard in the debate today about the extensive research and being able to treat certain diseases. When confronted with this a few weeks before September 11, 2001, the President announced that the administration would only allow Federal funding for this research to be used on existing colonies of embryonic stem cells. Of course, you have heard the chorus in the scientific community, since then, expressing concern about the quality, the longevity, and the availability of these lines—and they believe that the research advancement requires new embryonic stem cell lines. The key is to increase the availability of the quality embryonic stem cell lines.

The current rules have limited the supply and have resulted in fewer investigators focusing their efforts on stem cell research. Therefore, progress has been limited because of Federal funding in this research being limited. We have the ability to fix that. We can do that in this bill before the Senate.

This Senator intends to support this bill. This bill lifts the President's current restriction that allows researchers to receive the Federal funding for the study of embryonic stem cells. These stem cells can only be derived from embryos originally created for fertility treatments and that are willingly donated by patients and, I might say, that are slated to be discarded.

We will get a substantial majority of votes in the Senate. Although we hear the threats of a veto, it would be my hope the President will reexamine this issue. We are only talking about one kind of stem cell research. This is the stem cells that come through a rather complicated progress, from a fertilized egg that was going to be discarded.

There is another promising way of doing this called somatic cell nuclear transfer where it is not even a fertilized egg. You take an egg, scoop out the nucleus, take a stem cell from the donor—it can be from a skin cell—put that nucleus in, and activate the process of growing cells. That process of stem cell research has enormous promise.

This Senator has heard from thousands of Floridians who suffer on a daily basis from some of these terrible diseases. The Senate has the ability to bring hope to these people. It is time to act. The Senate should pass this bill and pass it with a fairly sizable majority, giving scientists the tools they need to search for cures.

I yield the floor.

The PRESIDING OFFICER. The Senator from Illinois

Mr. OBAMA. Mr. President, a few weeks ago I was visited by two of my constituents—Mary Schneider and her son Ryan.

When Ryan was just 2 years old, his parents and doctors noted severe delays in his motor and speech development, and he was diagnosed with cerebral palsy. His parents were devastated, as the prognosis for any children with cerebral palsy is quite grim, and given the severity of Ryan's condition, his doctors didn't have much hope for his improvement.

Yet, his parents had hope. Because when Ryan was born, his parents had saved his cord blood, a viable but limited source of stem cells. They found a doctor at Duke University who was willing to perform an experimental infusion with these cells to see if they might improve his condition.

They did. In fact, they seem to have cured him.

Within months of the infusion, Ryan was able to speak, use his arms, and eat normally, just like any other child—a miracle his family had once only dreamed of.

Ryan's story exemplifies the power and the promise of stem cells to treat and cure the millions of Americans who are suffering from catastrophic, debilitating and life-threatening diseases and health conditions.

Each year, 100,000 Americans will develop Alzheimer's disease. Over 1 million adults will be diagnosed with diabetes this year, which can lead to complications such as blindness, damaged nerves and loss of kidney function. And there are far too many individuals with spinal cord injuries who are struggling to maintain mobility and independence.

For most of our history, medicine has offered little hope of recovery to individuals affected by these and other devastating illnesses and injuries. Until now.

Recent developments in stem cell research may hold the key to improved treatments, if not cures, for those affected by Alzheimer's disease, diabetes, spinal cord injury and countless other conditions.

Many men, women and children who are cancer survivors are already familiar with the life-saving applications of adult stem cell research. Patients with leukemia or lymphoma often undergo bone marrow transplants.

One of my old law partners back in Chicago underwent a bone marrow transplant at the age of 30. It is a type of stem cell transplant which can significantly prolong life or permanently get rid of cancer. This is what happened, fortunately, to my partner. He is now cancer free. This therapy has been used successfully for decades and is saving lives every day.

Now, here is the problem. This particular breakthrough of adult stem cells has its limitations. Adult stem cells, as has already been mentioned by the distinguished Senator from Iowa, such as those which are used in bone marrow transplants can only be collected in small quantities. They may not be a match for the patient. They have limited ability to transform into specialized cells.

Cord blood, like the kind Ryan used, has limitations as well. If, for example, Ryan's condition should deteriorate or he should have another illness, there is simply not enough cord blood cells left for a second use. His mother has told us that the few remaining cells would have to be cloned to get enough cells for future use or they would have to obtain stem cells from another source.

These and other difficulties are the reason scientists have started to explore other types and other sources of stem cells, including embryonic stem cell research. Embryonic stem cells can be obtained from a number of sources, including in vitro fertilization. At this very moment, there are over 400,000 embryos being stored in over 400 facilities throughout the United States. The majority of these are reserved for infertile couples. However, many of these embryos will go unused, destined for permanent storage in a freezer or disposal. It makes sense for us to expand and accelerate research using these embryos, just as we should continue to explore the viability of adult stem cell use and cord blood use.

All over the country, exciting progress is being made in the area of embryonic stem cell research. At the University of Illinois, they are discovering that stem cells have the potential to treat blood disorders, lung diseases, and heart damage. At Johns Hopkins, researchers use mouse embryonic stem cells to restore damaged nerves and restore mobility in paralyzed rats. One cannot help but think it is a matter of when, not if, the research will be able to help those who have lost the ability to walk.

For these reasons, I am proud to be a longtime supporter of greater stem cell research. While I was a member of the Illinois Senate, I was the chief cosponsor of the Ronald Reagan Biomedical Research Act, which would specifically permit embryonic stem cell research in Illinois and establish a review of this research by the Illinois Department of Public Health.

I am proud to be a cosponsor of the stem cell bill before the Senate today. This bill embodies the innovative thinking we as a society demand and medical achievement requires. By expanding scientific access to embryonic stem cells which would be otherwise discarded, this bill will help our Nation's scientists and researchers develop treatments and cures to help people who suffer from illnesses and injuries for which there currently are none.

The bill is not without limits. It requires that scientific research also be subject to rigorous oversight. I recognize there are serious moral and ethical issues surrounding this debate. I am respectful of those on the other side. I also realize that we are not talking about harvesting cells that would

have been used to create life. We are not talking about cloning humans. We are talking about using stem cells that would otherwise have been discarded and lost forever. We are talking about using those stem cells to possibly save the lives of millions of Americans.

Democrats want this bill passed. Conservative pro-life Republicans want this bill passed. By large margins, the American people want this bill passed. It is only the White House right now that is standing in the way of progress, standing in the way of so many potential cures.

I ask, after this bill passes—because I am confident it will pass in the Senate—that the President think about this before he picks up his pen to deliver his first veto in 6 years. I ask that he think about Ryan Schneider and his parents and all the other families sitting and waiting and praying for a cure, hoping that somewhere a researcher or scientist will find an answer.

There was a time in the middle of the last century when America watched helplessly as a mysterious disease left thousands, especially children, disabled for life. The medical community worked tirelessly to fight to try to find a cure, but they needed help. They needed funding to make their research possible.

With a world war raging and the country still emerging from the Depression, the Federal Government could hav ignored their plight or told them to find their own cure, let it be funded privately, but that is not what happened. Instead, FDR helped to galvanize a community of compassion and organized the March of Dimes to find the cure for polio. While Roosevelt knew that his own polio would never be cured by the discovery of a vaccine, he also knew that at its best, the Government can be used as a force to accomplish together what we cannot achieve on our own. So the people began to care. The dimes piled up, and the funding started to flow. And 50 years ago, Jonas Salk discovered the polio vaccine.

Americans are looking for that kind of leadership today. All over the country, patients and families are waiting today for Congress and the President to open the door to the cures of tomorrow. At the dawn of this new century, we should approach this research with the same passion, the same commitment that has led to so many cures and saved so many lives throughout our history. I urge my colleagues to support this bill.

I yield back the remainder of my time.

Mr. HARKIN. How much time remains on our side?

The PRESIDING OFFICER. The minority has 3 minutes.

Mr. HARKIN. Mr. President, I yield that time to the Senator from Kentucky. We had a colloquy earlier that maybe we can find some time before 5 for Senator DORGAN to speak. I yield the floor.

The PRESIDING OFFICER. Under the previous order, the majority is in control of the next 30 minutes.

The Senator from Kentucky.

Mr. BUNNING. Mr. President, I come to the Senate today to speak on the three bills related to stem cell research. One of these bills is wrong, but I believe that the other two are worthy pieces of legislation.

Stem cell research is a controversial issue in the medical, scientific, and religious communities, as well as in Congress. I am not opposed to stem cell research; however, I am 100 percent opposed to embryonic stem cell research. This is why I oppose H.R. 810, the Stem Cell Research Enhancement Act of 2005. This bill would remove all current protections against the destructive use of embryos for harvesting stem cells. I firmly believe it is wrong to take these sources of life and destroy them, even if it is for a benign purpose such as medical research.

Current Federal policy on stem cell research developed out of a compromise between proponents of research and those who endeavor to protect life at its earliest stages, brokered by President Bush. This is the first administration to allow Federal funding of embryonic stem cell research. Today's policy allows Federal funds to be used for embryonic stem cell lines that were in existence prior to August 9, 2001.

As an opponent of the destruction of human embryos, I believed the Bush administration's decision to allow the embryonic stem cell research was misguided. H.R. 810 goes even further than the current policy. It cancels the protections of the 2001 cutoff for research by allowing research of all embryonic stem cells created from in vitro fertilization treatments. This legislation would move us in the wrong direction on this issue.

Some have said that these excess embryos which would be used for research would be destroyed anyway. However, I do not think this makes ethical sense. Just because these budding lives will not survive does not mean that we should ghoulishly conduct experiments on them.

I believe there is a disconnect between what many Americans believe about this issue and what the facts are. For one, we are debating the use of Federal funds for embryonic stem cell research. We are not debating the legality of embryonic stem cell research. Any company or organization that wants to conduct or fund embryonic stem cell research may do so. I just do not think taxpayers should be forced to pay for it.

Also, there are different kinds of stem cells. Adult stem cells, such as those derived from cord blood tissue, do not require the destruction of a human embryo. Why walk down such a dangerous ethical path when there is no need to do so? These adult stem cells have proven very effective in combating several serious conditions, such as diabetes and spinal cord injuries, among others.

This leads me to another point. We have seen the benefits that come from adult stem cell research. However, we have yet to see any tangible benefits from any embryonic stem cell research. Many scientists agree that these kinds of stem cells might—I say ''might''—be able to help fight disease someday, but it has not happened yet. We are talking about ending human life when no lives have been saved yet. Who knows how many human embryos we will have to destroy before any tangible progress is made.

That being said, I am pleased to see that the Senate is considering S. 2754, the Alternative Pluripotent Stem Cell Therapies Enhancement Act. This bill could very well remove the most contentious issues of this debate. Embryonic stem cells are pluripotent, meaning that they could potentially have a wide variety of uses. It is this quality that drives the supporters of embryonic stem cell research to their position. However, great strides have been made in deriving pluripotent stem cells from sources that do not destroy embryos.

S. 2754 would authorize Federal funding to conduct research on the creation of nonembryonic pluripotent stem cells. If successful, we would be able to end this debate by funding a morally acceptable replacement for research involving human embryo destruction. I urge the Senate to adopt this measure.

The final bill the Senate is debating on the subject is S. 3504, the Fetus Farming Prohibition Act. I fully support passage of this legislation. This bill would ban research from fetal farms where human embryos are implanted in nonhuman uteruses. It would also ban embryos from human pregnancies created specifically for research.

Most people would find these requirements to be self-evident. However, some groups have said this is unnecessary because research already follows ethical guidelines that forbid this. That may be the case, but I believe we should take these ethical guidelines and give them the force of law to prevent the possibility of such gruesome methods ever being used by researchers. I urge my colleagues to pass this bill.

I do not like to see people with medical conditions suffer. However, I believe many advocates of embryonic stem cell research are playing on the hopes and griefs of many people whose lives are touched by illness. We are at an ethical crossroads with this issue. We must stay true to our values of respecting life. It seems foolish to stubbornly barrel ahead with Federal funding for embryonic stem cell research when, with a small bit of patience, we can put aside the moral and ethical concerns and proceed down a path we can all agree upon.

In closing, I firmly believe we cannot create life and then destroy it in order

to save another life. I urge my colleagues to vote against the Stem Cell Research Enhancement Act and to support S. 2754 and S. 3504.

Mr. President, I yield back the remainder of my time.

The PRESIDING OFFICER. The Senator from Oklahoma.

Mr. COBURN. Mr. President, I want to spend a few minutes to kind of outline some of the statements that have been made. To just show how off base from reality some of them are, we heard there was a ban on embryonic stem cell research. There is no ban on embryonic stem cell research. As a matter of fact, the American people paid $40 million this last year on embryonic stem cell research—human, $40 million. So there is no ban. And considering that, there is a significant industry in the private sector that is researching it.

We heard there are only 21 cell lines around, available. There are 400 cell lines available to scientists. There are 21 that Federal dollars can be spent on. So let's be real clear about what the real facts are.

We also heard from the Senator from Florida that all medical researchers believe that embryonic stem cell research is the best hope. That could not be further from the truth. All of them do not. As a matter of fact, there is a large number who do not believe that way at all, based on not ethical concerns, on scientific concerns. They think it is not an acceptable way.

We heard the Senator from Illinois saying that adult stem cells can only be collected in small quantities. That is not true at all. Many adult stem cell lines are reproductive of themselves. They are progenitor cells. They reproduce themselves. They come from amnionic membrane. They come from bone marrow. They come from endometrial lining. They come from placental tissue. They come from cord blood. They come from the spleen and the liver. They come from all sorts of areas in our body.

We heard the Senator from California say we should let the scientists decide, not the Senators. Let's talk about Tuskegee. We let the scientists decide that one. I can think of two or three more instances in the 20th century when we let the scientists decide, and we went down a path that all of us were grieved over.

When Senator SPECTER opened the debate today, there was, again, the assumption, in his first statement, that there is no embryonic fetal stem cell research. Not true. He also said none of the others have the potential of embryonic stem cell research. Well, I think there is a large body of science and a larger body of scientists who would disagree with that, especially as they study the new breakthroughs on germ cell pluripotent stem cells.

I am going to ask to have printed in the RECORD a Rand study on the available numbers of human embryos, where in fact there are 400,000. But they outline, in great detail, that the fact is, a very small percentage of those are available for fetal research. They also outline in great detail so the American public can know that for every two embryos you are going to thaw, one of those two will die during the thawing process.

So for this limited number, the most number of new cell lines, if you took all that are available today, would be less than what is available in the world today. It is 273 cell lines. So we have this great big demand, that we are going to get all this, but what we are going to get is less than what is out in the world today.

Mr. President, I ask unanimous consent that the Rand study I referred to be printed in the RECORD.

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

[From the Rand Law & Health Research Brief]

HOW MANY FROZEN HUMAN EMBRYOS ARE AVAILABLE FOR RESEARCH?

Frozen human embryos have recently become the focus of considerable media attention. Frozen embryos are a potential source of embryonic stem cells, which can replicate themselves and develop into specialized cells (e.g., blood cells or nerve cells). Researchers believe that such cells might be capable of growing replacement tissues that could be used to treat people suffering from a number of diseases, including cancer, Alzheimer's disease, and diabetes. Among the most contentious issues in the stem cell debate are whether frozen embryos should be used to produce stem cells for research purposes and whether it is appropriate to use federal funds for research involving human embryos.

Many of the proposed resolutions to the embryonic stem cell debate are based on assumptions about the total number of frozen human embryos in the United States and the percentage of that total that is available for research. Accurate data on these issues, however, have not been available. Guesses on the total number of embryos have ranged wildly from tens of thousands to several hundred thousand.

RAND researchers Gail L. Zellman and C. Christine Fair, together with the Society of Assisted Reproductive Technology (SART) Working Group led by David Hoffman, MD, have completed a project designed to inform the policy debate by providing accurate data on the number of frozen embryos in the United States and how many of those embryos are available for research purposes. Their findings include the following:

Nearly 400,000 embryos (fertilized eggs that have developed for six or fewer days) have been frozen and stored since the late 1970s.

Patients have designated only 2.8 percent (about 11,000 embryos) for research. The vast majority of frozen embryos are designated for future attempts at pregnancy.

From those embryos designated for research, perhaps as many as 275 stem cell lines (cell cultures suitable for further development) could be created. The actual number is likely to be much lower.

VAST MAJORITY OF FROZEN EMBRYOS ARE HELD FOR FAMILY BUILDING

The practice of freezing embryos dates back to the first infertility treatments in the mid–1980s. The process of in vitro fertilization often produces more embryos than can be used at one time. In the United States, the decision about what to do with the extra embryos rests with the patients who produced them.

The RAND–SART team designed and implemented a survey to determine the number and current disposition of embryos frozen and stored since the mid-1980s at fertility clinics in the United States and the number of those embryos designated for research. The survey was sent to all 430 assisted reproductive technology facilities in the United States, 340 of which responded. Estimates for nonresponding clinics were developed using a statistical formula based on a clinic's size and other characteristics. The results show that as of April 11, 2002, a total of 396,526 embryos have been placed in storage in the United States. This number is higher than expected; previous estimates have ranged from 30,000 to 200,000.

Although the total number of frozen embryos is large, the RAND-SART survey found that only a small percentage of these embryos have been designated for research use. As the figure illustrates, the vast majority of stored embryos (88.2 percent) are being held for family building, with just 2.8 percent of the total (11,000) designated for research. Of the remaining embryos, 2.3 percent are awaiting donation to another patient, 2.2 percent are designated to be discarded, and 4.5 percent are held in storage for other reasons, including lost contact with a patient, patient death, abandonment, and divorce.

EMBRYOS AVAILABLE FOR RESEARCH DO NOT HAVE HIGH DEVELOPMENT POTENTIAL

Although the 11,000 embryos designated for research might seem like a large number, the actual number of embryos that might be converted into stem cell lines is likely to be substantially lower. Because assisted reproductive technology clinics generally transfer the best-quality embryos to the patient during treatment cycles, the remaining embryos available to be frozen are not always of the highest quality. (High-quality embryos are those that grow at normal rates.) In addition, some of the frozen embryos have been in storage for many years, and at the time that some of those embryos were created, laboratory cultures were not as conducive to preserving embryos as they are today. Some embryos would also be lost in the freeze-and-thaw process itself.

To illustrate how such laboratory conditions might limit the number of embryos available for research, the RAND-SART team performed a series of calculations. Drawing upon the few published studies in this area, they estimated that only about 65 percent of the approximately 11,000 embryos would survive the freeze-and-thaw process, resulting in 7,334 embryos. Of those, about 25 percent (1,834 embryos) would likely be able to survive the initial stages of development to the blastocyst stage (a blastocyst is an embryo that has developed for at least five days). Even fewer could be successfully converted into embryonic stem cell lines. For example, researchers at the University of Wisconsin needed 18 blastocysts to create five embryonic stem cell lines, while researchers at The Jones Institute used 40 blastocysts to create three lines.

Using a conservative estimate between the two conversion rates from blastocyst to stem cells noted above (27 percent and 7.5 percent), the research team calculated that about 275 embryonic stem cell lines could be created from the total number of embryos available for research. Even this number is probably an overestimate because it assumes that all the embryos designated for research in the United States would be used to create stem cell lines, which is highly unlikely.

The RAND-SART survey found that almost twice as many frozen embryos exist in the United States as the highest previous estimate. Only a small percentage of these embryos are available for research because the

vast majority are reserved for family building. Among those that are in principle available for research, some have been in storage for more than a decade and were frozen using techniques that are less effective than those that are currently available.

Mr. COBURN. Now, why do we want multiple cell lines? It goes back to the issue I have been talking about all day. It is called tissue rejection. That is the wonder of adult stem cells and germ cell pluripotent stem cells versus embryonic. With embryonic, there is rejection because there is an allergy to the foreign tissue. It is called the HLA, histocompatibility complex. The only way around that, with fetal embryonic stem cells, is to clone yourself—the only way you will get around it. And it will only work well in women. Only if you clone yourself with your own egg do you avoid all the allergy implications of foreign tissue.

So I think it is very important that we—it is OK to have this debate, but some of the claims we hear—we actually heard, and I know he did not mean this, Senator SPECTER talking about embryos injected into the pulp of the tooth to create a new set of teeth. He did not mean embryos. He meant pluripotent stem cells. But you do not want pluripotent. What you want is the epidermal stem cells that produce teeth in the first place. That is what is great about adult stem cells. We are going to be able to do that with adult stem cells.

He also stated that embryonic stem cell research is outstripping all of the research. That is not true. It is not true at all. The vast majority of success in stem cells today lies not with embryonic stem cells, it lies with everything but embryonic stem cells.

Now, I do not deny as a scientist that would be a wonderful area in which to work. There is lots unknown, and if you are a scientist today, and they say you can go to this area where there are all these areas where you can work and go and move and everything, it is a fun area of research. But it is loaded with hazards, just like the Senator from Kansas talked about, in terms of fetal tissue. The fact is, as we may someday learn how to turn on and turn off some of these cell lines, we do not know that yet. It is fine to perfect that in animals. It is not fine to perfect that in human clinical trials until we have that absolutely controlled. I do not have any trouble with what we are doing now, doing that in the private sector.

But the question is, do we ask American taxpayers to use their money to destroy embryos—embryos for which there are 2 million people in the country who would love to adopt—do we ask them to destroy that with their tax money so we can do that research, even though it is occurring in the private sector at a far greater rate than it is in the public finance sector?

So I think this really boils down to two questions: false choices and false promises. Let me outline them. The false promise is that only embryonic stem cells are going to solve the problem. It is not true.

The second promise is we are going to get treatments, but we are not going to have to clone. You are going to have to clone if you are going to get treatments from embryonic stem cells.

No. 3 is that adult stem cells and the pluripotent lines, as well as germ cell lines, will not be able to do what embryonic stem cells do. That is not proven anywhere in the scientific literature. That is a false promise.

And No. 4 is the false promise issue that you cannot take adult stem cells and dedifferentiate, move backwards, to make them pluripotent, which we are seeing great science with an enzyme today called reversa. So those are the false promises that are out there.

Now, there are four false choices, I believe. One is that there is no cure without embryonic stem cells. That, for sure, the evidence does not show. Another is that there will not be any research unless the Government pays for it. That is not true at all. The research is ongoing across the world in lots of areas without government research, and much more so in our country outside of government research.

The third choice is that there is no life in an embryo. The fact is there is. Now, we had one Senator talk about the fact that they are going to be incinerated. If you talk about the 108 snowflake babies, the other 2 or 3 organizations that are adopting those, those children belie that fact that there is wonderful potential with the amount of demand.

I am not saying that people who disagree with me on the ethical issues are bad or immoral people. I am saying I am not fighting this on ethical issues. I am fighting this on common sense, to see what things are happening and where we are seeing success and keeping up with the science. This debate in the Senate today is almost all about a year and a half old, as far as the science is concerned. I am talking about the new science. That is why I worked so hard to stay up on it.

Finally, the promise is what every scientist knows, what every embryologist knows and every cell biologist knows, which is the mighty mitochondria. You cannot clone without having potential rejections unless you clone yourself with your own egg. There is different DNA in the mitochondria and the cell cytoplasm. I appreciate the spirit of the debate, and I hope the American people understand that it is not a false choice of no research versus some. The question is, Do we destroy unborn children? Two, do we give Federal dollars to do that? Thank you.

The PRESIDING OFFICER. The Senator from West Virginia is recognized. The Senator is to be aware that the majority controls the time until 5 p.m.

Mr. BYRD. Mr. President, I am aware of that. I ask unanimous consent that, notwithstanding and without any prejudice to any Senator, to speak for 5 minutes on another matter.

The PRESIDING OFFICER. Is there objection?

Mr. BYRD. Not showing an interruption at this point.

The PRESIDING OFFICER. Is there objection?

Mr. DORGAN. Mr. President, reserving the right to object, my understanding was that I would be recognized for 10 minutes following the presentation by Senator COBURN. I don't object to anything someone else wishes to do, provided that following that presentation, I am recognized for 10 minutes. Would that be part of the unanimous consent request?

Mr. BYRD. I make that part of my request.

The PRESIDING OFFICER. Is there objection?

Mr. HARKIN. If I might, as a manager, we are on strict time limits. At 5 o'clock, Senator KENNEDY gets 25 minutes and then 5 minutes goes to Senator REED. At 5:30, it goes back to the other side. If we take time here and there, it spills over, and someone is going to lose time.

Mr. KENNEDY. I will be glad to yield 5 minutes of my time to the Senator from West Virginia.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

The Senator from West Virginia is recognized.

(The remarks of Mr. BYRD are printed in today's RECORD under ''Morning Business''.)

The PRESIDING OFFICER. Under the previous order, the Senator from North Dakota is recognized for 10 minutes.

Mr. DORGAN. Mr. President, all of us have great pride in being able to serve in this great body and the purpose of it is, of course, to be engaged in public policy debate, how to advance this country's interests. We come to this debate today on something that is very important, very controversial. This country's search in many areas—social justice, science, and so many areas of our lives—is a search that never ends. We have split the atom. We have spliced genes. We did the human genome project, developed the owner's manual for the human body. We invented plastics and radar and silicon chips, cured polio, cured smallpox, built airplanes and learned to fly them, and built rockets and walked on the moon; we invented the telephone, the computer, and the television.

It is pretty unbelievable, but this country is hardly out of breath. We continue to inquire, continue to search, and continue to ask questions. Those questions, especially in science, are, in some cases, difficult questions. We will have three pieces of legislation we will vote on tomorrow dealing with stem cell research. One piece of legislation prevents something that is not being done. I will not have any problem supporting that; preventing something

that is not being done is not posing any difficulty for me. The second piece of legislation authorizes that which is already authorized. I have no difficulty with that vote either. I will be happy to support that.

The third piece of legislation is called embryonic stem cell research. That is the basis of the controversy being discussed today. Those in this Chamber and those throughout this country who have lost loved ones to dreaded diseases understand the urgency to unlock the mysteries of these diseases. I lost a beautiful young daughter some years ago to heart disease. I wondered then, and I wonder now, and I will wonder for some long while, if there is anything that we could do to unlock the mystery of that devastating killer. But it is not just heart disease. It is diabetes, Alzheimer's, Parkinson's, cancer—the list goes on and on.

Every day, people die. Every day, there are scientists who inquire: What can be done? What can we do to unlock the mysteries to find cures for these terrible diseases?

Stem cell research. Mr. President, there are 1 million people walking on this Earth who were conceived outside of the womb in a test tube. There are 1 million living people who were conceived through in vitro fertilization. We had somebody testify before the Senate Commerce Committee a few years ago, and he said none of those people should have been born, it was wrong and in vitro fertilization should not exist. It is wrong, he said. I disagree with him. It is the blessing to provide the opportunity to have a family to so many couples who were childless through in vitro fertilization, using the egg and sperm and uniting them outside of the womb, implanting them, and providing a child for those families.

At in vitro fertilization clinics, many more eggs are fertilized than are used. Some are stored and frozen. Those frozen embryos at in vitro fertilization clinics, when they are not going to be used in the future, are discarded, simply thrown into a wastebasket. They become waste and they are discarded. Some of my colleagues would say each and every one of those represents murder. I don't believe that, but some of my colleagues would insist on that position. That is murdering an embryo. We have 400,000 of those embryos stored, cryogenically frozen, at in vitro fertilization clinics. Around 8,000 to 11,000 of them a year will be simply discarded.

The question is: Should we relax the ban on Federal funding of stem cell research and allow the use of frozen embryos that otherwise are going into a wastebasket, that otherwise are going to be discarded? Should we allow the use of them with ethical boundaries and be concerned about the ethics of its use for scientific research, to try to find the cures to these terrible diseases? Should we allow that? The answer clearly is yes.

Are we comparing someone who is suffering from Parkinson's, someone who has Alzheimer's, someone with heart disease or cancer or diabetes to an embryo that is going to be discarded into a wastebasket—8,000 to 11,000 of them a year? Do we find an equivalency there

Do you believe that all of those unused fertilized eggs that are frozen at an IV clinic, an in vitro fertilization clinic, that are discarded, that each and every one represents a murder? Some believe that. I don't.

What is pro-life, I believe, what is life-giving is to be able to continue in this area of science with ethical guidelines but continue this search to unlock the mysteries of these diseases.

My colleague a moment ago said quite correctly that we don't prevent stem cell research. He is quite right about that. This issue is the restriction of Federal funding, and, of course, a substantial amount of the funding for scientific research, research in health care in this country, comes from the Federal Government.

If we take a look at what has happened with respect to the United States and the rest of the world, we will see, because President Bush has imposed restrictions on stem cell research, we have lost a substantial amount of ground to the rest of the world. We are falling far behind.

This is not about Republicans or Democrats. It is not about conservatives or liberals. Let me quote Nancy Reagan: Science has presented us with a hope called stem cell research, which may provide our scientists with answers that have so long been beyond our grasp. I just don't see how we can turn our backs on this—there are just so many diseases that can be cured, or at least helped. We have lost so much time already, and I just really can't bear to lose any more.

Nancy Reagan watched the ravages of Alzheimer's disease destroy her husband, our former President, the late Ronald Reagan. I believe she understands the urgency with which we pursue this purpose. I can read the pain in this message, and that pain exists—my guess—with so many in this Chamber and across the country who have watched loved ones die because of dread diseases that have wasted away their lives. The question is: Are we willing to do something about that? Can we do something about that? Will we retard or will we advance science? Will we hold back or will we encourage the scientists to search for these cures?

I hope the Senate will do just as the House has done and indicate that we believe that with proper ethical guidelines, stem cell research should continue with Federal funding. I believe, as I said, this is about saving lives, this is not about taking lives.

I understand that this is a sensitive subject. In fact, in my last campaign for office 2 years ago, my opponent ran television commercials saying that my position was to be supportive of planting embryos into mommies' wombs and growing them for a while and then harvesting them for body parts. That is the Byzantine nonsense which, unfortunately, attends part of this debate. No one here—certainly not me—would ever countenance anything resembling that, and yet much of the political discussion about this issue becomes so bizarre and so Byzantine that it is detached from reality.

The bill that is before the Senate that I just described—I am not talking about the first two bills, the one that prevents something that is not being done. I don't have a problem with that. Or the one that authorizes something that is already authorized, and I have no problem with that.

I am talking about the legislation dealing with stem cell research. The bipartisan coalition that brought it to the Senate includes Republicans, Democrats, conservatives, and liberals. My hope is the Senate will act on this legislation with a veto-proof majority and decide whatever the President does that we have made this decision and the decision should stick.

The PRESIDING OFFICER (Mr. ALEXANDER). The Senator's time has expired. The Senator from Massachusetts is recognized.

Mr. KENNEDY. Mr. President, I believe I am to be recognized for 20 minutes. I would like the Chair to let me know when I have 3½ minutes remaining.

The PRESIDING OFFICER. The Chair will do that.

Mr. KENNEDY. Mr. President, I join my friend and colleague from North Dakota in giving special recognition to Mrs. Reagan on this issue. As someone who has been interested in this issue for some time, as many of my colleagues have, I think all of us pay tribute to her, to a very gracious, lovely, wonderful, warm First Lady and someone I admire so much because after she has been to the top of the mountain, so to speak, and entitled to a very secure and well-deserved retirement, she is still restless about this issue and tireless about talking with people and speaking about this issue with great knowledge, great awareness, great understanding, and great compassion. I mention that at this time. I think we all know this debate has moved farther down the road toward a hopeful conclusion because of her work.

Today, the Senate begins the debate on legislation unlike any other we have considered this year. Today's debate is not about economic gain or loss or helping one State or one region of the country. Today's debate is about something far more basic, something that touches the spirit of every American. Today's debate is about hope.

Hope is one of those qualities of spirit that makes us human. Hope allows us to dream of a better life for our children, our community, our world, and especially for loved ones now suffering or in pain. Hope is what stem cell research holds for the parents of children

with diabetes who dream of a day when their constant fears for their children's well-being are things of the past. Hope is what stem cell research brings to those with Parkinson's disease who long for a time when the tremors of that disease are banished forever. Hope is what stem cell research brings to millions of Americans who seek better treatments and better drugs for cancer or diabetes, spinal injury, and many other serious conditions. And hope cannot be extinguished or destroyed, but it can be delayed.

In the Bible, the Book of Proverbs tells us:

> Hope deferred makes the heart sick.

And today hearts are sick almost to the breaking point because, for the last 5 years, the Bush administration has shut down the stem cell research program begun at the National Institutes of Health and imposed the arbitrary restrictions on this lifesaving research.

Hope soared anew a year ago when the House of Representatives set aside partisan differences and courageously approved legislation to end those restrictions and to give our scientists the tools they need to make the progress in the fight against disease. The vote in the House affirmed that embryonic stem cells can promote a true culture of life by enabling fuller, longer lives for millions of our citizens. The House voted for hope, for progress, and for life.

The supporters of this legislation in the Senate come from backgrounds as diverse as its proponents in the House. All of the supporters of H.R. 810, with our different backgrounds and different faiths, representing different parts of this country, have concluded that support of this legislation is the moral choice to make.

The legislation before us takes only two actions, but they hold the key to medical progress.

First, our legislation overturns the restrictions on the embryonic stem cell research imposed by Presidential order 5 years ago. That unilateral action by the administration bypassed Congress and froze progress in its tracks by barring the NIH from funding research on stem cells derived after 9 p.m. eastern daylight time, August 9, 2001—an arbitrary date and time chosen solely to coincide with a Presidential speech.

At the time the President's order was issued, it was claimed that over 60 independent stem cell colonies, or lines, would be available to NIH researchers. Initially, the NIH listed 78 such lines in its registry, but time and the unalterable facts of science have shown that two-thirds of these lines are useless or that claims about them proved to be an illusion.

Today, only 21 stem cell lines are available to NIH researchers, and all of these were obtained using out-of-date methods and outmoded techniques. Each of these 21 lines is contaminated with animal tissue because each was cultured on a so-called feeder layer of mouse cells. Techniques developed since 2001 have allowed scientists to grow stem cells without mouse cells, but these are all off limits to NIH-funded scientists because of the administration's restrictive policy.

Even if the 21 lines were not contaminated with mouse cells, they would still be unusable for treatments. The reason is that the use of every one of these cells is constrained by a legal contract called a material transfer agreement, and each of these documents contains a clause forbidding the use of the cells in patients.

Let me be clear. If the cells in the NIH registry weren't already useless for treatment because they are contaminated, they would be useless because the contract under which they are provided forbids their use in patients.

Five years ago, we warned that imposing an arbitrary date restriction on new stem cell lines would freeze progress by denying NIH researchers access to new lines that might hold the key to medical breakthroughs, and these fears have proven well-founded.

Since the restrictions were imposed, scientists working overseas or with limited private funds have developed new lines with exceptional promise for research. For example, Dr. Douglas Melton at Harvard has derived 17 new stem cell lines with improved techniques. Scientists at the University of California have shown that stem cells can be derived without contamination from animal cells. And doctors in Israel have developed stem cell lines that have genetic traits with the potential of treating hereditary diseases, such as muscular dystrophy. These astonishing breakthroughs could lead to new cures and new understanding of these disorders, but the administration's restrictions bar NIH from supporting research to explore their promise. To unlock the healing power of stem cell research, the first action our legislation takes is to end the ban that keeps NIH from supporting research on new stem cell lines.

But science without ethics is like a ship without a compass. Strong ethical guidelines are needed to ensure that scientific progress follows the moral course that we as a society set. For this reason, the second major action our legislation takes is to establish ethical safeguards for stem cell research. And once again allowing NIH to lead stem cell research, we bring more research under the strong ethical standards that are part of every NIH grant for any kind of medical research. The bedrock principles of these standards are informed consent of the patient and approval of an ethics committee.

In addition, when it comes to stem cell research, our legislation requires NIH to go beyond these general requirements and requires NIH to issue specific standards for stem cell research. Before the NIH stem cell research program was terminated in the early days of the Bush administration, it had developed an extensive and robust ethical framework for the research. These requirements include an extra level of review to assure that all research was conducted according to special protections applicable to stem cell research. They limit research only to cells derived from embryos from fertility clinics that were never to be used to initiate a pregnancy and were likely to be discarded. They prohibit payment for donation of cells. They forbid improper inducements to donate embryos to further ensure that all cells used for research must come from embryos that would not be used to initiate a pregnancy.

I want to take a moment to discuss this last point in detail. Even with the intense debate on stem cells over the last 5 years, there remains some confusion about the source of stem cells. The cells are not derived from fetuses, they are not from embryos that might otherwise have been used to start a pregnancy.

Our legislation explicitly requires the stem cells to be derived:

> From human embryos that have been donated from in vitro fertilization clinics, were created for the purpose of fertility treatment, and were in excess of the clinical need of the individuals seeking such treatment.

Those are the words, Mr. President.

In fertility clinics around the country, there are thousands of embryos that are simply thrown away. Hundreds of thousands more are frozen and never used. They are not the result of a pregnancy; they are not the product of an abortion or a miscarriage. The only way they can produce life is to be implanted in a woman, and these embryos we propose to save for research have not been and will not be. We believe it is better to save embryos that would otherwise be destroyed so they can give the gift of life to patients who are suffering. Life is too precious to allow an opportunity to cure illness to be simply thrown away.

Some say this debate is only about science, and that it is not a moral choice. I disagree. A vote on this bill involves a deeply moral choice. It is a choice between making progress toward better treatment for patients or spurning a chance for new cures. There are deeply moral people on both sides of this debate, but I am convinced that medical progress is the right one.

We have faced similar choices many times in the past. In the 1970s, Congress was considering whether to ban research on recombinant DNA—the very foundation of biotechnology. Then, as now, some raised ethical concerns or dismissed the promise of this research as a pipedream, and urged Congress to forbid it. In the 1980s, Congress made the right choice by rejecting attempts to outlaw IVF, a technique that has fulfilled the hopes and dreams of thousands of parents who never would have been able to have a child otherwise.

Other forms of medical progress brought similar controversy: transplantation, blood transfusion, even

vaccines. All of these breakthroughs were once new and controversial, with strong voices raised against them. All were discussed and debated and eventually adopted in ways that are consistent with American values. Each time we looked to the future and saw the potential of controversial research, we chose progress, and the benefits have been immense.

We should make the same choice on stem cell research. We should not allow the misplaced fears of today to deny patients the cures of tomorrow.

Some argue that we should support research on adult stem cells, or stem cells from umbilical cords, or stem cells derived from using new genetic techniques. I agree. We should leave no stone unturned in the search for new cures. Perhaps some cures will come from one technique and other breakthroughs from another. Let's encourage our scientists to explore every avenue that is ethical and could lead to progress. But there is no sense in closing the door on one of the most promising areas of medical research discovered in decades, while we wait for other, less hopeful methods to show success or failure. That is not my assessment; it is the judgment of every major scientific leader in America.

According to a letter by 80 Nobel laureates:

> For disorders that prove not to be treatable with adult stem cells, impeding human pluripotent stem cell research risks unnecessary delay for millions of patients who may die or endure needless suffering while the effectiveness of adult stem cells is evaluated.

The Institute of Medicine was just as clear on the need for embryonic stem cell research:

> Embryonic stem cells studied in animals clearly are capable of developing into multiple tissues and capable of long-term self-renewal in culture, features that have not yet been demonstrated with many adult stem cells.

In a letter to the Senate Appropriations Committee, Dr. Elias Zerhouni, the Director of the NIH, said:

> It is clear that more cell lines would be helpful in ensuring expeditious progress in this important field of science.

His conclusions were echoed by other NIH Institute Directors such as Dr. Elizabeth Nabel, head of the NIH Institute on Heart, Lung and Blood Disorders, who said:

> The limitations of existing cell lines are hindering scientific progress among a community that is very eager to move forward in this promising area.

The judgment of the Nation's scientific leaders could not be clearer or more emphatic: Yes, we should study adult stem cells, but we should let science decide which approach works best for patients.

But in the end, this debate is not about abstract principles or complex terms of science. It is about people who look with hope to stem cell research to help them with the challenges they face.

Two years ago, I held a forum in Boston on the promise of stem cell research. One of the participants was Moira McCarthy Stanford from Plymouth, MA, whose 14-year-old daughter Lauren has juvenile diabetes. I wish to end my remarks today with a letter that Lauren wrote to me. It explains far more eloquently than any Senator could the urgent need to pass this legislation. These are Lauren's words:

> For as long as I can remember, I have had to take a lot of leaps of faith. I have had to believe my parents when they told me taking four or five shots a day and pricking my finger eight or more times a day was just a new kind of normal. I had to—

The PRESIDING OFFICER. The Senator has 3½ minutes remaining.

Mr. KENNEDY. I thank the Presiding Officer.

> I had to just smile and say I'm fine when a high blood sugar or a low blood sugar forced me to the sidelines in a big soccer game, or into the base lodge on a perfect ski day, or out at the pool during a swim meet.
>
> But when I watched, with my parents, President Bush's decision on stem cell research in the summer of 2001, I just could not accept it. You see, the one thing that has helped me accept all I have had to accept these years is the presence of hope. Hope keeps me going.
>
> That night, President Bush talked about protecting the innocent. I wondered then: What about me? I am truly innocent in this situation. I did nothing to bring my diabetes on. There is nothing I can do to make it any better. All I can do is hope for a research breakthrough and keep living the difficult, demanding life of a child with diabetes until the breakthrough comes. How, I ask my parents, is it more important to throw discarded embryos into the trash than it is to let them be used to hopefully save my life.
>
> I am so happy to hear that the Senate is thinking of passing H.R. 810. I can dream again—dream of that great day when I write a thank you letter to the Senate, to the House, and everyone who helped me become just another girl; a girl who dreamed and hoped and one day, got just what she wanted: her health and her future. That's all I'm really asking for.

Those are Lauren's words, and they command us to act. Tomorrow, we must cast a vote of conscience and of courage. We must reaffirm that our common value of bringing hope to those who need it outweighs any single ideology. We must approve the Stem Cell Research Enhancement Act, and we must call upon the President of the United States not to veto hope.

I thank the Chair.

Mr. REED. Mr. President, I believe I have 5 minutes under the order.

The PRESIDING OFFICER. The minority controls the time until 5:30.

Mr. REED. Mr. President, I yield myself 5 minutes.

I wish to take a few moments talking about H.R. 810, the Stem Cell Research Enhancement Act. Last year, the House overwhelmingly passed this bill, and I am pleased that the Senate will now finally consider this legislation. My colleague in the other body, Congressman JIM LANGEVIN, has been a staunch advocate for stem cell research and has played a central role in advancing this legislation through the House of Representatives, and I commend him for that.

I hope to be able to stand on the Senate floor a few years from now to highlight the advancements that have been made in the treatment of spinal cord victims, children with diabetes, and Parkinson's treatment because of embryonic stem cell research. However, I fear that even if the Senate approves legislation, patients will only see further delays in promising stem cell research.

The President endorsed the use of Federal funds research on existing cell lines in his August 2001 Executive Order. At the time of the announcement, he said:

> Scientists believe further research using stem cells offers great promise that could help improve the lives of those who suffer from many terrible diseases—from juvenile diabetes to Alzheimer's, from Parkinson's to spinal cord injuries. And while scientists admit they are not yet certain, they believe stem cells derived from embryos have unique potential.

This is from the President's Executive Order.

We know now that the stem cell lines identified in the Executive Order were not the panacea for breakthrough medical research. There are only 22 stem cell lines available for federally funded research, and since they were derived in the absence of scientific and ethical guidelines, they have proven unsuitable for most research. At the same time, there are approximately 400,000 frozen embryos in IVF clinics that will likely be destroyed. While I recognize the many benefits of using embryonic stem cells in biomedical research, I also realize that many serious ethical and moral issues have to be considered. I believe Federal guidelines designed to create and uphold strict oversight of these practices can achieve the appropriate balance needed in order to ensure that this research is being carried out in an acceptable manner.

H.R. 810 sets forth responsible rules and limitations for obtaining excess embryos as well as adequate standards for conducting research involving embryonic stem cells. It would establish the necessary framework for oversight so that principled research can finally be allowed to proceed.

Some of my colleagues believe embryonic stem cell research is not necessary, given some of the tremendous advances adult stem cells have yielded. Indeed, I wholeheartedly support continued progress in the area of adult stem cell research and was proud to be one of the lead sponsors of the Stem Cell Therapeutic and Research Act, which Congress enacted late last year. This bill was essential in maintaining patient access to lifesaving treatments through the National Marrow Donor program and also opening the door to the developments of a companion registry system for cord blood.

We know the use of umbilical cord blood in treating diseases such as leukemia, sickle cell anemia, and rare but deadly genetic disorders such as Krabbe disease is showing tremendous promise. The Stem Cell Therapeutic

and Research Act solidified the Nation's commitment to increasing the number of cord blood transplants by providing additional Federal funds to help public cord blood banks increase their inventory, as well as support outreach, patient advocacy, and coordinating information and education activities.

The President also recognized the importance of this avenue of research. During the 2001 Executive Order, he said:

> You should also know that stem cells can be derived from sources other than embryos. And many scientists feel research on these types of stem cells are also promising. Many patients suffering from a range of diseases are already being helped with treatment developed from adult stem cells.

He went on to add:

> However, most scientists, at least today, believe that research on embryonic stem cells offer the most promise because these cells have the potential to develop from all of the tissues of the body.

Those are the President's words. I urge all of us to heed those words today.

I urge the Senate to support H.R. 810 and also the President to sign it into law. I also intend to support S. 3504 and S. 2754, but neither of these measures is a substitute for H.R. 810.

Mr. President, I yield the floor, and I note the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. ISAKSON. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. ISAKSON. Mr. President, I rise to take advantage of the time assigned or allotted for all of us to discuss what is obviously a passionate, controversial, and important issue. But I rise to talk about it from, probably, a different perspective than some of the other speeches—at least those I have heard. I want to talk prospectively, about what happens after this debate is over.

If all the predictions come true, at the end of the day we will not debate stem cells for the rest of this year because the agreement to bring it to the floor was that we come to the floor, we debate these three bills, and the debate would be over for the year.

The debate will not be over. In fact, if anything, this is probably the beginning of a long debate as we deal with the ethics and the morality and the hope and the promise of science as it relates to stem cells—in particular, embryonic stem cells.

When the President issued his order in August of 2001, I supported it because it invested in embryonic stem cell research and it clearly drew the line in terms of how far we would go. I have been supportive of the President's policies on embryonic stem cell research since.

When H.R. 810 passed, I began to do what I think all of us should do. I began to get educated as best I could on this controversial and important issue. Dr. Michael Johns at Emory University helped me. Dr. Steven Stice, at the University of Georgia, helped me. I sat through more than a few demonstrations—not sales presentations but demonstrations of programs and efforts in embryonic stem cell research underway, under NIH guidelines, and were moving forward.

I learned a lot. I learned this promise of embryonic stem cells was uncovered or identified in 1998. Research has been done for 8 years. They hold great promise. Adult stem cells have been around longer and have demonstrated promise beyond what embryonic has today, but that is because of the time and the amount of money that has been invested.

But I learned one thing. I am not smart enough to know what the end result of all this research will be, but I am smart enough to know that our country must continue to be a player in the research. Everywhere NIH is involved, you have standards, you have ethics, you have procedures, and you have protocols. It is very important that all those exist in such a delicate and important type of research. We must be respectful of human life.

The proposal in H.R. 810 that is of concern is that it involves the destruction of an embryo that, if implanted, could become a human being. That is a legitimate concern for us as a country to have.

When Senator FRIST began fielding inquiries with regard to this issue, months ago, after H.R. 810 passed the House, I engaged myself as I was in this learning process in hopes of finding a prospect where we could match the standards of ethics we all want and also invest in the hope for the future. I believed that there was a way—in fact, there is a way—that we could invest in embryonic stem cell research without involving the destruction of an embryo that could be transferable to the womb and become a fetus.

For a second, I wish to discuss that on the floor simply, if nothing else, to point out that there are many opportunities of hope out there that meet both the ethical and the moral as well as the scientific desire that I think a consensus of this body has.

Dr. Steven Stice is a noted researcher at the University of Georgia. I had the privilege of meeting him last year. I have three times been to his clinic at the university. Dr. Steven Stice is a man who understands the concern over the ethics of the destruction of a viable embryo. So in the development of embryonic lines BG01, 2, and 3, which were developed prior to August of 2001 and are in operation at the University of Georgia today, those stem cell lines were derived from the byproducts of in vitro fertilization that could not be implanted and could not be frozen.

My point to you, the Presiding Officer, and the ladies and gentlemen of the Senate, is this: There are three lines that exist today that were derived from the byproducts of in vitro fertilization that could not be implanted in the womb and become a fetus or be frozen for subsequent implantation. Under the Guarder et al. principles in the grading of material in in vitro fertilization, there is a clear line of that which is viable, that which can be frozen, and that which cannot. It doesn't involve the discarding of anything that can be viable, but it does lend hope that from sources other than the viable embryos, stem cells can be derived.

I respect human life and I want us, as a nation, to always be respectful and never disrespectful of it and its potential. I also respect the wonder of science in innovation and the great discoveries that it has brought. I stand here today believing that you can do both and that as we move forward, beyond this debate, beyond a veto if it takes place—whatever the fire and substance is—we should start tomorrow looking at these other alternatives. Just in the 18 months since this issue began to bubble up in the Senate, there have been breakthroughs, such as single cell extraction from embryos without the destruction of the embryo—something that holds great promise for those cells to actually replicate themselves into stem cells.

We can do it. It is important that we stay on course to do it. But it is important that we not break the ethical principles to which we are committed and always be respectful of life.

In the course of the negotiations with the leader—and I want to inject something here with regard to Majority Leader FRIST. I don't know anybody who has ever been dealt a tougher hand in terms of coming to a resolution of these issues. I thank him for the amount of input he let me have. Unfortunately, I was unsuccessful in being a part of the final debate, in terms of what I just described, in terms of the stem cell lines they are operating on at the University of Georgia, but I think under the circumstances he did the best he could.

Sincerely I stand here as a Member of the Senate with 4 years remaining in my term, knowing that we will revisit this issue time and again. As science changes and moves forward, there will be ways we can embrace, ethically and rightfully, research that holds hope and promise for those who suffer and those who are afflicted.

My last comment is this. I was a real estate broker in my private life, before I came to Congress. I am not a doctor and I am not a scientist. I have heard some declaratory statements on the floor about what research will and will not prove in the future. I didn't just fall off a turnip truck. You do research to determine what you are going to find out, not just to predict what it will or will not do.

As we go through this difficult, tenuous debate over a subject of immense

importance to the American people, let's look for ways that we can be respectful of human life and open the doors for the furtherance of development in science in embryonic stem cells. I submit there are ways to do both, and I will be here to work with the leader, with my colleagues, and with our President to unlock those doors so that promise and hope exists and we never breach the ethical divide that caused the debate today.

I yield the remainder of my time and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. BROWNBACK. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BROWNBACK. Mr. President, I see the next speaker is here, and I yield the floor.

The PRESIDING OFFICER. The Senator from Maine is recognized.

Ms. SNOWE. Mr. President, I rise today to speak to an issue of tremendous significance to countless Americans and to generations to come—the matter of stem cell research. I thank the majority leader for his tireless efforts to ensure consideration of stem cell legislation. The bottom line is, there is research we could be conducting today that could help us treat—and in some cases cure—some of our most serious diseases. That is why two-thirds of Americans favor embryonic stem cell research and why I have cosponsored H.R. 810, the Stem Cell Research Enhancement Act.

The promise of stem cell legislation lies in the simple fact that embryonic stem cells have the unique potential to develop into any of the cells which could be needed to treat the multitude of diseases from which Americans suffer. The vast potential of stem cell therapy is key to many future therapy because in so many diseases, cells are lost and their function is often irreplaceable. Stem cells offer an opportunity to actually replace cells which are lost.

Consider today that 20 million Americans live with diabetes. Despite treatment with drugs and insulin, many experience vision loss, injury to extremities, heart disease and other complications. For years, scientists have sought to find a cure. And today stem cells offer that potential to end dependence on insulin, freeing millions from diabetes.

In many diseases, there simply is not even a therapy to replace the function of lost cells. Brain disorders such as Parkinson's disease, ALS or ''Lou Gehrig's disease,'' and Alzheimer's disease have only limited treatment options available. We simply cannot replace the function which is lost. But with new therapies derived from stem cells, we could see major breakthroughs in avoiding the terrible toll that millions now experience.

Today the Senate is considering three bills. The first of these, the Fetus Farming Prohibition Act, certainly addresses an issue about which I expect there is no disagreement in the Senate. No embryo should ever be conceived for the purpose of producing stem cells. That is not at issue. Nor does any reputable scientist desire to work with human tissue produced in an animal. These prohibitions are not controversial and I believe my colleagues will join me in supporting them.

In fact, 1 year ago this week, I joined with Senators FEINSTEIN, SPECTER, HATCH, and others to introduce the Human Cloning Ban Act to make indisputably clear another prohibition—that no human would be cloned. Nor is stem cell research about conducting research on embryos.

I do share with the majority leader the concern that we address the highest levels of ethical standards, and I have great confidence that with the Federal Government playing a role in this research, we can bring such standards to bear.

This is essential—that the Federal Government be constructively engaged.

The second piece of legislation concerns stem cell research already supported by the Federal Government. My colleague, Senator SANTORUM, has introduced legislation—the Alternative Pluripotent Stem Cell Therapies Enhancement Act, S. 2754—to promote the use of ''alternative stem cells.'' These are typically ''adult stem cells.'' These cells are already partly specialized, and have the potential to develop into several kinds of cells. Yet they are not the same as embryonic stem cells, which can develop into potentially any kind of tissue. So their use is limited. Cord blood stem cells are an example of this type of cell, and they have certainly proven useful in treating some diseases.

I must note that no obstacles currently exist to the kind of research the Santorum bill addresses. Clearly, adult stem cells have potential, and certainly research on them should continue to be pursued. Yet by passing this bill we do not open any new avenues to our scientists. In fact, we can make them take a detour. This is why.

We know that in order to use embryonic stem cells to make cells which can be used to treat a disease—like diabetes—scientists must learn how to make the cell become the right type.

But an adult stem cell is actually already somewhat specialized, so one could not use them to produce many of the types of cells we need to produce new therapies. Essentially, one would have to take such a stem cell and reverse its development back to an embryonic stage and then begin the task to develop it into the specialized cell required. It is as if you were driving down an interstate on a trip, took an exit, made a few turns, and then decided to back up in reverse all the way to the interstate in an attempt to try another destination. This is not the way to get where you are going.

So while adult stem cells have promise—they certainly are not comparable to an embryonic cell—with its potential to become any type of cell in the body. And even if you could turn an adult stem cell into an embryonic stem cell—you have simply doubled the obstacles and work required to reach your destination—which is a cure. That means millions of lives lost as you pursue a convoluted course. . . .when embryonic stem cells provide a far more direct path to creating cures.

That is why I am a sponsor of the Stem Cell Research Enhancement Act—H.R. 810—the third bill on which we will vote. Remember that we shared hope for progress back in August of 2001 when the President declared research could utilize the stem cell lines then in existence. Yet scientists have found that many of the cells were contaminated or otherwise unusable. In part we know that even when a stem cell line is created, it cannot reproduce indefinitely. So we must address how we may obtain additional cell lines for medical research.

I thank Senators SPECTER and HARKIN, and Representatives CASTLE and DEGETTE for joining together to work to address the fundamental question of federal participation in embryonic stem cell research. The legislation which they produced sets a very constrained set of circumstances under which embryonic stems cells may be obtained in order to assure we can move this vital research forward within an ethical framework. Never will an embryo be created for research purposes, nor does this legislation facilitate such studies. The act assures that an embryo may be used only when it would not ever be used for infertility treatment. Donation must be voluntary, under full informed consent and no financial or other inducement may be given.

The fact is that fertility treatment has allowed many to have families whom otherwise could not. A consequence of this remarkable therapy is that some embryos are created which will not be used. I must note that under the Stem Cell Research Enhancement Act, it will be the couple who will—under no bias—decide whether they will be used. This legislation facilitates that donation.

Today Americans who have faced fertility problems are facing the question of what to do with unused embryos. Indefinite storage is not truly an option—we know that we cannot maintain the viability of these embryos indefinitely. So given the choices available, some couples see the potential to help those suffering from serious disease. It assures that this gift can be given and used to help medical progress.

I believe many Americans who have undergone fertility treatment and realized a gift of life in their families will opt to save lives through a donation which promises to save many lives. But

it must always be individual conscience that is the determinative factor—and I respect the views and conscience of each and every individual on this matter.

There can be no doubt that stem cell research will move forward. The real question is whether our Nation will be engaged . . . whether our scientists will realize the breakthroughs . . . whether we will produce the treatments. Or whether those developments will draw our best minds and new medical investment abroad, where American vision and oversight will not influence the future of medicine.

I believe in stem cell research. More than 70 percent of the American people believe in stem cell research. I believe in it because I cannot look at a person suffering from a debilitating, and even fatal disease and support prohibitions which impede ethical research aimed at alleviating of that suffering. That is why I joined with my colleagues in the Senate in urging President Bush to ease the current restrictions on the use of stem cells so that research can move forward and lives could be saved. That is why I am a sponsor of the Senate version of this legislation introduced by Senators SPECTER and HARKIN. It is why I urge my colleagues to give that bill their support. This is the bill which will make a difference. I urge the President to reconsider this issue, and urge his support. Hopefully he will not veto this legislation because ultimately the alternative is to accept the status quo. The status quo is not right for those suffering from these diseases and for future generations who will.

I think back to President Reagan's passing 2 years ago, and remember the outpouring of concern we all had for our former President, and the First Lady and their entire family. We spoke much of the tragedy of Alzheimer's Disease and how we must do more to alleviate the suffering. Nancy Reagan inspired us all with her courage—and inspires us no less in her call for research which could alleviate the suffering from so many diseases. Her recent words call out to us, ''A lot of time is being wasted . . . A lot of people who could be helped are not being helped.''

I cannot think of a more significant living memorial to our former President than to allow more research to be done in order to find new cures for diseases affecting millions of people.

Today I ask my colleagues to consider allowing individuals—who have through modern medical science, enjoyed a gift of life, to contribute to saving other lives. That is exactly what H.R. 810 does, and that is why we must send this bill to the President and he must sign it.

The PRESIDING OFFICER. The Senator from Kansas is recognized.

Mr. BROWNBACK. Mr. President, how much time remains on our side?

The PRESIDING OFFICER. There is 8 minutes 30 seconds.

Mr. BROWNBACK. Thank you very much.

I want to point out in a little different format to my colleagues that when we talk about direct areas of being able to get treatments—we covered this some today—this is a little bit of a different presentation and a little more directly related to where we are getting treatments in this field, which is in the adult stem cell field. Here are some of the various areas where we get direct treatments.

The area of embryonic research, while interesting and intriguing, is not producing any results. It is not producing any cures. We are getting direct results from the adult, and we are not getting the formation of tumors in the adults. This area is working.

I also point out this is at no cost. People say these are embryos and we are throwing them away. You look at that. And I had this morning in my office and at a press conference three snowflake babies. These are all babies who were in in vitro fertilization clinics, were not going to be implanted by the natural parents, were given up for adoption. They are here now, and they are beautiful and they are wonderful. They are absolutely precious.

This isn't some sort of throwaway commodity. I point out to people that if you are one of those individuals who have frozen embryos—the number I hear is that 1 in 10 people in the United States suffer from infertility problems. There are a lot of people who would want to and do want to implant these frozen embryos and give them the nurturing they need to become humans we would all recognize. I hope people will look at that.

My other point is on President Reagan, who certainly was an inspiration for me to get into public office, and had a beautiful winsomeness about his presentation of truth. He was a fabulous individual. President Reagan was pro life. President Reagan did not and would not agree with the destruction of young human life. In fact, he said at one point in time, if there is a doubt about whether it is a life, if somebody was dying and there was a doubt about whether they are dead, you wouldn't put them in a casket and bury them. You would give them the benefit of the doubt. You would say, Well, let us work to bring them back.

The same on the young end—if there is a question, you err on the side of life. You treat this as life. There is a kind of common sense about it.

President Reagan was pro life. He fought for pro-life issues. He would not want to see us destroy one human life for the benefit of another.

A final point in this area: President Reagan suffered Alzheimer's disease. Alzheimer's is, as I understand it being explained to me, a plaque disease on the brain material. It is highly unlikely it is going to be treated with stem cells. Parkinson's is an area where we have adult stem cell treatment—a different type of disease. But the disease President Reagan fell to was Alzheimer's. It is highly unlikely that any stem cell, even adult or cord blood, and even more unlikely embryonic or cloning, would deal with the area of Alzheimer's.

The only reason I mention that is I think we need to try to be very accurate in our debate in saying what is a good possibility and hope and what is not. That one would be unlikely. Parkinson's we have a good shot at in the adult stem cell, and we have some early treatments already showing some promise in that particular field. But I don't think it is wise that we bring that up in that particular instance in the case of Alzheimer's. I think it is important that we be very clear about what this is and what will work and what will not.

The other thing I want to make mention of when we are talking about cures for things in this field is let us talk about areas where we have real scientific prospects of getting this done in the adult field. In the embryonic, as we have said for some period of time, it is unlikely to produce any sort of direct benefit to patients any time in the near future. That is according to scientists who are pro embryonic stem cell research. We can do more research in this field. There is some understanding from the presentation of the Senator from Georgia talking about other areas to derive embryonic type of stem cells. That is something we can do. The scientific community is producing more and more results in that particular area which I think are quite helpful and quite promising for us. It removes the ethical dilemma on this. It would be deriving embryonic type stem cells but without destroying embryos.

We are coming up with this along with the stem cell line. People are coming up with this in other fields. There is no reason to go into the ethical area—the question of destroying human life with taxpayer dollars to be able to get that done. I think it is important that we point out those particular areas in this bioethical debate.

One of the bills we will be voting on is an alternative bill. I talked about the fetal farming bill. I hope that passes 100 to zero so we can ban fetal farming. A lot has been talked about on H.R. 810, which is expansion of the stem cell lines using embryos and Federal taxpayer dollars to do that.

What has been talked about less is this area of the Santorum-Specter bill which would create embryonic type stem cells without destroying embryos. Here is a way for people, if they are troubled about the ethics of destroying a young human—I really do not want to do that, but you think there is a promising area of inquiry on these embryonic type stem cells and you are looking at this saying, Yes, it is not producing cures or results right now, but it might in a decade or two, so I would like to see this pursued—here is an ethical alternative for you to pursue. You don't have to say, Let's destroy this young human life. You can

say, Let us go with the alternative here where we are finding scientifically that we can derive these types of stem cells without the destruction of human life, embryos. If you like this field of inquiry, I raise a question about embryonic stem cells because we have invested $.5 billion in animal and human. We don't have any applications for it today, but if you are still saying we still ought to invest in this field because it might produce something, it might produce something big, you have an alternative which you can vote for in this Santorum-Specter alternative bill, and say, We want to pursue the science in this particular field. That is an area and a possibility that could work and we can and should, I think, pursue. I think it would be a good alternative for somebody who is in that type of quandary about which way to pursue this.

I will have further comments later on this evening. I don't want to take up the other side's time. I yield the floor. I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. HARKIN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. ISAKSON). Without objection, it is so ordered.

Mr. HARKIN. Mr. President, we are awaiting the arrival of a Senator on our side to speak on the stem cell issues. Until that happens, I will take a couple of minutes to talk about something my friend from Kansas brought up earlier today about adult stem cell treatments.

I am reading a letter from Scienceexpress, a publication of Science magazine. It is entitled, ''Adult Stem Cell Treatments for Diseases?''

Opponents of research with embryonic stem (ES) cells often claim that adult stem cells provide treatments for 65 human illnesses. The apparent origin of those claims is a list created by David A. prentice, an employee of the Family Research Council who advises U.S. Senator Sam Brownback (R–KS) and other opponents of ES cell research.

Prentice has said, ''Adult stem cells have now helped patients with at least 65 different human diseases. It's real help for real patients''. On 4 May, Senator Brownback stated, ''I ask unanimous consent to have printed in the Record the listing of 69 different human illnesses being treated by adult and cord blood stem cells''.

In fact, adult stem cell treatments fully tested in all required phases of clinical trials and approved by the U.S. Food and Drug Administration are available to treat only nine of the conditions on the Prentice list, not 65.

Again, it exposed most of these as kind of being bogus. One of those listed was testicular cancer. Testicular cancer is not being treated with adult stem cells, at least not successfully. In fact, according to the Sciencexpress article, the study that is supposed to be the basis for that claim is actually a study on how to isolate adult stem cells.

The Senator from Kansas also has a list that included several leukemias and lymphomas. Let's hear what George Dahlman of the Leukemia and Lymphoma Society has to say about that.

On behalf of the Leukemia & Lymphoma Society, I am writing in response to assertions that adult stem cells have treated or cured several blood cancers, including several leukemias, lymphomas and multiple myeloma.

As a representative of more than 700,000 patients and their caregivers in this country that battle blood cancers on a daily basis, our organization would like to emphasize as the Senate debates H.R. 810, the Stem Cell Research and Enhancement Act, that we exist today because we have not found cures for these devastating diseases. Furthermore, the claim that treatment of blood cancers with cord blood, blood or marrow stem cells—known as hematopoietic stem cells—demonstrates the potential of 'adult stem cell' research or is a substitute for embryonic stem cell research is misleading and disingenuous.

Mr. Dahlman concludes:

The Leukemia & Lymphoma Society asks that you and your colleagues pass H.R. 810, and not accept any substitutes.

All in all, according to the science journal, only nine diseases of the 65 examined have proved to even respond to treatment with adult stem cells.

The authors of the analysis conclude that claims about stem cells being in general use for 65 diseases are false. Such claims ''mislead lay people and cruelly deceive patients.''

Again, we are going to hear a lot of talk about all we can do other than embryonic stem cell research. This should not be a debate about whether we do adult stem cells, cord blood, or all these other things. They are all worthy of research.

Those that are for adult stem cell research, cord blood, bone marrow research, that type of thing, all say they want to do that to the exclusion of embryonic stem cells. Those who are in support of H.R. 810 say let's do them all and do them all in an ethically acceptable manner.

Again, we have strong ethical guidelines. One, we do not create any embryos with this bill. You can only use the embryos that are already existing in IVF clinics that are left over that will be discarded. Second, we must have written informed consent of the donors. Third, no one can get paid; no money can change hands. You cannot entice someone to donate these embryos with money. We have strong ethical guidelines.

Lastly, I have heard comments today time and time again about how this bill, H.R. 810, involves the destruction of embryos. I challenge anyone to show me where in H.R. 810 it provides for the destruction of any embryos. Under the Dickey-Wicker amendment that is now existing, no Federal funds can be used to destroy embryos. All H.R. 810 says is that once stem cells are derived through private means or whatever, then Federal funds can be used to go to universities or to other researchers to study these embryonic stem cells.

There is nothing in this bill, and I challenge anyone to show me in H.R. 810 where it provides for the destruction of any embryos; it does not. To say otherwise is being disingenuous. The Dickey-Wicker amendment still applies. No Federal money can be used for the destruction of embryos, plain and simple.

I see my colleague from Illinois is here. I yield the floor.

Mr. DURBIN. I thank the Senator from Iowa not only for yielding but also for being the leader on our side of the aisle on this issue, with Senator SPECTER on the Republican side. I am glad this day has finally come. This matter has been on the calendar for over a year.

For over a year, millions of Americans have been wondering when the Senate will take this up. Finally, it has been scheduled. A lot of people outside this Chamber had a lot to do with it being scheduled. First Lady Nancy Reagan stood up and spoke up when she saw the late President suffering from Alzheimer's. Her voice has made a difference. I salute her for that. Christopher and Dana Reeve, both gone now, in their lifetime, the dedication and energy they put on this issue made all the difference in the world.

There are three votes tomorrow. There is only one that gets to the heart of the issue. There are some that are going to address a lot of different issues from different perspectives, but there is only one that counts when it comes to stem cell research. The Stem Cell Research Enhancement Act is the only bill that expands Federal funding for embryonic stem cell research, the type that holds out so much promise.

The other two bills are well intentioned. I am not going to say anything negative about them. I will vote for them because, frankly, they make little or no difference. One of them bans practices that presently are not being used. I guess that is a good thing to do. I will vote for that bill.

The other one, by Senator SANTORUM of Pennsylvania, won't accomplish much. This was the question I asked of Dr. James Battey of the National Institutes of Health about the Santorum bill: Can you tell me whether S. 2754 authorizes research on stem cells at the NIH that currently is not permissible or legal?

He answered: No, it does not.

So it does not give new authority to NIH, and it does not expand research. It has some motive other than medical for being offered.

William Neaves, a leading stem cell researcher, has it right:

This is not a contest between adult stem cells and embryonic stem cells. Instead, it is a contest between society and disease.

I have listened to some of the arguments in the Senate. Some of the arguments are that adult stem cell research has great potential. I believe that is true. I believe we should pursue it aggressively. However, the argument seems to be that if that is the case,

then we do not have to concern ourselves with embryonic stem cell research.

I am a liberal arts lawyer and do not profess to know about medical research, but why foreclose a whole area of research with embryonic stem cells that the greatest minds in America tell us is so promising? Why wouldn't we do both, both adult stem cell research, as well as embryonic stem cell research? From that point of view, I cannot follow the logic in opposing this bill.

Former Senator John Danforth is another person who has thought about this issue. I respect him a lot. He is an ordained Episcopal minister and a longtime opponent of abortion. Like tens of millions of Americans, he comes from a family that knows the pain of disease. He lost one of his brothers to Lou Gehrig's disease. He wrote this in the St. Louis-Post Dispatch:

A choice between two understandings of human life. On one hand, we have millions of people who suffer from ALS, Alzheimer's, juvenile diabetes, Parkinson's, spinal cord injuries and cancer—and the loved ones who care for them and suffer by their sides. On the other hand, we have tiny bundles of unfertilized cells existing in petri dishes.

He went on to write, the people who oppose stem cell research:

should explain to the afflicted and their loved ones why they care more about those cell bundles than they do about the people.

This Stem Cell Research Enhancement Act has been supported by so many groups. I ask unanimous consent, Mr. President, to have the names of some of those groups printed in the RECORD.

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

WHO SUPPORTS H.R. 810

The Stem Cell Research Enhancement Act is supported by more than 200 patient groups, scientists and medical research groups. They include: American Medical Association, American Association for Cancer, American Diabetes Association, Juvenile Diabetes Foundation, American Pediatric Society, March of Dimes, the ALS Association, Parkinsons Action Network, Alzheimer's Association, Parent Project Muscular Dystrophy, Kidney Cancer Association, Coalition for Pulmonary Fibrosis, and the Society for Neuroscience Research.

Mr. DURBIN. I would say that all of the big names in medical research in America support this bill. They understand this is the real deal. This is the bill that will make a difference. The other two may not.

Among the other groups supporting the Stem Cell Research Enhancement Act are the Republican Main Street Partnership, the B'nai B'rith International, and a long list of people representing religious organizations from almost every denomination in America.

Why do we need this? We need it because President Bush decided in 2001 to take a position on medical research. I do not think there is a precedent in American history for what he did. He basically said we were going to cut off Federal funding for those who were involved in embryonic stem cell research, except for a limited number of lines. He identified 78 stem cell lines on the day of his speech and said that scientists who received any Federal funding at all could work only on those stem cell lines.

As Senator HARKIN has pointed out over and over, not only were the 78 lines reduced to 22, they are all contaminated. They cannot be used for this research anymore. So President Bush is not offering any hope when it comes to this area of research. I do not want to get into the moral argument here because it is almost religious. It is moral and theological here. But if the President could rationalize 78 stem cell lines as being appropriate and all right for research, then he has fundamentally decided the research is permissible, I suppose. I do not follow his logic. And I do not follow the logic of some who oppose it who say that because this is a product of in vitro fertilization and has the potential for life that we should not do research. We know that in that process, some of these fertilized eggs will end up being implanted in the womb of an expectant mother in the hope she becomes pregnant, and others will not be used. It is the nature of the process. They make more of these fertilized eggs than they will need in the hopes that one will work.

Then what happens to the rest? Well, they are going to be discarded. They are not used to find cures for diseases. But for those who find it immoral to use the product of that process for medical research, I still am troubled by the notion that they have not come to the floor asking that we ban in vitro fertilization, because we know that is a natural consequence of this process. And if it is permissible and moral and legal to have a process which results in these extra cells, I do not understand the moral question about using these fertilized cells to give people a chance to live and to live their lives better. I just do not understand that.

To measure the impact of President Bush's policy, Stanford University looked at peer-reviewed research published in scientific journals. They found that embryonic stem cell research in the United States made up one-third of the papers published in 2002 but only a fourth of those published in 2004. Research is slowing down. President Bush's decision is reducing the number of opportunities for embryonic stem cell research.

The world's best and most respected scientists—our own NIH leadership—tell us that this area of scientific research could lead to treatments and cures. Dr. James Battey chairs the NIH working group on stem cells. This is what he said before the Senate Labor, HHS Subcommittee:

There's no scientist that I know who would argue that more stem cell lines wouldn't accelerate the pace of scientific research. . . . Cell lines offer scientific opportunities that are right now beyond the reach of federal funds.

Other things have changed since President Bush's decision in 2001 as well. We have learned more about the potential of stem cell research. Dr. John Kessler is the chair of the neurology department at Northwestern University Medical School in Chicago, which I am honored to represent. He is also the father of a 20-year-old daughter who is paralyzed as a result of a spinal cord injury. He told me personally that he finds the current administration policy ''unconscionable'' in light of everything we have learned since 2001.

H.R. 810—the real bill, the one that is important, and the one that will make the difference—would loosen the handcuffs on America's scientists. It would allow scientists to receive Federal funding to use embryonic stem cell lines in their research if—and only if—two very specific conditions are met. First, the stem cell lines must be derived from eggs that were produced for in vitro fertilization but are going to be discarded. The choice is research or destruction of these potential means of creating medical opportunities. Second, both adults to whom the eggs belong must provide written consent that the eggs be donated to science.

It is estimated 400,000 excess eggs are being stored now in clinics around the country, stored in petri dishes at 300 degrees below zero. Opponents of this research say it is unethical to use them for research. But if they are not used, they will be destroyed. How in the world can that be the right ethical, moral choice to destroy the opportunity for research to cure disease?

I see my colleague from Washington is here, and I know she wants to speak. I will close by saying this: I have met some of the children who are victims of juvenile diabetes. I guess it comes home personally when you sit down with these kids and their mothers, and the mothers say: I wake my daughter up twice in the midst of the night to take a blood test to see how she is doing. Think about that for that poor little girl being awakened twice each night. And think about the mother and her worries that that little girl, who she loves so much, may go blind or lose a limb or die. And think about the hope they have in their hearts that this research will go forward.

I have met the victims of ALS and diabetes and Parkinson's and Alzheimer's. I know they are praying we do the right thing tomorrow. I hope we pass this bill. I am not certain it will pass, but I am hopeful it will. It will have strong support on this side of the aisle, and I hope there will be enough votes on both sides of the aisle to enact it. Then the bill will go to President Bush, and he will have a moment in the history of this country to make a momentous decision. If he decides to go forward and veto the stem cell research bill, it will be the first veto of the Bush Presidency.

President Bush described himself politically when he ran for office as a compassionate conservative. His decision on the future of this bill will be the test of his compassion. If he has compassion for those who are suffering across America, who are praying for the hope this research can bring, I hope he will pray over his decision long and hard. And if we pass this bill, I hope he will sign it and give these Americans a chance for a better tomorrow.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Washington.

Ms. CANTWELL. Mr. President, I join my colleagues on the floor to speak about H.R. 810. I applaud the Senator from Illinois for his comments because I know he has many fine research institutions in his State and has met with many people who suffer from a variety of diseases who could be helped if H.R. 810 is passed and signed by the President. So I commend him for his remarks.

I certainly thank the Senator from Iowa for being out here all afternoon talking about the importance of this legislation and trying to communicate how important it is that H.R. 810, the legislation that focuses on embryonic stem cell research, be passed and signed by the President.

I also want to say I know the Senator from Kansas has been out here, and I have enjoyed working with him on a variety of pieces of legislation, particularly legislation that dealt with international marriage brokers, trying to protect women who come to America, making sure they got full information about people who were helping them apply for visas before they come to the country. So I certainly have enjoyed working with the Senator from Kansas on other legislation.

But I wish to say I think it is important we focus our debate on H.R. 810—an important bill on embryonic stem cell research—in the context of science, because I believe Congress must not stand in the way of science. I think tomorrow's vote is exactly what that is about. So I want to be clear that I support that legislation and will work to overturn any attempts to veto this legislation.

Like my colleagues, I have met these Americans who for too long have wanted to have hope. They have waited to have real hope that there would be a lifesaving stem cell research program. Many Americans believe we can do better. We know there are 3 million Americans who need help, and we understand that by investing today we can save lives tomorrow. We understand, for Americans who suffer from Alzheimer's or ALS or Parkinson's disease, it really does mean hope and a new way of looking at opportunity for them.

We will have a debate about this continuing today and tomorrow. But we need to keep in mind it is good science that is at question. For us in Washington State, with 35,000 Washingtonians living with Parkinson's disease today, understanding what embryonic stem cell research can do for them is of utmost importance.

We also have 300,000 Washingtonians who have been diagnosed with diabetes who, obviously, are very interested in this legislation. We have 160,000 Washington State residents who struggle with heart failure and understand there is so much that could be done in this particular area of research. We have 5,000 Washingtonians who suffer from spinal cord injuries. So there are people all over our State with various medical challenges who are looking to us to make the right decision and to allow critical research to give them promise for opportunity in the future.

At the Fred Hutchinson Cancer Research Center—I know my colleague from Iowa has visited the Fred Hutchinson Research Center—they are applying groundbreaking science and using adult stem cells to treat blood cancers such as leukemia, lymphoma, and various other diseases. They are also looking to do the same for kidney cancers.

The Benaroya Research Institute at Virginia Mason in Seattle is working with stem cells on a collaborative 5-year project to grow a living heart. The effort could lead to tissue-engineered replacement hearts, and it means that could help us with various challenges in that particular area of health care.

The University of Washington, which is in Seattle, boasts 70 scientists involved in aspects of stem cell biology addressing everything from liver disease to coronary heart disease. Three years ago, the NIH named the University of Washington one of the three exemplary centers for human embryonic stem cell research. But in the last 5 years, since President Bush banned the funding for embryonic stem cell research, it is as though our Nation has turned its back on that science and that work that could be done, and I am sure not just in Washington State. But that is a representative example of what could be done if we moved forward.

It is important we continue to move forward by passing H.R. 810. The truth is that right now adult stem cells do not have anywhere near the scientific potential as embryonic stem cells. Their application is limited. Their reach is finite. And we do have a better option. Allowing federally funded research on embryos that would otherwise be destroyed would provide a much-needed expansion. Everything from eradicating, in our past, polio to mapping the human genome, our Nation has been a leader and an innovator in science and medicine. So let's not fall behind now. Just as we are challenged with so many of these diseases, we need to do more.

Of the original 78 stem cell lines the administration permitted scientists to work on, only 21 are available today. Lab scientists must turn to private investors and already struggling State governments to carry on this critical research. So researchers in my State, in the State of Washington, say that Federal funding would increase research opportunities and allow scientists to use that money much more effectively.

In March of 2006, the University of Washington announced that because of Federal funding restrictions, it would seek to establish a stem cell institute with private money and, instead, looks to raise $100 million in private funds to help it move forward. The University of Washington plans to reflect the intense competition it faces from other universities around the country that are boosting their research into stem cells which have permitted them to treat a variety of diseases. So the competition will continue. But we could be working together in a much more collaborative fashion, in a way that would help us extend the scope of that research.

It is very important because so many of those involved in this particular area believe passionately we need this new area of expansion. One of those individuals, Dr. Storb of the Fred Hutchinson Cancer Research Center in Seattle, recently said this:

> We have exhausted research on adult stem cells. They do not do the trick. We have worked with them for 30 years now and know that they do not make all of the tissues in the body.

He further went on to say:

> If the public wants cell-based therapies, then we must conduct that kind of stem cell research. We may learn more from embryonic cells how to program adult cells, but we have to work with embryonic cells to do just that.

So this Congress, I believe, must not stand in the way of science. We have three bills we will vote on tomorrow, but only H.R. 810 actually clears the way for critical research that could lead to cures for so many debilitating diseases.

There is no viable alternative to improving the research and serious investments that I believe H.R. 810 will provide. When we are talking to Americans who suffer from diseases such as Alzheimer's, Parkinson's, and others, I think it is important, as my colleague from Illinois stated, that we must keep in mind the stories of individuals.

Mr. President, one such individual is a 4-year-old who died of brain cancer. Her mother wrote to us saying how important this bill was in holding opportunities for other people in other families who suffer from brain cancer. To me, it is so important that we pass this legislation and help those individuals and families who are suffering by giving them hope for promising research that we know science can provide.

I yield the floor.

The PRESIDING OFFICER. The Senator from Iowa is recognized.

Mr. GRASSLEY. Mr. President, today, as everybody is doing, I want to discuss the three stem-cell-research-related bills before the Senate. I have been in the Senate for 26 years now. Every day, we make decisions that impact Americans. It becomes difficult,

however, when we debate bills that involve the lives of women and families, especially those who are sick and dying. We must be cognizant of their plights, but we cannot forget about those who don't have a voice.

Tomorrow, I will vote in favor of those who are not yet brought into this world. I will vote for those who don't have a chance to speak against legislation that doesn't give them a chance at life.

First, I intend to support S. 3504, the ban on fetus farming. This bill states that a person cannot solicit or knowingly acquire, receive, or accept a donation of fetal tissue or an embryo if the pregnancy was initiated to provide such material. This bill will reduce the likelihood that women will be used solely for their production of embryos. We have to draw the line, and we have to prevent the corruption that could occur.

Second, I intend to support a bill numbered S. 2754, which directs the National Institutes of Health to fund alternative techniques for stem cell research. It will allow researchers to use different techniques to derive pluripotent stem cells without destroying human life. This research could be done under current law, but a vote in support of this bill will send a signal to the NIH that we want to see even more of this research.

Finally, I will oppose H.R. 810 because it would expand Federal funding for embryonic stem cell research.

Some of my colleagues will characterize the bill, H.R. 810, as a lifesaving opportunity for many people with diseases. The focus will be on promises, hopes, and dreams. This focus disregards that this bill will allow researchers to use and abuse embryos. And there are enormous moral and ethical consequences associated with that research.

You cannot mess with the facts. An embryo is life. No Senator can disagree with that assertion. Once you realize that fact—that an embryo is life—you have to realize that this bill takes life and plays with it.

In addition, this bill doesn't prohibit cloning. In fact, it will make cloning even more attractive. Why would we want to go down this road of unethical research when we have a method that already works?

We all know that adult stem cell research has proven effective. We are investing the taxpayers' money in research that benefits the American people. We in Congress have to realize that there is a difference between hope and hype. I, for one, will not be misled.

Adult stem cells have already proven effective for over 72 treatments. I will not list them all, but some of them relate to adult stem cells being used to treat brain tumors, multiple sclerosis, arthritis, and Parkinson's disease. Peripheral blood stem cells have treated testicular cancer, lymphoma, and breast cancer. Cord blood stem cells have treated leukemia. Olfactory stem cells from the nose can develop into heart cells, liver cells, kidney cells, muscle cells, brain cells, and nerve cells. Bone marrow stem cells and stem cells from fat have the ability to differentiate and form other body tissues.

I wish I could list the advances with embryonic stem cell research, but I cannot; there are none. There are no treatments for human patients. So there is no evidence on which to argue that this research should be expanded with public resources.

I have a story about a person that I have known for 44 years, David Foege. I have known him since he was a page at the Iowa State Legislature back in 1962. He is originally from Waverly, IA, so even though he lives in Florida, I still consider him a constituent. There is evidence, then, through Dave Foege that we should continue supporting adult stem cell research.

Just 2 weeks ago, I had an opportunity to meet with David, who is now 61 years old and living in Florida. This is the story he told to me. David was given a life sentence because of heart failure. Three years ago, David was told that he had little chance of surviving. His heart was losing all function and there was little that doctors could do. David then turned to stem cell therapy. He found doctors in Bangkok that would harvest his own stem cells and then inject them back into his own heart. His own stem cells—his adult stem cells, not embryonic stem cells—cured him. His heart function has improved by 70 percent. David is alive and well, playing golf, and currently taking a cruise in Belize. Without adult stem cell therapy, David would not be here.

Embryonic stem cell research, on the contrary, has not yielded this kind of success that we have from adult stem cells. It makes sense to direct public resources to what works. Prioritizing resources: It makes sense for public resources to help those with heart disease, the No. 1 killer in the United States. It makes sense to encourage research that will work for those with Parkinson's, diabetes, cancer, and autoimmune diseases. Why would we want to desert patients in the United States by spending dollars on research that has not been proven?

I will oppose H.R. 810 not only because of the ethical consequences but because it doesn't prioritize our use of fiscal resources.

Let's be clear. There is no current policy in place that bans embryonic stem cell research. Everybody knows that we are doing some through the Federal Government because, being perfectly legal in the United States, President Bush, in 2001, allowed taxpayer dollars to be used for that research. This debate in the Senate today and tomorrow is not whether we want to ban or allow research, it is whether we want to spend our dollars on embryo creation and destruction.

Today, the Congress appropriates nearly $30 billion for medical research through the National Institutes of Health. Every year, hundreds of advocates come to my office to say that $30 billion is not enough. They say these funds are important to continue research and trials that are already started. So what would happen to those arguments if there was a higher priority placed through passage of H.R. 810? Will we have to double the budget again for NIH like we did between 1998 and 2003? I don't think that is possible given that was already done starting in the year 1998. So it makes me wonder whether we are prioritizing the use of Federal research dollars through the National Institutes of Health the way we should.

We don't have an infinite amount of Federal funding. We cannot pretend there is enough money to go around. We do have to prioritize. So I urge my colleagues to realize that Congress can only disburse so many funds. We can only fix so many problems. Therefore, we need to think rationally. We need to make tough choices. One of those tough choices might be to pursue what is proven to work, which is greater use of adult stem cells. The right choice, then, is to invest in what works. Let's keep the ball rolling with research that has been proven.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Texas is recognized.

Mrs. HUTCHISON. Mr. President, I ask unanimous consent to have 5 minutes to talk as in morning business regarding the resolution that will be on the Senate floor later tonight or tomorrow regarding condemning Hezbollah.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered. The Senator from Texas is recognized for 5 minutes.

(The remarks of Mrs. HUTCHISON are printed in today's RECORD under ''Morning Business.'')

Mrs. HUTCHISON. I yield the floor.

The PRESIDING OFFICER. The Senator from Ohio.

Mr. VOINOVICH. Mr. President, I rise today in support of legislation to expand the Federal investment in adult and umbilical cord blood stem cell research, as well as scientific ways to create embryonic stem cell lines without destroying human embryos.

It is important to point out that there are two very important categories of stem cells. I know that my colleagues are going to have a little difficulty with this because I have had difficulty with this. This is medical terminology.

The first, embryonic stem cells, as their name suggests, are derived from human embryos developed from eggs that have been fertilized in an in vitro fertilization clinic. Removing stem cells from these embryos destroys their potential life, making their use very controversial and something I cannot morally support.

On the other hand, adult stem cells are undifferentiated cells found among

differentiated cells in tissues or organs. Adult stem cells can renew themselves and will eventually differentiate into a special cell. However, before this occurs, the undifferentiated stem cells can be gathered by scientists without any harm to the individual.

Also included in this ethical category of stem cells are those from umbilical cord blood derived from the placenta of a newborn baby. With the birth of my seventh grandchild last summer, I learned a great deal about the benefits of preserving cord blood stem cells. Once considered medical waste and discarded after birth, science has determined that cord blood has the potential to save thousands of lives.

And that is exactly why I came to the floor today, to explain these differences and to highlight the unmatched value of adult and cord blood stem cells.

By the way, when I found out about the umbilical cord blood coming from the placenta, we are now freezing that umbilical cord, and each year we will pay some money to maintain it. But that umbilical cord can be used to help my seventh grandchild or, for that matter, the whole family. It is something more people should find out about.

I am concerned that the vast majority of Americans are unaware that some of the most promising advances in medical research and treatment today are not attributed to embryonic stem cells; rather, they are the result of noncontroversial, nonlife-ending use of adult and umbilical blood cord cells.

Unfortunately, many of the individuals who support embryonic stem cell research have been kept in the dark about the advances of umbilical and adult stem cell treatments and have been oversold on embryonic stem cell research, which is still in its infancy.

While embryonic cells have never been successfully used to treat even one disease—not used to treat one disease to date—adult stem cells have been used to treat 72 diseases, such as breast cancer, multiple sclerosis, rheumatoid arthritis, sickle cell anemia, spinal cord injuries, and many others. I have read reports that adult stem cells from a young girl's own fat cells were used to repair or regenerate a 19-square-inch section of her skull. I have also learned of a Parkinson's patient who has been without the vast majority of the disease's symptoms for 6 years after being treated with his own adult stem cells.

Even more encouraging, the potential use of adult and umbilical cord therapies continues to expand. In fact, there is a real possibility that these types of stem cells will be able to yield the same results as embryonic, or what they call pluripotent stem cells, without the need to destroy human life.

The American Journal of Pathology recently reported that a group of scientists have isolated a novel population of multipotent adult stem cells from human hair follicles—think of that, human hair follicles—which, like embryonic stem cells, express neural crest and neuron stem cell markers, as well as the embryonic stem cell transcription factors.

In other words, what we are saying is that they produce the same thing we would get if we were using the embryos that so many are anxious to use.

I was introduced to the promise of adult and umbilical stem cell research by experts at the National Center of Regenerative Medicine in my hometown of Cleveland, OH. The individual institutions involved in this partnership—Case Western Reserve University, University Hospital, and the Cleveland Clinic—each bring an expertise to the center that is leading the Nation in the use of nonembryonic stem cells to regenerate new tissue and diseased organs rather than using drugs or devices to improve the function of the organ.

The National Center for Regenerative Medicine team has told me that they are interested in the rapid translation of adult and umbilical cord stem cell technology into patients that is not possible today with embryonic stem cells.

Since 1976, investigators at the center have studied nonembryonic stem cells and performed their first stem cell transplant as early as 1980. That is back in 1980. Investigators at the center are now able to cure leukemias and lymphomas with nonembryonic stem cell transplantation, as well as to fix unstable bone fractures and treat genetic disorders.

In the next several years, investigators at the center believe they will be able to address cancer, bone, heart, and neurological disorders with nonembryonic stem cell treatments. They are hopeful that the new advances will lead to treatment of degenerative arthritis, will decrease the severity of graft versus host disease after stem cell transplantation, and allow physicians to use a patient's own stem cells to repair heart damage following congestive heart failure, as well as use their own neural stem cells to improve function after spinal cord damage. All of the things that folks are talking about because we have to have these embryonic stem cells because this is what we have to do—we are already on our way. We are making progress with adult and with umbilical cord stem cells.

The center has 10 ongoing or planned clinical trials to further explore the use of stem cell therapies to reduce the risks of chemotherapy, treat certain heart conditions, and improve umbilical stem cell treatment for leukemia. I recently had the privilege to personally hear two young Ohioans discuss the successful adult stem cell treatment received at the center for an aggressive form of leukemia and a severely broken bone that would not heal with traditional treatment.

I will never forget this young woman who was there. It was a meeting at the regenerative center. She talked about the fact that she was in this terrible motorcycle accident. She was a mountain climber, she was a skier, she was a runner. She was told by all of her doctors that she wouldn't be able to run again, that she would have to hobble around. She went to the Cleveland Clinic, to the regenerative center, and as a result of using her stem cells, they were able to repair the problem that she had in her leg.

Today she is running. I am getting goosebumps right now. I will never forget it. She started to cry. She hugged her doctor. We all started to cry. It was a miraculous thing using adult stem cells.

As a result, I support the legislation introduced by my colleagues from Pennsylvania, the Alternative Pluripotent Stem Cell Therapies Enhancement Act. The bill would require the Secretary of Health and Human Services to develop techniques for the isolation, derivation, protection or testing of stem cells not derived from a human embryo.

The bill would also require the Secretary to prioritize stem cell research that will reap near-term clinical benefits. It is my hope that this type of progress will help eliminate the controversy surrounding embryonic stem cell research without any compromise of scientific advancement.

I have the greatest sympathy for patients and their families who continue to struggle with a wide range of painful, life-ending diseases. Further, I understand what it is like to watch a loved one suffer and the tragedy of losing a member of your family, even a young child, to a life-ending disease. I personally lost my father to diabetes and my nephew C.T. to bone cancer. I have been a witness to the devastating effects of Alzheimer's, arthritis, and many other diseases.

One can hardly take issue with these individual efforts to seek out a potential cure, but too often, I fear, proponents of embryonic stem cell research provide patients with false promises from unproven, unexplored embryonic stem cells, while ignoring the real substantial progress that has been made with adult and blood cord treatments.

I am gravely concerned about the possible implication of spending taxpayers' dollars on an issue such as embryonic stem cell research that divides Americans on moral and ethical grounds, and I believe it is my moral responsibility to direct the Federal Government's dollars toward the areas of research that have the greatest near-term potential to help the largest number of Americans.

Since I have been a Member of the Senate, we have doubled the funding for the National Institutes of Health, NIH, and greatly increased the amount of medical research the Federal Government is able to fund, including increasing the amount of money available for research on all stem cells from $226 million in 1999 to $568 million this year.

However, as you know, Mr. President, in recent years with the cost of the war, the need to protect our homeland, and natural disasters such as Katrina, the amount the Federal budget has available for these priorities is getting smaller and smaller. We are seeing that now with the appropriations bills in the Senate.

I meet with groups all the time, and they ask me for increases in funding for research for diseases that personally impact on their families. I am sure they visit your office, Mr. President, every couple of weeks: We want more money for NIH to take care of this, to take care of that. Just within my own family, I met recently with my former brother-in-law in support of childhood cancer, and through my son I have heard a very emotional presentation by a group of my constituents on behalf of juvenile diabetes research. Again, if everyone in the Senate had been at that meeting, I think they would have said: Look, we have to do more, spend more money on juvenile diabetes.

There is a tremendous need to pursue treatments for these and many other diseases, but we face a reality of limited funding. That is the real world.

We have to be smart about spending our money, and in the current budget environment, I have concerns that increasing funding for research on embryonic stem cell will take away opportunities for research in areas such as adult and umbilical cord blood research, or even research for treatment of specific diseases such as cancer, juvenile diabetes, and others that have proven their usefulness.

Consequently, and in light of all the advances and results science has provided with adult and umbilical blood cord stem cells, I urge my colleagues to continue to direct Federal funding toward the noncontroversial areas of adult and umbilical cord blood stem cell research. I urge my colleagues to do that.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Kansas.

Mr. BROWNBACK. Mr. President, as we are waiting for my colleagues to come to the floor, I want to address some issues that have been brought forward and talked about previously.

Mr. President, I see my colleague from Iowa, and I am prepared to answer—he had raised a question about whether we had 72 different areas of treatment for adult stem cells, and so I wanted to respond.

The PRESIDING OFFICER. Unfortunately, the majority's time has expired.

Mr. BROWNBACK. Mr. President, I yield the floor.

Mr. HARKIN. Mr. President, I see the distinguished Senator from Washington is here to make her statement on this bill, and I would yield the floor to Senator MURRAY for her comments.

The PRESIDING OFFICER. The Senator from Washington is recognized.

Mrs. MURRAY. Mr. President, I thank my colleague for yielding me time tonight on this important legislation. I rise tonight to express my support for expanding stem cell research. This innovative research offers us a chance to save lives.

Families across this country are holding out hope that we will finally allow science to move forward and deliver on the promise of stem cell research. That is exactly what we should be doing. But, unfortunately, today the hands of American scientists are tied by political restrictions. I believe we can expand stem cell research while still maintaining strict ethical safeguards. That is why I will be supporting H.R. 810.

Back in 2001, President Bush imposed restrictions on promising stem cell research. Since that time, we have learned that there aren't as many useful stem cell lines as the President suggested. The Bush administration promised us that 60 lines would be available for research. To date, only 15 are available, and it appears that all of those lines have contamination problems. The President's restrictions have held back American science and stalled promising research. It is time to correct that mistake and allow our country to make progress.

Stem cell research is about improving medicine, and it is about saving lives. For patients with Parkinson's or Alzheimer's, diabetes or multiple sclerosis, stem cell research holds promising potential to provide the tools to understand, treat, and someday cure these devastating diseases.

I understand the challenges and frustrations these diseases cause. When I was just 15 years old, my dad was diagnosed with multiple sclerosis. In a few short years, his illness became very bad, so bad that he couldn't work anymore, and for most of my life my dad was in a wheelchair. His illness had a profound impact on my entire family. My mom, who stayed home to raise seven kids, had to work to care for him and had to get a job so she could support our family. She got that job, but it was never enough to support seven kids and a husband who was in a wheelchair and with growing medical bills.

I can only imagine how different our lives would have been had there been a cure for M.S. Back then, we didn't have the tools to find a cure, but today we do, and these tools unfortunately are being blocked by an ideological policy that puts politics over science. I think we can do better than that.

My dad's challenges are similar to the struggles millions of Americans and their families face every day. They deserve a chance, and they deserve hope. That is why we can't let the current restrictions stand.

A short time ago, I received a letter from a constituent of mine who lives in Mercer Island, and he wrote:

My 17-year-old son was recently involved in an automobile accident and is now paralyzed from the upper chest down. Stem cell research looks to be our brightest hope by far. Please help give him the chance to ride a bike, go for a hike, and run with his friends again. Please, support stem cell research.

As that father points out, this is about people. It is about keeping our country on the cutting edge of science and research, and I am proud to represent a State that has a strong reputation for scientific research. But for our country to remain a leader in this promising field, our scientists and our researchers need the support of our Government. America should never take a back seat to other countries in the search for promising new cures.

Unfortunately, the President's current stem cell research policy is tying the hands of our scientists by limiting the number of lines eligible for Federal funding. We can do better than that.

In fact, the majority of this Congress has been trying to correct the President's mistake for over a year now. H.R. 810 passed the House of Representatives 13 months ago. Since that date, my colleagues and I have been fighting to bring this issue of stem cell research to the Senate floor. We wrote letters, we pleaded on the floor, and we asked Republican leaders numerous times for even a few hours to debate and pass this bipartisan bill. Our efforts to promote research and offer hope had been denied at every turn. But now, finally, our day has come, and after more than a year of obstruction, we finally have a chance to offer hope to millions of patients and their families. On a bipartisan basis, I believe this bill will pass.

But, of course, we know that is not the whole story. Shortly after we got word that this bill would finally come to the floor, I was dismayed to see headlines announcing that Karl Rove, President Bush's chief political officer and adviser, guaranteed a veto of this important bill. In nearly 6 years in office, President Bush has never once vetoed a bill. It is pretty amazing to me that he would choose this bill—this bill which offers basic hope and opportunity to so many Americans—for his first veto. I believe the President is wrong on this issue, and I think threatening a veto is wrong.

I am here this evening to pledge my support for this bill and to call on my colleagues to support it. But next, I call on them to ask the President in no uncertain terms to stand with us in support of open opportunity, stand with us in support of medical research, stand with us and, more importantly, with millions of Americans who are waiting on a cure, in support of stem cell research.

For far too long, this administration's ideology has trumped research. Politics has been more important than science. With this bill, President Bush has a chance to change course and put people ahead of personal political ideology. I urge him to do the right thing.

For our patients, for their families, and for the future of our Nation's research leadership, it is time for the Senate to pass H.R. 810, and it is time for the President to sign it. Let's take the handcuffs off of our scientists and

let them find the cures that will save lives.

Mr. President, I yield the floor.

Mr. HARKIN. Mr. President, I thank the Senator from Washington for her very eloquent statement, and I thank all of the Senators who have come over here today to speak on this important issue.

We have about 20 minutes left in this half hour. I don't have any other Senators right now, but if there are other Senators on our side who wish to take a few minutes to speak on this bill, I would be glad to yield to them.

However, I would like to take this time to sum up, if I can, what we have heard today. We have come to the end of our first day of debate on stem cell research, and I think it has been a very enlightening debate and a very good exposition of the different sides of this issue. I hope the American people who have tuned in to watch this have learned a great deal about why we need to pass H.R. 810, the Stem Cell Research Enhancement Act. As we know, that bill passed the House by a bipartisan majority over a year ago, and I think it has a strong bipartisan majority here in the Senate. Certainly the bill itself is sponsored bipartisanly. If we can pass it tomorrow—and I am confident we can and we will—H.R. 810 can go straight to the President's desk.

I would like to reiterate a few things we have heard today.

First, H.R. 810 has enormous popular support. I have here a letter that was just transmitted to me, and it is a list of different advocacy groups, health organizations, research universities, scientific societies, religious groups, and other interested institutions and associations representing millions of patients, scientists, health care providers, and advocates, writing in strong support for H.R. 810. They point out in this letter that this is the bill which holds promise for expanding medical breakthroughs. The other two bills, the Alternative Pluripotent Stem Cell Therapies Enhancement Act, S. 2754, and the Fetus Farming Prohibition Act, S. 3504, are not substitutes for a ''yes'' vote on H.R. 810.

This letter is signed by 590 advocacy groups. I have been on this Senate floor now 21 years. We all get letters and things that come in expressing support, but I daresay I have never seen anything as overwhelming as this: 590 different groups. Earlier this year, I submitted a list of 205 different groups.

Mr. President, I ask unanimous consent that at the conclusion of my comments on this portion, this list of 590 groups be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. HARKIN. I thank the Presiding Officer.

Again, those are advocacy groups and scientific associations—590.

How about the American people? Three out of four Americans agree: support stem cell research. The question asked in a national poll: Do you support embryonic stem cell research? Seventy-two percent of Americans said yes. Seventy-two percent. That is pretty overwhelming.

I heard the distinguished Senator from Ohio here just a few moments ago say that one of the reasons he was opposed to the bill was because we wanted to do things that would not divide Americans. He thought this would divide Americans. Divide Americans? Seventy-two percent are in favor of it. Over 590 different advocacy groups expressing support, and 205 other disease-related groups all in support. This doesn't divide America at all. Of course, there is always going to be somebody opposed to something around here. But I haven't seen anything that received this much overwhelming support in a long time. As a matter of fact, passing embryonic stem cell research, H.R. 810, will pull Americans together in the fight against disease. And it is bipartisan. As I said, the bill passed the House bipartisanly. The sponsors of the bill itself were three Republicans and three Democrats.

It was stated earlier today a couple of times about a letter that former First Lady Nancy Reagan had written. I thought I would have it blown up and put on a chart for people around the country to take a look at, just to show you how this has nothing to do with partisanship. It shows it is from the office of Nancy Reagan dated May 1, 2006, a letter to ORRIN HATCH, Senator ORRIN HATCH of Utah, who was one of the cosponsors of this bill. It says:

Dear Orrin:

Thank you for your continued commitment to helping the millions of Americans who suffer from devastating and disabling diseases. Your support has given so much hope to so many.

It has been nearly a year since the United States House of Representatives first approved the stem cell legislation that would open the research so we could fully unleash its promise. For those who are waiting every day for scientific progress to help their loved ones, the wait for U.S. Senate action has been very difficult and hard to comprehend.

I understand that the U.S. Senate is now considering voting on H.R. 810, the Stem Cell Research Enhancement Act, sometime this month. Orrin, I know I can count on friends like you to help make sure this happens. There is just no more time to wait.

Sincerely, Nancy.

When you have seen a loved one suffer from Alzheimer's—I am sure as Mrs. Reagan watched the former President suffer from Alzheimer's—it motivates you to say: Whatever we can do to advance the research, to hopefully get a cure someday, that is what we should do.

For those of us who have friends who have Parkinson's disease, those of us who have seen friends and loved ones die of Lou Gehrig's disease, for those of us who have members of our family or close friends who have had spinal cord injuries, this motivates us to do everything humanly possible to expand this field of research.

My friend Christopher Reeve said, one time when we had watched a film of a rat, a white mouse or white rat, that had its spinal cord damaged so it couldn't walk and then it received embryonic stem cells and then it walked again, Christopher Reeve, former Superman said, ''Oh, to be a rat.''

It holds so much promise, embryonic stem cell research, to ease the suffering and the pain of so many people.

I hear today talk about we have to do adult stem cells; maybe there is not enough money.

Again, I refer to my friend from Ohio, who was here earlier who said funding for medical research is probably going down because of the war and because of Katrina and because of homeland security.

I said: Wait a minute, earlier this year this Senate voted 73 to 27, to put $7 billion back in the budget so we wouldn't cut medical research—73 votes in the Senate. I don't know, 73 votes is pretty overwhelming. It was $7 billion we were supposed to put back in to help medical research. I don't know to what the Senator was referring.

I have heard talk today about adult stem cells and all these other things and how we had adult stem cells do this and adult stem cells do that. Why haven't embryonic stem cells led to treatment as much as adult stem cells have? Scientists have been doing research on adult stem cells for over 30 years, and we still, after 30 years, have not extracted one stem cell line from adult cells—not one.

Now embryonic stem cells were only derived in 1998, 8 years ago, and they have only been getting Federal funding in a limited manner since 2002, under the guidelines the President set down in 2001, which limited the number of stem cell lines to then 78, which we found out later was only 21 stem cell lines.

Again, there are no arbitrary restrictions on research on adult stem cells. Scientists and private companies don't have to be skittish about doing the research. They don't have to worry that all of a sudden the Federal Government is going to ban it or limit it, so they can plan ahead and do long-term research.

Let's compare that situation with human embryonic stem cells. As I said, we didn't derive them until 1998 and the first Federal grant wasn't awarded until 2002. Even now, only a tiny fraction of the total Federal budget for human stem cell research is used for human embryonic stem cells. The vast majority still goes for adult stem cells.

Here it is. I pointed this out earlier today. Human embryonic stem cells in fiscal 2006 from NIH, $38.3 million. Adult stem cells, $200 million. Again, only a tiny fraction going for human embryonic stem cells. Five times as much is going for adult stem cell research. So it is no wonder, after 30 years and all this research and all this money, that more diseases are being treated today with adult stem cells.

Scientists have only been studying embryonic stem cells for 5 years, with

one arm tied behind their back. That one arm being tied their back by the President's proclamation of August 9, 2001, that only stem cell lines derived before 9 p.m. that evening could receive Federal funding. Anything derived after 9 p.m. could not receive Federal funding.

I have wondered ever since, why was it morally acceptable to use stem cell lines derived prior to 9 p.m. on August 9 of 2001 but morally unacceptable for funding of stem cell lines derived after 9 p.m. Can someone please tell me the ethics of that. Can someone please tell me why 9 p.m. on August 9 of 2001 is some kind of a moral dividing line? It is totally arbitrary. The President could have said stem cell lines derived at 10 p.m. or he could have said stem cell lines derived before Christmas of this year. It is the same thing. No one has taken this floor to define why August 9, at 9 p.m, is some kind of a moral dividing line.

The fact is, it doesn't really matter what I think about the potential of embryonic stem cell research. It doesn't matter a heck of a lot what other Senators may think about the potential of embryonic stem cell research. What matters is what does the great body of scientists think about the potential.

The overwhelming majority of reputable biomedical scientists also believes we should pursue embryonic stem cell research; not to the exclusion of others but that we should pursue it.

I have a letter from Dr. J. Michael Bishop who won the Nobel Prize in medicine in 1989. Here is what he says:

The vast majority of the biomedical community believes that human embryonic stem cells are likely to be the source of key discoveries relating to many debilitating diseases. In fact, some of the strongest advocates for human embryonic stem cell research are those scientists that have devoted their careers to the study of adult stem cells.

I have a letter from Dr. Alfred G. Gilman, who won the Nobel Prize in medicine in 1994.

It has become obvious, however, that the number of stem cell lines actually available under current policy is too small and is controlled by a limited monopoly, which has made it significantly more difficult and expensive for research to be conducted. These limits have hindered the important search for new understanding and treatment of devastating diseases.

I have a letter from the Director of the NIH, Dr. Elias Zerhouni.

Embryonic stem cell research holds great promise for treating, curing, and improving our understanding of disease.

The breakthroughs are coming. But they take time. They take a lot of scientists researching. This is not something you can put two people on. They need a lot of different lines. Embryonic stem cell research should be ongoing at universities all across America, at our great research institutions, and it ought to be done under the guidance and direction and ethical guidelines of NIH and the ethical guidelines that we have in this bill.

The clampdown on embryonic stem cell research before it even has a chance to start shows a total lack of understanding about how science works, how research works. I have often said that basic research is similar to having 10 doors and they are closed. There is a high probability that behind one of the doors is the answer to your question. If you open one door, you know what the odds are of finding the right answer. If you open two doors, the odds are a little bit better. If you open five doors, the odds are 50–50.

That is what basic research is about. It has been said here a lot of the earlier research on fetal tissue came to nothing. A lot of basic research comes to nothing—in terms of an actual application. But almost all basic research adds to our body of knowledge. Maybe, from one of those basic research grants that was put on the shelf, some other scientist coming along later on might pick something from that, put two or three together and find something.

I am reminded of John Embers, a scientist—I believe he was at Harvard. I will check my facts on that, but I believe he was a doctor at Harvard many years ago. I am talking about a long time ago. I am talking about in the 1940s. He had done some interesting research, basic research on kidney cells of monkeys because they had unique properties. It was a funny research. It was on certain Rhesus monkeys and the oddity of certain kidney cells.

Dr. John Enders didn't get anything for it. He did the research, put it on the shelf, and nothing ever came of it, until a few years later another scientist, examining in another area, remembered Dr. Enders' work, went back and got it, coupled it with his, and came up with something called the Salk polio vaccine. It wasn't until over 25 years later that Dr. John Enders finally received the Nobel Prize for his research.

But I suppose someone 5 years after Dr. Enders had done his research would have said: Why did we spend money on that foolish kind of research? It didn't lead to anything. It kept some scientists employed, but it didn't lead to anything. But Dr. Salk came along, coupled that research with what he was doing and came up with the Salk polio vaccine.

That is a true story.

Again, we have to understand a lot of this is basic research. A lot of it will lead to nothing. But as more and more scientists get involved in examining embryonic stem cells and how they grow, how they multiply, how they differentiate, how they become nerve tissue, how they become brain tissue, how they become skin tissue, how they become blood tissues—as they begin to investigate that, I am sure there will be a lot of blind alleys. But I submit that everything that is done builds the body of scientific evidence that we need, the science that will eventually lead to a cure of a disease. That is the promise of embryonic stem cell research. To stop it now or to limit it doesn't make sense.

People talk about the ethics and morality. I have heard talk about we have to protect innocent life. This is an embryo; an embryo with 100 cells, 200 cells. You can take whatever view you want of that embryo. The point is that the bill we are talking about does not destroy one embryo. It only says that we can get funding for the research on those. These are embryos that are going to be discarded anyway, in in vitro fertilization clinics. They are being discarded every day.

Why don't people come out and say: Stop in vitro fertilization. Make it a crime. You don't hear anybody saying that because 50,000 babies were born last year to people who wanted to have a baby and couldn't have one and used in vitro fertilization. Once they have their children, they call up the in vitro clinic and say: I don't want the remaining embryos, just discard them. I ask you, what is the moral thing to do, just discard them or, with the written consent of the donors, use those embryonic stem cells to save lives and ease suffering and cure disease? That, to me, is the moral and the ethical choice.

I see my time is up and I yield the floor.

EXHIBIT 1

U.S. SENATE,
Washington, DC, July 14, 2006.

DEAR SENATOR: We, the undersigned patient advocacy groups, health organizations, research universities, scientific societies, religious groups and other interested institutions and associations, representing millions of patients, scientists, health care providers and advocates, write you with our strong and unified support for H.R. 810, the Stem Cell Research Enhancement Act. We urge your vote in favor of H.R. 810 when the Senate considers the measure next week.

Of the bills being considered simultaneously, only H.R. 810 will move stem cell research forward in our country. This is the bill which holds promise for expanding medical breakthroughs. The other two bills—the Alternative Pluripotent Stem Cell Therapies Enhancement Act (S. 2754) and the Fetus Farming Prohibition Act (S. 3504)—are NOT substitutes for a YES vote on H.R. 810.

H.R. 810 is the pro-patient and pro-research bill. A vote in support of H.R. 810 will be considered a vote in support of more than 100 million patients in the U.S. and substantial progress for research. Please work to pass H.R. 810 immediately.

Sincerely,

A O North America; AAALAC International; AARP; Abbott Laboratories; Acadia Pharmaceuticals; Accelerated Cure Project for Multiple Sclerosis; Adams County Economic Development, Inc.; AdvaMed (Advanced Medical Technology Association); Affymetrix, Inc.; Albert Einstein College of Medicine of Yeshiva University; Alliance for Aging Research; Alliance for Lupus Research; Alliance for Stem Cell Research; Alnylam US, Inc.; Alpha-1 Foundation; ALS Association; Ambulatory Pediatric Association; AMDeC-Academic Medicine Development Co.; America on the Move Foundation; American Academy of Neurology.

American Academy of Nursing; American Academy of Pediatric Dentistry; American Academy of Pediatrics; American Association for Cancer Research;

American Association for Dental Research; American Association for Geriatric Psychiatry; American Association for the Advancement of Science; American Association of Anatomists; American Association of Colleges of Nursing; American Association of Colleges of Osteopathic Medicine; American Association of Colleges of Pharmacy; American Association of Neurological Surgeons/Congress of Neurological Surgeons; American Association of Public Health Dentistry; American Autoimmune Related Diseases Association; American Brain Coalition; American Chronic Pain Association; American College of Cardiology; American College of Medical Genetics; American College of Neuropsychopharmacology; American College of Obstetricians and Gynecologists.

American College of Surgeons; American Council on Education; American Council on Science and Health; American Dental Association; American Dental Education Association; American Diabetes Association; American Federation for Aging Research; American Gastroenterological Association; American Geriatrics Society; American Institute for Medical and Biological Engineering; American Lung Association; American Medical Association; American Medical Informatics Association; American Medical Women's Association; American Pain Foundation; American Parkinson's Disease Association; American Parkinson's Disease Association (Arizona Chapter); American Pediatric Society; American Physiological Society; American Psychiatric Association.

American Psychological Association; American Public Health Association; American Society for Biochemistry and Molecular Biology; American Society for Bone and Mineral Research; American Society for Cell Biology; American Society for Clinical Pharmacology and Therapeutics; American Society for Microbiology; American Society for Neural Transplantation and Repair; American Society for Nutrition; American Society for Pharmacology and Experimental Therapeutics; American Society for Reproductive Medicine; American Society for Virology; American Society of Clinical Oncology; American Society of Critical Care Anesthesiologists; American Society of Hematology; American Society of Human Genetics; American Society of Nephrology; American Society of Tropical Medicine and Hygiene; American Surgical Association; American Surgical Association Foundation.

American Thoracic Society; American Thyroid Association; American Transplant Foundation; Americans for Medical Progress; amFAR, The Foundation for AIDS Research; Arizona State University College of Nursing; Arthritis Foundation; Arthritis Foundation, Rocky Mountain Chapter; Association for Clinical Research Training; Association for Medical School Pharmacology Chairs; Association for Prevention Teaching and Research; Association for the Accreditation of Human Research Protection Programs, Inc.; Association of Academic Chairs of Emergency Medicine; Association of Academic Departments of Otolaryngology; Association of Academic Health Centers; Association of Academic Physiatrists; Association of American Medical Colleges; Association of American Physicians; Association of American Universities; Association of American Veterinary Medical Colleges.

Association of Anatomy, Cell Biology and Neurobiology Chairs; Association of Anesthesiology Program Directors; Association of Black Cardiologists; Association of Chairs of Departments of Physiology; Association of Independent Research Institutes; Association of Medical School Microbiology and Immunology Chairs; Association of Medical School Pediatric Department Chairs; Association of Medical School Pharmacology Chairs; Association of Professors of Dermatology; Association of Professors of Human and Medical Genetics; Association of Professors of Medicine; Association of Public Health Laboratories; Association of Reproductive Health Professionals; Association of Schools and Colleges of Optometry; Association of Specialty Professors; Association of University Anesthesiologists; Assurant Health; Asthma and Allergy Foundation of America; Athena Diagnostics; Aurora Economic Development Council.

Axion Research Foundation; B'nai B'rith International; Baylor College of Medicine; Baylor College of Medicine Graduate School of Biomedical Sciences; Biotechnology Industry Organization; BloodCenter of Wisconsin, Inc.; Blue Cross and Blue Shield Foundation on Health Care; Boston Biomedical Research Institute; Boston University School of Dental Medicine; Boston University School of Public Health; Brigham and Women's Hospital; Bristol-Myers Squibb Company; Broadened Horizons, LLC; Brown Medical School; Buck Institute for Age Research; Bums & Allen Research Institute; Burrill & Company; Burroughs Wellcome Fund; C3: Colorectal Cancer Coalition; California Biomedical Research Association.

California Institute of Technology; California Institute for Regenerative Medicine; California Wellness Foundation; Californians for Cures; Campaign for Medical Research; Cancer Research and Prevention Foundation; Canon U.S. Life Sciences, Inc.; Case Western Reserve University School of Dentistry; Case Western Reserve University School of Medicine; Cedars-Sinai Health System; Center for the Advancement of Health; Central Conference of American Rabbis; CFIDS Association of America; Charles R. Drew University of Medicine and Science; Charles River Laboratories; Child & Adolescent Bipolar Foundation; Children's Memorial Research Center; Children's Neurobiological Solutions Foundation;

(Columbus); Children's Research Institute (Washington).

Children's Tumor Foundation; Childrens Hospital Boston; Christopher Reeve Foundation; City and County of Denver; City of Hope National Medical Center; Cold Spring Harbor Laboratory; Coleman Institute for Cognitive Disabilities, University of Colorado System; Colfax Marathon Partnership, Inc.; Colorado Bioscience Association; Colorado Office of Economic Development and International Trade; Colorado State University; Columbia University; Columbia University College of Dental Medicine; Columbia University Medical Center; Community Health Partnership; Conference of Boston Teaching Hospitals; Connecticut United for Research Excellence, Inc.; Conquer Fragile X Foundation; Cornell University; Council for the Advancement of Nursing Science (CANS).

Creighton University School of Medicine; CURE (Citizens United for Research in Epilepsy); Cure Alzheimer's Fund; Cure Paralysis Now; CuresNow; Damon Runyon Cancer Research Foundation; Dana-Farber Cancer Institute; Dartmouth Medical School; David Geffen School of Medicine at UCLA; DENTSPLY International; Digene Corporation; Discovery Partners International; Doheny Eye Institute; Drexel University College of Medicine; Drexel University School of Public Health; Duke University Medical Center; Dystonia Medical Research Foundation; East Tennessee State University James H. Quillen College of Medicine; Eli Lilly and Company; Elizabeth Glaser Pediatric AIDS Foundation.

Emory University; Emory University Nell Hodgson Woodruff School of Nursing; Emory University Rollins School of Public Health; Emory University School of Medicine; FasterCures; FD Hope Foundation; Federation of American Scientists; Federation of American Societies for Experimental Biology (FASEB); Federation of State Medical Boards of the United States, Inc.; Fertile Hope; Fitzsimons Redevelopment Authority; Florida Atlantic University Division of Research; Ford Finance, Inc.; Fox Chase Cancer Center; Fred Hutchinson Cancer Research Center; Friends of Cancer Research, Friends of the National Institute for Dental and Craniofacial Research, Friends of the National Institute of Nursing Research; Friends of the National Library of Medicine; Genetic Alliance.

Genetics Policy Institute; George Mason University; Georgetown University Medical Center; Guillain Barre Syndrome Foundation International; Gynecologic Cancer Foundation; Hadassah; Harvard University; Harvard University School of Dental Medicine; Harvard University School of Public Health; Hauptman-Woodward Medical Research Institute, Inc.; Hereditary Disease Foundation, HHT Foundation International, Inc.; Home Safety Council; Howard University College of Dentistry; Howard University College of Medicine; Huntington's Disease Society of America; IBM Life Sciences Division; Illinois State University Mennonite College of Nursing; ImmunoGen, Inc.; Indiana University School of Dentistry.

Indiana University School of Medicine; Indiana University School of Nursing; Infectious Diseases Society of America; Institute for African American Health, Inc.; Intercultural Cancer Council Caucus; International Foundation for Anticancer Drug Discovery (IFADD); International Longevity Center—USA; International Society for Stem Cell Research; Invitrogen Corporation; Iraq Veterans for Cures; Iris Alliance Fund; Iron Disorders Institute;

tute of Women's Health; Jeffrey Modell Foundation; Johns Hopkins; Johnson & Johnson; Joint Commission on Accreditation of Healthcare Organizations (JCAHO); Joint Steering Committee for Public Policy; Juvenile Diabetes Research Foundation; Keck School of Medicine of the University of Southern California.

Kennedy Krieger Institute; Keystone Symposia on Molecular and Cellular

Biology; KID Foundation; Kidney Cancer Association; La Jolla Institute for Allergy and Immunology; Lance Armstrong Foundation; Lawson Wilkins Pediatric Endocrine Society; Leukemia and Lymphoma Society; Lombardi Comprehensive Cancer Center, Georgetown University; Los Angeles Biomedical Research Institute at Harbor-UCLA Medical Center; Louisiana State University Health Sciences Center; Louisiana State University Health Sciences Center School of Dentistry; Lovelace Respiratory Research Institute; Loyola University of Chicago Stritch School of Medicine; Lung Cancer Alliance; Lupus Foundation of America, Inc.; Lupus Foundation of Colorado, Inc.; Lupus Research Institute; Lymphatic Research Foundation; Mailman School of Public Health of Columbia University.

Malecare Prostate Cancer Support; March of Dimes Birth Defects Foundation; Marine Biological Laboratory; Marshalltown [IA] Cancer Resource Center; Masonic Medical Research Laboratory; Massachusetts Biotechnology Council; Massachusetts General Hospital; Massachusetts Institute of Technology; MaxCyte, Inc.; McLaughlin Research Institute; Medical College of Georgia; Medical University of South Carolina; Medical University of South Carolina College of Nursing; MedStar Research Institute (MRI); Meharry Medical College School of Dentistry; Memorial Sloan-Kettering Cancer Center; Memory Pharmaceuticals; Mercer University; Metro Denver Economic Development Corporation; Miami Children's Hospital.

Midwest Nursing Research Society; Morehouse School of Medicine; Mount Sinai Medical Center; Mount Sinai School of Medicine; National Alliance for Eye and Vision Research; National Alliance for Hispanic Health; National Alliance for Research on Schizophrenia and Depression; National Alliance on Mental Illness; National Alopecia Areata Foundation; National Asian Women's Health Organization; National Association for Biomedical Research; National Association of Hepatitis Task Forces; National Caucus of Basic Biomedical Science Chairs; National Coalition for Cancer Research; National Coalition for Cancer Survivorship; National Coalition for Women with Heart Disease; National Committee for Quality Health Care; National Council of Jewish Women; National Council on Spinal Cord Injury; National Down Syndrome Society.

National Electrical Manufacturers Association; National Foundation for Ectodermal Dysplasias; National Health Council; National Hemophilia Foundation; National Hispanic Health Foundation; National Jewish Medical and Research Center; National Marfan Foundation; National Medical Association; National Multiple Sclerosis Society; National Osteoporosis Foundation; National Partnership for Women and Families; National Pharmaceutical Council; National Prostate Cancer Coalition; National Quality Forum; National Spinal Cord Injury Association; National Venture Capital Association; Nebraskans for Research; Nemours; New Jersey Association for Biomedical Research; New Jersey Dental School.

New York Blood Center; New York College of Osteopathic Medicine; New York State Association of County Health Officials; New York Stem Cell Foundation; New York University College of Dentistry; New York University School of Medicine;

byterian Hospital; North American Brain Tumor Coalition; North Carolina Association for Biomedical Research; Northwest Association for Biomedical Research; Northwestern University; Northwestern University, The Feinberg School of Medicine; Nova Southeastern University College of Dental Medicine; Novartis Pharmaceuticals; Oklahoma Medical Research Foundation; Oral Health America; Oregon Health & Science University; Oregon Health & Science University School of Nursing; Oregon Research Institute; Oxford Bioscience Partners.

Pacific Health Research Institute; Paralyzed Veterans of America; Parent Project Muscular Dystrophy; Parkinson's Action Network; Parkinson's Disease Foundation; Partnership for Prevention; Pennsylvania Society for Biomedical Research; Pharmaceutical Research and Manufacturers of America; Pittsburgh Development Center; Princeton University; Project A.L.S.; Prostate Cancer Foundation; Pseudoxanthoma Elasticum International; Quest for the Cure; RAND Health; Research! America; Resolve: The National Infertility Association; RetireSafe; Rett Syndrome Research Foundation; Rice University.

Robert Packard Center for ALS Research at Johns Hopkins; Rosalind Franklin University of Medicine and Science; Rush University Medical Center; Rutgers University; Salk Institute for Biological Studies; sanofi-aventis; Scleroderma Research Foundation; Secular Coalition for America; Sjogren's Syndrome Foundation, Inc.; Society for Advancement of Violence and Injury Research (SAVIR); Society for Assisted Reproductive Technology; Society for Education in Anesthesia; Society for Male Reproduction and Urology; Society for Neuroscience; Society for Pediatric Research; Society for Reproductive Endocrinology and Infertility; Society for Women's Health Research; Society of Academic Anesthesiology Chairs; Society of General Internal Medicine; Society of Gynecologic Oncologists.

Society of Reproductive Surgeons; Society of University Otolaryngologists; South Alabama Medical Science Foundation; South Dakota State University; Southern Illinois University School of Medicine; Spina Bifida Association of America; Stanford University; State University of New York at Buffalo School of Dental Medicine; State University of New York Downstate Medical Center College of Medicine at Brooklyn; State University of New York Upstate Medical University; Stem Cell Action Network; Stem Cell Research Foundation; Steven and Michele Kirsch Foundation; Stony Brook University, State University of New York; Strategic Health Policy International, Inc.; Student Society for Stem Cell Research; Suicide Prevention Action Network-USA (SPAN); Take Charge! Cure Parkinson's, Inc.; Targacept, Inc.;

Temple University School of Dentistry; Texans for Advancement of Medical Research; Texas A&M University Health Science Center; Texas Medical Center; Texas Tech University Health Sciences Center; The Arc of the United States; The Association for Research in Vision and Ophthalmology; The Biophysical Society; The Brody School of Medicine at East Carolina University; The Burnham Institute; The CJD Foundation; The Critical Path Institute (C–Path); The Endocrine Society; The FAIR Foundation; The Food Allergy and Anaphylaxis Network; The Food Allergy Project, Inc.; The Forsyth Institute; The Foundation Fighting Blindness; The George Washington University Medical Center.

town University Center for the Study of Sex Difference in Health, Aging and Disease.

The Gerontological Society of America; The J. David Gladstone Institutes; The Jackson Laboratory; The Johns Hopkins University Bloomberg School of Public Health; The Johns Hopkins University School of Nursing; The Medical College of Wisconsin; The Medical Foundation, Inc., The Michael J. Fox Foundation for Parkinson's Research; The Ohio State University College of Dentistry; The Ohio State University College of Medicine and Public Health; The Ohio State University School of Public Health; The Parkinson Alliance and Unity Walk; The Research Foundation for Mental Hygiene, Inc.; The Rockefeller University; The Schepens Eye Research Institute; The Scientist; The Scripps Research Institute; The Smith-Kettlewell Eye Research Institute; The Society for Investigative Dermatology; The Spiral Foundation.

The University of Chicago Pritzker School of Medicine; The University of Iowa Carver College of Medicine; The University of Iowa College of Dentistry; The University of Iowa College of Public Health; The University of Mississippi Medical Center; The University of Mississippi Medical Center School of Dentistry; The University of Oklahoma College of Dentistry; The University of Oklahoma Health Sciences Center; The University of Tennessee Health Science Center; The University of Tennessee HSC College of Nursing; The University of Texas Health Science Center at Houston; The University of Texas Health Science Center at San Antonio; The University of Texas M.D. Anderson Cancer Center; The University of Texas Medical Branch at Galveston School of Medicine; The University of Texas Southwestern Medical Center; The University of Toledo Academic Health Science Center; Tourette Syndrome Association; Travis Roy Foundation; Tufts University School of Dental Medicine; Tulane University.

Tulane University Health Sciences Center; Union for Reformed Judaism; Union of Concerned Scientists; Unitarian Universalist Association of Congregations; United Spinal Association; University of Alabama at Birmingham School of Medicine; University of Alabama at Birmingham School of Nursing; University of Alabama at Birmingham School of Public Health; University of Arizona College of Medicine; University of Arkansas for Medical Sciences; University of Buffalo; University of California System; University of California, Berkeley; University of California, Berkeley School of Public Health; University of California, Davis; University of California, Irvine; University of California, Los Angeles; University of California, Los Angeles School of Dentistry; University of California, Los Angeles School of Medicine; University of California, San Diego.

University of California, San Francisco; University of California, San Francisco School of Dentistry; University of California, San Francisco School of Nursing; University of California, Santa Cruz; University of Chicago; University of Cincinnati Medical Center; University of Colorado at Denver and Health Sciences Center; University of Colorado at Denver and HSC School of Dentistry; University of Colorado at Denver and HSC School of Nursing; University of Connecticut School of Medicine; University of Florida; University of Florida College of Dentistry; University of Georgia; University of Illinois; University of Illinois at Chicago; University of Illinois at Chicago College of Dentistry; University of Illinois at Chicago College of Nursing; University of Iowa; University of Kansas; University of Kansas Medical Center.

University of Kansas Medical Center School of Nursing; University of Kentucky; University of Kentucky College of Dentistry; University of Louisville; University of Louisville School of Dentistry; University of Maryland at Baltimore; University of Maryland at Baltimore College of Dental Surgery; University of Maryland at Baltimore School of Nursing; University of Miami; University of Michigan; University of Michigan College of Pharmacy; University of Michigan Medical School; University of Michigan School of Dentistry; University of Michigan School of Nursing; University of Michigan School of Public Health; University of Minnesota; University of Minnesota School of Public Health; University of Missouri at Kansas City School of Dentistry; University of Montana School of Pharmacy and Allied Health Sciences; University of Nebraska Medical Center.

University of Nebraska Medical Center College of Dentistry; University of Nevada, Las Vegas School of Dental Medicine; University of Nevada, Reno School of Medicine; University of North Carolina at Chapel Hill; University of North Carolina at Chapel Hill School of Dentistry; University of North Carolina at Chapel Hill School of Public Health; University of North Dakota; University of North Texas Health Science Center; University of Oregon; University of Pennsylvania School of Dental Medicine; University of Pennsylvania School of Medicine; University of Pennsylvania School of Nursing; University of Pittsburgh Graduate School of Public Health; University of Pittsburgh School of Dental Medicine; University of Pittsburgh School of Medicine; University of Rochester Medical Center; University of Rochester School of Medicine and Dentistry; University of Rochester School of Nursing; University of South Carolina Office of Research and Health Sciences; University of South Dakota School of Medicine and Health Sciences.

University of South Florida; University of South Florida College of Nursing; University of Southern California; University of Southern California School of Dentistry; University of Utah HSC School of Medicine; University of Vermont College of Medicine; University of Washington; University of Washington School of Dentistry; University of Washington School of Nursing; University of Washington School of Public Health and Community Medicine; University of Wisconsin-Madison; Van Andel Research Institute; Vanderbilt University and Medical Center; Vanderbilt University School of Nursing; Virginia Commonwealth University School of Dentistry; Virginia Commonwealth University School of Medicine; Wake Forest University School of Medicine; Washington University in St. Louis; Washington University in St. Louis Center for Health Policy; Washington University in St. Louis School of Medicine.

WE MOVE; Weill Medical College of Cornell University; Whitehead Institute for Biomedical Research; WiCell Research Institution; Wisconsin Alumni Research Foundation; Wisconsin Association for Biomedical Research and Education; Woodruff Health Sciences Center at Emory University; Wright State University; School of Medicine; Yale University; Yale University School of Medicine; Yale University School of Nursing.

The PRESIDING OFFICER. The Senator from Georgia.

Mr. CHAMBLISS. Mr. President, I rise today to speak about stem cell research. This is a very delicate and very tough issue and these are difficult decisions that we will all have to make this week.

Some scientists believe that advancement in research requires the creation and development of new embryonic stem cell lines. The truth of the matter is that there are very promising alternatives to embryonic stem cell research, such as stem cells from adult tissue like bone marrow and umbilical cord blood. These cells have repeatedly demonstrated the capability of turning into most tissue types providing the basis for advanced research to find cures for many diseases, including leukemia, Parkinson's disease, juvenile diabetes, sickle cell anemia, heart disease and spinal cord injuries. To date, we have seen promising results coming from the research that has been conducted on these types of cells. Doctors have successfully treated 69 diseases and injuries using adult stem cells such as Lupus, arthritis, liver damage, brain tumors and various forms of cancer. It is vital that we continue to conduct important medical research and continue producing these types of results providing hope for patients and their families.

I am very thankful for the accomplishments that have been made in modern medicine, those of which many of us have already enjoyed or perhaps will in the future.

However, I see the life changing results that have come from adult stem cell research, and can't help but compare these to the lack of results we have seen from embryonic stem cell research which has not provided the concrete benefits to patients that we have seen otherwise. We should not discount the possibilities surrounding the discoveries that lie ahead within medical research, but, since we have seen results from alternative types of stem cell research, not involving embryonic stem cells, should we spend federal money on researching something that has yielded few positive results?

I have seen positive results from the research we have done in the area of adult stem cell research. In fact, an overwhelming proportion of privately funded research is going towards adult stem cell research.

This is a strong indication of what researchers think regarding the direction of future stem cell research. Adult stem cells and other similar alternatives have helped thousands of patients throughout the world, while the results of embryonic stem cell research have not helped any one patient yet.

I have seen the proven results and lives that have benefited from the research done on adult stem cells. It has been proven that the results of this research have created procedures that have assisted in saving lives, and curing illnesses. Advancements are constantly being made in science, medical research, and technology and so this issue is constantly changing. Just look at how far we have come in the last year on this issue. This debate is not going to be over after this vote, tomorrow but rather the debate is just beginning. However, at this time, I feel that the taxpayer's money should be spent in places where we yield the best results for patients, and currently this is in the area of adult stem cell research.

It is my hope, Mr. President, that we continue to see monumental steps made in medical research, stem cell and otherwise, and that we find cures to diseases such as juvenile diabetes, cancer, sickle cell anemia, and Alzheimer's disease.

I yield the floor.

The PRESIDING OFFICER. The Senator from Kansas is recognized.

Mr. BROWNBACK. Mr. President, I thank my colleague from Georgia for his comments. We are about to wrap up the first full day of debate. We will vote tomorrow on a package of three votes. This is an important debate. This is one area that we have needed to debate for some period of time. We haven't had a real debate on a pending bioethics bill since 1998. The science has changed dramatically since 1998 and the debate at that point in time. We should benefit from this debate and from the science. All of us are interested in people such as Jacki Rabon. I have shown her picture before, but I want to make the point again because several of my colleagues have talked about people with spinal cord injuries. They talk about people with Parkinson's disease and what they wanted to do was cure that—to get something that would work for them. That is what was motivating them. I just want to help this person.

Here is a real live person; traffic accident; paraplegic from the waist down; an active athlete; excited about her future—and that all changed in a few seconds.

We all know this story too well because we have heard it and seen it in our own communities. I simply ask my colleagues: What is the most likely treatment route for her? Is it adult and cord blood stem cells or is it embryonic stem cells? We have to make choices

on dollars and where you invest funds. If we take the $.5 billion that we have invested in the embryonic stem cells in human and animals over the last 5 years and say we are going to get people such as Jacki walking again, what are we going to invest that money in? Is it going to be on embryonic or adult? She is already showing some improvement and feeling in her hip area. She is able to walk now with braces—through use of adult stem cell therapy which, unfortunately, she has had to go to Portugal to get. Researchers are here, but they cannot get into the FDA trials.

Clearly, the answer, if we want her to walk again during her lifetime, is to work and to fund adult and cord blood stem cells. That is where we are going to get the treatments. That is where it is working.

The other areas may provide some interesting science. But if we are interested in helping people such as Jacki, we have one area that works, and we have another area into which we have put $.5 billion and it hasn't worked—and we know that.

I want to show you a picture of Dennis Turner. He has been brought up in this debate. I have had him in to testify. He is a Parkinson's patient. We want to cure Parkinson's disease. He was Parkinson's-free for 5 years because of adult stem cell therapy. It started to come back after that period of time, but he got 5 years of his life back.

If our objective is to have a treatment or cure for people such as Dennis Turner, where are we going to put the money? Are we going to put it in embryonic stem cells, where the scientists supporting it say this will take decades to find any sort of treatment, if they ever find a treatment, or put it into the adult stem cell area where they are already showing some results?

I know if I have limited resources, I would want to put my money where it is most likely to yield. It clearly is in the adult and cord blood stem cell area.

A lot of allegations and questions have been made regarding adult stem cells and cord blood and whether they are actually showing the types of results that I have been suggesting.

I ask unanimous consent to have printed in the RECORD at the end of my statement the current list—it gets updated often—of 72 current human clinical applications using adult stem cells.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. BROWNBACK. Mr. President, next week it will may be 75, but for this week it is 72.

My point in saying highlighting this is that some have said they really question whether we are getting that many treatments. There have only been nine FDA-approved full clinical trials, full treatment areas using adult stem cells. Okay. I will take that. I do not know if that is an accurate number. But remember that FDA is the standard where you have to go through clinical trials 1 and 2 to get the application and get it tested before it is fully used.

I note that people are challenging how many areas of adult stem cell are being treated. I welcome this debate. I think we should be looking at the science and where it is going. They were saying we really question whether this many areas of adult stem cell treatments are actually happening. They produced an addendum to their challenge on it. They went through all of the 65 areas at that time. It is now 72. But when they did the review, it was 65. The Senator from Iowa was particularly challenging whether we have this many treatment areas. He pulled out one on testicular cancer and said: I don't think they are really getting it there. But this addendum is the people challenging the number of adult stem cell areas that have treatment. On testicular cancer, the researcher described a clinical evaluation showing improved long-term survival of a relapsed testicular cancer patient following the radical therapy that included a transplant of adult stem cells from bone marrow or blood. The research is actually showing that it was an improvement.

I am not saying that these are all FDA-approved areas. This is an area of research. But you actually have a researcher saying it showed improvement. This isn't the group who is challenging whether we are getting these treatments at all. They are not cures today. This is research. But the research shows a promise even in the area that they challenge.

Leukemia—this is from the same addendum. Two clinical studies, each incorporating multiple leukemia types, indicate that adult stem cell transplants from bone marrow or umbilical cord blood improved the survival of children with leukemia.

That is not FDA approved. But it is working. This, after only a short period of time that we have been working with all these different types of adult stem cells. We have known about them in bone marrow for some period of time.

Some patients with Hodgkin's lymphoma show an overall improved survival rate when transplanted with adult stem cells from blood.

The list goes on and on.

I welcome a debate about whether we are getting treatment for areas where people are showing improvement taking place with adult and cord blood because the truth of matter is we are. These are not all FDA approved. We never said that they were. The problem is we need more money to be able to get more of these FDA trials so that we can get more people treated. If we do that, there is a very promising area that is already showing results. Why not put your money there?

Let me give my colleagues a visual of this, if anybody is interested. There is a notebook of showing the accumulation of recent advances in adult stem cell research and other alternatives to cloning and embryonic stem cell research. This is a one-page summary of each of these areas where we are getting treatment. Note that I am not saying cures. I want to be very careful with my words. The treatments are promising in adult and cord blood.

Look how thick this book is. This is just one-page summaries of each of these various areas—cord blood, cartilage, brain damage, cancers. It has been very impressive.

If you do not like this example or if you are still questioning whether we are showing this much progress in adult stem cell, I invite people to go on the Internet and look at a site called ClinicalTrials.gov. This is an area where clinical trials are listed on the Internet. I didn't know about it until today. It sounded very interesting to me. It shows, as of now—I guess these numbers are actually growing with 565 such clinical trials currently active or recruiting patients using adult or cord blood stem cells to treat people.

If we want to cure people, if we want to find real treatments, if we want to see cures for people with spinal cord injuries, Parkinson's, diabetes, cancer or heart disease, the clear area to invest in is adult and cord blood. That is the clear area to go into.

Let us look on the other side of the aisle on this the embryonic stem cell work which is being pushed here today.

By the way, my colleagues have known about this for a very long time. We have known about embryonic stem cells for 25 years. We have worked and looked at these things for a long period of time.

They say this is arbitrary and it is not going to support killing embryos. What is being talked about is using taxpayer money to expand the lines of embryonic stem cell research. To get embryonic stem cells, you have to destroy an embryo.

The President set a date, August 9 at 9 p.m, when he was delivering a speech to the Nation saying, after this point in time, we are not going to fund it any further because we do not want to fund the additional destruction of human life. We will work on it on a prior date. That is why that date was picked.

Here is a clear demarcation. We will fund it prior; we have to the tune of half a billion on human and animal. It is both. After that, we will not fund it on humans because the life-and-death decision has already been made on these designs prior to August 9 but not on future ones.

Now, if we say we are going to use taxpayer money to fund any human embryonic stem cell research, people could go out today after we fund this, destroy human embryos, develop the lines, and have Federal taxpayer dollars. I again point out to my colleagues, there are no prohibitions in the United States today against any embryonic stem cell research. You can do it anywhere you want. We do have a

limitation on the Federal taxpayer dollars, on where they can go in the future destruction of human life.

Now, with this half a billion that we have invested over the last 5 years, how many human treatments do we have from embryonic stem cells? I have a notebook that shows the number of human treatments. I will show this notebook again. This is adult and cord blood. Here are human treatments on embryonic stem cell research. We do not have the research. It is not there. They do not exist.

It is interesting research. It has proven very problematic to get to people.

A number of my colleagues have been pushing this bill for some period of time, and I do not question or challenge what they were doing. I think they want to find cures. But the problem is we have not found treatments in the embryonic field.

They were saying in the year 1999 one of my colleague's medical experts testified that it may well be within 5 years of a cure for Parkinson's disease, Alzheimer's, and a long list of other human ailments. Stem cell research has enormous potential.

That is true. But it is adult cord blood stem cell research that is working. It is not embryonic. The embryonic has not produced the treatments. That was 1999. We are 7 years later, and it has not produced a peer-reviewed treatment.

We have scientists who testified at a hearing in 1998. Mr. President, I refer my colleagues to www.access.gpo.gov/congress/senate for that testimony.

Mr. President, when Dr. Gearhart was asked how long will it be before we get these cures to Parkinson's, Alzheimer's, or cancer, he responded:

I actually think within several years, to be honest with you . . .

That was 1998. Eight years later, here we are. Dr. Gearhart—one of the leading researchers in this field.

Then Dr. Thompson, one of the leading researchers on Parkinson's:

I am going to say 5 to 10 years more. It will be one of the first ones.

We do have a treatment being developed. And it is adult stem cells for Parkinson's. We do not need to make this life-and-death decision and expand taxpayer funding for the embryonic lines.

My point is, in 1998 the leading researchers were saying we will have these cures in a few years, 5 to 10 years, and now researchers are saying it is decades, if even in their lifetime, that it will happen.

I conclude with this point. If this were all in the abstract and we were saying that we will spend another half a billion in this area, go ahead and do that, you could say: Well, all right, we spend a lot of money around here, we will do that. The problem with it is: how many millions of dollars will be spent on research, which is based on destroying human embryos that become human people? This is the beginnings of human life. That is the real ethical rub on top of the financial rub of whether this is the right place to invest.

I have cited the snowflake child, Hannah previously. Was she just a clump of stem cells? Early life can be very fragile.

This is Isaiah Royal, born to one of my staff members. Isaiah Royal was born at 24 weeks of age, very early. He is a fighter. But I don't think you can possibly say he is not human life. He is just 23 weeks after the embryonic stage that we are talking about, 23 weeks and a couple of days after that. Would you deny that he is human life? You would say no, of course not. Isaiah is struggling. He weighed 1 pound 14 ounces at birth. He is a good, tough, fighter. But we are talking about fragile human life, and it should be treated as sacred. We should not do research on it. Human life is important.

This is an important question. I urge my colleagues to vote against H.R. 810.

EXHIBIT I

72 CURRENT HUMAN CLINICAL APPLICATIONS USING ADULT STEM CELLS

ANEMIAS & OTHER BLOOD CONDITIONS

Sickle cell anemia.
Sideroblastic anemia.
Aplastic anemia.
Red cell aplasia (failure of red blood cell development).
Amegakaryocytic thrombocytopenia.
Thalassemia (genetic [inherited] disorders all of which involve underproduction of hemoglobin).
Primary amyloidosis (A disorder of plasma cells).
Diamond blackfan anemia.
Fanconi's anemia.
Chronic Epstein-Barr infection (similar to Mono).

AUTO-IMMUNE DISEASES

Systemic lupus (auto-immune condition that can affect skin, heart, lungs, kidneys, joints, and nervous system).
Sjogren's syndrome (autoimmune disease w/symptoms similar to arthritis).
Myasthenia (An autoimmune neuromuscular disorder).
Autoimmune cytopenia.
Scleromyxedema (skin condition).
Scleroderma (skin disorder).
Crohn's disease (chronic inflammatory disease of the intestines).
Behcet's disease.
Rheumatoid arthritis.
Juvenile arthritis.
Multiple sclerosis.
Polychondritis (chronic disorder of the cartilage).
Systemic vasculitis (inflammation of the blood vessels).
Alopecia universalis.
Buerger's disease (limb vessel constriction, inflammation).

BLADDER DISEASE

End-stage bladder disease.

CANCERS

Brain tumors—medulloblastoma and glioma.
Retinoblastoma (cancer).
Ovarian cancer.
Skin cancer: Merkel cell carcinoma.
Testicular cancer.
Lymphoma.
Non-Hodgkin's lymphoma.
Hodgkin's lymphoma.
Acute lymphoblastic leukemia.
Acute myelogenous leukemia.
Chronic myelogenous leukemia.
Chronic myelomonocytic leukemia.
Juvenile myelomonocytic leukemia.
Cancer of the lymph nodes: Angioimmunoblastic lymphadenopathy.
Multiple myeloma (cancer affecting white blood cells of the immune system).
Myelodysplasia (bone marrow disorder).
Breast cancer.
Neuroblastoma (childhood cancer of the nervous system).
Renal cell carcinoma (cancer of the kidney).
Soft tissue sarcoma (malignant tumor that begins in the muscle, fat, fibrous tissue, blood vessels).
Ewing's sarcoma.
Various solid tumors.
Waldenstrom's macroglobulinemia (type of lymphoma).
Hemophagocytic lymphohistiocytosis.
POEMS syndrome (osteosclerotic myeloma).
Myelofibrosis.

CARDIOVASCULAR

Acute Heart damage.
Chronic coronary artery disease.

IMMUNODEFICIENCIES

Severe combined immunodeficiency syndrome.
X-linked lymphoproliferative syndrome.
X-linked hyper immunoglobulin M syndrome.

LIVER DISEASE

Chronic liver failure.
Liver cirrhosis.

NEURAL DEGENERATIVE DISEASES & INJURIES

Parkinson's disease.
Spinal cord injury.
Stroke damage.

OCULAR

Corneal regeneration.

WOUNDS & INJURIES

Limb gangrene.
Surface wound healing.
Jawbone replacement.
Skull bone repair.

OTHER METABOLIC DISORDERS

Hurler's syndrome (hereditary genetic disorder).
Osteogenesis imperfecta (bone/cartilage disorder).
Krabbe Leukodystrophy (hereditary genetic disorder).
Osteopetrosis (genetic bone disorder).
Cerebral X-linked adrenoleukodystrophy.

Mr. BROWNBACK. I yield to my colleague from Virginia who is here to speak on some important topics.

The PRESIDING OFFICER. The Senator from Virginia.

Mr. WARNER. Mr. President, I thank my distinguished colleague. We have another distinguished colleague here. It is my understanding that at 8 o'clock, the time of the distinguished Senator from Kansas now shifts to the other side of the aisle, but my colleague said he only wants 3 or 4 minutes.

Mr. BROWNBACK. I have other things I can cover. I understand the distinguished Senator from Virginia wanted to come over and speak on a very pressing matter of foreign policy. That is why I yielded the time to my colleague.

Mr. WARNER. I will try to compress my time in 10 minutes.

Mr. BROWNBACK. Good.

If I could, what does the Senator from Iowa desire?

Mr. HARKIN. If the Senator would yield, I understand the Senator from Virginia wanted 10 minutes. I said I didn't intend to speak for half an hour; I just wanted to speak for about 5 minutes at 8 o'clock and yield back the remainder of my time and he could speak as long as he wanted to at that time. It is only 15 minutes from now. I thought the Senator from Kansas was probably going to use up most of the time.

Mr. BROWNBACK. I was. But I understood that my colleague wanted to speak on this particular issue. If the Senator wants to summarize and my colleague from Virginia wants to wait, I was offering him that courtesy because he had discussed coming over here early to do that.

Mr. WARNER. I am here to accommodate all.

Would the Senator like to finish his remarks?

Mr. HARKIN. I say to the Senator from Virginia, go ahead and take your time. I will speak later. That is fine.

(The remarks of Mr. WARNER are printed in today's RECORD under ''Morning Business.'')

Ms. COLLINS. Mr. President, as a long-time supporter of stem cell research, I want to commend the majority leader for working out an agreement that will give the Senate the opportunity to act on this critically important issue.

I am particularly pleased that the Senate will finally have the opportunity to vote on the Stem Cell Research Enhancement Act. I am proud to be a cosponsor of this bipartisan bill which will expand the number of stem cell lines that are eligible for federally funded research, enabling scientists to take full advantage of the scientific and medical opportunities provided by stem cells. At the same time, it establishes standards and creates a framework to ensure that this research is conducted ethically.

The promise of embryonic Stem cell lines lies with their potential to develop into virtually any cell, tissue, or organ in the body. As a consequence, this research holds considerable potential to treat and even cure a vast array of diseases and conditions. Researchers could, for example, potentially generate insulin-producing islet cells for patients with juvenile diabetes; neurons to treat Parkinson's disease, ALS, and Alzheimer's disease; as well as bone marrow cells to treat cancer. It is estimated that more than 100 million Americans are currently afflicted by diseases or disabilities that have the potential to be treated through this research.

On August 9, 2001, President Bush announced that Federal funds could, for the first time, be used to support research on embryonic stem cells. This research, however, was limited to existing embryonic stem cell lines created prior to 9 p.m. on that day.

In the 4 years since the President made that announcement, this stem cell policy has fallen far short of its original goals. While the Human Embryonic Stem Cell Registry at the NIH lists 78 stem cell lines, at best, no more than 212 lines will ever be available for research under the current policy.

Moreover, as Dr. John Gearhart of Johns Hopkins University told the Special Committee on Aging last year, existing lines are ''contaminated with animal cells, lack genetic diversity, are not disease-specific and are not adequate for researchers to apply to a wide variety of diseases.'' Limiting researchers to these lines therefore places huge and unnecessary roadblocks in the way of possible treatments and cures for devastating diseases like Alzheimer's disease, ALS, cancer and diabetes.

We have learned a lot about stem cells since 2001. For example, scientists have now crated methods for growing stem cell lines that are free of animal cells, greatly improving their potential for treating and curing disease. They have also created ''disease specific'' stem cell lines. Under the current policy, however, these ''new and improved'' stem cell lines are not available to federally funded researchers in the United States.

It is therefore time for us to update our stem cell policy to reflect what we have learned so that we can accelerate this important research, which hold such promise for millions of Americans and their families.

The Stem Cell Research Enhancement Act lifts the current restriction so that stem cell lines are eligible for federally funded research regardless of the date on which they were created. Federal funding, however, would continue to be restricted to stem cells derived from embryos originally created for fertility treatments that are in excess of the clinical need and that otherwise would be discarded.

The legislation also requires the informed consent of the donors and prohibits any financial inducement to donate. Finally, the bill calls on the National Institutes of Health to develop strict guidelines to ensure that researchers adhere to clear ethical and moral standards.

As the founder and co-chair of the Senate Diabetes Caucus, I am particularly excited about the promise that stem cell research holds for a cure for diabetes. Early research has shown that stem cells have the potential to develop into insulin-producing cells to replace those that have been destroyed in people with type I diabetes.

Last year, I chaired a hearing in conjunction with the Juvenile Diabetes Research Foundation's Children's Congress to examine the devastating impact that juvenile diabetes has had on American children and their families. We heard heartbreaking testimony from children who had traveled to Washington to tell Congress what it is like to have diabetes, just how serious it is, and how important it is that we fund the research necessary to find a cure.

Steffi Rothweiler from Falmouth, ME, told the committee that she actually couldn't remember having a normal life without nights and weekends, and every hour of every day to take care of diabetes. She told us about her parents, who have given up their nights and weekends, and every hour of every day to take care of her and make sure that she stays in tight control of her blood sugar levels so that she can stay as healthy as possible. Steffi asked that we do all that we can to find a cure for diabetes as quickly as possible. We simply cannot ignore the potential that embryonic stem cell research holds for wonderful young people like Steffi.

I am sensitive to the ethical concerns raised by opponents of this research. That is why I have cosponsored the legislation introduced by Senators SANTORUM and SPECTER to encourage the development of alternative methods for deriving stem cells without using embryos.

The fact is, however, that the embryos that will be used for this research would otherwise be discarded. In my view, the ethical choice is to use them for research that may benefit millions of Americans rather than discard them as medical waste.

Moreover, what is often ignored in this debate is that embryonic stem cell research is occurring in the private sector, where it is outside the purview of the NIH. It therefore lacks the scientific and ethical oversight that routinely occurs with federally funded research. Dr. Allen Spiegel, who was then the Director of the National Institute of Diabetes anti Digestive and Kidney Diseases, testified at our Children's Congress hearing last year. He told the committee that, while NIH routinely works very closely with the private sector, in the area of stem cell research, ''there is a wall.'' By expanding our current stem cell policy, we are tearing down that wall, allowing more research but with clear ethical standards.

Opponents of embryonic stem cell research contend that adult stem cells derived from tissue, such as bone marrow, are a sufficient replacement for embryonic stem cells in forwarding this important research. I believe that we need both. But, as Dr. Speigel told our committee, with regard to diabetes research:

> We need to do embryonic stem cell first because it can give us a better understanding of what causes Type I diabetes . . . because it will actually inform our ability to work with adult stem cells . . . and finally, because, and one cannot guarantee or promise this, the embryonic stem cells themselves, if successfully turned into insulin-secreting beta cells, could be the source of cell therapy.

Mr. President, I believe that it would be tragic not to take advantage of this opportunity to accelerate research that can potentially help millions of people. I therefore urge my colleagues to join me in voting for the Stem Cell Research Enhancement Act.

The PRESIDING OFFICER. The Senator from Iowa.

Mr. HARKIN. Mr. President, I will not take the entire 25 minutes that are left, but I did want to close out a little bit today before we proceed into tomorrow by just responding to a few of the things that were said today to try to clear up a couple of issues.

The Senator from Kansas, my good friend, was going on and on about stem cells, as he has most of the day, and about how all these treatments and everything are out there. I could respond to every one of them, but I think what we have to keep in mind is that if all of these diseases that the Senator from Kansas talked about have been treated with adult stem cells, how come all of the patient advocacy groups for these diseases support H.R. 810?

One has to wonder, when you listen to the Senator from Kansas outline all these diseases that are being helped by adult stem cells. He brings up the picture of the guy who had Parkinson's. He was helped with adult stem cells. But, again, he has now gone back and he is where he was before.

Well, if adult stem cells are doing so much, why is the Parkinson's group, the Parkinson's Action Network, supporting H.R. 810? Why are all these advocacy groups supporting H.R. 810 if adult stem cells are so great? Are they just a bunch of stupid people out there? Have they been hoodwinked and misguided?

These advocacy groups know. They know what is going on. And they know that S. 2754 is no substitute for H.R. 810. While adult stem cells are fine, as I pointed out earlier, they have been investigating and doing science on adult stem cells for over 30 years.

Now, just another little thing that happened: The Senator from Kansas, I heard him say: Well, they have been investigating animal stem cells for 20 years.

That might lead you to think: Well, we have been looking at stem cells for 20 years. Not so. We never derived human embryonic stem cells until 1998—8 years ago. So I wanted to make the record clear on that.

Now, the Senator also mentioned something about testicular cancer. He made all kinds of claims about adult stem cells helping testicular cancer. Let me read from a letter written by Craig Nichols, MD, a member of the board of the Lance Armstrong Foundation. We all know the Lance Armstrong Foundation is basically focused on testicular cancer because that is what Lance Armstrong had. And he licked it. But let me quote from the letter written on July 14:

Dear Senator FRIST:

As a member of the Lance Armstrong Foundation's Board of Directors, I am writing in response to assertions that adult stem cells have treated or cured the disease of testicular cancer. . . . I feel that it is important to set the record straight on this issue.

Testicular cancer is the most common cancer among men ages 15–35 and approximately 8,000 men will be diagnosed with testicular cancer in the United States this year. While testicular cancer is one of the most curable forms of cancer, our organization would like to emphasize as the Senate debates H.R. 810 . . . that we have NOT completely eradicated the disease.

There is not an FDA-approved adult stem cell treatment generally available to treat testicular cancer.

The Senator from Kansas kind of, in his comments, led us to think that there might be. Here is what Dr. Nichols said:

Rather, adult stem cells enable testicular cancer patients to withstand a higher dose of chemotherapy during treatment for the disease.

The adult stem cells enable patients to withstand a higher dose of chemotherapy. Dr. Nichols says:

We support exploring every avenue of research, including embryonic stem cell research within specified ethical limits, until a cure is found. . . .

The Lance Armstrong Foundation asks that you and your colleagues pass H.R. 810, and not accept any substitutes.

I ask unanimous consent that this letter from the Lance Armstrong Foundation be printed in the RECORD.

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

LANCE ARMSTRONG FOUNDATION,
Austin, TX, July 14, 2006.

Hon. WILLIAM FRIST,
Majority Leader, U.S. Senate,
Washington, DC.

DEAR SENATOR FRIST: As a member of the Lance Armstrong Foundation's (LAF) Board of Directors, I am writing in response to assertions that adult stem cells have treated or cured the disease of testicular cancer. While the mission of the LAF is to inspire and empower people affected by ALL types of cancer, I feel that it is important to set the record straight on this issue.

Testicular cancer is the most common cancer among men ages 15–35 and approximately 8,000 men will be diagnosed with testicular cancer in the United States this year. While testicular cancer is one of the most curable forms of cancer, our organization would like to emphasize as the Senate debates H.R. 810, the Stem Cell Research and Enhancement Act, that we have NOT completely eradicated the disease.

There is not an FDA-approved adult stem cell treatment generally available to treat testicular cancer. Rather, adult stem cells enable testicular cancer patients to withstand a higher dose of chemotherapy during treatment for the disease.

We support exploring every avenue of research, including embryonic stem cell research within specified ethical limits, until a cure is found. The most respected scientists in our field view embryonic stem cells as an area of research that must be explored, and one that our government must make a commitment to support. The Lance Armstrong Foundation asks that you and your colleagues pass H.R. 810, and not accept any substitutes.

Sincerely,

CRAIG NICHOLS, M.D.,
Member of the Board,
Lance Armstrong Foundation.

Mr. HARKIN. Now, we hear claims that leukemia and lymphomas have been cured or treated by adult stem cells. Here is what George Dahlman of the Leukemia and Lymphoma Society has to say about that:

On behalf of the Leukemia and Lymphoma Society, I am writing in response to assertions that adult stem cells have treated or cured several blood cancers, including several leukemias, lymphomas and multiple myeloma.

As a representative of more than 700,000 patients and their caregivers in this country that battle blood cancers on a daily basis, our organization would like to emphasize, as the Senate debates H.R. 810 . . . that we exist today because we have not found cures for these devastating diseases. . . . the claim that treatment of blood cancers with cord blood, blood or marrow stem cells—known as hematopoietic stem cells—demonstrates a potential of ''adult stem cell'' research or is a substitute of embryonic stem cell research is misleading and disingenuous.

Again, this says that the claim that treatment of blood cancer with marrow stem cells demonstrates that adult stem cells is a substitute is misleading and disingenuous.

Mr. Dahlman concludes:

The Leukemia and Lymphoma Society asks that you and your colleagues pass H.R. 810, and not accept any substitutes.

Mr. President, we have heard a lot of talk about these embryos and that we all started as a dot. I have often used this example. I have said: What is an embryo? I have often put a dot on a piece of paper and held it up for audiences to see and said that is what we are talking about. It is that big, the size of a period at the end of a sentence. That is not to diminish the importance of an embryo. But I use it in comparison. An embryo at the blastocyst stage has between 100 and 200 cells. That embryo we are talking about that is in an in vitro fertilization clinic and frozen in liquid nitrogen will never become a human being unless and until it is implanted into a uterus and it takes hold and develops. Sometimes they are implanted and they don't take hold and they are discharged. So an embryo is potential life—potential in that if it is implanted and takes hold, it could become a human being. It is potential life.

Look at this photo of Lauren Stanford. She says:

I am so happy to hear that the Senate is thinking of passing H.R. 810. I can dream again—dream of that great day when I write a thank you letter to the Senate, the House, and everyone who helped me become just another girl; a girl who dreamed and hoped and one day got just what she wanted; her health and future.

Lauren Stanford has diabetes. She knows what will happen if she is not cured. At some point in her life, she will probably become blind. At some point in her life, she will probably lose a foot, a leg, one or more of her limbs. At some point in her life, diabetes will take her. Lauren Stanford. I don't know her. I don't know that I ever met Lauren Stanford. This is not potential life; this is real life. This is a human being who is living right now.

That dot on the paper is an embryo. Is it alive? Of course it is alive. Is it a human being? No. It is potential life. Lauren Stanford is real life.

Read the bill. Read H.R. 810. Ethical guidelines. We can only use those embryos that are left over from in vitro

fertilization that are going to be discarded. Read the bill:

Prior to the consideration of embryo donation and through consultation with the individuals seeking fertility treatment, it was determined that the embryos would never be implanted in a woman and would otherwise be discarded.

Written consent.

The individuals seeking fertility treatment donated the embryos with written informed consent and without receiving any financial or other inducements to make the donation.

It has to be determined, before any embryo could ever be used for stem cell derivation, that the embryos would never be implanted in a woman and would otherwise be discarded. Every day, fertility clinics discard unwanted embryos. People have IVF—50,000 babies were born last year to couples who wanted to have a baby and could not and needed IVF. But some embryos were left over. Well, couples who have had their children then call up the clinic or the clinic calls them and the clinic says: Do you want to continue to pay for us to keep these embryos frozen?

If you have had your children and you don't want to expand your family, you say: No, I don't want to pay for that anymore. Guess what. The IVF clinic discards it. I have heard they basically throw them in the sink and wash them down the sink. They are only as big as a period at the end of a sentence.

So the real question for us really comes down to that, unless we want to outlaw in vitro fertilization and make it a crime, which I don't hear anybody here wanting to do. As long as we have in vitro fertilization and have leftover embryos, the real question for us is this: If the donors of those embryos, through written informed consent, determine it will never be implanted in a woman and will be discarded, is it better to have them discarded and flushed down the drain or used for the kind of scientific research that will cure Lauren Stanford of her diabetes? Potential life versus real life. Potential life that will be discarded versus real life. Potential life that will be flushed down the drain versus Lauren Stanford, real life. That is the question for us.

We hear all of these arguments around here about we were all an embryo at one time. Of course we were. The question is, What happens to all those embryos? Right now, they are being discarded, and it is perfectly legal to do so. I don't see anyone here with legislation saying it is going to be a crime for them to be discarded, a crime to have in vitro fertilization. Really, that is the choice. Do we discard potential life or do we use it to save real life? This is not potential life, this is real.

My nephew Kelly, who suffered a tragic accident on an aircraft carrier 27 years ago, hasn't walked since. He keeps hope alive that one day he will walk again. He knows about the research that has been done on rats and mice where spinal cords have been reconnected using embryonic stem cells. He knows that. I have never heard him say it, but I suppose he would probably echo what Christopher Reeve once said: Oh, to be a rat.

He knows that. That is real life. Kelly is a real person. He is alive. He is not potential life. That is our decision when we face the vote tomorrow on H.R. 810.

So all these other arguments about adult stem cells and this kind of stuff, fine, I have nothing against adult stem cell research. I am in favor of it. We ought to keep it going. But to choke off—not what I say but what the leading scientists say, the leading Nobel Prize winners say, what all of these disease groups who have medical people sitting on their boards, what they all say is the most promising avenue of research for curing Alzheimer's, juvenile diabetes, spinal cord injuries, Parkinson's, and ALS, the most promising is not adult stem cells. It is embryonic stem cells. That is what they say, not me.

To cut that off and to say, no, we won't do it is telling Lauren Stanford that potential life, that an embryo the size of a pencil dot, yes, is life; it is human potential that is as important as she is; that they have equal weight on the scales. I am sorry, Mr. President, I don't think so, not when it is going to be discarded, legally thrown down the drain. And as long as we have strict ethical guidelines in the bill—strict ethical guidelines, more than exists right now, stronger ethical guidelines than are in the law right now.

To me, there is really only one answer. We should be in favor of this real life of curing diseases, seeking treatments and cures in an ethical manner, which is what this bill does. So I hope that tomorrow we have an overwhelming vote in favor of H.R. 810.

I understand today the administration came out with a Statement of Administration Policy, or SAP as it is called around here, saying the President would veto it. I hope the President rethinks this. He is overseas anyway. Let's face it, we are all kind of captives of our staff around here. Staff tells us this and that. OMB says this, OMB says that. I am hopeful this is the work of some staff, that the President hasn't thought about it. He has been overseas focused on the G8; now, I am sure, focused on the Middle East.

I hope when President Bush thinks about it that he remembers Lauren Stanford, that he will remember the letter from Nancy Reagan and he will come down on the side of real life, and he will come down on the side of an ethical approach to embryonic stem cell research.

I still believe in miracles, and I hope a miracle will occur and the President of the United States finds it in his heart to say that what he did on August 9, 2001, was done with a lack of adequate knowledge. He can say: Look, we thought there were 78 lines, and there were not; there were only 21 lines. We didn't know they were all contaminated with mouse feeder cells. They can't be used for human therapies. That he will say in light of all that we know now, and with the strict ethical guidelines we have in this bill, I see fit to sign into law H.R. 810.

That is my hope. That is the hope of Lauren Stanford. That is the hope of the millions of Americans out there who suffer from Alzheimer's, the millions who suffer from spinal cord injuries and their families and caregivers and Parkinson's and ALS, and so many more.

Tonight they are praying—they are praying—that a miracle occurs and that the President will change his mind and sign this bill. And until the very moment that he vetoes it, I will remain hopeful that miracle will occur.

Mr. President, I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. FRIST. Mr. President, I ask unanimous consent the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, so ordered.

MORNING BUSINESS

Mr. FRIST. I ask unanimous consent there now be a period for morning business with Senators permitted to speak for up to 10 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

THE GREAT COMPROMISE; AN AMERICAN MOMENT

Mr. BYRD. Mr. President, yesterday, July 16, was the anniversary of one of the greatest events in American history. It was 219 years ago that our Founding Fathers were meeting at the Constitutional Convention in Philadelphia, attempting to formulate a workable plan of Government. At the time, the young American Government was operating under the Articles of Confederation, which every day was proving to be unworkable.

For 7 weeks, the Constitutional Convention had been working to devise a better form of Government, a ''more perfect union.'' It would be a Government with three branches: an executive branch, a legislative branch, and a judicial branch. The branches of the Government would have separated powers and the ability to check and balance one another.

The Convention delegates had already made a number of important decisions about the structure of the Congress. The Convention had set the minimum age for Members of the Senate at 30 and a term length at 6 years, as opposed to 25 years of age for Members of the House of Representatives, who would have 2-year terms.

But then came the stumbling block, how the States would be represented in

Congress. Delegates from the large States believed that because their States contributed more to the Nation's financial and defensive resources, they should have greater representation in the legislative bodies. Small State delegates demanded that all States be equally represented in both Houses.

Hours, even days, of heated, contentious debate followed. A number of proposals, including one by Benjamin Franklin, were considered and rejected. Stalemate was in the air. Failure threatened the Convention and the youthful Republic was stymied, stopped in its tracks. If the Constitutional Convention collapsed, it meant that the American Government would have to continue operating under the flawed and failing Articles of Confederation.

So maybe it was a miracle in Philadelphia. It may have been divine intervention. Who knows. Perhaps it was because there were great political leaders and they acted as mature political statesmen. Politics, it is said, is the art of compromise. And this is exactly what our Founding Fathers did; they compromised. They worked out a compromise, the Great Compromise, also known as the Connecticut Compromise because it was designed by the Connecticut delegates Roger Sherman and Oliver Ellsworth. It provided a dual system of congressional representation. In the House of Representatives, every State would be assigned a number of seats in proportion to its population. In the Senate, all States would have the same number of seats.

Just 8 days after the Great Compromise was adopted, the Convention was able to elect a committee to draft a detailed Constitution embodying the fundamental principles of the proceedings.

Today, representation of the two Houses of Congress seems so logical and so accepted that we take it for granted. Perhaps it is for that reason that we pass this anniversary with very little notice, too little notice—that is a shame—and no fanfare. It was a crucial moment in history. An American moment. It should be recognized and honored and remembered.

Thou, too, sail on, O Ship of State!
Sail on, O Union, strong and great!
Humanity with all its fears,
With all the hopes of future years,
Is hanging breathless on thy fate!
We know what Master laid thy keel,
What Workmen wrought thy ribs of steel,
Who made each mast, and sail, and rope,
What anvils rang, what hammers beat,
In what a forge and what a heat
Were shaped the anchors of thy hope!
Fear not each sudden and sound and shock,
'Tis of the wave and not the rock;
'Tis but the flapping of the sail,
And not a rent made by the gale!
In spite of rock and tempest's roar,
In spite of false lights on the shore,
Sail on, nor fear to breast the sea!
Our hearts, our hopes, are all with thee,
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears,
Are all with thee—are all with thee!

Mr. DORGAN. Mr. President, let me thank the Senator from West Virginia for reminding us, once again, of an important part of this country's great history. He educates all of us on the floor of the Senate, and I appreciate his comments.

Mr. BYRD. Mr. President, I thank the distinguished Senator. Were it not for that compromise, we would not be here today. There would be no Senate. There would be no Republic as we know it.

I thank the Senator.

The PRESIDING OFFICER. The Senator from Virginia.

THE MIDDLE EAST

Mr. WARNER. Mr. President, I thank the distinguished Presiding Officer.

During the course of the day, there was brought to the attention of the Members of the Senate a resolution regarding the situation in the Middle East. It was my understanding this resolution would be brought to the Senate tonight and that presumably it would be agreed to by the Senate.

My concern is that there are certain additional matters which should be included. If the Senate is going to exercise the important act of bringing this up, seeking unanimous consent, and the message goes out all over the world that the Senate has spoken, I would support what is in this resolution. I believe now that is not going to take place tonight for various reasons.

It is imperative that I address what was to have taken place, what I was told was to have taken place, assuming the unanimous consent could be achieved on both sides.

No. 1, this matter is so important, it deserves an opportunity for a number of Senators to speak on a resolution of this import. I am now advised by our cloakroom that it will not be taken up tonight, but I will take this opportunity to address parts of it or at least one part that I think should bear further careful drafting and possibly be changed. Otherwise, it is only one section, on page 3, item 3, which says:

(3) urges the President to continue fully supporting Israel as Israel exercises its right of self-defense in Lebanon and Gaza;

There is no question about their right of self-defense against Hezbollah and Hamas, but I wondered whether we should draft it in this way.

I urge those, since we are not going to take it up tonight, to make sure there is not an ambiguity there because the people of Lebanon are suffering enormously at this time, as are the people in Gaza. Many of those people are not aligned with either Hezbollah or Hamas.

I am also concerned about the Government in Lebanon and the actions which are taking place now, what do we do if that Government were to fall.

I would vote for this resolution if it were brought up tonight. I would have addressed the Senate and brought up other matters which I will now discuss.

I turn now again to the fact that this is so important, it deserves the consideration of every Senator and a debate of some length. I don't know about the schedule of the Senate, but if we are going to go forward and send a message to the world about our position in the Senate with respect to the conflicts in Palestine, Lebanon, and Israel, and the suffering that is taking place on all borders, each side of the various borders, then it deserves very careful consideration.

The purpose of me taking the floor is to point out some areas which deserve full consideration in that debate which are not included. I don't criticize the drafter of this resolution, but it requires the consideration of the whole Senate rather than a unanimous consent with a number of Senators who may not be here tonight.

In the course of that debate, I urge a larger focus. For example, there is no mention in the resolution of some perhaps 25,000 Americans who are trapped or engulfed in one way in this conflict. How best do we address this conflict to help protect those 25,000 persons? That is an essential part of this debate.

Second, I said the following on Friday night in response to a press inquiry when I first learned of this conflict:

While I fully recognize that Israel was a victim of provocative attacks on her people and sovereignty, I urge the Administration to think through very carefully how Israel's extraordinary reaction could affect our operations in Iraq and our joint diplomatic efforts to resolve the Iranian nuclear issue.

This is a very critical time for the United States in the Middle East, and the Israeli actions will certainly have an impact beyond just Lebanon and Gaza.

I stand by that statement. That is why I urge, and I am pleased to say this resolution, at such time as it would be brought up, will be broadened to cover the other points.

First, are the 25,000 Americans trapped? Second, this Nation has made a very great sacrifice to achieve goals established by our President and a coalition of forces associated with our country in both Iraq and Afghanistan. Over 2,500 have lost their lives in Iraq; over 300 have lost their lives in Afghanistan. That is U.S. forces. Our coalition partners have lost. We have 20,000-plus wounded, many severely wounded in Iraq and Afghanistan. And $436 billion is a rough calculation of just a part, not all, but a significant part of the investment of our country in achieving our goals in those nations, of stabilizing their governments now with free elections in both countries and hopefully enabling those governments to gain the strength to provide for the peoples of Iraq and Afghanistan, a measure of liberty and freedom and possibly democracy which we enjoy here and in other nations.

What is the effect of any statement made by the Senate? What is the effect on that very fragile situation in both countries? There is a resurgence in Afghanistan. I was just there a short time ago—and each of us have followed the

news to date—a resurgence in the fighting. NATO has come in.

We cannot just address one portion of the Middle East conflict without seeing how the manner in which we address that could affect the other areas, notably Afghanistan and Iraq.

So I say to my colleagues, as I said Friday night, we urge our President, our administration, as they take such, hopefully, bold and firm and convincing initiatives in regard to the conflicts in Israel and Gaza and Lebanon, to be mindful of how it could impact on our conflicts in Afghanistan and Iraq and our negotiations thus far with Iran in participating with other nations—not unilaterally—to try to bring about some resolution of what many of us considered up until this conflict—and I am not sure how we are going to eventually characterize the magnitude and the future potential spreading of this conflict—but certainly up until this conflict, in my judgment, the potential of Iran gaining nuclear weapons was absolutely—there was nothing more serious, in my judgment, than to try to resolve that.

There is no reference in here to the other Arab nations. It is quite interesting; some of those nations have come forward in strong condemnation, joined our country, joined other nations, in condemning Hamas and Hezbollah. That is of importance.

Now we see today that so many nations say the United States must take a stronger role in trying to work our way through this conflict, yes, supporting Israel but at the same time trying to bring about some resolution to spare the life and limb and suffering in Palestine, Lebanon, and Israel, to see that it not spread to other areas.

Now, our President has indicated that the Secretary of State will soon embark on a mission. What we say in the Senate must be carefully drafted so it does not remove the flexibility that our Secretary of State—a very able person—will need in helping to resolve this problem.

So I say that historically this Nation has stood steadfast, and I am proud that I have been among those in this Chamber in my 28 years here, to strongly support Israel. Our Nation is viewed upon as an honest broker—recognizing our support of Israel but as an honest broker. If the world is going to look to us as to how we can provide that leadership, I do not want any loss of flexibility on the part of the President and the Secretary of State and such others who may be tasked to try to work out this situation.

Yes, I conclude our support for Israel is very strong, Mr. President, but it cannot be unconditional.

I yield the floor.

CONDEMNING HEZBOLLAH

Mrs. HUTCHISON. Mr. President, I rise to speak in support of a resolution the Senate is expected to soon consider, and which I have cosponsored, along with Senator FRIST, who is the lead sponsor, and Senators REID, BIDEN, SANTORUM, NELSON of Florida, KYL, BOND, and LEVIN. It is a resolution that condemns Hezbollah and expresses support for Israel's right to self defense.

All of us are watching in horror what is happening there, and I think it is important that the United States Senate speak forcefully in support of our President. The G–8 leaders have spoken this week to condemn Hezbollah and terrorist activities and to ask the Government of Lebanon to help find the Israeli soldiers who are being held hostage and free them and to disarm Hezbollah.

Mr. President, there should be no misunderstanding. Israel has fully complied with the United Nations mandate. They have no forces in Lebanon and yet they have continued to withstand attack after attack from Hezbollah.

We watched with sadness last year when Lebanon's former Prime Minister was assassinated by terrorists.

I think we have to put the blame where we believe it lies. We know Iran and Syria are infiltrating Lebanon with support for Hezbollah and Hamas.

We know Hezbollah and Hamas are committed to the destruction of Israel. Since 1948 it has been forced to continually fight for its very existence, and yet in the middle of this it has stood as a democratic form of government, with a free economy. Israel has never backed away from its fundamental commitment to freedom and human liberty.

So, Mr. President, I think this is something the United States Senate should stand firm with this bipartisan resolution that says we do support our President and the G–8 leaders and condemn Hezbollah. We encourage the Government of Lebanon, to stop these attacks on Israel, and locate and return the soldiers who have been taken hostage. Let's add our voice to that of the unified leaders of the world who are saying this should not be allowed to happen.

We must speak together, we must stay together, we must support Israel's right to self-defense and understand that they should have the support of a unified world community, saying to the terrorists and the governments that are supporting the terrorists—Hamas, Hezbollah, Iran, Syria supporting them—that the world is not going to sit by and let people be terrorized. This is a global war on terror, and we must speak.

I thank the distinguished Senator from Kansas for allowing me to speak. I know I am speaking during the stem cell debate. The resolution will be considered soon, and I wanted to speak on the floor because I think it is so important what is happening in the world today, and we must speak as a unified voice in the Senate.

VISIT TO NEW ORLEANS

Mr. FEINGOLD. Mr. President, I recently made a brief visit to New Orleans to see for myself where things stand now, not quite 11 months after Hurricane Katrina hit the gulf coast. Katrina, of course, was the first of two major hurricanes to ravage that area last year. I only had the chance to see a small part of the area hit by that first storm, but what I did see was striking.

The news reports cannot fully convey the devastation or the enormity of the problems the region faces in trying to put things back in working order. One problem feeds into another. Businesses can't get back up and running without employees. Workers don't want to return without a safe place to live, without a school for their children, and without health care and other essential services upon which we all rely. Hospitals and other health providers face the same staffing shortages that businesses face. The neighborhood schools face challenges both in the physical infrastructure—providing a safe place in which kids can learn—and staffing shortages. All of these issues must be addressed.

Housing is an overarching challenge. I saw neighborhood after neighborhood still empty and unlivable. The outside shell of some homes was still standing, but the inside was uninhabitable because of the flood of toxic liquid filth that soaked into those houses.

I also saw lots where homes had stood but where now there was nothing but a slab of concrete. While many are living in the notorious FEMA trailers, many others, I understand, are having a hard time getting approval for a trailer. I was pleased to learn a little bit more about the so-called Katrina cottages that might be an alternative to the trailers, and I look forward to learning still more about them.

So much still needs to be done that one can be overwhelmed by the size of the task that remains. I have a great deal of respect for those who have made the commitment to remain in or move back to the city, for those who are working to make the neighborhoods habitable again, for the State and local law enforcement, the National Guard, and all the other dedicated individuals who are working so hard to bring the region back.

I still have a lot to learn about the particulars of what is needed in New Orleans and the other areas ravaged by Hurricanes Katrina and Rita—what is working, what has not worked, what Congress can still do to help. My central message today is that people from other parts of the country should not think that the gulf coast has recovered from those two hurricanes. That simply isn't the case. People are making progress, but there is still a very long way to go.

To put it in perspective, I will compare it to another place I visited earlier this year: Banda Aceh, Indonesia. I was there in February, a little more

than a year after it was devastated by the tsunami in late 2004. Having been to both places, I was struck by what the people in Banda Aceh and New Orleans had in common, both because of what they went through and because of the incredible resilience they have shown in the wake of those tragedies. But I was just as struck by how those places differed—especially how, in many ways, New Orleans seemed worse off than Banda Aceh did a year after the disaster.

When I visited Banda Aceh in February 2006—a little over a year after the original tsunami hit—though many of the reconstruction programs had yet to be completed, there was visible progress being made, thanks in large part to the generosity of the American taxpayer. I saw homes, roads, buildings, and bridges being built with funds that the American Government generously gave to the victims of the tsunami.

I strongly support the aid we have given to those in Banda Aceh and others who were the victims of the tsunami in 2004, and no one disputes that we have responsibility to help them rebuild. But we cannot let the disasters of Hurricanes Katrina and Rita be forgotten. We have a special duty to the people of the Gulf Coast who still need us. Almost a year later, after more than 1,500 people were killed and countless lives were disrupted, our fellow Americans do still need us. We still need to stand by them as they rebuild their lives, and I know the people of Wisconsin stand ready to help.

ADDITIONAL STATEMENTS

HONORING THE LIFE OF A GREAT COLORADAN

• Mr. SALAZAR. Mr. President, I would like to recognize the life of Edward G. Eid, the head of the Colorado State Soccer Association, CSSA, who died recently while attending the World Cup soccer tournament in Munich, Germany.

Ed Eid passionately believed in the power of soccer to bring people together. He knew that the beautiful game, as we saw in this year's World Cup, can bridge national, linguistic, racial, economic, and cultural gaps.

Ed Eid used soccer to strengthen and bind communities in our State and across the globe. As a coach, he took a team to compete behind the Iron Curtain, recognizing that shared passions for sport could warm a relationship between superpowers. At CSSA he reached out to teams from immigrant communities, helping kids from all walks of life learn the game and participate in leagues.

When Ed Eid immigrated to the U.S. in 1958, soccer had not yet entered the American mainstream. The sport thrived in immigrant communities, but the U.S. had neither a professional league nor its own soccer icons. After fighting through adversity and discrimination to become a successful entrepreneur, Eid dedicated more and more time to helping the game he loved gain ground. Thanks to his efforts, and the efforts of other visionaries like him, soccer is the most widely played game in America.

Mr. Eid is survived by a wonderful family. He was especially proud of his two grandchildren, Alex and Emily Eid. Earlier this year he saw his daughter-in-law, Allison, appointed by Governor Bill Owens to the Colorado Supreme Court. And he saw his son, Troy, nominated by President Bush to be Colorado's next U.S. Attorney.

The legacy of Ed Eid's life is clear. In the soccer leagues of Colorado, in all the communities he has touched, and in a sport whose popularity is growing by leaps and bounds, he will be sorely missed.•

MESSAGE FROM THE HOUSE

ENROLLED BILLS SIGNED

At 7:37 p.m., a message from the House of Representatives, delivered by Ms. Niland, one of its reading clerks, announced that the Speaker has signed the following enrolled bills:

S. 655. An act to amend the Public Health Service Act with respect to the National Foundation for the Centers for Disease Control and Prevention.

H.R. 2872. An act to require the Secretary the Treasury to mint coins in commemoration of Louis Braille.

MEASURES DISCHARGED

The following measure was discharged from the Committee on Environment and Public Works by unanimous consent, and referred as indicated:

H.R. 125. An act to authorize the Secretary of the Interior to construct facilities to provide water for irrigation, municipal, domestic, military, and other uses from the Santa Margarita River, California, and for other purposes; to the Committee on Energy and Natural Resources.

MEASURES PLACED ON THE CALENDAR

The following bill was read the second time, and placed on the calendar:

H.R. 9. An act to amend the Voting Rights Act of 1965.

EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, and were referred as indicated:

EC–7537. A communication from the Deputy Secretary of Defense, transmitting, pursuant to law, a report on the military operations of the Armed Forces and the reconstruction activities of the Department of Defense in Iraq and Afghanistan for the period ending April 30, 2006; to the Committee on Armed Services.

EC–7538. A communication from the Regulations Coordinator, Centers for Medicare and Medicaid Services, Department of Health and Human Services, transmitting, pursuant to law, the report of a rule entitled ''Medicare Program; Citizenship Documentation Requirements'' (RIN0938–AO51) received on July 11, 2006; to the Committee on Finance.

EC–7539. A communication from the Assistant Secretary, Legislative Affairs, Department of State, transmitting, pursuant to the Arms Export Control Act, the certification of a proposed license for the export of defense articles or defense services sold commercially under contract in the amount of $100,000,000 or more to Germany; to the Committee on Foreign Relations.

EC–7540. A communication from the Assistant General Counsel, Division of Regulatory Services, Department of Education, transmitting, pursuant to law, the report of a rule entitled ''Establishment of Regulations for the Academic Competitiveness Grant and National Science and Mathematics Access to Retain Talent Grant Programs, and Grant and Loan Program Amendments; Interim Rule'' received on July 11, 2006; to the Committee on Health, Education, Labor, and Pensions.

EC–7541. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled ''Approval and Promulgation of Air Quality Implementation Plan; Idaho'' (FRL No. 8191–6) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7542. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled ''Approval and Promulgation of Air Quality Implementation Plans; Rhode Island Update to Materials Incorporated by Reference'' (FRL No. 8185–1) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7543. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled ''Approval and Promulgation of Air Quality Implementation Plans; Virginia; NSR in the Ozone Transport Region'' (FRL No. 8196–8) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7544. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled ''Approval and Promulgation of Air Quality Implementation Plans; West Virginia; Redesignation of the City of Weirton PM–10 Nonattainment Area to Attainment and Approval of the Maintenance Plan'' (FRL No. 8197–1) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7545. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled

''Indiana; Final Approval of State Underground Storage Tank Program'' (FRL No. 8195–8) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7546. A communication from the Principal Deputy Associate Administrator, Office of Policy, Economics, and Innovation, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled ''National Emission Standards for Hazardous Air Pollutants for Integrated Iron and Steel Manufacturing Facilities'' (FRL No. 8196–6) received on July 11, 2006; to the Committee on Environment and Public Works.

EC–7547. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Modification of Class E Airspace; Scott City, KS'' ((RIN2120–AA66)(Docket No. 06–ACE–2)) received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7548. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Standard Instrument Approach Procedures (60); Amdt. No. 3170'' ((RIN2120–AA65)(Docket No. 30498)) received on June 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7549. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Standard Instrument Approach Procedures (38); Amdt. No. 3171'' ((RIN2120–AA65)(Docket No. 30499)) received on June 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7550. A communication from the Regulatory Ombudsman, Federal Motor Carrier Safety Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Parts and Accessories Necessary for Safe Operation: Protection Against Shifting and Falling Cargo'' (RIN2126–AA88) received on July 11, 2005; to the Committee on Commerce, Science, and Transportation.

EC–7551. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. Model ERJ 170–100 LR, –100 STD, –100 SE, and –100 SU Airplanes; and Empresa Brasileira de Aeronautica S.A. Model ERJ 190–100 LR, –100 STD, and –100 IGW Airplanes'' ((RIN2120–AA64)(Docket No. 2006–NM–111)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7552. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Airbus Model A318, A319, A320, and A321 Airplanes'' ((RIN2120–AA64)(Docket No. 2006–NM–101)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7553. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Hamilton Sundstrand Model 14RF–9 Propellers'' ((RIN2120–AA64)(Docket No. 2006–NE–18)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7554. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. Model EMB–120, –120ER, –120FC, –120QC, and –120RT Airplanes'' ((RIN2120–AA64)(Docket No. 2006–NM–016)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7555. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Viking Air Limited Model DHC-7 Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-049)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7556. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Airbus Model A321-100 Series Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-084)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7557. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Bombardier Model CL-600-2B19 Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-233)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7558. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 757 Airplanes'' ((RIN2120-AA64)(Docket No. 2005-NM-192)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7559. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Bombardier Model CL-600-2B19'' ((RIN2120-AA64)(Docket No. 2006-NM-214)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7560. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 767 Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-228)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7561. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 777-200 and -300 Series Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-278)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7562. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 767-200 and -300 Series Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-123)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7563. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Gulfstream Model GV and GV-SP Series Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-182)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7564. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; BAE Systems Limited Model BAe 146 and Avro 146-RJ Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-178)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7565. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Raytheon Model Hawker 800XP Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-017)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7566. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Rolls-Royce plc RB211 Series Turbofan Engines'' ((RIN2120-AA64)(Docket No. 2003-NE-12)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7567. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Viking Air Limited Model DHC-7 Airplanes'' ((RIN2120-AA64)(Docket No. 2002-NM-184)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7568. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Airbus Model A300 B4-600R and A300 F4-600R Series Airplanes'' ((RIN2120-AA64)(Docket No. 2005-NM-211)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7569. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 737-600, -700, -700C, -800, and -900 Series Airplanes'' ((RIN2120-AA64)(Docket No. 2004-NM-238)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7570. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Engine Components Incorporated Reciprocating Engine Connecting Rods'' ((RIN2120-AA64)(Docket No. 2005-NE-07)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7571. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled ''Airworthiness Directives; Boeing Model 747-100B, 747-200B, 747-200F, 747-300, 747-400, 747-400F, and 747SP Series Airplanes'' ((RIN2120-AA64)(Docket No. 2006-NM-036)), received on July 11, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7572. A communication from the Attorney Advisor, Department of Transportation, transmitting, pursuant to law, (2) reports relative to vacancy announcements within the Department, received on July 12, 2006; to the Committee on Commerce, Science, and Transportation.

EC–7573. A communication from the Deputy Assistant Secretary of the Interior, Bureau of Land Management, Department of the Interior, transmitting, pursuant to law, the report of a rule entitled ''Grazing Administration—Exclusive of Alaska'' (RIN1004-

AD42) received on July 12, 2006; to the Committee on Energy and Natural Resources.

EC–7574. A communication from the Chairman, Federal Energy Regulatory Commission, transmitting, pursuant to law, a report describing the progress made in licensing and constructing the Alaska natural gas pipeline and describing any issue impeding that progress; to the Committee on Energy and Natural Resources.

EC–7575. A communication from the Director, Office of Personnel Management, transmitting, pursuant to law, the report of a rule entitled ''Senior Executive Service Pay'' (RIN3206-AL01) received on July 11, 2006; to the Committee on Homeland Security and Governmental Affairs.

EC–7576. A communication from the Acting Senior Procurement Executive, Office of the Chief Acquisition Officer, National Aeronautics and Space Administration, transmitting, pursuant to law, the report of a rule entitled ''Federal Acquisition Regulation; Federal Acquisition Circular 2005-11'' (FAC 2005-11) received on July 12, 2006; to the Committee on Homeland Security and Governmental Affairs.

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first and second times by unanimous consent, and referred as indicated:

By Mr. HATCH (for himself and Mr. KENNEDY):

S. 3668. A bill to amend the Public Health Service Act to provide for the expansion and improvement of traumatic brain injury programs, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3669. A bill to suspend temporarily the duty on certain footwear with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3670. A bill to suspend temporarily the duty on certain men's footwear covering the ankle with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3671. A bill to suspend temporarily the duty on certain other footwear covering the ankle with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3672. A bill to suspend temporarily the duty on certain footwear not covering the ankle with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3673. A bill to suspend temporarily the duty on certain women's footwear covering the ankle with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER (for himself and Mr. GREGG):

S. 3674. A bill to suspend temporarily the duty on certain women's footwear not covering the ankle with coated or laminated textile fabrics; to the Committee on Finance.

By Mr. CARPER:

S. 3675. A bill to extend the suspension of duty on Methyl 2-[[[[[4-(dimethylamino)-6-(2,2,2-trifluorethoxy)-1,3,5-tri zin-2-yl]-amino]carbonyl]amino]sulfonyl]-3-methylbenzoate and application adjuvants; to the Committee on Finance.

By Mr. GRASSLEY:

S. 3676. A bill to amend the Congressional Accountability Act of 1995 to apply whistleblower protections available to certain executive branch employees to legislative branch employees, and for other purposes; to the Committee on Homeland Security and Governmental Affairs.

By Mr. BINGAMAN (for himself, Mr. SANTORUM, Mrs. MURRAY, Mr. AKAKA, Mr. JEFFORDS, Mr. KERRY, Mr. HARKIN, and Mr. LIEBERMAN):

S. 3677. A bill to amend title XVIII of the Social Security Act to eliminate the in the home restriction for Medicare coverage of mobility devices for individuals with expected long-term needs; to the Committee on Finance.

SUBMISSION OF CONCURRENT AND SENATE RESOLUTIONS

The following concurrent resolutions and Senate resolutions were read, and referred (or acted upon), as indicated:

By Mr. VOINOVICH (for himself, Mr. DEWINE, and Mr. ALLEN):

S. Res. 533. A resolution commemorating the 60th anniversary of the permanent integration of professional football by 4 pioneering players; considered and agreed to.

ADDITIONAL COSPONSORS

S. 195

At the request of Mr. LIEBERMAN, the name of the Senator from California (Mrs. BOXER) was added as a cosponsor of S. 195, a bill to provide for full voting representation in Congress for the citizens of the District of Columbia, and for other purposes.

S. 914

At the request of Mr. ALLARD, the name of the Senator from Wisconsin (Mr. KOHL) was added as a cosponsor of S. 914, a bill to amend the Public Health Service Act to establish a competitive grant program to build capacity in veterinary medical education and expand the workforce of veterinarians engaged in public health practice and biomedical research.

S. 1035

At the request of Mr. INHOFE, the name of the Senator from Arkansas (Mr. PRYOR) was added as a cosponsor of S. 1035, a bill to authorize the presentation of commemorative medals on behalf of Congress to Native Americans who served as Code Talkers during foreign conflicts in which the United States was involved during the 20th century in recognition of the service of those Native Americans to the United States.

S. 1597

At the request of Mr. ENZI, the name of the Senator from Pennsylvania (Mr. SANTORUM) was added as a cosponsor of S. 1597, a bill to award posthumously a Congressional gold medal to Constantino Brumidi.

S. 1864

At the request of Mr. TALENT, the name of the Senator from Georgia (Mr. ISAKSON) was added as a cosponsor of S. 1864, a bill to amend the Internal Revenue Code of 1986 to treat certain farming business machinery and equipment as 5-year property for purposes of depreciation.

S. 1907

At the request of Mr. JOHNSON, the name of the Senator from Wyoming (Mr. ENZI) was added as a cosponsor of S. 1907, a bill to promote the development of Native American small business concerns, and for other purposes.

S. 2014

At the request of Mr. DEWINE, the name of the Senator from Arkansas (Mr. PRYOR) was added as a cosponsor of S. 2014, a bill to amend title 38, United States Code, to expand and enhance educational assistance for survivors and dependents of veterans.

S. 2123

At the request of Mr. NELSON of Florida, his name was added as a cosponsor of S. 2123, a bill to modernize the manufactured housing loan insurance program under title I of the National Housing Act.

S. 2250

At the request of Mr. GRASSLEY, the names of the Senator from Indiana (Mr. BAYH) and the Senator from Arkansas (Mrs. LINCOLN) were added as cosponsors of S. 2250, a bill to award a congressional gold medal to Dr. Norman E. Borlaug.

S. 2491

At the request of Mr. CORNYN, the name of the Senator from Oregon (Mr. SMITH) was added as a cosponsor of S. 2491, a bill to award a Congressional gold medal to Byron Nelson in recognition of his significant contributions to the game of golf as a player, a teacher, and a commentator.

S. 2590

At the request of Mr. COBURN, the names of the Senator from Georgia (Mr. ISAKSON) and the Senator from Virginia (Mr. ALLEN) were added as cosponsors of S. 2590, a bill to require full disclosure of all entities and organizations receiving Federal funds.

S. 2677

At the request of Mr. SMITH, the name of the Senator from Pennsylvania (Mr. SANTORUM) was added as a cosponsor of S. 2677, a bill to amend the Internal Revenue Code of 1986 to extend the investment tax credit with respect to solar energy property and qualified fuel cell property, and for other purposes.

S. 2762

At the request of Mr. AKAKA, the name of the Senator from Maine (Ms. COLLINS) was added as a cosponsor of S. 2762, a bill to amend title 38, United States Code, to ensure appropriate payment for the cost of long-term care provided to veterans in State homes, and for other purposes.

S. 3238

At the request of Mr. CORNYN, the names of the Senator from California (Mrs. FEINSTEIN) and the Senator from Massachusetts (Mr. KENNEDY) were added as cosponsors of S. 3238, a bill to require the Secretary of the Treasury

to mint coins in commemoration of the 50th anniversary of the establishment of the National Aeronautics and Space Administration and the Jet Propulsion Laboratory.

S. 3609

At the request of Mrs. LINCOLN, the name of the Senator from Louisiana (Ms. LANDRIEU) was added as a cosponsor of S. 3609, a bill to amend title XVIII of the Social Security Act to provide for the treatment of certain physician pathology services under the Medicare program.

S. 3659

At the request of Ms. SNOWE, the names of the Senator from Louisiana (Ms. LANDRIEU), the Senator from Indiana (Mr. BAYH) and the Senator from Arkansas (Mr. PRYOR) were added as cosponsors of S. 3659, a bill to reauthorize and improve the women's small business ownership programs of the Small Business Administration, and for other purposes.

S. 3667

At the request of Mr. FRIST, the name of the Senator from Kentucky (Mr. BUNNING) was added as a cosponsor of S. 3667, a bill to promote nuclear nonproliferation in North Korea.

S. RES. 407

At the request of Mr. MENENDEZ, the name of the Senator from New York (Mrs. CLINTON) was added as a cosponsor of S. Res. 407, a resolution recognizing the African American Spiritual as a national treasure.

S. RES. 420

At the request of Mr. SMITH, the name of the Senator from Oregon (Mr. WYDEN) was added as a cosponsor of S. Res. 420, a resolution expressing the sense of the Senate that effective treatment and access to care for individuals with psoriasis and psoriatic arthritis should be improved.

S. RES. 507

At the request of Mr. BIDEN, the names of the Senator from Illinois (Mr. DURBIN) and the Senator from Georgia (Mr. ISAKSON) were added as cosponsors of S. Res. 507, a resolution designating the week of November 5 through November 11, 2006, as ''National Veterans Awareness Week'' to emphasize the need to develop educational programs regarding the contributions of veterans to the country.

S. RES. 510

At the request of Mr. MARTINEZ, the names of the Senator from Delaware (Mr. BIDEN), the Senator from Connecticut (Mr. LIEBERMAN) and the Senator from Louisiana (Ms. LANDRIEU) were added as cosponsors of S. Res. 510, a resolution designating the period beginning on June 28, 2006, and ending on July 5, 2006, as ''National Clean Beaches Week'', supporting the goals and ideals of that week, and recognizing the considerable value and role of beaches in the culture of the United States.

S. RES. 531

At the request of Mr. LIEBERMAN, the names of the Senator from Massachusetts (Mr. KENNEDY), the Senator from Massachusetts (Mr. KERRY) and the Senator from Illinois (Mr. DURBIN) were added as cosponsors of S. Res. 531, a resolution to urge the President to appoint a Presidential Special Envoy for Sudan.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. HATCH (for himself and Mr. KENNEDY):

S. 3668. A bill to amend the Public Health Service Act to provide for the expansion and improvement of traumatic brain injury programs, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

Mr. HATCH. Mr. President, as we face the close of the 109th Congress in the coming months, I feel it is important that we reauthorize the Traumatic Brain Injury Act. It is my pleasure to introduce this reauthorization bill along with the ranking minority member of the Senate Health, Education, Labor, and Pension Committee, Senator TED KENNEDY, with whom I worked on the original legislation over 10 years ago. Our colleagues on the House side, Representatives BILL PASCRELL, JR., and TODD RUSSELL PLATTS, have just recently introduced a companion bill with the same goal of reauthorizing the TBI Act this year.

Sustaining a traumatic brain injury—or TBI—can be both catastrophic and devastating. The financial and emotional costs to the individual, family, and community are enormous. Traumatic brain injuries contribute to a substantial number of deaths and cases of permanent disability annually.

Of the 1.4 million who sustain a TBI each year in the United States: 50,000 die; 235,000 are hospitalized; and 1.1 million are treated and released from an emergency department. Brain injuries are the most frequent reasons for visits to physicians and emergency rooms.

These statistics are more revealing when one considers that every 16 seconds someone in the U.S. sustains a head injury; every 12 minutes, one of these people will die and another will become permanently disabled. Of those who survive, each year, an estimated 80,000 to 90,000 people experience the onset of long-term disability associated with a TBI. An additional 2,000 will exist in a persistent vegetative state.

Even more startling is the fact that brain injury kills more Americans under the age of 34 than all other causes combined and has claimed more lives since the Turn of the Century than all United States wars combined. Sixty-eight percent of war veterans are returning home with sustained brain injuries.

The distress of TBI is not limited to diagnosis. A survivor of a severe brain injury typically faces 5 to 10 years of intensive services and estimated lifetime costs can exceed $4 million. Direct medical costs and indirect costs such as lost productivity of TBI totaled an estimated $60 billion in the United States in 2000.

The Traumatic Brain Injury Act is the only Federal legislation specifically addressing issues faced by 5.3 million American children and adults who live with a long-term disability as a result of traumatic brain injury. Reauthorization of the Traumatic Brain Injury Act will provide for the continuation of research, not only for the treatment of TBI but also for prevention and awareness programs which will help decrease the occurrence of traumatic brain injury and improve the long-term outcome.

In 2006, Congress has an opportunity to strengthen the TBI Act by authorizing the Centers for Disease Control and Prevention, CDC, to determine the incidence and prevalence of traumatic brain injury in the general population of the United States, including all age groups and persons in institutional settings such as nursing homes, correctional facilities, psychiatric hospitals, child care facilities, and residential institutes for people with developmental disabilities.

This legislation authorizes the Health Resources and Services Administration, HRSA, to make grants for projects of national significance that improve individual and family access to service systems; assist states in developing service capacity; improve monitoring and evaluation of rehabilitation services and supports; and address emerging needs of servicemen and women, veterans, and individuals and families who have experienced brain injury through service delivery demonstration projects.

This bill also authorizes HRSA to include the American Indian Consortium as an eligible recipient of competitive grants awarded to States, Territories, and the District of Columbia to develop comprehensive system of services and supports nationwide.

Furthermore, this bill instructs HRSA and the Administration on Developmental Disabilities to coordinate data collection regarding protection and advocacy services.

The TBI Act offers balanced and coordinated public policy in brain injury prevention, research, education, and community-based services and supports for individuals living with traumatic brain injury and their families.

Mr. President, reauthorization of the Traumatic Brain Injury Act will further provide mechanisms for the prevention, treatment and the improvement of the quality of life for those Americans and their families who may sustain such a devastating disability. I ask my colleagues' support in promptly reauthorizing the Traumatic Brain Injury Act.

Mr. KENNEDY. Mr. President, today I am proud to join with Senator HATCH in sponsoring the reauthorization of the Traumatic Brain Injury Act. This

bill will provide valuable assistance to the millions of children and adults in our nation who are facing an array of problems because of their injuries.

First, it is critical for us to acknowledge the important role which the programs authorized under this bill can play for the large number of soldiers wounded in the war. As of June 2006—almost 19,000 service members have been wounded in Iraq and data continue to demonstrate that brain injuries are approximately two-thirds of the injuries suffered in the war.

On top of that, there is an extremely high incidence of traumatic brain injuries among children between birth and age 14—approximately 475,000 a year—and some of the highest numbers of injuries are among children under the age of five.

Soldiers and children—I cannot think of groups more deserving of our attention.

Reauthorization of the TBI Act is crucial to continued federal funding for a range of traumatic brain injury programs. The bill will reauthorize grants that have provided vital assistance to States, Territories, the District of Columbia, and American Indian Consortia in building or enhancing coordinated systems of community-based services and supports for children and adults with traumatic brain injuries.

In addition, when Congress first authorized the Traumatic Brain Injury Act as part of the Children's Health Act of 2000, it had the foresight to include funding for the Protection and Advocacy for Individuals with Traumatic Brain Injury Program. This program has played a crucial role because individuals with traumatic brain injury have help in returning to work, finding a place to live, accessing needed supports and services such as attendant care and assistive technology, and obtaining appropriate mental health, substance abuse, and rehabilitation services. Often those with brain injuries—including our returning veterans—are forced to remain in extremely expensive institutional settings far longer than necessary because the community-based supports and services they need are not available. Effective protection and advocacy services for people with traumatic brain injury can lead both to reduced Government expenditures and increased productivity, independence and community integration for patients. However, those who advocate for the injured must possess specialized skills and the work is often time-intensive.

This legislation also provides funding for critical CDC programs that provide extremely important surveillance and injury prevention information.

In a time when both the administration and Congress are searching for programs that provide the right kind of ''bang for the Federal buck,'' the recent findings in an Institute of Medicine March 2006 report show that the TBI programs work. Last year the various programs in the TBI bill were funded for a total of only $12 million—yet look at the good they do. Not only should these programs be reauthorized, the funding also should be increased.

The IOM calls the TBI programs an ''overall success,'' stating that ''there is considerable value in providing funding,'' and ''it is worrisome that the modestly budgeted HRSA TBI Program continues to be vulnerable to budget cuts.'' As the IOM study suggests, this program must be continued and allowed to grow in order to ensure that each state has the resources necessary to maintain critical services and advocacy for the estimated 5.3 million people currently living with disabilities resulting from brain injury.

Again, soldiers and children, I cannot think of two more deserving groups of people in our Nation. We owe them the services and advocacy that these critical programs offer. And I urge our colleagues to support the passage of this important piece of bipartisan disability legislation this year.

By Mr. GRASSLEY:

S. 3676. A bill to amend the Congressional Accountability Act of 1995 to apply whistleblower protections available to certain executive branch employees to legislative branch employees, and for other purposes; to the Committee on Homeland Security and Governmental Affairs.

Mr. GRASSLEY. Mr. President, I rise today to announce that I am introducing a bill that will extend whistleblower protections currently available to certain executive branch employees to legislative branch employees.

This bill is long overdue. The Office of Compliance has called for these changes on numerous occasions in recent years, and they are very supportive of this bill.

I have fought for whistleblowers for many years. Whistleblowers are the key to exposing a dysfunctional bureaucracy. Government agencies too often want to cover up their mistakes. Without insiders being brave enough to uncover these violations or waste, the American taxpayer would continue to pay for them. These people should not be punished for bringing the misdeeds to light.

Whistleblowers in the executive branch have helped me do my job of oversight. We have done a good job to make sure that whistleblowers in the executive branch are protected. It is simply not fair, nor is it good governance for Congress to enact whistleblower protections on the other branches of Government without giving its own employees the same consideration. This bill merely extends those same protections that other Government employees enjoy to Congress's own employees.

I fully back hard-working Government employees who serve to protect our country, and I hope my colleagues will join me. Congress needs to make sure that its own employees can speak up without retaliation when they blow the whistle on fraud, waste, or abuse.

Mr. President, I ask unanimous consent that the text of this bill be printed in the RECORD.

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

S. 3676

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

SECTION 1. APPLICATION OF WHISTLEBLOWER PROTECTION RULES TO LEGISLATIVE BRANCH EMPLOYEES.

(a) IN GENERAL.—Part A of title II of the Congressional Accountability Act of 1995 (2 U.S.C. 1311 et seq.) is amended—

(1) in the heading, by striking ''**FAIR LABOR STANDARDS,**'' and all that follows and inserting ''**AND OTHER PROTECTIONS AND BENEFITS**'';

(2) by redesignating section 207 as section 208; and

(3) by inserting after section 206 the following:

''SEC. 207. RIGHTS AND PROTECTIONS UNDER WHISTLEBLOWER PROTECTION RULES.

''(a) RIGHTS AND PROTECTIONS DESCRIBED.—

''(1) IN GENERAL.—No employing office may take or fail to take, or threaten to take or fail to take, a personnel action (within the meaning of chapter 23 of title 5, United States Code) with respect to any covered employee or applicant for employment because of—

''(A) any disclosure of information by a covered employee or applicant which the employee or applicant reasonably believes evidences—

''(i) a violation of any law, rule, or regulation; or

''(ii) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety;

if such disclosure is not specifically prohibited by law and if such information is not specifically required by Executive order or the rules of the Senate or the House of Representatives to be kept secret in the interest of national defense or the conduct of foreign affairs; or

''(B) any disclosure to the General Counsel, or to the Inspector General of a legislative or executive agency or another employee designated by the head of the legislative or executive agency to receive such disclosures, of information which the employee or applicant reasonably believes evidences—

''(i) a violation of any law, rule, or regulation; or

''(ii) gross mismanagement, a gross waste of funds, an abuse of authority, or a substantial and specific danger to public health or safety.

''(2) DEFINITIONS.—For purposes of this section and for purposes of applying the procedures established under title IV for the consideration of alleged violations of this section—

''(A) the term 'covered employee' includes an employee of the Government Accountability Office or Library of Congress; and

''(B) the term 'employing office' includes the Government Accountability Office and the Library of Congress.

''(b) REMEDY.—The remedy for a violation of subsection (a) shall be such remedy as would be appropriate if awarded under chapter 12 of title 5, United States Code, with respect to a prohibited personnel practice described in section 2302(b)(8) of such title.

''(c) REGULATIONS TO IMPLEMENT SECTION.—

''(1) IN GENERAL.—The Board shall, pursuant to section 304, issue regulations to implement this section.

''(2) AGENCY REGULATIONS.—The regulations issued under paragraph (1) shall be the same as the substantive regulations promulgated by the Merit Systems Protection Board to implement chapters 12 and 23 of title 5, United States Code, except to the extent that the Board of Directors of the Office of Compliance may determine, for good cause shown and stated together with the regulation, that a modification of such regulations would be more effective for the implementation of the rights and protections under this section.''.

(b) TECHNICAL AND CONFORMING AMENDMENTS.—

(1) TABLE OF CONTENTS.—The table of contents for part A of title II of the Congressional Accountability Act of 1995 is amended—

(A) in the item relating to part A, by striking ''**FAIR LABOR STANDARDS,**'' and all that follows and inserting ''**AND OTHER PROTECTIONS AND BENEFITS**'';

(B) by redesignating the item relating to section 207 as relating to section 208; and

(C) by inserting after the item relating to section 206 the following:

''Sec. 207. Rights and protections under whistleblower protection rules.''.

(2) APPLICATION OF LAWS.—Section 102(a) of the Congressional Accountability Act of 1995 (2 U.S.C. 1302(a)) is amended by adding at the end the following:

''(12) Section 2302(b)(8) of title 5, United States Code.''.

By Mr. BINGAMAN (for himself, Mr. SANTORUM, Mrs. MURRAY, Mr. AKAKA, Mr. JEFFORDS, Mr. KERRY, Mr. HARKIN, and Mr. LIEBERMAN):

S. 3677. A bill to amend title XVIII on the Social Security Act to eliminate the in the home restriction for Medicare coverage of mobility devices for individuals with expected long-term needs; to the Committee on Finance.

Mr. BINGAMAN. Mr. President, I rise today to introduce the Medicare Independent Living Act of 2006 with Senators SANTORUM, MURRAY, COLLINS, AKAKA, JEFFORDS, KERRY, HARKIN, KENNEDY, and LIEBERMAN. This legislation would eliminate Medicare's ''in the home'' restriction for the coverage of mobility devices, including wheelchairs and scooters, for those with disabilities and expected long-term needs. This includes people with multiple sclerosis, paraglegia, osteoarthritis, and cerebrovascular disease that includes acute stroke and conditions like aneurysms.

As currently interpreted by the Centers for Medicare and Medicaid Services, CMS, the ''in the home'' restriction prevents beneficiaries from obtaining wheelchairs that are necessary for use outside the home. This precludes beneficiaries who need a wheelchair to access work, the community at-large, his or her place of worship, school, physician's offices, or pharmacies.

On July 13, 2005, 34 senators wrote Secretary Leavitt asking the Department of Health and Human Services, or HHS, to modify the ''in the home'' requirement so as to ''improve community access for Medicare beneficiaries with mobility impairments.''

Unfortunately, CMS continues to impose the ''in the home'' restriction on Medicare beneficiaries in need of mobility devices. The result is that people who may not need a wheelchair to get around their house but do need one to get around their communities, such as to a job, church, or the grocery store, can't get Medicare to pay for one. As the Medicare Rights Center in a report entitled ''Forced Isolation: Medicare's 'In The home' Coverage Standards for Wheelchairs'' in March 2004 notes, ''This effectively disqualifies you from leaving your home without the assistance of others.''

Furthermore, in a Kansas City Star article dated July 3, 2005, Mike Oxford with the National Council on Independent Living noted, ''You look at mobility assistance as a way to liberate yourself.'' He added that the restriction ''is just backward.''

In fact, policies such as these are not only backward but directly contradict numerous initiatives aimed at increasing community integration of people with disabilities, including the Americans with Disabilities Act, the Ticket-to-Work Program, the New Freedom Initiative, and the Olmstead Supreme Court decision.

According to the Medicare Rights Center update dated March 23, 2006, ''This results in arbitrary denials. People with apartments too small for a power wheelchair are denied a device that could also get them down the street. Those in more spacious quarters get coverage, allowing them to scoot from room to room and to the grocery store. People who summon all their willpower and strength to hobble around a small apartment get no help for talks that are beyond them and their front door.''

In New Mexico, I have heard this complaint about the law repeatedly from our State's most vulnerable disabled and senior citizens. People argue the provision is being misinterpreted by the administration and results in Medicare beneficiaries being trapped in their home.

The ITEM Coalition adds in a letter to CMS on this issue in November 25, 2005, ''There continues to be no clinical basis for the 'in the home' restriction and by asking treating practioners to document medical need only within the home setting, CMS is severely restricting patients from receiving the most appropriate devices to meet their mobility needs.''

Therefore, our bipartisan legislation would clarify that this restriction does not apply to mobility devices, including wheelchairs, for people with disabilities in the Medicare Program. The language change is fairly simple and simply clarifies that the ''in the home'' restriction for durable medical equipment does not apply in the case of mobility devices needed by Medicare beneficiaries with expected long-term needs for use ''in customary settings such as normal domestic, vocational, and community activities.''

This legislation is certainly not intended to discourage CMS from dedicating its resources to reducing waste, fraud, and abuse in the Medicare system, as those efforts are critical to ensuring that Medicare remains financially viable and strong in the future. However, it should be noted that neither Medicaid nor the Department of Veterans Affairs impose such ''in the home'' restrictions on mobility devices. As Senator BROWNBACK said to the Kansas City Star, it is important to lift the restriction ''to reflect our goal of ensuring that Americans with disabilities are able to live independent, healthy, and productive lives.''

I thank Senators SANTORUM, MURRAY, COLLINS, AKAKA, JEFFORDS, KERRY, HARKIN, KENNEDY, and LIEBERMAN for cosponsoring this important legislation, and attached is a fact sheet that I request to be printed in the RECORD. I would also ask unanimous consent to have printed in the RECORD copies of the letter to the administration and the response that was received by Capitol Hill.

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

U.S. SENATE,
Washington, DC, July 13, 2005.

Re reconsideration of the Medicare ''In the Home'' requirement on wheelchair coverage.

Hon. MICHAEL O. LEAVITT,
Secretary, Department of Health and Human Services, Washington, DC.

DEAR SECRETARY LEAVITT: The undersigned members write to request that you modify the ''in the home'' requirement in Medicare's wheeled mobility benefit to improve community access for Medicare beneficiaries with mobility impairments.

We commend CMS for its dedication to reducing waste, fraud and abuse in the Medicare system, particularly under the mobility device benefit, and fully support your intention to protect precious Medicare funds and resources. Additionally, we commend the agency for recently taking on the task of creating a new and, hopefully, more appropriate Medicare coverage criteria for mobility devices. However, we are concerned that CMS' current interpretation of the ''in the home'' requirement may continue to act as an inappropriate restriction in meeting the real-life mobility needs of Medicare beneficiaries with physical disabilities and mobility impairments.

Recently CMS announced a final National Coverage Determination (NCD) for mobility assistance equipment (MAE) that fails to adequately address the concerns of beneficiaries and other parties with the ''in the home'' restriction.

In order to ensure that the ''in the home'' requirement does not act as a barrier to community participation for Medicare beneficiaries with disabilities and mobility impairments; we ask that you modify this requirement through the regulatory process. Additionally, if your agency concludes that the ''in the home'' requirement cannot be addressed through the regulatory process, we request that you respond with such information as quickly as possible, so that Congress may begin examining legislative alternatives.

We thank you for your consideration of this matter.

Sincerely,

Jeff Bingaman, Rick Santorum, John Kerry, Joseph I. Lieberman, Barbara Mikulski, Maria Cantwell, Edward M. Kennedy, Patty Murray, Evan Bayh, Mark Dayton, Jack Reed, Johnny Isakson, Sam Brownback, Jon S. Corzine, James M. Talent, Pat Roberts, Frank Lautenberg.

James M. Jeffords, Christopher S. Bond, Mike DeWine, Daniel K. Akaka, Mary L. Landrieu, Debbie Stabenow, Charles E. Schumer, Ron Wyden, Herb Kohl, Patrick J. Leahy, Arlen Specter, Hillary Rodham Clinton, Christopher J. Dodd, John McCain, Carl Levin, Tom Harkin, Olympia J. Snowe.

THE SECRETARY OF
HEALTH AND HUMAN SERVICES,
Washington, DC, October 25, 2005.

Hon. CHARLES F. BASS,
House of Representatives,
Washington, DC.

DEAR MR. BASS: Thank you for your letter regarding the ''in the home'' requirement for Mobility Assistive Equipment (MAE).

The Centers for Medicare & Medicaid Services (CMS) is required to follow section 1861(n) of the Social Security Act (the Act) which states ''the term 'durable medical equipment' includes iron lungs, oxygen tents, hospital beds, and wheelchairs (which may include a power-operated vehicle that may be appropriately used as a wheelchair, but only where the use of such a vehicle is determined to be necessary on the basis of the individual's medical and physical condition and the vehicle meets such safety requirements as the Secretary may prescribe) used in the patient's home (including an institution used as his home other than an institution that meets the requirements of subsection (e)(1) of this section or section 1819(a)(1)), whether furnished on a rental basis or purchased. . . .'' CMS further defined the durable medical equipment (DME) benefit category at 42 CFR section 414.202 to include equipment that can (a) withstand repeated use, (b) is primarily and customarily used to serve a medical purpose, (c) is not generally useful in the absence of illness or injury, and (d) is appropriate for use in the home.

There are two practical requirements that must be satisfied for coverage of DME which are a logical result of the definition of DME:

(1) The equipment must be appropriate for use in the home. This requirement excludes a gasoline-powered vehicle, for example.

(2) The patient must have a need to use the equipment in the home. This requirement excludes equipment that is only necessary for use outside the patient's home.

Therefore, we do not cover equipment if it is exclusively needed outside of the home. However, if DME is needed in the home and the beneficiary also uses it outside the home, the equipment would still be covered. For example, a high strength wheelchair may be covered when appropriate for home use even though it may also be useful outside the home. We do not have any restrictions on the use of the equipment outside of the home as long as there is also a need to use it in the home.

I hope this information has been helpful. Please call me if you have any further thoughts or questions. I will also provide this response to the cosigners of your letter.

Sincerely,

MICHAEL O. LEAVITT.

SUBMITTED RESOLUTIONS

SENATE RESOLUTION 533—COMMEMORATING THE 60TH ANNIVERSARY OF THE PERMANENT INTEGRATION OF PROFESSIONAL FOOTBALL BY 4 PIONEERING PLAYERS

Mr. VOINOVICH (for himself, Mr. DEWINE, and Mr. ALLEN) submitted the following resolution, which was considered and agreed to:

S. RES. 533

Whereas the integration of sports supported other ongoing efforts to permanently end racial segregation as an accepted practice in the United States;

Whereas, in 1946, 4 African-American football players, William ''Bill'' K. Willis and Marion Motley, who played for the Cleveland Browns, and Kenny Washington and Woody Strode, who played for the Los Angeles Rams, all signed contracts to play professional football;

Whereas, on August 7, 1946, Bill Willis was the first of this pioneering foursome to sign a contract to play professional football for the Cleveland Browns forever ending the race barrier in professional football, 1 full year before Jackie Robinson broke the race barrier in professional baseball;

Whereas, thanks to the significant contributions of Bill Willis and Marion Motley, the Cleveland Browns won the National Football League (NFL) Championship in 1950 which was the first year the Cleveland Browns played in the NFL;

Whereas, in addition to permanently ending the race barrier in professional football, Bill Willis and Marion Motley were recognized for their outstanding professional football careers by their election to the Pro Football Hall of Fame; and

Whereas 2006 marks the 60th anniversary of the permanent integration of professional football, and the NFL will commemorate this milestone during the 2006 Pro Football Hall of Fame Game: Now, therefore, be it

Resolved, That the Senate—

(1) recognizes the 60th anniversary of the permanent integration of professional football; and

(2) respectfully requests the Secretary of the Senate to transmit for appropriate display an enrolled copy of this resolution to—

(A) the Pro Football Hall of Fame in Canton, Ohio; and

(B) William K. Willis, the only surviving member of the pioneering foursome who permanently ended the race barrier in professional football.

AUTHORITY FOR COMMITTEES TO MEET

COMMITTEE ON ENERGY AND NATURAL RESOURCES

Mr. COBURN. Mr. President, I ask unanimous consent that the Committee on Energy and Natural Resources be authorized to meet during the session of the Senate on Monday, July 17, 2006, at 2:30 p.m. The purpose of this hearing is to receive testimony relating to the implementation of the Energy Policy Act of 2005 Provisions on Hydrogen and Fuel Cell Research and Development.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMITTEE ON FOREIGN RELATIONS

Mr. COBURN. Mr. President, I ask unanimous consent that the Committee on Foreign Relations be authorized to meet during the session of the Senate on Monday, July 17, 2006, at 3 p.m. to hold nominations hearings.

The PRESIDING OFFICER. Without objection, it is so ordered.

PRIVILEGES OF THE FLOOR

Mr. SPECTER. Mr. President, on behalf of the leader, I ask unanimous consent that floor privileges be granted for the duration of the stem cell debate to the following: Dr. Roger Johns of Senator HATCH's office; Laura Holland, Jeff McCaffrey, Jon Koegler, Martina Bebin, and Dave Schmickel of Senator ENZI's office; and Nicole Weitz of Senator FRIST's office.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. HARKIN. Mr. President, I ask unanimous consent that Nathan Porteshawver and Tracie Bryant of my staff be granted floor privileges for the duration of today's session.

On behalf of Senator KENNEDY, I ask unanimous consent that Ahmed Salem, an intern on his HELP Committee staff, be accorded floor privileges during the consideration of the three bills addressing the stem cell issue and all rollcall votes thereon.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered.

Mr. HARKIN. Mr. President, on behalf of Senator ROCKEFELLER, I ask unanimous consent that the following legislative fellows in his office be accorded floor privileges for the duration of Senate consideration of stem cell bills, and on all votes thereon: Dr. Al Pheley, a Robert Wood Johnson fellow; and Bruce Gilberg, an American Association for the Advancement of Sciences fellow.

Mr. COBURN. Mr. President, I ask unanimous consent that floor privileges be granted to Lesley Stewart of Senator ENZI's staff, and also Matt Blackburn of my staff for the duration of the stem cell debate.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. BROWNBACK. Mr. President, I ask unanimous consent that the privilege of the floor be granted to Nicholas Greenway and Eugene Lipkin, interns here on Capitol Hill.

The PRESIDING OFFICER. Without objection, it is so ordered.

DEPARTMENT OF HOMELAND SECURITY APPROPRIATIONS ACT, 2007

On Thursday, July 13, 2006 the Senate passed H.R. 5441, as follows:

H.R. 5441

Resolved, That the bill from the House of Representatives (H.R. 5441) entitled ''An Act making appropriations for the Department of Homeland Security for the fiscal year ending September 30, 2007, and for other purposes.'', do pass with the following amendment:

Strike out all after the enacting clause and insert:

That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the Department of Homeland Security for the fiscal year ending September 30, 2007, and for other purposes, namely:

TITLE I

DEPARTMENTAL MANAGEMENT AND OPERATIONS

OFFICE OF THE SECRETARY AND EXECUTIVE MANAGEMENT

For necessary expenses of the Office of the Secretary of Homeland Security, as authorized by section 102 of the Homeland Security Act of 2002 (6 U.S.C. 112), and executive management of the Department of Homeland Security, as authorized by law, $82,622,000: Provided, That not to exceed $40,000 shall be for official reception and representation expenses.

OFFICE OF THE UNDER SECRETARY FOR MANAGEMENT

For necessary expenses of the Office of the Under Secretary for Management, as authorized by sections 701 through 705 of the Homeland Security Act of 2002 (6 U.S.C. 341 through 345), $163,456,000: Provided, That not to exceed $3,000 shall be for official reception and representation expenses: Provided further, That of the total amount provided, $8,206,000 shall remain available until expended solely for the alteration and improvement of facilities, tenant improvements, and relocation costs to consolidate Department headquarters operations.

OFFICE OF THE CHIEF FINANCIAL OFFICER

For necessary expenses of the Office of the Chief Financial Officer, as authorized by section 103 of the Homeland Security Act of 2002 (6 U.S.C. 113), $26,018,000.

OFFICE OF THE CHIEF INFORMATION OFFICER

For necessary expenses of the Office of the Chief Information Officer, as authorized by section 103 of the Homeland Security Act of 2002 (6 U.S.C. 113), and Department-wide technology investments, $306,765,000; of which $79,521,000 shall be available for salaries and expenses; and of which $227,244,000 shall be available for development and acquisition of information technology equipment, software, services, and related activities for the Department of Homeland Security, and for the costs of conversion to narrowband communications, including the cost for operation of the land mobile radio legacy systems, to remain available until expended: Provided, That none of the funds appropriated shall be used to support or supplement the appropriations provided for the United States Visitor and Immigrant Status Indicator Technology project or the Automated Commercial Environment: Provided further, That the Chief Information Officer shall submit to the Committees on Appropriations of the Senate and the House of Representatives, not more than 60 days after the date of enactment of this Act, an expenditure plan for all information technology projects that: (1) are funded under this heading; or (2) are funded by multiple components of the Department of Homeland Security through reimbursable agreements: Provided further, That such expenditure plan shall include each specific project funded, key milestones, all funding sources for each project, details of annual and lifecycle costs, and projected cost savings or cost avoidance to be achieved by the project.

ANALYSIS AND OPERATIONS

For necessary expenses for information analysis and operations coordination activities, as authorized by title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.), $298,663,000, to remain available until September 30, 2008, of which not to exceed $5,000 shall be for official reception and representation expenses.

OFFICE OF INSPECTOR GENERAL

For necessary expenses of the Office of Inspector General in carrying out the provisions of the Inspector General Act of 1978 (5 U.S.C. App.), $90,185,000, of which not to exceed $100,000 may be used for certain confidential operational expenses, including the payment of informants, to be expended at the direction of the Inspector General: Provided further, That the Department of Homeland Security Inspector General shall investigate whether, and to what extent, in adjusting and settling claims resulting from Hurricane Katrina, insurers making flood insurance coverage available under the Write-Your-Own program pursuant to section 1345 of the National Flood Insurance Act of 1968 (42 U.S.C. 4081) and subpart C of part 62 of title 44, Code of Federal Regulations, improperly attributed damages from such hurricane to flooding covered under the insurance coverage provided under the national flood insurance program rather than to windstorms covered under coverage provided by such insurers or by windstorm insurance pools in which such insurers participated: Provided further, That the Department of Homeland Security Inspector General may request the assistance of the Attorney General and the Department of Justice in conducting such investigation and may reimburse the costs of the Attorney General and the Department of Justice in providing such assistance from such funds: Provided further, That the Department of Homeland Security Inspector General shall submit a report to Congress not later than April 1, 2007, setting forth the conclusions of such investigation.

TITLE II

SECURITY, ENFORCEMENT, AND INVESTIGATIONS

UNITED STATES VISITOR AND IMMIGRANT STATUS INDICATOR TECHNOLOGY

For necessary expenses for the development of the United States Visitor and Immigrant Status Indicator Technology project, as authorized by section 110 of the Illegal Immigration Reform and Immigration Responsibility Act of 1996 (8 U.S.C. 1221 note), $399,494,000, to remain available until expended: Provided, That of the total amount made available under this heading, $200,000,000 may not be obligated for the United States Visitor and Immigrant Status Indicator Technology project until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure prepared by the Secretary of Homeland Security that—

(1) meets the capital planning and investment control review requirements established by the Office of Management and Budget, including Circular A–11, part 7;

(2) complies with the Department of Homeland Security information systems enterprise architecture;

(3) complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the Federal Government;

(4) includes a certification by the Chief Information Officer of the Department of Homeland Security that an independent verification and validation agent is currently under contract for the project;

(5) is reviewed and approved by the Department of Homeland Security Investment Review Board, the Secretary of Homeland Security, and the Office of Management and Budget; and

(6) is reviewed by the Government Accountability Office.

CUSTOMS AND BORDER PROTECTION

SALARIES AND EXPENSES

For necessary expenses for enforcement of laws relating to border security, immigration, customs, and agricultural inspections and regulatory activities related to plant and animal imports; purchase and lease of up to 4,500 (3,500 for replacement only) police-type vehicles; and contracting with individuals for personal services abroad; $5,329,874,000, of which $44,000,000 shall be used to hire an additional 236 border patrol agents; of which $3,026,000 shall be derived from the Harbor Maintenance Trust Fund for administrative expenses related to the collection of the Harbor Maintenance Fee under section 9505(c)(3) of the Internal Revenue Code of 1986 (26 U.S.C. 9505(c)(3)) and notwithstanding section 1511(e)(1) of the Homeland Security Act of 2002 (6 U.S.C. 551(e)(1)); of which not to exceed $45,000 shall be for official reception and representation expenses; of which not less than $172,676,000 shall be for Air and Marine Operations; of which such sums as become available in the Customs User Fee Account, except sums subject to section 13031(f)(3) of the Consolidated Omnibus Budget Reconciliation Act of 1985 (19 U.S.C. 58c(f)(3)), shall be derived from that account; of which not to exceed $150,000 shall be available for payment for rental space in connection with preclearance operations; of which not to exceed $1,000,000 shall be for awards of compensation to informants, to be accounted for solely under the certificate of the Secretary of Homeland Security: Provided, That for fiscal year 2007, the overtime limitation prescribed in section 5(c)(1) of the Act of February 13, 1911 (19 U.S.C. 267(c)(1)) shall be $35,000; and notwithstanding any other provision of law, none of the funds appropriated by this Act may be available to compensate any employee of United States Customs and Border Protection for overtime, from whatever source, in an amount that exceeds such limitation, except in individual cases determined by the Secretary of Homeland Security, or the designee of the Secretary, to be necessary for national security purposes, to prevent excessive costs, or in cases of immigration emergencies.

AUTOMATION MODERNIZATION

For expenses for customs and border protection automated systems, $461,207,000, to remain available until expended, of which not less than $318,490,000 shall be for the development of the Automated Commercial Environment: Provided, That none of the funds made available under this heading may be obligated for the Automated Commercial Environment until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure prepared by the Secretary of Homeland Security that—

(1) meets the capital planning and investment control review requirements established by the Office of Management and Budget, including Circular A–11, part 7;

(2) complies with the Department of Homeland Security information systems enterprise architecture;

(3) complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the Federal Government;

(4) includes a certification by the Chief Information Officer of the Department of Homeland Security that an independent verification and validation agent is currently under contract for the project;

(5) is reviewed and approved by the Department of Homeland Security Investment Review Board, the Secretary of Homeland Security, and the Office of Management and Budget; and

(6) is reviewed by the Government Accountability Office.

TECHNOLOGY MODERNIZATION

For expenses for customs and border protection technology systems, $131,559,000, to remain available until expended: Provided, That of the funds made available under this heading, $100,000,000 may not be obligated until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure prepared by the Secretary of Homeland Security that—

(1) meets the capital planning and investment control review requirements established by the Office of Management and Budget, including Circular A–11, part 7;

(2) complies with the Department of Homeland Security information systems enterprise architecture;

(3) complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the Federal Government;

(4) includes a certification by the Chief Information Officer of the Department of Homeland Security that an independent verification and validation agent is currently under contract for the project;

(5) is reviewed and approved by the Department of Homeland Security Investment Review Board, the Secretary of Homeland Security, and the Office of Management and Budget; and

(6) is reviewed by the Government Accountability Office.

AIR AND MARINE INTERDICTION, OPERATIONS, MAINTENANCE, AND PROCUREMENT

(INCLUDING RESCISSION OF FUNDS)

For necessary expenses for the operations, maintenance, and procurement of marine vessels, aircraft, unmanned aerial vehicles, and other related equipment of the air and marine program, including operational training and mission-related travel, and rental payments for facilities occupied by the air or marine interdiction and demand reduction programs, the operations of which include the following: the interdiction of narcotics and other goods; the provision of support to Federal, State, and local agencies in the enforcement or administration of laws enforced by the Department of Homeland Security; and at the discretion of the Secretary of Homeland Security, the provision of assistance to Federal, State, and local agencies in other law enforcement and emergency humanitarian efforts, $472,499,000, to remain available until expended: Provided, That no aircraft or other related equipment, with the exception of aircraft that are one of a kind and have been identified as excess to United States Customs and Border Protection requirements and aircraft that have been damaged beyond repair, shall be transferred to any other Federal agency, department, or office outside of the Department of Homeland Security during fiscal year 2007 without the prior approval of the Committees on Appropriations of the Senate and the House of Representatives.

In addition, of the funds appropriated under this heading in title II of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2068) for a covert manned surveillance aircraft, $14,000,000 are rescinded.

CONSTRUCTION

For necessary expenses to plan, construct, renovate, equip, and maintain buildings and facilities necessary for the administration and enforcement of the laws relating to customs and immigration, $288,084,000, to remain available until expended.

IMMIGRATION AND CUSTOMS ENFORCEMENT

SALARIES AND EXPENSES

For necessary expenses for enforcement of immigration and customs laws, detention and removals, and investigations; and purchase and lease of up to 2,740 (2,000 for replacement only) police-type vehicles; $3,740,357,000, of which not to exceed $7,500,000 shall be available until expended for conducting special operations under section 3131 of the Customs Enforcement Act of 1986 (19 U.S.C. 2081); of which not to exceed $15,000 shall be for official reception and representation expenses; of which not to exceed $1,000,000 shall be for awards of compensation to informants, to be accounted for solely under the certificate of the Secretary of Homeland Security; of which not less than $102,000 shall be for promotion of public awareness of the child pornography tipline; of which not less than $203,000 shall be for Project Alert; of which not less than $5,400,000 may be used to facilitate agreements consistent with section 287(g) of the Immigration and Nationality Act (8 U.S.C. 1357(g)); and of which not to exceed $11,216,000 shall be available to fund or reimburse other Federal agencies for the costs associated with the care, maintenance, and repatriation of smuggled illegal aliens: Provided, That none of the funds made available under this heading shall be available to compensate any employee for overtime in an annual amount in excess of $35,000, except that the Secretary of Homeland Security, or the designee of the Secretary, may waive that amount as necessary for national security purposes and in cases of immigration emergencies: Provided further, That none of the funds in this Act or any other appropriations Act may be used to fund any activity other than those activities funded in fiscal year 2005 to facilitate agreements consistent with section 287(g) of the Immigration and Nationality Act (8 U.S.C. 1357(g)): Provided further, That of the total amount provided, $15,770,000 shall be for activities to enforce laws against forced child labor in fiscal year 2007, of which not to exceed $6,000,000 shall remain available until expended: Provided further, That an additional $58,000,000 shall be available under this heading and authorized for 1,700 additional detention beds spaces and the necessary operational and mission support positions, information technology, relocation costs, and training for those beds and the amount made available under the heading ''DISASTER RELIEF'' in this Act is reduced by $58,000,000.

FEDERAL PROTECTIVE SERVICE

The revenues and collections of security fees credited to this account, not to exceed $516,011,000, shall be available until expended for necessary expenses related to the protection of federally-owned and leased buildings and for the operations of the Federal Protective Service.

AUTOMATION MODERNIZATION

For expenses of immigration and customs enforcement automated systems, $20,000,000, to remain available until expended: Provided, That of the funds made available under this heading, $16,000,000 may not be obligated until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure prepared by the Secretary of Homeland Security that—

(1) meets the capital planning and investment control review requirements established by the Office of Management and Budget, including Circular A–11, part 7;

(2) complies with the Department of Homeland Security information systems enterprise architecture;

(3) complies with the acquisition rules, requirements, guidelines, and systems acquisition management practices of the Federal Government;

(4) includes a certification by the Chief Information Officer of the Department of Homeland Security that an independent verification and validation agent is currently under contract for the project;

(5) is reviewed and approved by the Department of Homeland Security Investment Review Board, the Secretary of Homeland Security, and the Office of Management and Budget; and

(6) is reviewed by the Government Accountability Office.

CONSTRUCTION

For necessary expenses to plan, construct, renovate, equip, and maintain buildings and facilities necessary for the administration and enforcement of the laws relating to customs and immigration, $101,281,000, to remain available until expended.

TRANSPORTATION SECURITY ADMINISTRATION

AVIATION SECURITY

For necessary expenses of the Transportation Security Administration related to providing civil aviation security services under the Aviation and Transportation Security Act (49 U.S.C. 40101 note; Public Law 107–71; 115 Stat. 597), $4,751,580,000, to remain available until September 30, 2008, of which not to exceed $10,000 shall be for official reception and representation expenses: Provided, That of the total amount made available under this heading, not to exceed $3,790,132,000 shall be for screening operations, of which $141,400,000 shall be available only for procurement of checked baggage explosive detection systems and $171,500,000 shall be available only for installation of checked baggage explosive detection systems; and not to exceed $961,448,000 shall be for aviation security direction and enforcement presence: Provided further, That the Transportation Security Administration shall provide passenger and baggage screeners and related resources at the New Castle Airport in Wilmington, Delaware, as long as commercial air service is provided at that airport: Provided further, That of the funds appropriated under this heading, $25,000,000 shall not be obligated until after the Secretary of Homeland Security submits to the Committees on Appropriations of the Senate and the House of Representatives a detailed report in response to findings in the Department of Homeland Security Office of Inspector General report (OIG–04–44) concerning contractor fees: Provided further, That security service fees authorized under section 44940 of title 49, United States Code, shall be credited to this appropriation as offsetting collections and shall be available only for aviation security: Provided further, That the sum herein appropriated from the General Fund shall be reduced on a dollar-for-dollar basis as such offsetting collections are received during fiscal year 2007, so as to result in a final fiscal year appropriation from the General Fund estimated at not more than $2,331,580,000 Provided further, That any security service fees collected in excess of the amount made available under this heading shall become available during fiscal year 2008: Provided further, That notwithstanding section 44923 of title 49, United States Code, the share of the cost of the Federal Government for a project under any letter of intent shall be 75 percent for any medium or large hub airport and not more than 90 percent for any other airport, and all funding provided by section 44923(h) of title 49 United States Code, or from appropriations authorized under section 44923(i)(1) of title 49, United States Code, may be distributed in any manner determined necessary to ensure aviation security and to fulfill the Government's planned cost share under existing letters of intent: Provided further, That Members of the United States House of Representatives and United States Senate, including the leadership; and the heads of Federal agencies and commissions, including the Secretary, Under Secretaries, and Assistant Secretaries of the Department of Homeland Security; the United States Attorney General and Assistant Attorneys General and the United States attorneys; and senior members of the Executive Office of the President, including the Director of the Office of Management and Budget; shall not be exempt from Federal passenger and baggage screening: Provided further, That beginning in fiscal year 2007 and thereafter, reimbursement for security services and related equipment and supplies provided in support of general aviation access to the Ronald Reagan Washington National Airport shall be credited to this appropriation and shall be available until expended solely for these purposes.

SURFACE TRANSPORTATION SECURITY

For necessary expenses of the Transportation Security Administration related to providing surface transportation security activities, $37,200,000, to remain available until September 30, 2008.

TRANSPORTATION THREAT ASSESSMENT AND CREDENTIALING

For necessary expenses for the development and implementation of screening programs of the Office of Transportation Threat Assessment and Credentialing, $29,700,000, to remain available until September 30, 2008.

TRANSPORTATION SECURITY SUPPORT

For necessary expenses of the Transportation Security Administration related to providing transportation security support and intelligence under the Aviation and Transportation Security Act (Public Law 107–71; 115 Stat. 597; 49 U.S.C. 40101 note), $618,865,000, to remain available until September 30, 2008.

FEDERAL AIR MARSHALS

For necessary expenses of the Federal Air Marshals, $699,294,000.

UNITED STATES COAST GUARD

OPERATING EXPENSES

For necessary expenses for the operation and maintenance of the United States Coast Guard not otherwise provided for; purchase or lease of not to exceed 25 passenger motor vehicles, which shall be for replacement only; payments under section 156 of Public Law 97–377 (42 U.S.C. 402 note; 96 Stat. 1920); and recreation and welfare; $5,534,349,000, of which $340,000,000 shall be for defense-related activities; of which $24,255,000 shall be derived from the Oil Spill Liability Trust Fund to carry out the purposes of section 1012(a)(5) of the Oil Pollution Act of 1990 (33 U.S.C. 2712(a)(5)); and of which not to exceed $10,000 shall be for official reception and representation expenses: Provided, That none of the funds made available by this or any other Act shall be available for administrative expenses in connection with shipping commissioners in the United States: Provided further, That none of the funds made available by this Act shall be for expenses incurred for yacht documentation under section 12109 of title 46, United States Code, except to the extent fees are collected from yacht owners and credited to this appropriation.

ENVIRONMENTAL COMPLIANCE AND RESTORATION

For necessary expenses to carry out the environmental compliance and restoration functions of the United States Coast Guard under chapter 19 of title 14, United States Code, $10,880,000, to remain available until expended.

RESERVE TRAINING

For necessary expenses of the Coast Guard Reserve, as authorized by law; operations and maintenance of the reserve program; personnel and training costs; and equipment and services; $123,948,000.

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

(INCLUDING RESCISSIONS OF FUNDS)

For necessary expenses of acquisition, construction, renovation, and improvement of aids to navigation, shore facilities, vessels, and aircraft, including equipment related thereto; and maintenance, rehabilitation, lease and operation of facilities and equipment, as authorized by law; $1,145,329,000, of which $19,800,000 shall be derived from the Oil Spill Liability Trust Fund to carry out the purposes of section 1012(a)(5) of the Oil Pollution Act of 1990 (33 U.S.C. 2712(a)(5)); of which $24,750,000 shall be available until September 30, 2011, to acquire, repair, renovate, or improve vessels, small boats, and related equipment; of which $14,000,000 shall be available until September 30, 2011, to increase aviation capability; of which $92,268,000 shall be available until September 30, 2009, for other equipment; of which $20,680,000 shall be available until September 30, 2009, for shore facilities and aids to navigation facilities; and of which $993,631,000 shall be available until September 30, 2011, for the Integrated Deepwater Systems program: Provided, That the Commandant of the Coast Guard is authorized to dispose of surplus real property, by sale or lease, and the proceeds shall be credited to this appropriation as offsetting collections and shall be available until September 30, 2009: Provided further, That the Secretary of Homeland Security shall submit to the Committees on Appropriations of the Senate and the House of Representatives, in conjunction with the President's fiscal year 2008 budget, a review of the Revised Deepwater Implementation Plan that identifies any changes to the plan for the fiscal year; an annual performance comparison of Deepwater assets to pre-Deepwater legacy assets; a status report of legacy assets; a detailed explanation of how the costs of legacy assets are being accounted for within the Deepwater program; an explanation of why many assets that are elements of the Integrated Deepwater System are not accounted for within the Deepwater appropriation under this heading; a description of the competitive process conducted in all contracts and subcontracts exceeding $5,000,000 within the Deepwater program; a description of how the Coast Guard is planning for the human resource needs of Deepwater assets; and the earned value management system gold card data for each Deepwater asset: Provided further, That the Secretary shall submit to the Committees on Appropriations of the Senate and the House of Representatives a comprehensive review of the Revised Deepwater Implementation Plan every 5 years, beginning in fiscal year 2011, that includes a complete projection of the acquisition costs and schedule for the duration of the plan through fiscal year 2027: Provided further, That the Secretary shall annually submit to the Committees on Appropriations of the Senate and the House of Representatives, at the time that the President's budget is submitted under section 1105(a) of title 31, United States Code, a future-years capital investment plan for the Coast Guard that identifies for each capital budget line item—

(1) the proposed appropriation included in that budget;

(2) the total estimated cost of completion;

(3) projected funding levels for each fiscal year for the next five fiscal years or until project completion, whichever is earlier;

(4) an estimated completion date at the projected funding levels; and

(5) changes, if any, in the total estimated cost of completion or estimated completion date from previous future-years capital investment plans submitted to the Committees on Appropriations of the Senate and the House of Representatives:

Provided further, That the Secretary shall ensure that amounts specified in the future-years capital investment plan are consistent to the maximum extent practicable with proposed appropriations necessary to support the programs, projects, and activities of the Coast Guard in the President's budget as submitted under section 1105(a) of title 31, United States Code, for that fiscal year: Provided further, That any inconsistencies between the capital investment plan and proposed appropriations shall be identified and justified.

In addition, of the funds appropriated under this heading in title II of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2087), $79,200,000 are rescinded from the unexpended balances specifically identified in the Joint Explanatory Statement (House Report 109–241) accompanying that Act for the Fast Response Cutter, the service life extension program of the current 110-foot Island Class patrol boat fleet, and accelerated design and production of the Fast Response Cutter.

In addition, of the funds appropriated under this heading in title II of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2087), $1,933,000 are rescinded from the unexpended balances specifically identified in the Joint Explanatory Statement (House Report 109–241) accompanying that Act for the covert surveillance aircraft.

In addition, of the funds appropriated under this heading in title II of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2087), $1,835,000 are rescinded from the unexpended balances specifically identified in the Joint Explanatory Statement (House Report 109–241) accompanying that Act for the automatic identification system.

ALTERATION OF BRIDGES

For necessary expenses for alteration or removal of obstructive bridges, as authorized by section 6 of the Truman-Hobbs Act (33 U.S.C. 516), $15,000,000, to remain available until expended.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

For necessary expenses for applied scientific research, development, test, and evaluation; and for maintenance, rehabilitation, lease, and operation of facilities and equipment; as authorized by law; $17,573,000, to remain available until expended, of which $495,000 shall be derived from the Oil Spill Liability Trust Fund to carry out the purposes of section 1012(a)(5) of the Oil Pollution Act of 1990 (33 U.S.C. 2712(a)(5)): Provided, That there may be credited to and used for the purposes of this appropriation funds received from State and local governments, other public authorities, private sources, and foreign countries for expenses incurred for research, development, testing, and evaluation.

RETIRED PAY

For retired pay, including the payment of obligations otherwise chargeable to lapsed appropriations for this purpose, payments under the Retired Serviceman's Family Protection and Survivor Benefits Plans, payment for career status bonuses, concurrent receipts and combat-related special compensation under the National Defense Authorization Act, and payments for medical care of retired personnel and their dependents under chapter 55 of title 10, United States Code, $1,063,323,000.

UNITED STATES SECRET SERVICE

PROTECTION, ADMINISTRATION, AND TRAINING

For necessary expenses of the United States Secret Service, including purchase of not to exceed 755 vehicles for police-type use, of which 624 shall be for replacement only, and hire of passenger motor vehicles; purchase of motorcycles made in the United States; hire of aircraft; services of expert witnesses at such rates as may be determined by the Director of the Secret Service; rental of buildings in the District of Columbia, and fencing, lighting, guard booths, and other facilities on private or other property not in Government ownership or control, as may be necessary to perform protective functions; payment of per diem or subsistence allowances to employees where a protective assignment during the actual day or days of the visit of a protectee requires an employee to work 16 hours per day or to remain overnight at a post of duty; conduct of and participation in firearms matches; presentation of awards; travel of Secret Service employees on protective missions without regard to the limitations on such expenditures in this or any other Act if approval is obtained in advance from the Committees on Appropriations of the Senate and the House of Representatives; research and development; grants to conduct behavioral research in support of protective research and operations; and payment in advance for commercial accommodations as may be necessary to perform protective functions; $918,028,000, of which not to exceed $25,000 shall be for official reception and representation expenses: Provided, That up to $18,000,000 provided for protective travel shall remain available until September 30, 2008: Provided further, That the United States Secret Service is authorized to obligate funds in anticipation of reimbursements from Federal agencies and entities, as defined in section 105 of title 5, United States Code, receiving training sponsored by the James J. Rowley Training Center, except that total obligations at the end of the fiscal year shall not exceed total budgetary resources available under this heading at the end of the fiscal year.

INVESTIGATIONS AND FIELD OPERATIONS

For necessary expenses for investigations and field operations of the United States Secret Service, not otherwise provided for, including costs

related to office space and services of expert witnesses at such rate as may be determined by the Director of the Secret Service, $304,205,000; of which not to exceed $100,000 shall be to provide technical assistance and equipment to foreign law enforcement organizations in counterfeit investigations; of which $2,366,000 shall be for forensic and related support of investigations of missing and exploited children; and of which $6,000,000 shall be a grant for activities related to the investigations of missing and exploited children and shall remain available until expended.

ACQUISITION, CONSTRUCTION, IMPROVEMENTS, AND RELATED EXPENSES

For necessary expenses for acquisition, construction, repair, alteration, and improvement of facilities, $3,725,000, to remain available until expended.

TITLE III

PREPAREDNESS AND RECOVERY

PREPAREDNESS

MANAGEMENT AND ADMINISTRATION

For salaries and expenses of the Office of the Under Secretary for Preparedness, the Office of the Chief Medical Officer, and the Office of National Capital Region Coordination, $30,572,000, of which no less than $2,741,000 may be used for the Office of National Capital Region Coordination, and of which $6,459,000 shall be for the National Preparedness Integration Program: Provided, That none of the funds made available under this heading may be obligated for the National Preparedness Integration Program until the Committees on Appropriations of the Senate and the House of Representatives receive and approve a plan for expenditure prepared by the Secretary of Homeland Security: Provided further, That not to exceed $7,000 shall be for official reception and representation expenses: Provided further, That none of the funds made available in this title under the heading ''Management and Administration'' may be used for travel by an officer or employee of the Department of Homeland Security until the Under Secretary for Preparedness has implemented the recommendations in the report by the Inspector General of the Department of Homeland Security titled ''Progress in Developing the National Asset Database'', dated June 2006; or until the Under Secretary for Preparedness submits a report to the Committee on Homeland Security and Governmental Affairs and the Committee on Appropriations of the Senate and the Committee on Homeland Security and the Committee on Appropriations of the House of Representatives explaining why such recommendations have not been fully implemented.

OFFICE FOR DOMESTIC PREPAREDNESS

STATE AND LOCAL PROGRAMS

For grants, contracts, cooperative agreements, and other activities, including grants to State and local governments for terrorism prevention activities, notwithstanding any other provision of law, $2,400,000,000, which shall be allocated as follows:

(1) $500,000,000 for formula-based grants and $350,000,000 for law enforcement terrorism prevention grants under section 1014 of the USA PATRIOT ACT (42 U.S.C. 3714): Provided, That the application for grants shall be made available to States within 45 days after the date of enactment of this Act; that States shall submit applications within 90 days after the grant announcement; and that the Office for Domestic Preparedness shall act within 90 days after the grant announcement: Provided further, That not less than 80 percent of any grant under this paragraph to a State (other than Puerto Rico) shall be made available by the State to local governments within 60 days after the receipt of the funds.

(2) $1,172,000,000 for discretionary grants, as determined by the Secretary of Homeland Security, of which—

(A) $745,000,000 shall be for use in high-threat, high-density urban areas: Provided, That not later than September 30, 2007, the Secretary shall distribute any unallocated funds provided for in title III of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2075) under the heading ''STATE AND LOCAL PROGRAMS'' under the heading ''OFFICE FOR DOMESTIC PREPAREDNESS'' to assist organizations (as described under section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such Code) determined by the Secretary to be at high-risk or potential high-risk of a terrorist attack: Provided further, That applicants shall provide for the Secretary's consideration prior threats or attacks (within or outside the United States) by a terrorist organization, network, or cell against an organization described in the previous proviso, and the Secretary shall consider prior threats or attacks (within or outside the United States) against such organizations when determining risk: Provided further, That the Secretary shall report to the Committees on Appropriations of the Senate and the House of Representatives the risk to each designated tax exempt grantee at least 3 full business days in advance of the announcement of any grant award;

(B) $210,000,000 shall be for port security grants for the purposes of section 70107(a) through (h) of title 46, United States Code, which shall be awarded based on risk notwithstanding subsection (a), for eligible costs as defined in subsections (b)(2), (3), and (4);

(C) $5,000,000 shall be for trucking industry security grants;

(D) $12,000,000 shall be for intercity bus security grants;

(E) $150,000,000 shall be for intercity passenger rail transportation (as defined in section 24102 of title 49, United States Code), freight rail, and transit security grants; and

(F) $50,000,000 shall be for buffer zone protection grants:

Provided, That for grants under subparagraph (A), the application for grants shall be made available to States within 45 days after the date of enactment of this Act; that States shall submit applications within 90 days after the grant announcement; and that the Office for Domestic Preparedness shall act within 90 days after receipt of an application: Provided further, That not less than 80 percent of any grant under this paragraph to a State shall be made available by the State to local governments within 60 days after the receipt of the funds: Provided further, That for grants under subparagraphs (B) through (F), the applications for such grants shall be made available to eligible applicants not later than 75 days after the date of enactment of this Act, eligible applicants shall submit applications not later than 45 days after the date of the grant announcement, and the Office for Domestic Preparedness shall act on such applications not later than 45 days after the date on which such an application is received.

(3) $40,000,000 shall be available for the Commercial Equipment Direct Assistance Program.

(4) $338,000,000 for training, exercises, technical assistance, and other programs (including mass evacuation preparation and exercises): Provided, That not less than $18,000,000 is for technical assistance:

Provided, That none of the grants provided under this heading shall be used for the construction or renovation of facilities, except for a minor perimeter security project, not to exceed $1,000,000, as determined necessary by the Secretary of Homeland Security: Provided further, That the proceeding proviso shall not apply to grants under subparagraphs (B), (E), and (F) of paragraph (2) of this heading: Provided further, That grantees shall provide additional reports on their use of funds, as determined necessary by the Secretary of Homeland Security: Provided further, That funds appropriated for law enforcement terrorism prevention grants under paragraph (1) and discretionary grants under paragraph (2)(A) of this heading shall be available for operational costs, to include personnel overtime and overtime associated with Office for Domestic Preparedness certified training, as needed: Provided further, That the Government Accountability Office shall report on the validity, relevance, reliability, timeliness, and availability of the risk factors (including threat, vulnerability, and consequence) used by the Secretary for the purpose of allocating discretionary grants funded under this heading, and the application of those factors in the allocation of funds to the Committees on Appropriations of the Senate and the House of Representatives on its findings not later than 45 days after the date of enactment of this Act: Provided further, That within 7 days after the date of enactment of this Act, the Secretary shall provide the Government Accountability Office with the threat and risk methodology and factors that will be used to allocate discretionary grants funded under this heading.

FIREFIGHTER ASSISTANCE GRANTS

For necessary expenses for programs authorized by the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2201 et seq.), $680,000,000, of which $552,500,000 shall be available to carry out section 33 of that Act (15 U.S.C. 2229) and $127,500,000 shall be available to carry out section 34 (15 U.S.C. 2229a) of that Act, to remain available until September 30, 2008: Provided, That not to exceed 5 percent of this amount shall be available for program administration.

EMERGENCY MANAGEMENT PERFORMANCE GRANTS

For necessary expenses for emergency management performance grants, as authorized by the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), and Reorganization Plan No. 3 of 1978 (5 U.S.C. App.), $220,000,000: Provided, That total administrative costs shall not exceed 3 percent of the total appropriation.

RADIOLOGICAL EMERGENCY PREPAREDNESS PROGRAM

The aggregate charges assessed during fiscal year 2007, as authorized in title III of the Departments of Veterans Affairs and Housing and Urban Development, and Independent Agencies Appropriations Act, 1999 (42 U.S.C. 5196e), shall not be less than 100 percent of the amounts anticipated by the Department of Homeland Security necessary for its radiological emergency preparedness program for the next fiscal year: Provided, That the methodology for assessment and collection of fees shall be fair and equitable and shall reflect costs of providing such services, including administrative costs of collecting such fees: Provided further, That fees received under this heading shall be deposited in this account as offsetting collections and will become available for authorized purposes on October 1, 2007, and remain available until expended.

UNITED STATES FIRE ADMINISTRATION AND TRAINING

For necessary expenses of the United States Fire Administration and for other purposes, as authorized by the Federal Fire Prevention and Control Act of 1974 (15 U.S.C. 2201 et seq.) and the Homeland Security Act of 2002 (6 U.S.C. 101 et seq.), $45,887,000.

INFRASTRUCTURE PROTECTION AND INFORMATION SECURITY

For necessary expenses for infrastructure protection and information security programs and activities, as authorized by title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.), $525,056,000, of which $442,547,000 shall remain available until September 30, 2008: Provided, That of the amount made available under this heading, $20,000,000 may not be obligated until the Secretary submits to the Committees on Appropriations of the Senate and House of Representatives the report required in House Report 109–241 accompanying the Department of Homeland Security Appropriations Act, 2006 (Public

Law 109–90) on resources necessary to implement mandatory security requirements for the Nation's chemical sector and to create a system for auditing and ensuring compliance with the security standards: Provided further, That not later than 120 days after the date of the enactment of this Act, the Secretary of Homeland Security shall submit a classified report describing the security vulnerabilities of all rail, transit, and highway bridges and tunnels connecting Northern New Jersey and New York City to the Committee on Appropriations of the Senate; the Committee on Appropriations of the House of Representatives; the Committee on Commerce, Science, and Transportation of the Senate; and the Committee on Transportation and Infrastructure of the House of Representatives.

FEDERAL EMERGENCY MANAGEMENT AGENCY

ADMINISTRATIVE AND REGIONAL OPERATIONS

For necessary expenses for administrative and regional operations, $249,499,000, including activities authorized by the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), the Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.), sections 107 and 303 of the National Security Act of 1947 (50 U.S.C. 404, 405), Reorganization Plan No. 3 of 1978 (5 U.S.C. App.), and the Homeland Security Act of 2002 (6 U.S.C. 101 et seq.): Provided, That not to exceed $3,000 shall be for official reception and representation expenses.

READINESS, MITIGATION, RESPONSE, AND RECOVERY

For necessary expenses for readiness, mitigation, response, and recovery activities, $240,000,000, including activities authorized by the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), the Earthquake Hazards Reduction Act of 1977 (42 U.S.C. 7701 et seq.), the Defense Production Act of 1950 (50 U.S.C. App. 2061 et seq.), sections 107 and 303 of the National Security Act of 1947 (50 U.S.C. 404, 405), Reorganization Plan No. 3 of 1978 (5 U.S.C. App.), and the Homeland Security Act of 2002 (6 U.S.C. 101 et seq.): Provided, That of the total amount made available under this heading, $30,000,000 shall be for Urban Search and Rescue Teams, of which not to exceed $1,600,000 may be made available for administrative costs: Provided further, That the Secretary of Homeland Security, in consultation with the Secretary of Health and Human Services and the Attorney General of the United States, shall conduct an assessment of the models used by the Louisiana family assistance call center and the National Center for Missing and Exploited Children in assisting individuals displaced by Hurricane Katrina of 2005 in locating members of their family to determine how these models may be modified to assist individuals displaced in a major disaster (as that term is defined in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122) in locating members of their family: Provided further, That the Secretary of Homeland Security shall submit to the chairman and ranking member of the Committee on Homeland Security and Governmental Affairs; the Committee on Health, Education, Labor, and Pensions; and the Committee on the Judiciary of the Senate; and the chairman and ranking member of the Committee on Homeland Security, the Committee on Energy and Commerce, and the Committee on the Judiciary of the House of Representatives results of the assessment conducted under the previous proviso; as well as a plan to implement the findings of such assessment, to the maximum extent practicable.

PUBLIC HEALTH PROGRAMS

(INCLUDING TRANSFER OF FUNDS)

For necessary expenses for countering potential biological, disease, and chemical threats to civilian populations, $33,885,000: Provided, That the total amount appropriated and, notwithstanding any other provision of law, the functions, personnel, assets, and liabilities of the National Disaster Medical System established under section 2811(b) of the Public Health Service Act (42 U.S.C. 300hh–11(b)), including any functions of the Secretary of Homeland Security relating to such System, shall be permanently transferred to the Secretary of the Department of Health and Human Services effective January 1, 2007.

DISASTER RELIEF

(INCLUDING TRANSFER OF FUNDS)

For necessary expenses in carrying out the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.), $1,640,000,000, to remain available until expended: Provided, That of the total amount provided, not to exceed $15,000,000 shall be transferred to the Department of Homeland Security Office of Inspector General for audits and investigations related to natural disasters subject to section 503 of this Act: Provided further, That none of the funds appropriated or otherwise made available under this heading may be used to enter into contracts using procedures based upon the unusual and compelling urgency exception to competitive procedures requirements under section 303(c)(2) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 253(c)(2)) or section 2304(c)(2) of title 10, United States Code, unless the contract is for the procurement of only such property and services as are necessary to address the immediate emergency and is only for so long as is necessary to put competitive procedures in place in connection with such procurement and the Secretary of Homeland Security notifies the Committees on Appropriations and Homeland Security and Government Affairs of the Senate and Appropriations and Homeland Security of the House of Representatives of such contract not later than 7 days after the contract is entered into.

DISASTER ASSISTANCE DIRECT LOAN PROGRAM ACCOUNT

For administrative expenses to carry out the direct loan program, as authorized by section 319 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5162), $569,000: Provided, That gross obligations for the principal amount of direct loans shall not exceed $25,000,000: Provided further, That the cost of modifying such loans shall be as defined in section 502 of the Congressional Budget Act of 1974 (2 U.S.C. 661a).

FLOOD MAP MODERNIZATION FUND

For necessary expenses under section 1360 of the National Flood Insurance Act of 1968 (42 U.S.C. 4101), $198,980,000, and such additional sums as may be provided by State and local governments or other political subdivisions for cost-shared mapping activities under section 1360(f)(2) of such Act, to remain available until expended: Provided, That total administrative costs shall not exceed 3 percent of the total appropriation.

NATIONAL FLOOD INSURANCE FUND

(INCLUDING TRANSFER OF FUNDS)

For activities under the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), and the Flood Disaster Protection Act of 1973 (42 U.S.C. 4001 et seq.), $128,588,000, which is available as follows: (1) not to exceed $38,230,000 for salaries and expenses associated with flood mitigation and flood insurance operations; and (2) not to exceed $90,358,000 for flood hazard mitigation which shall be derived from offsetting collections assessed and collected under section 1307 of the National Flood Insurance Act of 1968 (42 U.S.C. 4001 et seq.), to remain available until September 30, 2008, including up to $31,000,000 for flood mitigation expenses under section 1366 of that Act, which amount shall be available for transfer to the National Flood Mitigation Fund until September 30, 2008: Provided, That in fiscal year 2007, no funds in excess of: (1) $70,000,000 for operating expenses; (2) $692,999,000 for commissions and taxes of agents; (3) such sums as necessary for interest on Treasury borrowings shall be available from the National Flood Insurance Fund; and (4) not to exceed $50,000,000 for flood mitigation actions with respect to severe repetitive loss properties under section 1361A of that Act and repetitive insurance claims properties under section 1323 of that Act, which shall remain available until expended: Provided further, That total administrative costs shall not exceed 3 percent of the total appropriation.

NATIONAL FLOOD MITIGATION FUND

(INCLUDING TRANSFER OF FUNDS)

Notwithstanding subparagraphs (B) and (C) of subsection (b)(3), and subsection (f), of section 1366 of the National Flood Insurance Act of 1968 (42 U.S.C. 4104c), $31,000,000, to remain available until September 30, 2008, for activities designed to reduce the risk of flood damage to structures pursuant to such Act, of which $31,000,000 shall be derived from the National Flood Insurance Fund.

NATIONAL PRE-DISASTER MITIGATION FUND

For a pre-disaster mitigation grant program under title II of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5131 et seq.), $149,978,000, to remain available until expended: Provided, That grants made for pre-disaster mitigation shall be awarded on a competitive basis subject to the criteria in section 203(g) of such Act (42 U.S.C. 5133(g)), and notwithstanding section 203(f) of such Act, shall be made without reference to State allocations, quotas, or other formula-based allocation of funds: Provided further, That total administrative costs shall not exceed 3 percent of the total appropriation.

EMERGENCY FOOD AND SHELTER

To carry out an emergency food and shelter program under title III of the Stewart B. McKinney Homeless Assistance Act (42 U.S.C. 11331 et seq.), $151,470,000, to remain available until expended: Provided, That total administrative costs shall not exceed 3.5 percent of the total appropriation.

TITLE IV

RESEARCH AND DEVELOPMENT, TRAINING, AND SERVICES

UNITED STATES CITIZENSHIP AND IMMIGRATION SERVICES

For necessary expenses for citizenship and immigration services, $134,990,000.

FEDERAL LAW ENFORCEMENT TRAINING CENTER

SALARIES AND EXPENSES

For necessary expenses of the Federal Law Enforcement Training Center, including materials and support costs of Federal law enforcement basic training; purchase of not to exceed 117 vehicles for police-type use and hire of passenger motor vehicles; expenses for student athletic and related activities; the conduct of and participation in firearms matches and presentation of awards; public awareness and enhancement of community support of law enforcement training; room and board for student interns; a flat monthly reimbursement to employees authorized to use personal mobile phones for official duties; and services as authorized by section 3109 of title 5, United States Code; $207,634,000, of which up to $43,910,000 for materials and support costs of Federal law enforcement basic training shall remain available until September 30, 2008; of which $300,000 shall remain available until expended for Federal law enforcement agencies participating in training

accreditation, to be distributed as determined by the Federal Law Enforcement Training Center for the needs of participating agencies; and of which not to exceed $12,000 shall be for official reception and representation expenses: Provided, That the Center is authorized to obligate funds in anticipation of reimbursements from agencies receiving training sponsored by the Center, except that total obligations at the end of the fiscal year shall not exceed total budgetary resources available at the end of the fiscal year.

ACQUISITION, CONSTRUCTION, IMPROVEMENTS, AND RELATED EXPENSES

For acquisition of necessary additional real property and facilities, construction, and ongoing maintenance, facility improvements, and related expenses of the Federal Law Enforcement Training Center, $63,246,000, to remain available until expended: Provided, That the Center is authorized to accept reimbursement to this appropriation from government agencies requesting the construction of special use facilities.

SCIENCE AND TECHNOLOGY

MANAGEMENT AND ADMINISTRATION

For salaries and expenses of the Office of the Under Secretary for Science and Technology and for management and administration of programs and activities, as authorized by title III of the Homeland Security Act of 2002 (6 U.S.C. 181 et seq.), $104,414,000: Provided, That of the amount provided under this heading, $60,000,000 shall not be obligated until the Committees on Appropriations of the Senate and the House of Representatives receive and approve an expenditure plan by program, project, and activity; with a detailed breakdown and justification of the management and administrative costs for each; prepared by the Secretary of Homeland Security that has been reviewed by the Government Accountability Office: Provided further, That the expenditure plan shall include the method utilized to derive administration costs in fiscal year 2006 and fiscal year 2007: Provided further, That not to exceed $3,000 shall be for official reception and representation expenses.

RESEARCH, DEVELOPMENT, ACQUISITION, AND OPERATIONS

For necessary expenses for science and technology research, including advanced research projects; development; test and evaluation; acquisition; and operations; as authorized by title III of the Homeland Security Act of 2002 (6 U.S.C. 181 et seq.); $714,041,000, to remain available until expended: Provided, That no university participating in the University-based Centers of Excellence Program shall receive a grant for a period in excess of 3 years: Provided further, That none of the funds provided under this heading shall be made available for management and administrative costs: Provided further, That $2,000,000 under this heading shall be available for the construction of radiological laboratories at Pacific Northwest National Laboratory: Provided further, That funding will not be available until a Memorandum of Understanding between the Department of Homeland Security and the Department of Energy has been entered into.

DOMESTIC NUCLEAR DETECTION OFFICE

MANAGEMENT AND ADMINISTRATION

For salaries and expenses of the Domestic Nuclear Detection Office and for management and administration of programs and activities, $30,468,000: Provided, That no funds will be made available for the reimbursement of individuals from other Federal agencies or organizations in fiscal year 2008: Provided further, That not to exceed $3,000 shall be for official reception and representation expenses.

RESEARCH, DEVELOPMENT, AND OPERATIONS

For necessary expenses for radiological and nuclear research, development, testing, evaluation and operations, $234,024,000, to remain available until expended; and of which not to exceed $65,000,000 shall be made available for transformation research and development; and of which no less than $40,000,000 shall be made available for radiation portal monitor research and development: Provided, That of the amount provided, $80,000,000 shall not be obligated until the Secretary of Homeland Security provides notification to the Committees on Appropriations of the Senate and the House of Representatives that the Domestic Nuclear Detection Office has entered into a Memorandum of Understanding with each Federal entity and organization: Provided further, That each Memorandum of Understanding shall include a description of the role, responsibilities, and resource commitment of each Federal entity or organization for the domestic nuclear global architecture.

SYSTEMS ACQUISITION

For expenses for the Domestic Nuclear Detection Office acquisition and deployment of radiological detection systems in accordance with the global nuclear detection architecture, $178,000,000, to remain available until September 30, 2009; and of which no less than $143,000,000 shall be for radiation portal monitors; and of which not to exceed $5,000,000 shall be for the Surge program: Provided, That none of the funds provided for the Sodium Iodine Manufacturing program shall be made available until a cost-benefit analysis on the Advance Spectroscopic Portal monitors is submitted to the Committees on Appropriations of the Senate and the House of Representatives by the Secretary of Homeland Security and reviewed by the Government Accountability Office.

TITLE V

GENERAL PROVISIONS

SEC. 501. No part of any appropriation contained in this Act shall remain available for obligation beyond the current fiscal year unless expressly so provided herein.

SEC. 502. Subject to the requirements of section 503 of this Act, the unexpended balances of prior appropriations provided for activities in this Act may be transferred to appropriation accounts for such activities established under this Act: Provided, That balances so transferred may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

SEC. 503. (a) None of the funds provided by this Act, provided by previous appropriations Acts to the agencies in or transferred to the Department of Homeland Security that remain available for obligation or expenditure in fiscal year 2007, or provided from any accounts in the Treasury of the United States derived by the collection of fees available to the agencies funded by this Act, shall be available for obligation or expenditure through a reprogramming of funds that: (1) creates a new program; (2) eliminates a program, project, or activity; (3) increases funds for any program, project, or activity for which funds have been denied or restricted by the Congress; (4) proposes to use funds directed for a specific activity by either of the Committees on Appropriations of the Senate or House of Representatives for a different purpose; or (5) contracts out any function or activity for which funds have been appropriated for Federal full-time equivalent positions; unless the Committees on Appropriations of the Senate and the House of Representatives are notified 15 days in advance of such reprogramming of funds.

(b) None of the funds provided by this Act, provided by previous appropriations Acts to the agencies in or transferred to the Department of Homeland Security that remain available for obligation or expenditure in fiscal year 2007, or provided from any accounts in the Treasury of the United States derived by the collection of fees available to the agencies funded by this Act, shall be available for obligation or expenditure for programs, projects, or activities through a reprogramming of funds in excess of $5,000,000 or 10 percent, whichever is less, that: (1) augments existing programs, projects, or activities; (2) reduces by 10 percent funding for any existing program, project, or activity, or numbers of personnel by 10 percent as approved by the Congress; or (3) results from any general savings from a reduction in personnel that would result in a change in existing programs, projects, or activities as approved by the Congress; unless the Committees on Appropriations of the Senate and the House of Representatives are notified 15 days in advance of such reprogramming of funds.

(c) Not to exceed 5 percent of any appropriation made available for the current fiscal year for the Department of Homeland Security by this Act or provided by previous appropriations Acts may be transferred between such appropriations, but no such appropriations, except as otherwise specifically provided, shall be increased by more than 10 percent by such transfers: Provided, That any transfer under this section shall be treated as a reprogramming of funds under subsection (b) of this section and shall not be available for obligation unless the Committees on Appropriations of the Senate and the House of Representatives are notified 15 days in advance of such transfer.

(d) Notwithstanding subsections (a), (b), and (c) of this section, no funds shall be reprogrammed within or transferred between appropriations after June 30, except in extraordinary circumstances which imminently threaten the safety of human life or the protection of property.

SEC. 504. None of the funds appropriated or otherwise made available to the Department of Homeland Security may be used to make payments to the ''Department of Homeland Security Working Capital Fund'', except for the activities and amounts allowed in the President's fiscal year 2007 budget, excluding sedan service, shuttle service, transit subsidy, mail operations, parking, and competitive sourcing: Provided, That any additional activities and amounts shall be approved by the Committees on Appropriations of the Senate and the House of Representatives 30 days in advance of obligation.

SEC. 505. Except as otherwise specifically provided by law, not to exceed 50 percent of unobligated balances remaining available at the end of fiscal year 2007 from appropriations for salaries and expenses for fiscal year 2007 in this Act shall remain available through September 30, 2008, in the account and for the purposes for which the appropriations were provided: Provided, That prior to the obligation of such funds, a request shall be submitted to the Committees on Appropriations of the Senate and the House of Representatives for approval in accordance with section 503 of this Act.

SEC. 506. Funds made available by this Act for intelligence activities are deemed to be specifically authorized by the Congress for purposes of section 504 of the National Security Act of 1947 (50 U.S.C. 414) during fiscal year 2007 until the enactment of an Act authorizing intelligence activities for fiscal year 2007.

SEC. 507. The Federal Law Enforcement Training Center shall lead the Federal law enforcement training accreditation process, to include representatives from the Federal law enforcement community and non-Federal accreditation experts involved in law enforcement training, to continue the implementation of measuring and assessing the quality and effectiveness of Federal law enforcement training programs, facilities, and instructors.

SEC. 508. None of the funds in this Act may be used to make a grant allocation, discretionary grant award, discretionary contract award, or to issue a letter of intent totaling in excess of $1,000,000, or to announce publicly the intention to make such an award, unless the Secretary of Homeland Security notifies the Committees on Appropriations of the Senate and the House of Representatives at least 3 full business days in advance: Provided, That no notification shall

involve funds that are not available for obligation.

SEC. 509. Notwithstanding any other provision of law, no agency shall purchase, construct, or lease any additional facilities, except within or contiguous to existing locations, to be used for the purpose of conducting Federal law enforcement training without the advance approval of the Committees on Appropriations of the Senate and the House of Representatives, except that the Federal Law Enforcement Training Center is authorized to obtain the temporary use of additional facilities by lease, contract, or other agreement for training which cannot be accommodated in existing Center facilities.

SEC. 510. The Director of the Federal Law Enforcement Training Center shall schedule basic or advanced law enforcement training (including both types of training) at all four training facilities under the control of the Federal Law Enforcement Training Center to ensure that these training centers are operated at the highest capacity throughout the fiscal year.

SEC. 511. None of the funds appropriated or otherwise made available by this Act may be used for expenses of any construction, repair, alteration, or acquisition project for which a prospectus, if required by the Public Buildings Act of 1959 (40 U.S.C. 3301), has not been approved, except that necessary funds may be expended for each project for required expenses for the development of a proposed prospectus.

SEC. 512. None of the funds in this Act may be used in contravention of the applicable provisions of the Buy American Act (41 U.S.C. 10a et seq.).

SEC. 513. Notwithstanding any other provision of law, the authority of the Office of Personnel Management to conduct personnel security and suitability background investigations, update investigations, and periodic reinvestigations of applicants for, or appointees in, positions in the Office of the Secretary and Executive Management, the Office of the Under Secretary for Management, Analysis and Operations, Immigration and Customs Enforcement, Directorate for Preparedness, and the Directorate of Science and Technology of the Department of Homeland Security is transferred to the Department of Homeland Security: Provided, That on request of the Department of Homeland Security, the Office of Personnel Management shall cooperate with and assist the Department in any investigation or reinvestigation under this section: Provided further, That this section shall cease to be effective at such time as the President has selected a single agency to conduct security clearance investigations under section 3001(c) of the Intelligence Reform and Terrorism Prevention Act of 2004 (Public Law 108–458; 50 U.S.C. 435b) and the entity selected under section 3001(b) of such Act has reported to Congress that the agency selected under such section 3001(c) is capable of conducting all necessary investigations in a timely manner or has authorized the entities within the Department of Homeland Security covered by this section to conduct their own investigations under section 3001 of such Act.

SEC. 514. (a) None of the funds provided by this or previous appropriations Acts may be obligated for deployment or implementation, on other than a test basis, of the Secure Flight program or any other follow on or successor passenger prescreening programs, until the Secretary of Homeland Security certifies, and the Government Accountability Office reports, to the Committees on Appropriations of the Senate and the House of Representatives, that all 10 of the conditions contained in paragraphs (1) through (10) of section 522(a) of the Department of Homeland Security Appropriations Act, 2005 (Public Law 108–334; 118 Stat. 1319) have been successfully met. Until the Secure Flight program or a follow on or successor passenger screening program has been deployed or implemented, the Transportation Security Administration shall provide airlines with technical or other assistance to better align their reservation and ticketing systems with terrorist databases to assist in alleviating travel delays and other problems associated with mistaken identification.

(b) The report required by subsection (a) shall be submitted within 90 days after the certification required by such subsection is provided, and periodically thereafter, if necessary, until the Government Accountability Office confirms that all 10 conditions have been successfully met.

(c) During the testing phase permitted by subsection (a), no information gathered from passengers, foreign or domestic air carriers, or reservation systems may be used to screen aviation passengers, or delay or deny boarding to such passengers, except in instances where passenger names are matched to a Government watch list.

(d) None of the funds provided in this or previous appropriations Acts may be utilized to develop or test algorithms assigning risk to passengers whose names are not on Government watch lists.

(e) None of the funds provided in this or previous appropriations Acts may be utilized for data or a database that is obtained from or remains under the control of a non-Federal entity: Provided, That this restriction shall not apply to Passenger Name Record data obtained from air carriers.

SEC. 515. None of the funds made available in this Act may be used to amend the oath of allegiance required by section 337 of the Immigration and Nationality Act (8 U.S.C. 1448).

SEC. 516. None of the funds appropriated by this Act may be used to process or approve a competition under Office of Management and Budget Circular A–76 for services provided as of June 1, 2004, by employees (including employees serving on a temporary or term basis) of United States Citizenship and Immigration Services of the Department of Homeland Security who are known as of that date as Immigration Information Officers, Contact Representatives, or Investigative Assistants.

SEC. 517. (a) None of the funds appropriated to the United States Secret Service by this Act or by previous appropriations Acts may be made available for the protection of a person, other than persons granted protection under 3056(a) of title 18, United States Code, and the Secretary of the Department of Homeland Security.

(b) Notwithstanding (a) of this section, the Director of the United States Secret Service may enter into a fully reimbursable agreement to perform such service for protectees not designated under 3056(a) of title 18, United States Code.

SEC. 518. The Secretary of Homeland Security, in consultation with industry stakeholders, shall develop standards and protocols for increasing the use of explosive detection equipment to screen air cargo when appropriate.

SEC. 519. (a) The Secretary of Homeland Security is directed to research, develop, and procure new technologies to inspect and screen air cargo carried on passenger aircraft at the earliest date possible.

(b) Existing checked baggage explosive detection equipment and screeners shall be utilized to screen air cargo carried on passenger aircraft to the greatest extent practicable at each airport until technologies developed under subsection (a) are available.

(c) The Transportation Security Administration shall report air cargo inspection statistics within 15 days of the close of each quarter of the fiscal year to the Committees on Appropriations of the Senate and the House of Representatives, by airport and air carrier, including any reasons for non-compliance with the second proviso of section 513 of the Department of Homeland Security Appropriations Act, 2005 (Public Law 108–334; 118 Stat. 1317), within 45 days after the end of the quarter.

SEC. 520. (a) None of the funds available for obligation for the transportation worker identification credential program shall be used to develop a personalization system that is executed without fair and open competition for both the implementation and production of the program and identification cards.

(b) The Transportation Security Administration shall certify to the Committees on Appropriations of the Senate and the House of Representatives not later than December 1, 2006, that the competition required under subsection (a) has been achieved.

SEC. 521. None of the funds made available in this Act may be used by any person other than the privacy officer appointed under section 222 of the Homeland Security Act of 2002 (6 U.S.C. 142) to alter, direct that changes be made to, delay, or prohibit the transmission to Congress of any report prepared under paragraph (5) of such section.

SEC. 522. No funding provided by this or previous appropriation Acts shall be available to pay the salary of any employee serving as a contracting officer's technical representative (COTR) or anyone acting in a similar or like capacity who has not received COTR training.

SEC. 523. Except as provided in section 44945 of title 49, United States Code, funds appropriated or transferred to Transportation Security Administration ''Aviation Security'', ''Administration'' and ''Transportation Security Support'' in fiscal years 2004, 2005, and 2006 that are recovered or deobligated shall be available only for procurement and installation of explosive detection systems for air cargo, baggage, and checkpoint screening systems, subject to section 503 of this Act.

SEC. 524. (a) Within 60 days of enactment of this Act, the Secretary of the Department of Homeland Security shall revise DHS MD (Management Directive) 11056 to provide for the following:

(1) That when a lawful request is made to publicly release a document containing information designated as sensitive security information (SSI), the document shall be reviewed in a timely manner to determine whether any information contained in the document meets the criteria for continued SSI protection under applicable law and regulation and shall further provide that all portions that no longer require SSI designation be released, subject to applicable law, including sections 552 and 552a of title 5, United States Code.

(2) That sensitive security information that is four years old shall be subject to release upon request unless—

(A) the Secretary or his designee makes a written determination that identifies a rational basis why the information must remain SSI;

(B) the information is covered by a current sensitive security information application guide approved by the Secretary or his designee in writing; or

(C) such information is otherwise exempt from disclosure under applicable law:

Provided, That any determination made by the Secretary under clause (a)(2)(A) shall be provided to the party making a request to release such information and to the Committees on Appropriations of the Senate and House of Representatives as part of the annual reporting requirement pursuant to section 537 of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2088).

(3) Common and extensive examples of the individual categories of SSI information cited under 49 CFR 1520(b)(1) through (16) in order to minimize and standardize judgment by covered persons in the application of SSI marking.

(b) Not later than 120 days after the date of enactment of this Act, the Secretary of Homeland Security shall report to the Committees on Appropriations of the Senate and the House of Representatives on the progress that the Department has made in implementing the remaining requirements of section 537 of the Department of Homeland Security Appropriations Act, 2006 (Public Law 109–90; 119 Stat. 2088), including information on the current procedures regarding

access to SSI by civil litigants and the security risks and benefits of any proposed changes to these procedures.

SEC. 525. RESCISSION. From the unobligated balances from prior year appropriations made available for Transportation Security Administration ''Aviation Security'' and ''Headquarters Administration'', $4,776,000 are rescinded.

SEC. 526. The Department of Homeland Security Working Capital Fund, established under section 403 of the Government Management Reform Act of 1994 (31 U.S.C. 501 note; Public Law 103–356), shall continue operations during fiscal year 2007.

SEC. 527. RESCISSION. Of the unobligated balances from prior year appropriations made available for the ''Counterterrorism Fund'', $16,000,000 are rescinded.

SEC. 528. RESCISSION. From the unobligated balances from prior year appropriations made available for Transportation Security Administration ''Aviation Security'', $61,936,000 are rescinded.

SEC. 529. None of the funds made available in this Act may be used to enforce section 4025(1) of Public Law 108–458 if the Assistant Secretary (Transportation Security Administration) determines that butane lighters are not a significant threat to civil aviation security: Provided, That the Assistant Secretary (Transportation Security Administration) shall notify the Committees on Appropriations of the Senate and the House of Representatives 15 days in advance of such determination including a report on whether the effectiveness of screening operations is enhanced by suspending enforcement of the prohibition.

SEC. 530. RESCISSIONS. Of the unobligated balances from prior year appropriations made available for Science and Technology, $55,000,000 for ''Management and Administration'' and $184,000,000 from ''Research, Development, Acquisition, and Operations'' are rescinded: Provided, That of the total amount rescinded from ''Management and Administration'', $30,000,000 shall be from the contingency fund and $25,000,000 shall be from the Homeland Security Institute.

SEC. 531. Notwithstanding any other provision of law, the Secretary of Homeland Security shall consider the Hancock County Port and Harbor Commission in Mississippi eligible under the Federal Emergency Management Agency Public Assistance Program for all costs incurred for dredging from navigation channel in Little Lake, Louisiana, sediment deposited as a result of Hurricane George in 1998: Provided, That the appropriate Federal share shall apply to approval of this project.

SEC. 532. The Department of Homeland Security shall, in approving standards for State and local emergency preparedness operational plans under section 613(b)(3) of the Robert T. Stafford Disaster and Emergency Assistance Act (42 U.S.C. 5196b(b)(3)), account for the needs of individuals with household pets and service animals before, during, and following a major disaster or emergency: Provided, That Federal agencies may provide assistance as described in section 403(a) of the Robert T. Stafford Disaster and Emergency Assistance Act (42 U.S.C. 5170b(a)) to carry out the plans described in the previous proviso.

SEC. 533. RESCISSION. From the unexpended balances of the United States Coast Guard ''Acquisition, Construction, and Improvements'' account specifically identified in the Joint Explanatory Statement (House Report 109–241) accompanying the Department of Homeland Security Act, 2006 (Public Law 109–90) for the development of the Offshore Patrol Cutter, $20,000,000 are rescinded.

SEC. 534. TRANSFER. All obligated and unobligated balances of funds, totaling not less than $98,552,000, for the Transportation Security Laboratory shall be transferred from the Science and Technology ''Research, Development, Acquisition, and Operations'' account to the Transportation Security Administration ''Transportation Security Support'' account effective October 1, 2006.

SEC. 535. (a)(1) Within 45 days after the close of each month, the Chief Financial Officer of the Department of Homeland Security shall submit to the Committees on Appropriations of the Senate and the House of Representatives a monthly budget execution report that sets forth the total obligational authority appropriated (new budget authority plus unobligated carryover), undistributed obligational authority, amount allotted, current year obligations, unobligated authority (the difference between total obligational authority and current year obligations), beginning unexpended obligations, year-to-date costs, and year-end unexpended obligations, of the Department of Homeland Security.

(2) The information required under paragraph (1) shall be provided for each Departmental component and the Working Capital Fund at the level of detail shown in the table of detailed funding recommendations displayed at the end of the Statement of Managers accompanying the conference report on this Act.

(3) Each report submitted under paragraph (1) shall include for each Department of Homeland Security component the total full-time equivalent for the prior fiscal year, the on-board total full-time equivalent on September 30 of the prior fiscal year, the estimated total full-time equivalent for the current fiscal year, and the on-board total full-time equivalent on the last day of the month for the applicable report.

(b) Obligation authority and transfer authority provided under section 503 and 504 of this Act shall not be available unless on the date of a notification under section 503 and 504, the Committees on Appropriations of the Senate and House of Representatives have received the most recent report required by subsection (a) of this section.

SEC. 536. None of the funds provided by this or previous appropriations Acts or transferred to the Department of Homeland Security that remain available for obligation or expenditure in fiscal year 2007, or provided from any accounts in the Treasury of the United States derived by the collection of fees available to the agencies funded by this Act, shall be available for obligation or expenditure for the Office of the Federal Coordinator for Gulf Coast Rebuilding effective October 1, 2006, unless the Committees on Appropriations of the Senate and the House of Representatives receive a reprogramming notification for fiscal year 2006 pursuant to section 503 of Public Law 109–90 and a budget request and expenditure plan for fiscal year 2007 for this office.

SEC. 537. The Federal Law Enforcement Training Center instructor staff shall be classified as inherently governmental for the purpose of the Federal Activities Inventory Reform Act of 1998 (31 U.S.C. 501 note).

SEC. 538. Section 7209(b)(1) of the Intelligence Reform and Terrorism Prevention Act of 2004 (Public Law 108–458; 8 U.S.C. 1185 note) is amended by striking from ''(1) DEVELOPMENT OF PLAN.—The Secretary'' through ''7208(k)).'' and inserting the following:

''(1) DEVELOPMENT OF PLAN AND IMPLEMENTATION.—

''(A) The Secretary of Homeland Security, in consultation with the Secretary of State, shall develop and implement a plan as expeditiously as possible to require a passport or other document, or combination of documents, deemed by the Secretary of Homeland Security to be sufficient to denote identity and citizenship, for all travel into the United States by United States citizens and by categories of individuals for whom documentation requirements have previously been waived under section 212(d)(4)(B) of the Immigration and Nationality Act (8 U.S.C. 1182(d)(4)(B)). This plan shall be implemented not later than 3 months after the Secretary of State and the Secretary of Homeland Security make the certifications required in subsection (B), or June 1, 2009, whichever is earlier. The plan shall seek to expedite the travel of frequent travelers, including those who reside in border communities, and in doing so, shall make readily available a registered traveler program (as described in section 7208(k)).

''(B) The Secretary of Homeland Security and the Secretary of State shall jointly certify to the Committees on Appropriations of the Senate and the House of Representatives that the following criteria have been met prior to implementation of Section 7209(b)(1)(A)—

''(i) the National Institutes of Standards and Technology has certified that the card architecture meets the International Organization for Standardization ISO 14443 security standards, or justifies a deviation from such standard;

''(ii) the technology to be used by the United States for the passport card, and any subsequent change to that technology, has been shared with the governments of Canada and Mexico;

''(iii) an agreement has been reached with the United States Postal Service on the fee to be charged individuals for the passport card, and a detailed justification has been submitted to the Committees on Appropriations of the Senate and the House of Representatives;

''(iv) an alternative procedure has been developed for groups of children traveling across an international border under adult supervision with parental consent;

''(v) the necessary technological infrastructure to process the passport cards has been installed, and all employees at ports of entry have been properly trained in the use of the new technology;

''(vi) the passport card has been made available for the purpose of international travel by United States citizens through land and sea ports of entry between the United States and Canada, Mexico, the Caribbean and Bermuda; and

''(vii) a single implementation date for sea and land borders has been established.''.

SEC. 539. Notwithstanding any time limitation established for a grant awarded under title I, chapter 6, Public Law 106–31, in the item relating to Federal Emergency Management Agency—Disaster Assistance for Unmet Needs, the City of Cuero, Texas, may use funds received under such grant program until September 30, 2007.

SEC. 540. None of the funds made available in this Act for United States Customs and Border Protection may be used to prevent an individual not in the business of importing a prescription drug (within the meaning of section 801(g) of the Federal Food, Drug, and Cosmetic Act) from importing a prescription drug from Canada that complies with the Food, Drug, and Cosmetic Act.

SEC. 541. The Secretary of Homeland Security shall submit a report to the Committees on Appropriations of the Senate and the House of Representatives, not later than February 8, 2007, that—

(1) identifies activities being carried out by the Department of Homeland Security to improve—

(A) the targeting of agricultural inspections;

(B) the ability of United States Customs and Border Protection to adjust to new agricultural threats; and

(C) the in-service training for interception of prohibited plant and animal products and agricultural pests under the agriculture quarantine inspection monitoring program of the Animal and Plant Health Inspection Service; and

(2) describes the manner in which the Secretary of Homeland Security will coordinate with the Secretary of Agriculture and State and local governments in carrying out the activities described in paragraph (1).

SEC. 542. Any limitation, directive, or earmarking contained in either the House of Representatives or Senate report accompanying H.R. 5441 shall also be included in the conference report or joint statement accompanying

H.R. 5441 in order to be considered as having been approved by both Houses of Congress.

SEC. 543. Any reports required in this Act and accompanying reports to be submitted to the Committees on Appropriations and the Department of Homeland Security's annual justifications of the President's budget request shall be posted on the Department of Homeland Security's public website not later than 48 hours after such submission unless information in the report compromises national security.

SEC. 544. Notwithstanding any other provision of this Act, $1,000,000 shall be made available from appropriations for training, exercises, technical assistance, and other programs under paragraph (4) under the subheading ''STATE AND LOCAL PROGRAMS'' under the heading ''OFFICE FOR DOMESTIC PREPAREDNESS'' under title III, for the Chief Financial Officer of the Department of Homeland Security to ensure compliance with the Improper Payments Information Act of 2002 (31 U.S.C. 3321 note).

SEC. 545. None of the amounts available or otherwise available to the Coast Guard under title II of this Act under the heading ''UNITED STATES COAST GUARD'' under the heading ''OPERATING EXPENSES'' may be obligated or expended for the continuation of operations at Long Range Aids to Navigation (LORAN) stations nationwide, except in Alaska, the far northwest, and the far northeast continental United States of America.

SEC. 546. No amount appropriated by this or any other Act may be used to enforce or comply with any statutory limitation on the number of employees in the Transportation Security Administration, before or after its transfer to the Department of Homeland Security from the Department of Transportation, and no amount appropriated by this or any other Act may be used to enforce or comply with any administrative rule or regulation imposing a limitation on the recruiting or hiring of personnel into the Transportation Security Administration to a maximum number of permanent positions, except to the extent that enforcement or compliance with that limitation does not prevent the Secretary of Homeland Security from recruiting and hiring such personnel into the Administration as may be necessary—

(1) to provide appropriate levels of aviation security; and

(2) to accomplish that goal in such a manner that the average aviation security-related delay experienced by airline passengers is reduced to a level of 10 minutes.

SEC. 547. Not later than 6 months after the date of enactment of this Act, the Secretary of Homeland Security shall submit a report to the Committees on Appropriations of the Senate and the House of Representatives with an assessment of short-term (defined as within 2 years after the date of enactment of this Act), intermediate-term (defined as between 2 years and 4 years after such date of enactment), and long-term (defined as more than 4 years after such date of enactment) actions necessary for the Department of Homeland Security to take in order to assist Federal, State, and local governments achieve communications interoperability, including equipment acquisition, changes in governance structure, and training.

SEC. 548. (a) Section 114 of title 49, United States Code, is amended by striking subsection (o) and redesignating subsections (p) through (t) as subsections (o) through (s), respectively.

(b) The amendment made by subsection (a) shall take effect 180 days after the date of enactment of this Act.

SEC. 549. DATA-MINING. (a) DEFINITIONS.—In this section:

(1) DATA-MINING.—The term ''data-mining'' means a query or search or other analysis of 1 or more electronic databases, whereas—

(A) at least 1 of the databases was obtained from or remains under the control of a non-Federal entity, or the information was acquired initially by another department or agency of the Federal Government for purposes other than intelligence or law enforcement;

(B) a department or agency of the Federal Government or a non-Federal entity acting on behalf of the Federal Government is conducting the query or search or other analysis to find a predictive pattern indicating terrorist or criminal activity; and

(C) the search does not use a specific individual's personal identifiers to acquire information concerning that individual.

(2) DATABASE.—The term ''database'' does not include telephone directories, news reporting, information publicly available via the Internet or available by any other means to any member of the public without payment of a fee, or databases of judicial and administrative opinions.

(b) REPORTS ON DATA-MINING ACTIVITIES BY THE DEPARTMENT OF HOMELAND SECURITY.—

(1) REQUIREMENT FOR REPORT.—The head of each department or agency in the Department of Homeland Security that is engaged in any activity to use or develop data-mining technology shall each submit a report to Congress on all such activities of the agency under the jurisdiction of that official. The report shall be made available to the public.

(2) CONTENT OF REPORT.—Each report submitted under paragraph (1) shall include, for each activity to use or develop data-mining technology that is required to be covered by the report, the following information:

(A) A thorough description of the data-mining technology and the data that is being or will be used.

(B) A thorough description of the goals and plans for the use or development of such technology and, where appropriate, the target dates for the deployment of the data-mining technology.

(C) An assessment of the efficacy or likely efficacy of the data-mining technology in providing accurate information consistent with and valuable to the stated goals and plans for the use or development of the technology.

(D) An assessment of the impact or likely impact of the implementation of the data-mining technology on the privacy and civil liberties of individuals.

(E) A list and analysis of the laws and regulations that govern the information being or to be collected, reviewed, gathered, analyzed, or used with the data-mining technology.

(F) A thorough discussion of the policies, procedures, and guidelines that are in place or that are to be developed and applied in the use of such technology for data-mining in order to—

(i) protect the privacy and due process rights of individuals; and

(ii) ensure that only accurate information is collected, reviewed, gathered, analyzed, or used.

(G) Any necessary classified information in an annex that shall be available to the Committee on Homeland Security and Governmental Affairs, the Committee on the Judiciary, and the Committee on Appropriations of the Senate and the Committee on Homeland Security, the Committee on the Judiciary, and the Committee on Appropriations of the House of Representatives.

(3) TIME FOR REPORT.—Each report required under paragraph (1) shall be submitted not later than 90 days after the end of fiscal year 2007.

SEC. 550. (a) Not later than 6 months after the date of enactment of this Act, the Secretary of Homeland Security shall hereafter issue interim final regulations that establish homeland security requirements, including minimum standards and required submission of facility security plans to the Secretary, for chemical facilities that the Secretary determines present the greatest security risk and that are not currently regulated under Federal law for homeland security purposes.

(b) Interim regulations under this section shall apply to a chemical facility until the effective date of final regulations issued under other laws by the Secretary, that establish requirements and standards referred to in subsection (a) that apply with respect to that facility.

(c) Any person that violates an interim regulation issued under this section shall be liable for a civil penalty under section 70117 of title 46, United States Code.

SEC. 551. Not later than 1 year after the date of enactment of this Act, the Secretary of Homeland Security shall establish and conduct a pilot program at the Northern Border Air Wing bases of the Office of CBP Air and Marine, United States Customs and Border Protection, working expeditiously with the Administrator of the Federal Aviation Administration to test unmanned aerial vehicles for border surveillance along the international marine and land border between Canada and the United States.

SEC. 552. Not later than February 8, 2007, the Assistant Secretary for Immigration and Customs Enforcement of the Department of Homeland Security shall submit a report to Congress on the costs and need for establishing a sub-office in Greeley, Colorado.

SEC. 553. Not later than 90 days after the date of the enactment of this Act, the Secretary of Homeland Security shall submit to the Committees on Appropriations of the Senate and the House of Representatives a report on the feasibility and advisability of locating existing Louisiana facilities and assets of the Coast Guard in the Federal City Project of New Orleans, Louisiana, as described in the report of the Defense Base Closure and Realignment Commission submitted to the President in 2005 during the 2005 round of defense base closure and realignment under the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101–510; 10 U.S.C. 2687 note).

SEC. 554. Notwithstanding any other provision of this Act, funding made available under title VII, under the heading UNITED STATES COAST GUARD ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS may be used to acquire law enforcement patrol boats.

SEC. 555. SCREENING OF MUNICIPAL SOLID WASTE. (a) DEFINITIONS.—In this section:

(1) BUREAU.—The term '' Bureau'' means the Bureau of Customs and Border Protection.

(2) COMMERCIAL MOTOR VEHICLE.—The term ''commercial motor vehicle'' has the meaning given the term in section 31101 of title 49, United States Code.

(3) COMMISSIONER.—The term ''Commissioner'' means the Commissioner of the Bureau.

(4) MUNICIPAL SOLID WASTE.—The term ''municipal solid waste'' includes sludge (as defined in section 1004 of the Solid Waste Disposal Act (42 U.S.C. 6903)).

(b) REPORTS TO CONGRESS.—Not later than 90 days after the date of enactment of this Act, the Commissioner shall submit to Congress a report that—

(1) indicates whether the methodologies and technologies used by the Bureau to screen for and detect the presence of chemical, nuclear, biological, and radiological weapons in municipal solid waste are as effective as the methodologies and technologies used by the Bureau to screen for those materials in other items of commerce entering the United States through commercial motor vehicle transport; and

(2) if the report indicates that the methodologies and technologies used to screen municipal solid waste are less effective than those used to screen other items of commerce, identifies the actions that the Bureau will take to achieve the same level of effectiveness in the screening of municipal solid waste, including actions necessary to meet the need for additional screening technologies.

(c) IMPACT ON COMMERCIAL MOTOR VEHICLES.—If the Commissioner fails to fully implement an action identified under subsection (b)(2) before the earlier of the date that is 180 days after the date on which the report under subsection (b) is required to be submitted or the date that is 180 days after the date on which the report is submitted, the Secretary shall deny entry into the United States of any commercial motor vehicle carrying municipal solid waste

until the Secretary certifies to Congress that the methodologies and technologies used by the Bureau to screen for and detect the presence of chemical, nuclear, biological, and radiological weapons in municipal solid waste are as effective as the methodologies and technologies used by the Bureau to screen for those materials in other items of commerce entering into the United States through commercial motor vehicle transport.

SEC. 556. (a) CONSTRUCTION OF BORDER TUNNEL OR PASSAGE.—Chapter 27 of title 18, United States Code, is amended by adding at the end the following:

''§ 554. Border tunnels and passages

''(a) Any person who knowingly constructs or finances the construction of a tunnel or subterranean passage that crosses the international border between the United States and another country, other than a lawfully authorized tunnel or passage known to the Secretary of Homeland Security and subject to inspection by the Bureau of Immigration and Customs Enforcement, shall be fined under this title and imprisoned for not more than 20 years.

''(b) Any person who knows or recklessly disregards the construction or use of a tunnel or passage described in subsection (a) on land that the person owns or controls shall be fined under this title and imprisoned for not more than 10 years.

''(c) Any person who uses a tunnel or passage described in subsection (a) to unlawfully smuggle an alien, goods (in violation of section 545), controlled substances, weapons of mass destruction (including biological weapons), or a member of a terrorist organization (as defined in section 2339B(g)(6)) shall be subject to a maximum term of imprisonment that is twice the maximum term of imprisonment that would have otherwise been applicable had the unlawful activity not made use of such a tunnel or passage.''.

(b) CLERICAL AMENDMENT.—The table of sections for chapter 27 of title 18, United States Code, is amended by adding at the end the following:

''Sec. 554. Border tunnels and passages.''.

(c) CRIMINAL FORFEITURE.—Section 982(a)(6) of title 18, United States Code, is amended by inserting ''554,'' before ''1425,''.

(d) DIRECTIVE TO THE UNITED STATES SENTENCING COMMISSION.—

(1) IN GENERAL.—Pursuant to its authority under section 994 of title 28, United States Code, and in accordance with this subsection, the United States Sentencing Commission shall promulgate or amend sentencing guidelines to provide for increased penalties for persons convicted of offenses described in section 554 of title 18, United States Code, as added by subsection (a).

(2) REQUIREMENTS.—In carrying out this subsection, the United States Sentencing Commission shall—

(A) ensure that the sentencing guidelines, policy statements, and official commentary reflect the serious nature of the offenses described in section 554 of title 18, United States Code, and the need for aggressive and appropriate law enforcement action to prevent such offenses;

(B) provide adequate base offense levels for offenses under such section;

(C) account for any aggravating or mitigating circumstances that might justify exceptions, including—

(i) the use of a tunnel or passage described in subsection (a) of such section to facilitate other felonies; and

(ii) the circumstances for which the sentencing guidelines currently provide applicable sentencing enhancements;

(D) ensure reasonable consistency with other relevant directives, other sentencing guidelines, and statutes;

(E) make any necessary and conforming changes to the sentencing guidelines and policy statements; and

(F) ensure that the sentencing guidelines adequately meet the purposes of sentencing set forth in section 3553(a)(2) of title 18, United States Code.

SEC. 557. Notwithstanding any other provision of law, the Secretary of Homeland Security shall provide personnel and equipment to improve national security by inspecting international shipments of municipal solid waste, and shall levy a fee limited to the approximate cost of such inspections.

SEC. 558. (a) Not later than 6 months after the date of enactment of this Act, the Secretary of Homeland Security, in coordination with the Secretary of State, the Federal Communications Commission, and relevant agencies in the States of Alaska, Idaho, Montana, Oregon, and Washington, shall—

(1) evaluate the technical and operational challenges with respect to interoperable communications facing regional, local, State, and Federal authorities in preparing for the 2010 Olympics; and

(2) develop an integrated plan for addressing such technical and operational challenges.

(b) The Secretary of Homeland Security shall submit and present the plan developed under subsection (a) to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives.

SEC. 559. The Secretary of Homeland Security may not take any action to alter or reduce operations within the Civil Engineering Program of the Coast Guard nationwide, including the civil engineering units, facilities, and design and construction centers, the Coast Guard Academy, and the Research and Development Center until the Committees on Appropriations and Commerce, Science, and Transportation of the Senate receive and approve a plan on changes to the Civil Engineering Program of the Coast Guard. The plan shall include a description of the current functions of the Civil Engineering Program and a description of any proposed modifications of such functions and of any proposed modification of personnel and offices, including the rationale for such modification, an assessment of the costs and benefits of such modification, any proposed alternatives to such modification, and the processes utilized by the Coast Guard and the Office of Management and Budget to analyze and assess such modification.

SEC. 560. (a) All amounts made available under this Act for travel and transportation shall be reduced by $43,000,000.

(b) All amounts made available under this Act for printing and reproduction shall be reduced by $1,000,000.

SEC. 561. None of the funds made available by this Act may be used to take an action that would violate Executive Order 13149 (65 Fed. Reg. 24607; relating to greening the government through Federal fleet and transportation efficiency).

SEC. 562. (a) The Transportation Security Administration shall require each air carrier and foreign air carrier that provides air transportation or intrastate air transportation to submit plans to the Transportation Security Administration on how such air carrier will participate in the voluntary provision of emergency services program established by section 44944(a) of title 49, United States Code.

(b)(1) Not more than 90 days after the date of the enactment of this Act, the Transportation Security Administration shall prepare a report that contains the following:

(A) Procedures that qualified individuals need to follow in order to participate in the program described in subsection (a).

(B) Relevant contacts for individuals interested in participating in the program described in subsection (a).

(2) The Transportation Security Administration shall make the report required by paragraph (1) available, by Internet web site or other appropriate method, to the following:

(A) The Congress.

(B) The emergency response agency of each State.

(C) The relevant organizations representing individuals to participate in the program.

SEC. 563. Not later than 90 days after the date of enactment of this Act, the Director of the Federal Emergency Management Agency in conjunction with the Director of the National Institutes of Standards and Technology shall submit a report to the Senate Committee on Appropriations outlining Federal earthquake response plans for high-risk earthquake regions in the United States as determined by the United States Geological Survey.

SEC. 564. Not later than 6 months after the date of enactment of this Act, the Secretary of Homeland Security shall establish revised procedures for expeditiously clearing individuals whose names have been mistakenly placed on a terrorist database list or who have names identical or similar to individuals on a terrorist database list. The Secretary shall advise Congress of the procedures established.

SEC. 565. Of the amount appropriated or otherwise made available by title II of this Act under the heading ''UNITED STATES COAST GUARD'', ''OPERATING EXPENSES'', $13,934,000 may be available for the purpose of the National Capital Region Air Defense mission of the Coast Guard.

SEC. 566. (a) The Congress makes the following findings:

(1) Domestic methamphetamine production in both small-and large-scale laboratories is decreasing as a result of law enforcement pressure and public awareness campaigns.

(2) It is now estimated that 80 percent of methamphetamine consumed in the United States originates in Mexico and is smuggled into the United States.

(3) The movement of methamphetamine into the United States poses new law enforcement challenges at the border, in the financial system, and in communities affected by methamphetamine.

(4) Customs and Border Protection is working to stop the spread of methamphetamine by examining the movement of the drug and its precursors at the borders and points of entry.

(5) Customs and Border Protection is a vital source of information for the Drug Enforcement Administration and other law enforcement agencies.

(b) It is the sense of the Senate that Customs and Border Protection should continue to focus on methamphetamine in its reporting and analysis of trade flows to prevent the spread of methamphetamine throughout the United States.

SEC. 567. Not later than 30 days after the date of enactment of this Act, the Secretary of Homeland Security shall submit to the Committee on Appropriations a report addressing the compliance by the Department of Homeland Security with the recommendations set forth in the July 6, 2006, Inspector General of Homeland Security report entitled ''Progress in Developing the National Asset Database''. The report shall include the status of the prioritization of assets by the Department of Homeland Security into high-value, medium-value, and low-value asset tiers, and how such tiers will be used by the Secretary of Homeland Security in the issuance of grant funds.

SEC. 568. (a) Not later than 60 days after the initiation of any contract relating to the Secure Border Initiative that is valued at more than $20,000,000, and upon the conclusion of the performance of such contract, the Inspector General of the Department of Homeland Security shall review each action relating to such contract to determine whether such action fully complies with applicable cost requirements, performance objectives, program milestones, inclusion of small, minority-owned, and women-owned businesses, and time lines.

(b) If a contract review under subsection (a) uncovers information regarding improper conduct or wrongdoing, the Inspector General shall, as expeditiously as practicable, submit such information to the Secretary of Homeland Security, or to another appropriate official of the Department of Homeland Security, who shall determine if the contractor should be suspended from further participation in the Secure Border Initiative.

(c) Upon the completion of each review under subsection (a), the Inspector General shall submit a report to the Secretary that contains the findings of the review, including findings regarding—

(1) cost overruns;

(2) significant delays in contract execution;

(3) lack of rigorous departmental contract management;

(4) insufficient departmental financial oversight;

(5) contract bundling that limits the ability of small businesses to compete; or

(6) other high risk business practices.

(d)(1) Not later than 30 days after the receipt of each report submitted under subsection (c), the Secretary shall submit a report to the congressional committees listed in paragraph (3) that describes—

(A) the findings of the report received from the Inspector General; and

(B) the steps the Secretary has taken, or plans to take, to address the problems identified in the report.

(2) Not later than 60 days after the initiation of each contract action with a company whose headquarters is outside of the United States, the Secretary shall submit a report regarding the Secure Border Initiative to the congressional committees listed in paragraph (3).

(3) The congressional committees listed in this paragraph are—

(A) the Committee on Appropriations of the Senate;

(B) the Committee on Appropriations of the House of Representatives;

(C) the Committee on the Judiciary of the Senate;

(D) the Committee on the Judiciary of the House of Representatives;

(E) the Committee on Homeland Security and Governmental Affairs of the Senate; and

(F) the Committee on Homeland Security of the House of Representatives.

SEC. 569. Of the amount appropriated by title VI for Customs and Border Protection for Air and Marine Interdiction, Operations, Maintenance, and Procurement, such funds as are necessary may be available for the establishment of the final Northern border air wing site in Michigan.

SEC. 570. None of the funds appropriated by this Act shall be used for the seizure of a firearm based on the existence of a declaration or state of emergency.

SEC. 571. PILOT INTEGRATED SCANNING SYSTEM. (a) DESIGNATIONS.—

(1) IN GENERAL.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Homeland Security (referred to in this section as the ''Secretary'') shall designate 3 foreign seaports through which containers pass or are transshipped to the United States to pilot an integrated scanning system that couples nonintrusive imaging equipment and radiation detection equipment, which may be provided by the Megaports Initiative of the Department of Energy. In making designations under this subsection, the Secretary shall consider 3 distinct ports with unique features and differing levels of trade volume.

(2) COLLABORATION AND COOPERATION.—The Secretary shall collaborate with the Secretary of Energy and cooperate with the private sector and host foreign government to implement the pilot program under this subsection.

(b) IMPLEMENTATION.—Not later than 1 year after the date of the enactment of this Act, the Secretary shall achieve a full-scale implementation of the pilot integrated screening system, which shall—

(1) scan all containers destined for the United States that transit through the terminal;

(2) electronically transmit the images and information to the container security initiative personnel in the host country and/or Customs and Border Protection personnel in the United States for evaluation and analysis;

(3) resolve every radiation alarm according to established Department procedures;

(4) utilize the information collected to enhance the Automated Targeting System or other relevant programs; and

(5) store the information for later retrieval and analysis.

(c) REPORT.—Not later than 120 days after achieving full-scale implementation under subsection (b), the Secretary, in consultation with the Secretary of Energy and the Secretary of State, shall submit a report, to the appropriate congressional committees, that includes—

(1) an evaluation of the lessons derived from the pilot program implemented under this section;

(2) an analysis of the efficacy of the Automated Targeted System or other relevant programs in utilizing the images captured to examine high-risk containers;

(3) an evaluation of software that is capable of automatically identifying potential anomalies in scanned containers; and

(4) a plan and schedule to expand the integrated scanning system developed under this section to other container security initiative ports.

(d) IMPLEMENTATION.—As soon as practicable and possible after the date of enactment of this Act, an integrated scanning system shall be implemented to scan all containers entering the United States prior to arrival in the United States.

SEC. 572. EXPANSION OF THE NATIONAL INFRASTRUCTURE SIMULATION AND ANALYSIS CENTER.

(a) DEFINITIONS.—In this section:

(1) CRITICAL INFRASTRUCTURE.—The term ''critical infrastructure'' has the meaning given the term in section 1016(e) of the USA PATRIOT Act (42 U.S.C. 5195c(e)).

(2) EMERGENCY AND MAJOR DISASTER.—The terms ''emergency'' and ''major disaster'' have the meanings given the terms in section 102 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5122).

(3) NATIONAL INFRASTRUCTURE SIMULATION AND ANALYSIS CENTER.—The term ''National Infrastructure Simulation and Analysis Center'' means the National Infrastructure Simulation and Analysis Center established under section 1016(d) of the USA PATRIOT Act (42 U.S.C. 5195c(d)).

(4) PROTECT.—The term ''protect'' means to reduce the vulnerability of critical infrastructure in order to deter, mitigate, or neutralize an emergency, natural disaster, terrorist attack, or other catastrophic event.

(b) AUTHORITY.—

(1) IN GENERAL.—The National Infrastructure Simulation and Analysis Center shall serve as a source of national competence to address critical infrastructure protection and continuity through support for activities related to—

(A) counterterrorism, threat assessment, and risk mitigation; and

(B) an emergency, natural disaster, terrorist attack, or other catastrophic event.

(2) INFRASTRUCTURE MODELING.—

(A) PARTICULAR SUPPORT.—The support provided under paragraph (1) shall include modeling, simulation, and analysis of the systems comprising critical infrastructure, in order to enhance critical infrastructure preparedness, protection, response, and recovery activities.

(B) RELATIONSHIP WITH OTHER AGENCIES.—Each Federal agency and department with critical infrastructure responsibilities under Homeland Security Presidential Directive 7, or any successor to such directive, shall establish a formal relationship, including an agreement regarding information sharing, between the elements of such agency or department and the National Infrastructure Simulation and Analysis Center.

(C) PURPOSE.—

(i) IN GENERAL.—The purpose of the relationship under subparagraph (B) shall be to permit each Federal agency and department described in subparagraph (B) to take full advantage of the capabilities of the National Infrastructure Simulation and Analysis Center consistent with its workload capacity and priorities (particularly vulnerability and consequence analysis) for real-time response to reported and projected emergencies, natural disasters, terrorist attacks, or other catastrophic events.

(ii) RECIPIENT OF CERTAIN SUPPORT.—Modeling, simulation, and analysis provided under this subsection shall be provided to relevant Federal agencies and departments, including Federal agencies and departments with critical infrastructure responsibilities under Homeland Security Presidential Directive 7, or any successor to such directive.

SEC. 573. Notwithstanding any other provisions of law, the Secretary of Homeland Security shall consult with National Council on Radiation Protection and Measurements (in this section referred to as the ''NCRP'') and other qualified organizations and government organizations in preparing guidance and recommendations for emergency responders, to assist recovery operations, and to protect the general public with respect to radiological terrorism, threats, and events.

SEC. 574. The Comptroller General shall provide a report to the Senate and House Committees on Appropriations no later than thirty days after enactment describing the impact on public safety and on the effectiveness of screening operations resulting from the modification of the list of items prohibited from being carried aboard a passenger aircraft operated by an air carrier or foreign air carrier in air transportation or intrastate air transportation set forth in section 1540 of title 49, Code of Federal Regulations, as of December 1, 2005, to be carried aboard a passenger aircraft.

TITLE VI

BORDER SECURITY INFRASTRUCTURE ENHANCEMENTS

SEC. 601. (a) Notwithstanding any other provision of law, the Secretary of Homeland Security shall adjust fees charged by the Department against any non-United States citizen by notice in the Federal Register no later than January 1, 2007, to achieve not less than $350,000,000 in additional receipts by September 30, 2007: Provided, That the Secretary may adjust only those fees authorized under the Immigration and Nationality Act and the Illegal Immigration Reform and Immigrant Responsibility Act: Provided further, That this adjustment shall be in addition to fees authorized under 8 United States Code 1356.

(b) Amounts collected under subsection (a) shall be deposited in the accounts as provided by 8 United States Code 1356: Provided, That of the total amount collected pursuant to subsection (a) the Secretary shall transfer the following amounts:

(1) $25,000,000 to Customs and Border Protection ''Salaries and Expenses'' for vehicle replacement;

(2) $105,000,000 to Customs and Border Protection ''Air and Marine Interdiction, Operations, Maintenance, and Procurement'' for air asset replacement and air operations facilities upgrades;

(3) $90,000,000 to Customs and Border Protection ''Construction'';

(4) $30,000,000 to Immigration and Customs Enforcement ''Salaries and Expenses'' for vehicle replacement; and,

(5) $15,000,000 to Immigration and Customs Enforcement ''Automation Modernization''.

(c) Of the total amount collected pursuant to subsection (a) $85,000,000 shall be made available to United States Citizenship and Immigration Services: Provided, That of the additional amount available, $47,000,000 shall be for Business Transformation and $38,000,000 shall be for Fraud Detection and National Security initiatives.

(d) Amounts deposited under paragraph (b) shall remain available until expended for the activities and services described in paragraphs (b) and (c).

TITLE VII

SUPPLEMENTAL APPROPRIATIONS FOR PORT SECURITY ENHANCEMENTS

The following sums are appropriated, out of any money in the Treasury not otherwise appropriated, to enhance port security for the fiscal year ending September 30, 2006, and for other purposes, namely:

CUSTOMS AND BORDER PROTECTION

SALARIES AND EXPENSES

For an additional amount for ''Salaries and Expenses'', $251,000,000, to remain available until expended.

UNITED STATES COAST GUARD

OPERATING EXPENSES

For an additional amount for ''Operating Expenses'', $23,000,000, to remain available until expended: Provided, That funding is available to accelerate foreign port security assessments, conduct domestic port vulnerability assessments, and perform unscheduled security audits of facilities regulated by chapter 701 of title 46, United States Code, commonly known as the Maritime Transportation Security Act of 2002.

ACQUISITION, CONSTRUCTION, AND IMPROVEMENTS

For an additional amount for ''Acquisition, Construction, and Improvements'' for acquisition, construction, renovation, and improvement of vessels, aircraft, and equipment, $184,000,000 for the Integrated Deepwater Systems program, to remain available until expended: Provided, That funding is available to acquire maritime patrol aircraft and parent craft patrol boats, to provide armed helicopter capability, and to sustain the medium endurance cutter fleet.

OFFICE FOR DOMESTIC PREPAREDNESS

STATE AND LOCAL PROGRAMS

For an additional amount for ''State and Local Programs'', $190,000,000 to remain available until September 30, 2007: Provided, That the entire amount shall be for port security grants pursuant to the purposes of subsection (a) through (h) of section 70107 of title 46, United States Code, which shall be awarded based on risk notwithstanding subsection (a), for eligible costs as defined in paragraphs (2), (3), and (4) of subsection (b).

TITLE VIII

UNITED STATES EMERGENCY MANAGEMENT AUTHORITY

SEC. 801. SHORT TITLE.

This title may be cited as the ''United States Emergency Management Authority Act of 2006''.

SEC. 802. UNITED STATES EMERGENCY MANAGEMENT AUTHORITY.

Title V of the Homeland Security Act of 2002 (6 U.S.C. 311 et seq.) is amended—

(1) by striking the title heading and inserting the following:

''TITLE V—NATIONAL PREPAREDNESS AND RESPONSE'';

(2) by striking sections 501 through 503;

(3) by striking sections 506 and 507;

(4) by redesignating sections 504, 505, 508, and 509 as sections 521, 522, 523, and 524, respectively;

(5) by redesignating section 510 (relating to procurement of security countermeasures for the strategic national stockpile) as section 525;

(6) by redesignating section 510 (relating to urban and other high risk area communications capabilities) as section 526; and

(7) by inserting before section 521, as so redesignated by this section, the following:

''SEC. 501. DEFINITIONS.

''In this title—

''(1) the term 'all-hazards-plus' means an approach to preparedness, response, recovery, and mitigation that emphasizes the development of capabilities that are common to natural and man-made disasters, while also including the development of capabilities that are uniquely relevant to specific types of disasters;

''(2) the term 'Authority' means the United States Emergency Management Authority established under section 502;

''(3) the term 'Administrator' means the Administrator of the Authority;

''(4) the term 'Federal coordinating officer' means a Federal coordinating officer as described in section 302 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5143);

''(5) the term 'National Advisory Council' means the National Advisory Council on Emergency Preparedness and Response established under section 508;

''(6) the term 'National Incident Management System' means the National Incident Management System as described in the National Response Plan;

''(7) the term 'National Response Plan' means the National Response Plan prepared under Homeland Security Presidential Directive 5 or any presidential directive meant to replace or augment that directive;

''(8) the term 'Nuclear Incident Response Team' means a resource that includes—

''(A) those entities of the Department of Energy that perform nuclear or radiological emergency support functions (including accident response, search response, advisory, and technical operations functions), radiation exposure functions at the medical assistance facility known as the Radiation Emergency Assistance Center/Training Site (REAC/TS), radiological assistance functions, and related functions; and

''(B) those entities of the Environmental Protection Agency that perform such support functions (including radiological emergency response functions) and related functions;

''(9) the term 'Regional Advisory Council' means a Regional Advisory Council on Preparedness and Response established under section 503;

''(10) the term 'Regional Administrator' means a Regional Administrator for Preparedness and Response appointed under section 507;

''(11) the term 'Regional Office' means a Regional Office established under section 507; and

''(12) the term 'surge capacity' means the ability to rapidly and substantially increase the provision of search and rescue capabilities, food, water, medicine, shelter and housing, medical care, evacuation capacity, staffing, including disaster assistance employees, and other resources necessary to save lives and protect property during a catastrophic incident, or other natural or man-made disaster.

''SEC. 502. UNITED STATES EMERGENCY MANAGEMENT AUTHORITY.

''(a) IN GENERAL.—There is established in the Department the United States Emergency Management Authority, headed by an Administrator.

''(b) MISSION.—The mission of the Authority is to—

''(1) lead the Nation's efforts to prepare for, respond to, recover from, and mitigate the risks of natural and man-made disasters, including catastrophic incidents;

''(2) partner with State and local governments and emergency response providers, with other Federal agencies, with the private sector, and with nongovernmental organizations to build a national system of emergency management that can effectively and efficiently utilize the full measure of the Nation's resources to respond to a catastrophic incident or other natural or man-made disaster;

''(3) develop a Federal response capability that, when necessary and appropriate, can act effectively, rapidly, and proactively to deliver assistance essential to saving lives or protecting or preserving property or public health and safety in a natural or man-made disaster;

''(4) fuse the Department's emergency response, preparedness, recovery, mitigation, and critical infrastructure assets into a new, integrated organization that can effectively confront the challenges of a natural or man-made disaster;

''(5) develop and maintain robust Regional Offices that will work with State and local governments and emergency response providers to identify and address regional priorities;

''(6) under the leadership of the Secretary, coordinate with the Commandant of the Coast Guard, the Director of Customs and Border Protection, the Director of Immigration and Customs Enforcement, the National Operations Center, and other agencies and offices in the Department to take full advantage of the substantial range of resources in the Department that can be brought to bear in preparing for and responding to a natural or man-made disaster;

''(7) carry out the provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.);

''(8) provide funding, training, exercises, technical assistance, planning, and other assistance, to build local, State, regional, and national capabilities, including communications capabilities, necessary to respond to a potential natural or man-made disaster;

''(9) implement an all-hazards-plus strategy for preparedness that places priority on building those common capabilities necessary to respond to both terrorist attacks and natural disasters while also building the unique capabilities necessary to respond to specific types of incidents that pose the greatest risk to our Nation; and

''(10) promote, plan for, and facilitate the security and resiliency of critical infrastructure and key resources, including cyber infrastructure, against a natural or man-made disaster, and the post-disaster restoration of such critical infrastructure and key resources.

''(c) ADMINISTRATOR.—

''(1) IN GENERAL.—The Administrator shall be appointed by the President, by and with the advice and consent of the Senate.

''(2) QUALIFICATIONS.—The Administrator shall have not less than 5 years of executive leadership and management experience in the public or private sector, significant experience in crisis management or another relevant field, and a demonstrated ability to manage a substantial staff and budget.

''(3) REPORTING.—The Administrator shall report to the Secretary, without being required to report through any other official of the Department.

''(4) PRINCIPAL ADVISOR ON EMERGENCY PREPAREDNESS AND RESPONSE.—

''(A) IN GENERAL.—The Administrator is the principal emergency preparedness and response advisor to the President, the Homeland Security Council, and the Secretary.

''(B) ADVICE AND RECOMMENDATIONS.—

''(i) IN GENERAL.—In presenting advice with respect to any matter to the President, the Homeland Security Council, or the Secretary, the Administrator shall, as the Administrator considers appropriate, inform the President, the Homeland Security Council, or the Secretary, as the case may be, of the range of emergency mitigation, preparedness, response, and recovery options with respect to that matter.

''(ii) ADVICE ON REQUEST.—The Administrator, as an emergency preparedness and response advisor, shall provide advice to the President, the Homeland Security Council, or the Secretary on a particular matter when the President, the Homeland Security Council, or the Secretary requests such advice.

''(iii) RECOMMENDATIONS TO CONGRESS.—After informing the Secretary, the Administrator may

make such recommendations to Congress relating to emergency preparedness and response as the Administrator considers appropriate.

''(C) RETENTION OF AUTHORITY.—Nothing in this paragraph shall be construed as affecting the authority of the Secretary under this Act.

''SEC. 503. AUTHORITIES AND RESPONSIBILITIES.

''(a) IN GENERAL.—The Administrator shall provide Federal leadership necessary to prepare for and respond to a natural or man-made disaster, including—

''(1) carrying out the mission to reduce the loss of life and property and protect the Nation from all hazards by leading and supporting the Nation in a comprehensive, risk-based emergency preparedness and response program of—

''(A) mitigation, by taking sustained actions to reduce or eliminate long-term risk to people and property from hazards and their effects;

''(B) preparedness, by planning, training, and building the emergency preparedness and response workforce to prepare effectively for, mitigate against, respond to, and recover from any hazard;

''(C) response, by conducting emergency operations to save lives and property through positioning emergency equipment, personnel, and supplies, through evacuating potential victims, through providing food, water, shelter, and medical care to those in need, and through restoring critical public services;

''(D) recovery, by rebuilding communities so individuals, businesses, and governments can function on their own, return to normal life, and protect against future hazards; and

''(E) critical infrastructure protection, by establishing an inventory of, and protections for, public and private sector critical infrastructure, including cyber and communications assets;

''(2) increasing efficiencies, by coordinating efforts relating to mitigation, preparedness, response, recovery, and infrastructure protection;

''(3) helping to ensure the effectiveness of emergency response providers in responding to a natural or man-made disaster;

''(4) providing the Federal Government's response to a natural or man-made disaster, including—

''(A) managing such response;

''(B) directing the Domestic Emergency Support Team, the National Disaster Medical System, and (when operating as an organizational unit of the Department under this title) the Nuclear Incident Response Team;

''(C) overseeing the Metropolitan Medical Response System; and

''(D) coordinating other Federal response resources, including requiring deployment of the Strategic National Stockpile, in the event of a natural or man-made disaster;

''(5) working with Federal, State, and local government personnel, agencies, and authorities to build a comprehensive national incident management system to respond to a natural or man-made disaster;

''(6) with respect to the Nuclear Incident Response Team (regardless of whether it is operating as an organizational unit of the Department under this title)—

''(A) establishing standards and certifying when those standards have been met;

''(B) conducting joint and other exercises and training and evaluating performance; and

''(C) providing funds to the Department of Energy and the Environmental Protection Agency, as appropriate, for homeland security planning, exercises and training, and equipment;

''(7) helping to ensure that emergency response providers acquire interoperable and sustainable technology;

''(8) assisting the President in carrying out the functions under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. 5121 et seq.);

''(9) administering homeland security emergency management, first responder, and other preparedness grants;

''(10) administering and implementing the National Response Plan, including monitoring, evaluating, and ensuring the readiness of each emergency support function under the National Response Plan;

''(11) coordinating with the National Advisory Council;

''(12) ensuring the protection of critical infrastructure by—

''(A) carrying out the responsibilities under paragraphs (2) through (6) of section 201(d);

''(B) helping ensure the protection and resiliency of key resources and critical infrastructure, including cyber infrastructure, against a natural or man-made disaster; and

''(C) planning for, assisting with, and facilitating, the restoration of key resources and critical infrastructure, including cyber infrastructure, in the event of a natural or man-made disaster;

''(13) establishing in each Regional Office a Regional Advisory Council on Preparedness and Response, to advise the Regional Administrator of that Regional Office on emergency preparedness and response issues specific to the region; and

''(14) otherwise carrying out the mission of the Authority as described in section 502(b).

''(b) ADDITIONAL RESPONSIBILITIES RELATED TO CATASTROPHIC INCIDENTS.—

''(1) IN GENERAL.—The Administrator, in consultation with the Secretary and other senior Department officials, shall develop a national emergency management system that is capable of responding to catastrophic incidents.

''(2) IDENTIFICATION OF RESOURCES.—

''(A) IN GENERAL.—The Administrator shall develop and submit to Congress annually an estimate of the resources of the Authority and other Federal agencies needed for and devoted specifically to developing local, State, and national capabilities necessary to respond to a catastrophic incident.

''(B) CONTENTS.—Each estimate under subparagraph (A) shall include the resources both necessary for and devoted to—

''(i) planning;

''(ii) training and exercises;

''(iii) Regional Office enhancements;

''(iv) staffing, including for surge capacity during a catastrophic event;

''(v) additional logistics capabilities;

''(vi) other responsibilities under the Catastrophic Incident Annex of the Catastrophic Incident Supplement of the National Response Plan; and

''(vii) State and local catastrophic preparedness.

''(c) ALL-HAZARDS-PLUS APPROACH.—In carrying out this section, the Administrator shall implement an all-hazards-plus strategy that places priority on building those common capabilities necessary to prepare for, respond to, recover from, and mitigate the risks of terrorist attacks and natural disasters, while also building the unique capabilities necessary to prepare for, respond to, recover from, and mitigate the risks of specific types of incidents that pose the greatest risk to the Nation.

''SEC. 504. AUTHORITY COMPONENTS.

''There are transferred to the Authority the following:

''(1) Except as provided in title III of the Department of Homeland Security Appropriations Act, 2007, regarding the transfer of the National Disaster Medical System, the Federal Emergency Management Agency, as constituted on June 1, 2006, including all of its functions, personnel, assets, components, and liabilities, and including the functions of the Under Secretary for Federal Emergency Management relating thereto.

''(2) The Directorate of Preparedness, as constituted on June 1, 2006, including all of its functions, personnel assets, components, and liabilities, and including the functions of the Under Secretary for Preparedness relating to the Directorate, as constituted on that date.

''SEC. 505. PRESERVING THE UNITED STATES EMERGENCY MANAGEMENT AUTHORITY.

''(a) DISTINCT ENTITY.—The Authority shall be maintained as a distinct entity within the Department.

''(b) REORGANIZATION.—Section 872 shall not apply to the Authority, including any function or organizational unit of the Authority.

''(c) PROHIBITION ON CHANGES TO MISSIONS.—

''(1) IN GENERAL.—The Secretary may not substantially or significantly reduce the authorities, responsibilities, or functions of the Authority or the capability of the Authority to perform those responsibilities, except as otherwise specifically provided in an Act enacted after the date of enactment of the United States Emergency Management Authority Act of 2006.

''(2) CERTAIN TRANSFERS PROHIBITED.—No asset, function or mission of the Authority may be diverted to the principal and continuing use of any other organization, unit, or entity of the Department, except for details or assignments that do not reduce the capability of the Authority to perform its missions.

''SEC. 506. DIRECTORS.

''(a) IN GENERAL.—There shall be in the Authority a Director for Preparedness and a Director for Response and Recovery, each of whom shall be appointed by the President, by and with the advice and consent of the Senate, and shall report to the Administrator.

''(b) QUALIFICATIONS.—

''(1) IN GENERAL.—A Director shall have—

''(A) not less than 5 years of—

''(i) executive leadership and management experience in the public or private sector; and

''(ii) significant experience in crisis management or another relevant field; and

''(B) a demonstrated ability to manage a substantial staff and budget.

''(2) CONCURRENT EXPERIENCE.—Service during any period of time may be used in meeting the requirements under both clause (i) and (ii) of paragraph (1)(A).

''(c) INITIAL DIRECTORS.—The individual serving as the Under Secretary for Preparedness and the individual serving as the Under Secretary for the Federal Emergency Management Agency on the effective date of the United States Emergency Management Authority Act of 2006, may serve as the Director for Preparedness and the Director of Response and Recovery, respectively, until a Director for Preparedness or a Director of Response and Recovery, as the case may be, is appointed under subsection (a).

''SEC. 507. REGIONAL OFFICES.

''(a) IN GENERAL.—

''(1) REGIONAL OFFICES.—The Administrator shall establish 10 Regional Offices of the Authority.

''(2) ADDITIONAL OFFICE.—In addition to the Regional Offices established under paragraph (1), the Administrator may designate the Office for National Capital Region Coordination under section 882 as a Regional Office.

''(b) MANAGEMENT OF REGIONAL OFFICES.—

''(1) REGIONAL ADMINISTRATOR.—Each Regional Office shall be headed by a Regional Administrator for Preparedness and Response, who shall be appointed by the Administrator. Each Regional Administrator for Emergency Preparedness and Response shall report directly to the Administrator.

''(2) QUALIFICATIONS.—Each Regional Office shall be headed by an individual in the Senior Executive Service qualified to act as a senior Federal coordinating officer to provide strategic oversight of incident management when needed.

''(c) RESPONSIBILITIES.—

''(1) IN GENERAL.—The Regional Administrator shall work in partnership with State and local governments, emergency managers, emergency response providers, medical providers, the private sector, nongovernmental organizations, multijurisdictional councils of governments, and regional planning commissions and organizations in the geographical area served by the Regional Office to carry out the responsibilities of a Regional Administrator under this section.

''(2) RESPONSIBILITIES.—The responsibilities of a Regional Administrator include—

''(A) ensuring effective, coordinated, and integrated regional preparedness, mitigation, response, and recovery activities and programs for natural and man-made disasters (including planning, training, exercises, and professional development);

''(B) coordinating and integrating regional preparedness, mitigation, response, and recovery activities and programs for natural and man-made disasters (including planning, training, exercises, and professional development), which shall include—

''(i) providing regional and interstate planning assistance;

''(ii) organizing, in consultation with the Administrator, regional training and exercise programs;

''(iii) providing support and coordination officers for State and local government training and exercises;

''(iv) participating in emergency preparedness and planning activities by State, regional, and local governments;

''(v) assisting in the development of regional capabilities needed for a national catastrophic response system; and

''(vi) helping to coordinate and develop interstate agreements;

''(C) establishing and overseeing 1 or more strike teams within the region under subsection (e), which shall serve as the focal point of the Federal Government's initial response efforts for a natural or man-made disaster within that region, and otherwise building Federal response capabilities to respond to a natural or man-made disaster within that region;

''(D) working with the private sector to assess weaknesses in critical infrastructure protection in the region and to design and implement programs to address those weaknesses;

''(E) coordinating all activities conducted under this section with other Federal departments and agencies; and

''(F) performing such other duties relating to such responsibilities as the Administrator may require.

''(d) AREA OFFICES.—The Administrator shall establish an Area Office for the Pacific and an Area Office for the Caribbean, as components in the appropriate Regional Offices.

''(e) REGIONAL OFFICE STRIKE TEAMS.—

''(1) ESTABLISHMENT.—In coordination with other relevant Federal agencies, each Regional Administrator shall establish multi-agency strike teams that shall consist of—

''(A) a designated Federal coordinating officer;

''(B) personnel trained in incident management;

''(C) public affairs, response and recovery, and communications support personnel;

''(D) a defense coordinating officer;

''(E) liaisons to other Federal agencies;

''(F) such other personnel as the Administrator or Regional Administrator determines appropriate; and

''(G) individuals from the agencies with primary responsibility for each of the emergency support functions in the National Response Plan, including the following:

''(i) Transportation.

''(ii) Communications.

''(iii) Public works and engineering.

''(iv) Emergency management.

''(v) Mass care.

''(vi) Housing and human services.

''(vii) Public health and medical services.

''(viii) Urban search and rescue.

''(ix) Public safety and security.

''(x) External affairs.

''(2) LOCATION OF MEMBERS.—The members of each Regional Office strike team, including representatives from agencies other than the Department, shall be based primarily at the Regional Office that corresponds to that strike team.

''(3) COORDINATION.—Each Regional Office strike team shall coordinate the training and exercises of that strike team with the State and local governments and private sector and nongovernmental entities which the strike team shall support when a natural or man-made disaster occurs.

''(4) PREPAREDNESS.—Each Regional Office strike team shall be trained, equipped, and staffed to be well prepared to respond to natural and man-made disasters, including catastrophic incidents.

''(5) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated such sums as necessary to carry out this subsection.

''SEC. 508. NATIONAL ADVISORY COUNCIL ON EMERGENCY PREPAREDNESS AND RESPONSE.

''(a) ESTABLISHMENT.—Not later than 60 days after the date of enactment of the United States Emergency Management Authority Act of 2006, the Secretary shall establish an advisory body under section 871(a), to be known as the National Advisory Council on Emergency Preparedness and Response.

''(b) RESPONSIBILITIES.—The National Advisory Council shall advise the Administrator on all aspects of emergency preparedness and response.

''(c) MEMBERSHIP.—

''(1) IN GENERAL.—The members of the National Advisory Council shall be appointed by the Administrator, and shall, to the extent practicable, represent a geographic (including urban and rural) and substantive cross section of State and local government officials and emergency managers, and emergency response providers, from State and local governments, the private sector, and nongovernmental organizations, including as appropriate—

''(A) members selected from the emergency preparedness and response fields, including fire service, law enforcement, hazardous materials response, emergency medical services, and emergency preparedness and response personnel;

''(B) health scientists, emergency and inpatient medical providers, and public health professionals;

''(C) experts representing standards setting organizations;

''(D) State and local government officials with expertise in terrorism preparedness and emergency preparedness and response;

''(E) elected State and local government executives;

''(F) experts in public and private sector infrastructure protection, cybersecurity, and communications;

''(G) representatives of the disabled and other special needs populations; and

''(H) such other individuals as the Administrator determines to be appropriate.

''(d) APPLICABILITY OF FEDERAL ADVISORY COMMITTEE ACT.—

''(1) IN GENERAL.—Notwithstanding section 871(a) and subject to paragraph (2), the Federal Advisory Committee Act (5 U.S.C. App.), including subsections (a), (b), and (d) of section 10 of such Act, and section 552b(c) of title 5, United States Code, shall apply to the Advisory Council.

''(2) TERMINATION.—Section 14(a)(2)(B) of the Federal Advisory Committee Act (5 U.S.C. App.) shall not apply to the Advisory Council.

''SEC. 509. NATIONAL INCIDENT MANAGEMENT SYSTEM INTEGRATION CENTER.

''(a) IN GENERAL.—There is in the Authority a National Incident Management System Integration Center.

''(b) RESPONSIBILITIES.—

''(1) IN GENERAL.—The Administrator, through the National Incident Management System Integration Center, and in consultation with other Federal departments and agencies and the National Advisory Council, shall ensure ongoing management and maintenance of the National Incident Management System, the National Response Plan, any other document or tool in support of Homeland Security Presidential Directive 5, or any other Homeland Security Presidential Directive relating to incident management and response.

''(2) SPECIFIC RESPONSIBILITIES.—The National Incident Management System Integration Center shall—

''(A) periodically review, and revise, as appropriate, the National Incident Management System and the National Response Plan;

''(B) review other matters relating to the National Incident Management System and the National Response Plan, as the Administrator may require;

''(C) develop and implement a national program for National Incident Management System and National Response Plan education and awareness;

''(D) oversee all aspects of the National Incident Management System, including the development of compliance criteria and implementation activities at Federal, State, and local government levels;

''(E) provide guidance and assistance to States and local governments and emergency response providers, in adopting the National Incident Management System; and

''(F) perform such other duties relating to such responsibilities as the Administrator may require.

''SEC. 510. NATIONAL OPERATIONS CENTER.

''(a) DEFINITION.—In this section, the term 'situational awareness' means information gathered from a variety of sources that, when communicated to emergency preparedness and response managers and decision makers, can form the basis for incident management decision-making.

''(b) ESTABLISHMENT.—There is established in the Department a National Operations Center.

''(c) PURPOSE.—The purposes of the National Operations Center are to—

''(1) coordinate the national response to any natural or man-made disaster, as determined by the Secretary;

''(2) provide situational awareness and a common operating picture for the entire Federal Government, and for State and local governments as appropriate, for an event described in paragraph (1);

''(3) collect and analyze information to help deter, detect, and prevent terrorist acts;

''(4) disseminate terrorism and disaster-related information to Federal, State, and local governments;

''(5) ensure that critical terrorism and disaster-related information reaches government decision-makers; and

''(6) perform such other duties as the Secretary may require.

''(d) RESPONSIBILITIES.—The National Operations Center shall carry out the responsibilities of the Homeland Security Operations Center, the National Response Coordination Center, and the Interagency Incident Management Group, as constituted on September 1, 2005.

''SEC. 511. CHIEF MEDICAL OFFICER.

''(a) IN GENERAL.—There is in the Authority a Chief Medical Officer, who shall be appointed by the President, by and with the advice and consent of the Senate. The Chief Medical Officer shall report directly to the Administrator.

''(b) QUALIFICATIONS.—The individual appointed as Chief Medical Officer shall possess a demonstrated ability in and knowledge of medicine and public health.

''(c) RESPONSIBILITIES.—The Chief Medical Officer shall have the primary responsibility within the Department for medical issues related to natural and man-made disasters, including—

''(1) serving as the principal advisor to the Secretary and the Administrator on medical and public health issues;

''(2) coordinating the biosurveillance and detection activities of the Department;

''(3) ensuring internal and external coordination of all medical preparedness and response

activities of the Department, including training, exercises, and equipment support;

''(4) serving as the Department's primary point of contact with the Department of Agriculture, the Department of Defense, the Department of Health and Human Services, the Department of Transportation, the Department of Veterans Affairs, and other Federal departments or agencies, on medical and public health issues;

''(5) serving as the Department's primary point of contact for State and local government, the medical community, and others within and outside the Department, with respect to medical and public health matters;

''(6) discharging, in coordination with the Under Secretary for Science and Technology, the responsibilities of the Department related to Project Bioshield;

''(7) establishing doctrine and priorities for the National Disaster Medical System, consistent with the National Response Plan and the National Incident Management System, supervising its medical components, and exercising predeployment operational control, including—

''(A) determining composition of the teams;

''(B) overseeing credentialing of the teams; and

''(C) training personnel of the teams;

''(8) establishing doctrine and priorities for the Metropolitan Medical Response System, consistent with the National Response Plan and the National Incident Management System;

''(9) managing the Metropolitan Medical Response System, including developing and overseeing standards, plans, training, and exercises and coordinating with the Office of Grants and Training on the use and distribution of Metropolitan Medical Response grants;

''(10) assessing and monitoring long-term health issues of emergency managers and emergency response providers;

''(11) developing and updating, in consultation with the Secretary of Health and Human Services, guidelines for State and local governments for medical response plans for chemical, biological, radiological, nuclear, or explosive weapon attacks;

''(12) developing, in consultation with the Secretary of Health and Human Services, appropriate patient tracking capabilities to execute domestic patient movement and evacuations, including a system that has the capacity of electronically maintaining and transmitting the health information of hospital patients;

''(13) establishing and providing oversight for the Department's occupational health and safety program, including workforce health; and

''(14) performing such other duties relating to such responsibilities as the Secretary or the Administrator may require.

''(d) LONG-TERM HEALTH ASSESSMENT PROGRAM.—The Chief Medical Officer, in consultation with the Director of the National Institute for Occupational Safety and Health, shall establish a program to assess, monitor, and study the health and safety of emergency managers and emergency response providers, following Incidents of National Significance declared by the Secretary under the National Response Plan.

''SEC. 512. PUBLIC AND COMMUNITY PREPAREDNESS.

''The Administrator shall promote public and community preparedness.

''SEC. 513. SAVER PROGRAM.

''(a) IN GENERAL.—In the Department there is a System Assessment and Validation for Emergency Responders Program to provide impartial evaluations of emergency response equipment and systems.

''(b) REQUIREMENTS.—The program established under subsection (a) shall—

''(1) provide impartial, practitioner relevant, and operationally oriented assessments and validations of emergency response provider equipment and systems that have not already been third-party certified to a standard adopted by the Department, including—

''(A) commercial, off-the-shelf emergency response provider equipment and systems in all equipment list categories of the Standardized Equipment List published by the Interagency Board for Equipment Standardization and Interoperability; and

''(B) such other equipment or systems as the Secretary determines are appropriate;

''(2) provide information that enables decision-makers and emergency response providers to better select, procure, use, and maintain emergency response provider equipment or systems;

''(3) assess and validate the performance of products within a system and subsystems; and

''(4) provide information and feedback to emergency response providers through the Responder Knowledge Base of the National Memorial Institute for the Prevention of Terrorism, or other appropriate forum.

''(c) ASSESSMENT AND VALIDATION PROCESS.—The assessment and validation of emergency response provider equipment and systems shall use multiple evaluation techniques, including—

''(1) operational assessments of equipment performance on vehicle platforms;

''(2) technical assessments on a comparative basis of system component performance across makes and models under controlled conditions; and

''(3) integrative assessments on an individual basis of system component interoperability and compatibility with other system components.

''(d) PERSONAL PROTECTIVE EQUIPMENT.—To the extent practical, the assessment and validation of personal protective equipment under this section shall be conducted by the National Personal Protective Technology Laboratory of the National Institute for Occupational Safety and Health.

''SEC. 514. NATIONAL SEARCH AND RESCUE RESPONSE SYSTEM.

''(a) NATIONAL SEARCH AND RESCUE RESPONSE SYSTEM.—There is established in the Authority an emergency response system known as the National Search and Rescue Response System that provides a national network of standardized search and rescue resources to assist State and local governments in responding to any natural or man-made disaster.

''(b) ADMINISTRATION OF THE SYSTEM.—

''(1) TASK FORCE PARTICIPATION.—The Administrator shall select eligible search and rescue teams that are sponsored by State and local government entities to participate as task forces in the National Search and Rescue Response System. The Administrator shall determine the criteria for such participation.

''(2) AGREEMENTS WITH SPONSORING AGENCIES.—The Administrator shall enter into an agreement with the State or local government entity that sponsors each search and rescue team selected under paragraph (1) with respect the team's participation as a task force in the National Search and Rescue Response System.

''(3) MANAGEMENT AND TECHNICAL TEAMS.—The Administrator shall maintain such management and other technical teams as are necessary to administer the National Search and Rescue Response System.

''SEC. 515. METROPOLITAN MEDICAL RESPONSE SYSTEM.

''(a) IN GENERAL.—There is in the Authority a Metropolitan Medical Response System. Under the Metropolitan Medical Response System, the Assistant Secretary for Grants and Planning, in coordination with the Chief Medical Officer, shall administer grants to develop, maintain, and enhance medical preparedness systems that are capable of responding effectively to a public health crisis or mass-casualty event caused by a natural or man-made disaster.

''(b) USE OF FUNDS.—The Metropolitan Medical Response System shall make grants to local governments to enhance any of the following activities:

''(1) Medical surge capacity.

''(2) Mass prophylaxis.

''(3) Chemical, biological, radiological, nuclear, and explosive detection, response, and decontamination capabilities.

''(4) Emergency communications capabilities.

''(5) Information sharing and collaboration capabilities.

''(6) Regional collaboration.

''(7) Triage and pre-hospital treatment.

''(8) Medical supply management and distribution.

''(9) Fatality management.

''(10) Such other activities as the Secretary may provide.

''SEC. 516. EMERGENCY MANAGEMENT ASSISTANCE COMPACT.

''(a) IN GENERAL.—The Secretary, acting through the Administrator, may make grants for the purposes of administering and improving the Emergency Management Assistance Compact consented to by the Joint Resolution entitled 'Joint Resolution granting the consent of Congress to the Emergency Management Assistance Compact' (Public Law 104–321; 110 Stat. 3877).

''(b) USES.—A grant under this section shall be used to—

''(1) carry out recommendations identified in after-action reports for the 2004 and 2005 hurricane season issued under the Emergency Management Assistance Compact;

''(2) coordinate with the Department and other Federal Government agencies;

''(3) coordinate with State and local government entities and their respective national associations;

''(4) assist State and local governments with credentialing emergency response providers and the typing of emergency response resources; or

''(5) administer the operations of the Emergency Management Assistance Compact.

''(c) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Secretary to carry out this section $4,000,000 for each of fiscal years 2007 through 2010. Amounts appropriated under this section shall remain available for 3 fiscal years after the date on which such funds are appropriated.

''SEC. 517. OFFICE FOR THE PREVENTION OF TERRORISM.

''(a) ESTABLISHMENT.—There is established in the Department an Office for the Prevention of Terrorism, which shall be headed by a Director.

''(b) DIRECTOR.—

''(1) REPORTING.—The Director of the Office for the Prevention of Terrorism shall report directly to the Secretary.

''(2) QUALIFICATIONS.—The Director of the Office for the Prevention of Terrorism shall have an appropriate background with experience in law enforcement, intelligence, or other anti-terrorist functions.

''(c) ASSIGNMENT OF PERSONNEL.—

''(1) IN GENERAL.—The Secretary shall assign to the Office for the Prevention of Terrorism permanent staff and other appropriate personnel detailed from other components of the Department to carry out the responsibilities under this section.

''(2) LIAISONS.—The Secretary shall designate senior employees from each component of the Department that has significant antiterrorism responsibilities to act a liaison between that component and the Office for the Prevention of Terrorism.

''(d) RESPONSIBILITIES.—The Director of the Office for the Prevention of Terrorism shall—

''(1) coordinate policy and operations between the Department and State and local government agencies relating to preventing acts of terrorism within the United States;

''(2) serve as a liaison between State and local law enforcement agencies and the Department;

''(3) in coordination with the Office of Intelligence, develop better methods for the sharing of intelligence with State and local law enforcement agencies;

''(4) work with the Assistant Secretary of the Office of Grants and Training to ensure that

homeland security grants to State and local agencies, including the Law Enforcement Terrorism Prevention Program, Commercial Equipment Direct Assistance Program, grants for fusion centers, and other law enforcement programs are adequately focused on terrorism prevention activities; and

''(5) coordinate with the Authority, the Department of Justice, the National Institute of Justice, law enforcement organizations, and other appropriate entities to develop national voluntary consensus standards for training and personal protective equipment to be used in a tactical environment by law enforcement officers.

''(e) PILOT PROJECT.—

''(1) IN GENERAL.—The Director of the Office for the Prevention of Terrorism, in coordination with the Director for Response, shall establish a pilot project to determine the efficacy and feasibility of establishing law enforcement deployment teams.

''(2) FUNCTION.—The law enforcement deployment teams participating in the pilot program under this subsection shall form the basis of a national network of standardized law enforcement resources to assist State and local governments in responding to a natural or man-made disaster.

''(f) CONSTRUCTION.—Nothing in this section may be construed to affect the roles or responsibilities of the Department of Justice.

''SEC. 518. DEPARTMENT OFFICIALS.

''(a) CYBERSECURITY AND TELECOMMUNICATIONS.—There is in the Department an Assistant Secretary for Cybersecurity and Telecommunications.

''(b) UNITED STATES FIRE ADMINISTRATION.—The Administrator of the United States Fire Administration shall have a rank equivalent to an assistant secretary of the Department.

''SEC. 519. CREDENTIALING.

''(a) DEFINITIONS.—In this section—

''(1) the term 'credential' means to provide documentation that can authenticate and verify the qualifications and identity of managers of incidents, emergency response providers, and other appropriate personnel including by ensuring that such personnel possess a minimum common level of training, experience, physical and medical fitness, and capability appropriate for their position;

''(2) the term 'credentialing' means evaluating an individual's qualifications for a specific position under guidelines created in this section and assigning such individual a qualification under the standards developed in this section; and

''(3) the term 'credentialed' means an individual has been evaluated for a specific position under the guidelines created under this section.

''(b) REQUIREMENTS.—

''(1) IN GENERAL.—The Administrator shall enter into a memorandum of understanding to collaborate with the Emergency Management Assistance Compact and other organizations to establish, in consultation with the Authority, nationwide standards for credentialing all personnel who are likely to respond to an emergency or major disaster.

''(2) CONTENTS.—The standards developed under paragraph (1) shall—

''(A) include the minimum professional qualifications, certifications, training, and education requirements for specific emergency response functional positions that are applicable to Federal, State and local government;

''(B) be compatible with the National Incident Management System; and

''(C) be consistent with standards for advance registration for health professions volunteers under section 319I of the Public Health Services Act (42 U.S.C. 247d-7b).

''(3) TIMEFRAME.—The standards developed under paragraph (1) shall be completed not later than 6 months after the date of enactment of the United States Emergency Management Authority Act of 2006.

''(c) CREDENTIALING OF DEPARTMENT PERSONNEL.—Not later than 1 year after the date of enactment of this Act, the Secretary and the Administrator shall ensure that all personnel of the Department (including temporary personnel) who are likely to respond to an emergency or major disaster are credentialed.

''(d) INTEGRATION WITH NATIONAL RESPONSE PLAN.—

''(1) DISTRIBUTION OF STANDARDS.—Not later than 6 months after the date of enactment of this Act, the Administrator of the Authority shall provide the standards developed under subsection (b) to all Federal agencies that have responsibilities under the National Response Plan.

''(2) CREDENTIALING OF AGENCIES.—Not later than 180 days after the date on which the standards are provided under paragraph (1), each agency described in paragraph (1) shall—

''(A) ensure that all employees or volunteers of that agency who are likely to respond to an emergency or major disaster are credentialed; and

''(B) submit to the Secretary the name of each credentialed employee or volunteer of such agency.

''(3) LEADERSHIP.—The Administrator shall provide leadership, guidance, and technical assistance to an agency described in paragraph (1) to facilitate the credentialing process of that agency.

''(e) DOCUMENTATION AND DATABASE SYSTEM.—

''(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator of the Authority shall establish and maintain a documentation and database system of Federal emergency response providers and all other Federal personnel credentialed to respond to an emergency or major disaster.

''(2) ACCESSIBILITY.—The documentation and database system established under paragraph (1) shall be accessible to the Federal coordinating officer and other appropriate officials preparing for or responding to an emergency or major disaster.

''(3) CONSIDERATIONS.—The Administrator shall consider whether the credentialing system can be used to regulate access to areas affected by a major disaster.

''(f) GUIDANCE TO STATE AND LOCAL GOVERNMENTS.—Not later than 6 months after the date of enactment of this Act, the Administrator shall—

''(1) in collaboration with the Emergency Management Assistance Compact provide detailed written guidance, assistance, and expertise to State and local governments to facilitate the credentialing of State and local emergency response providers and typing of assets commonly or likely to be used in responding to an emergency or major disaster; and

''(2) in coordination with the Emergency Management Assistance Compact and appropriate national professional organizations, assist State and local governments with credentialing the personnel and typing the resources of the State or local government under the guidance provided under paragraph (1).

''(g) REPORT.—Not later than 6 months after the date of enactment of this Act and annually thereafter, the Director of the Authority shall submit to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Homeland Security of the House of Representatives a report describing the implementation of this section, including the number and level of qualification of Federal personnel trained and ready to respond to an emergency or major disaster.

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

''SEC. 520. TYPING OF RESOURCES AND ASSETS.

''(a) DEFINITIONS.—In this section—

''(1) the term 'typed' means an asset or resource has been evaluated for a specific function under the guidelines created under this section; and

''(2) the term 'typing' means to define in detail the minimum capabilities of an asset or resource.

''(b) REQUIREMENTS.—

''(1) IN GENERAL.—The Administrator shall enter into a memorandum of understanding to collaborate with the Emergency Management Assistance Compact and other organizations to establish, in consultation with the Authority, nationwide standards for typing of resources and assets commonly or likely to be used in responding to an emergency or major disaster.

''(2) CONTENTS.—The standards developed under paragraph (1) shall—

''(A) be applicable to Federal, State and local government; and

''(B) be compatible with the National Incident Management System.

''(c) TYPING OF DEPARTMENT RESOURCES.—Not later than 1 year after the date of enactment of this Act, the Secretary shall ensure that all resources and assets of the Department that are likely to be used to respond to an emergency or major disaster are typed.

''(d) INTEGRATION WITH NATIONAL RESPONSE PLAN.—

''(1) DISTRIBUTION OF STANDARDS.—Not later than 6 months after the date of enactment of this Act, the Administrator of the Authority shall provide the standards developed under subsection (b) to all Federal agencies that have responsibilities under the National Response Plan.

''(2) TYPING OF AGENCIES, ASSETS, AND RESOURCES.—Not later than 180 days after the date on which the standards are provided under paragraph (1), each agency described in paragraph (1) shall—

''(A) ensure that all resources and assets (including teams, equipment, and other assets) of that agency that are likely to be used to respond to an emergency or major disaster are typed; and

''(B) submit to the Secretary a list of all typed resources and assets

''(3) LEADERSHIP.—The Administrator shall provide leadership, guidance, and technical assistance to an agency described in paragraph (1) to facilitate the typing process of that agency.

''(e) DOCUMENTATION AND DATABASE SYSTEM.—

''(1) IN GENERAL.—Not later than 1 year after the date of enactment of this Act, the Administrator shall establish and maintain a documentation and database system of Federal resources and assets likely to be used to respond to an emergency or major disaster.

''(2) ACCESSIBILITY.—The documentation and database system established under paragraph (1) shall be accessible to the Federal coordinating officer and other appropriate officials preparing for or responding to an emergency or major disaster.

''(f) GUIDANCE TO STATE AND LOCAL GOVERNMENTS.—Not later than 6 months after the date of enactment of this Act, the Administrator of the Authority, in collaboration with the Emergency Management Assistance Compact, shall—

''(1) provide detailed written guidance, assistance, and expertise to State and local governments to facilitate the typing of the resources and assets of State and local governments likely to be used in responding to an emergency or major disaster; and

''(2) assist State and local governments with typing the resources and assets of the State or local governments under the guidance provided under paragraph (1).

''(g) GRANTS.—The Secretary may make grants to the party states of the Emergency Management Assistance Compact to develop and maintain a database of typed resources and assets of State and local governments.

''(h) REPORT.—Not later than 6 months after the date of enactment of this Act and annually thereafter, the Administrator shall submit to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee

on Homeland Security of the House of Representatives a report describing the implementation of this section, including the number and type of Federal resources and assets ready to respond to an emergency or major disaster.''.

SEC. 803. CONFORMING AMENDMENTS. (a) EXECUTIVE SCHEDULE.—

(1) ADMINISTRATOR.—Section 5313 of title 5, United States Code, is amended by adding at the end the following:

''Administrator of the United States Emergency Management Authority.''.

(2) DIRECTORS.—Section 5314 of title 5, United States Code, is amended by adding at the end the following:

''Directors, United States Emergency Management Authority.''.

(3) FEMA OFFICERS.—

(A) FEDERAL INSURANCE ADMINISTRATOR.—Section 5315 of title 5, United States Code, is amended by striking ''Federal Insurance Administrator, Federal Emergency Management Agency.'' and inserting ''Federal Insurance Administrator, United States Emergency Management Agency.''.

(B) INSPECTOR GENERAL.—Section 5315 of title 5, United States Code, is amended by striking ''Inspector General, Federal Emergency Management Agency.'' and inserting ''Inspector General, United States Emergency Management Agency.''.

(C) CHIEF INFORMATION OFFICER.—Section 5315 of title 5, United States Code, is amended by striking ''Chief Information Officer, Federal Emergency Management Agency.'' and inserting ''Chief Information Officer, United States Emergency Management Agency.''.

(b) OFFICERS OF THE DEPARTMENT.—Section 103(a) of the Homeland Security Act of 2002 (6 U.S.C. 113(a)) is amended—

(1) by striking paragraph (5) and inserting the following:

''(5) An Administrator of the United States Emergency Management Authority.'';

(2) by striking paragraph (2); and

(3) by redesignating paragraphs (3) through (10) (as amended by this subsection) as paragraphs (2) through (9), respectively.

(c) REFERENCES.—Any reference to the Federal Emergency Management Agency, or the Director thereof, in any law, rule, regulation, certificate, directive, instruction, or other official paper in force on the effective date of this title shall be considered to refer and apply to the United States Emergency Management Authority and the Administrator thereof, respectively.

(d) TABLE OF CONTENTS.—The table of contents in section 1(b) of the Homeland Security Act of 2002 (6 U.S.C. 101 et seq.) is amended by striking the items relating to title V and sections 501 through 509 and inserting the following:

''TITLE V—NATIONAL PREPAREDNESS AND RESPONSE

SEC. 804. AUTHORIZATION OF APPROPRIATIONS. There are authorized to be appropriated such sums as are necessary to carry out this title and the amendments made by this title.

SEC. 805. EFFECTIVE DATE. This title, and the amendments made by this title, shall take effect on January 1, 2007.

TITLE IX

BORDER LAW ENFORCEMENT RELIEF ACT

SEC. 901. SHORT TITLE. This title may be cited as the ''Border Law Enforcement Relief Act of 2006''.

SEC. 902. FINDINGS. Congress finds the following:

(1) It is the obligation of the Federal Government of the United States to adequately secure the Nation's borders and prevent the flow of undocumented persons and illegal drugs into the United States.

(2) Despite the fact that the United States Border Patrol apprehends over 1,000,000 people each year trying to illegally enter the United States, according to the Congressional Research Service, the net growth in the number of unauthorized aliens has increased by approximately 500,000 each year. The Southwest border accounts for approximately 94 percent of all migrant apprehensions each year. Currently, there are an estimated 11,000,000 unauthorized aliens in the United States.

(3) The border region is also a major corridor for the shipment of drugs. According to the El Paso Intelligence Center, 65 percent of the narcotics that are sold in the markets of the United States enter the country through the Southwest Border.

(4) Border communities continue to incur significant costs due to the lack of adequate border security. A 2001 study by the United States-Mexico Border Counties Coalition found that law enforcement and criminal justice expenses associated with illegal immigration exceed $89,000,000 annually for the Southwest border counties.

(5) In August 2005, the States of New Mexico and Arizona declared states of emergency in order to provide local law enforcement immediate assistance in addressing criminal activity along the Southwest border.

(6) While the Federal Government provides States and localities assistance in covering costs related to the detention of certain criminal aliens and the prosecution of Federal drug cases, local law enforcement along the border are provided no assistance in covering such expenses and must use their limited resources to combat drug trafficking, human smuggling, kidnappings, the destruction of private property, and other border-related crimes.

(7) The United States shares 5,525 miles of border with Canada and 1,989 miles with Mexico. Many of the local law enforcement agencies located along the border are small, rural departments charged with patrolling large areas of land. Counties along the Southwest United States-Mexico border are some of the poorest in the country and lack the financial resources to cover the additional costs associated with illegal immigration, drug trafficking, and other border-related crimes.

(8) Federal assistance is required to help local law enforcement operating along the border address the unique challenges that arise as a result of their proximity to an international border and the lack of overall border security in the region.

SEC. 903. BORDER RELIEF GRANT PROGRAM. (a) GRANTS AUTHORIZED.—

(1) IN GENERAL.—The Secretary is authorized to award grants, subject to the availability of appropriations, to an eligible law enforcement agency to provide assistance to such agency to address—

(A) criminal activity that occurs in the jurisdiction of such agency by virtue of such agency's proximity to the United States border; and

(B) the impact of any lack of security along the United States border.

(2) DURATION.—Grants may be awarded under this subsection during fiscal years 2007 through 2011.

(3) COMPETITIVE BASIS.—The Secretary shall award grants under this subsection on a competitive basis, except that the Secretary shall give priority to applications from any eligible law enforcement agency serving a community—

(A) with a population of less than 50,000; and

(B) located no more than 100 miles from a United States border with—

(i) Canada; or

(ii) Mexico.

(b) USE OF FUNDS.—Grants awarded pursuant to subsection (a) may only be used to provide additional resources for an eligible law enforcement agency to address criminal activity occurring along any such border, including—

(1) to obtain equipment;

(2) to hire additional personnel;

(3) to upgrade and maintain law enforcement technology;

(4) to cover operational costs, including overtime and transportation costs; and

(5) such other resources as are available to assist that agency.

(c) APPLICATION.—

(1) IN GENERAL.—Each eligible law enforcement agency seeking a grant under this section shall submit an application to the Secretary at such time, in such manner, and accompanied by such information as the Secretary may reasonably require.

(2) CONTENTS.—Each application submitted pursuant to paragraph (1) shall—

(A) describe the activities for which assistance under this section is sought; and

(B) provide such additional assurances as the Secretary determines to be essential to ensure compliance with the requirements of this section.

(d) DEFINITIONS.—For the purposes of this section:

(1) ELIGIBLE LAW ENFORCEMENT AGENCY.—The term ''eligible law enforcement agency'' means a tribal, State, or local law enforcement agency—

(A) located in a county no more than 100 miles from a United States border with—

(i) Canada; or

(ii) Mexico; or

(B) located in a county more than 100 miles from any such border, but where such county has been certified by the Secretary as a High Impact Area.

(2) HIGH IMPACT AREA.—The term ''High Impact Area'' means any county designated by the Secretary as such, taking into consideration—

(A) whether local law enforcement agencies in that county have the resources to protect the lives, property, safety, or welfare of the residents of that county;

(B) the relationship between any lack of security along the United States border and the rise, if any, of criminal activity in that county; and

(C) any other unique challenges that local law enforcement face due to a lack of security along the United States border.

(3) SECRETARY.—The term ''Secretary'' means the Secretary of the Department of Homeland Security.

(e) AUTHORIZATION OF APPROPRIATIONS.—

(1) IN GENERAL.—There are authorized to be appropriated $50,000,000 for each of fiscal years 2007 through 2011 to carry out the provisions of this section.

(2) DIVISION OF AUTHORIZED FUNDS.—Of the amounts authorized under paragraph (1)—

(A) ⅔ shall be set aside for eligible law enforcement agencies located in the 6 States with the largest number of undocumented alien apprehensions; and

(B) ⅓ shall be set aside for areas designated as a High Impact Area under subsection (d).

(f) SUPPLEMENT NOT SUPPLANT.—Amounts appropriated for grants under this section shall be used to supplement and not supplant other State and local public funds obligated for the purposes provided under this title.

SEC. 904. ENFORCEMENT OF FEDERAL IMMIGRATION LAW.

Nothing in this title shall be construed to authorize State or local law enforcement agencies or their officers to exercise Federal immigration law enforcement authority.

This Act may be cited as the ''Department of Homeland Security Appropriations Act, 2007''.

MEASURE PLACED ON THE CALENDAR—H.R. 9

Mr. FRIST. I understand there is a bill at the desk due for a second reading.

The PRESIDING OFFICER. The clerk will read the bill by title for the second time.

The legislative clerk read as follows:

A bill (H.R. 9) to amend the Voting Rights Act of 1965.

Mr. FRIST. In order to place the bill on the calendar under the provisions of rule XIV, I object to further proceeding.

The PRESIDING OFFICER. Objection being heard, the bill will be placed on the calendar.

ORDER FOR STAR PRINT—H.R. 5672

Mr. FRIST. I ask unanimous consent that the report to accompany H.R. 5672 be star printed.

The PRESIDING OFFICER. Without objection, it is so ordered.

DISCHARGE AND REFERRAL—H.R. 125

Mr. FRIST. I ask unanimous consent the Committee on Environment and Public Works be discharged from further consideration of H.R. 125 and the bill be referred to the Committee on Energy and Natural Resources.

The PRESIDING OFFICER. Without objection, it is so ordered.

COMMEMORATING THE 60TH ANNIVERSARY OF THE PERMANENT INTEGRATION OF PROFESSIONAL FOOTBALL

Mr. FRIST. I ask unanimous consent the Senate now proceed to consideration of S. Res. 533, which was submitted earlier today.

The PRESIDING OFFICER. The clerk will report the resolution by title.

The legislative clerk read as follows:

A resolution (S. Res. 533) commemorating the 60th anniversary of the permanent integration of professional football by 4 pioneering players.

There being no objection, the Senate proceeded to consider the resolution.

Mr. FRIST. I ask unanimous consent the resolution be agreed to, the preamble be agreed to, and the motion to reconsider be laid upon the table.

The PRESIDING OFFICER. Without objection, it is so ordered.

The resolution (S. Res. 533) was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

S. RES. 533

Whereas the integration of sports supported other ongoing efforts to permanently end racial segregation as an accepted practice in the United States;

Whereas, in 1946, 4 African-American football players, William ''Bill'' K. Willis and Marion Motley, who played for the Cleveland Browns, and Kenny Washington and Woody Strode, who played for the Los Angeles Rams, all signed contracts to play professional football;

Whereas, on August 7, 1946, Bill Willis was the first of this pioneering foursome to sign a contract to play professional football for the Cleveland Browns forever ending the race barrier in professional football, 1 full year before Jackie Robinson broke the race barrier in professional baseball;

Whereas, thanks to the significant contributions of Bill Willis and Marion Motley, the Cleveland Browns won the National Football League (NFL) Championship in 1950 which was the first year the Cleveland Browns played in the NFL;

Whereas, in addition to permanently ending the race barrier in professional football, Bill Willis and Marion Motley were recognized for their outstanding professional football careers by their election to the Pro Football Hall of Fame; and

Whereas 2006 marks the 60th anniversary of the permanent integration of professional football, and the NFL will commemorate this milestone during the 2006 Pro Football Hall of Fame Game: Now, therefore, be it

Resolved, That the Senate—

(1) recognizes the 60th anniversary of the permanent integration of professional football; and

(2) respectfully requests the Secretary of the Senate to transmit for appropriate display an enrolled copy of this resolution to—

(A) the Pro Football Hall of Fame in Canton, Ohio; and

(B) William K. Willis, the only surviving member of the pioneering foursome who permanently ended the race barrier in professional football.

FREEDOM TO DISPLAY THE AMERICAN FLAG ACT OF 2005

Mr. FRIST. I ask unanimous consent the committee on Banking, Housing and Urban Affairs be discharged from further consideration of H.R. 42, and the Senate proceed to its immediate consideration.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will report the bill by title.

The legislative clerk read as follows:

A bill (H.R. 42) to ensure that the right of an individual to display the flag of the United States on residential property not be abridged.

There being no objection, the Senate proceeded to consider the bill.

Mr. FRIST. I ask unanimous consent the bill be read a third time and passed, the motion to reconsider be laid on the table, and any statements be printed in the RECORD.

The PRESIDING OFFICER. Without objection, it is so ordered.

The bill (H.R. 42) was ordered to a third reading, was read the third time, and passed.

UNANIMOUS CONSENT AGREEMENT—H.R. 5441

Mr. FRIST. I ask unanimous consent that notwithstanding passage of H.R. 5441, amendments Nos. 4642, 4570, and 4578 be further modified with the changes at the desk.

The PRESIDING OFFICER. Without objection, it is so ordered.

The amendments, as modified, are as follows:

AMENDMENT NO. 4642, AS MODIFIED

On page 66, line 5, strike ''$166,456,000'' and insert ''$163,456,000''.

On page 91, line 6, strike ''$2,393,500,000'' and insert ''$2,400,000,000''.

On page 93, strike lines 7 and 8, and insert the following:

''(4) $338,000,000 for training, exercises, technical assistance, and other programs (including mass evacuation preparation and exercises): *Provided*, That not less than $18,000,000 is for technical assistance:''.

On page 120, increase that amount on line 9 by $3,500,000.

AMENDMENT NO. 4570, AS FURTHER MODIFIED

On page 68, line 9, strike ''General.'' and insert the following: ''General: *Provided further*, That the Department of Homeland Security Inspector General shall investigate whether, and to what extent, in adjusting and settling claims resulting from Hurricane Katrina, insurers making flood insurance coverage available under the Write-Your-Own program pursuant to section 1345 of the National Flood Insurance Act of 1968 (42 U.S.C. 4081) and subpart C of part 62 of title 44, Code of Federal Regulations, improperly attributed damages from such hurricane to flooding covered under the insurance coverage provided under the national flood insurance program rather than to windstorms covered under coverage provided by such insurers or by windstorm insurance pools in which such insurers participated: *Provided further*, That the Department of Homeland Security Inspector General may request the assistance of the Attorney General and the Department of Justice in conducting such investigation and may reimburse the costs of the Attorney General and the Department of Justice in providing such assistance from such funds: *Provided further*, That the Department of Homeland Security Inspector General shall submit a report to Congress not later than April 1, 2007, setting forth the conclusions of such investigation.''

On page 120, increase the amount on line 9 by $3,000,000.

On page 68, increase the amount on line 6 by $3,000,000.

AMENDMENT NO. 4578, AS MODIFIED

On page 90, line 15, strike ''of which $8,000,000'' and insert ''of which no less than $2,741,000 may be used for the Office of National Capital Region Coordination, and of which $6,459,000''.

ORDERS FOR TUESDAY, JULY 18, 2006

Mr. FRIST. I ask unanimous consent that when the Senate completes its business today, it stand in adjournment until 9:45 a.m. on Tuesday, July 18. I further ask that following the prayer and pledge, the morning hour be deemed expired, the Journal of proceedings be approved to date, the time for the two leaders be reserved, and the Senate proceed to a period of morning business with the time equally divided until 10 a.m.; further, I ask unanimous consent that at 10 a.m. the Senate proceed to the stem cell bills under the previous order. I further ask unanimous consent that the Senate stand in recess from 12:30 to 2:15 to accommodate the weekly policy luncheons.

The PRESIDING OFFICER. Without objection, it is so ordered.

PROGRAM

Mr. FRIST. Mr. President, today we have been debating the stem cell research bills. That debate will continue at 10 o'clock tomorrow morning, again the time alternating between the two sides. Senators are reminded that we will have votes on these bills tomorrow afternoon starting at 3:45. Each bill does require 60 votes for passage. These votes tomorrow afternoon will be the first votes of the week. Following that stem cell debate, we will be considering the Water Resources Development Act. We hope to complete consideration of that bill on Wednesday afternoon.

ADJOURNMENT UNTIL 9:45 A.M. TOMORROW

Mr. FRIST. If there is no further business to come before the Senate, I ask unanimous consent that the Senate stand in adjournment under the previous order.

There being no objection, the Senate, at 8:43 p.m., adjourned until Tuesday, July 18, 2006, at 9:45 a.m.