

of America

# Congressional Record

Proceedings and debates of the  $110^{th}$  congress, first session

Vol. 153

WASHINGTON, WEDNESDAY, APRIL 11, 2007

## House of Representatives

The House was not in session today. Its next meeting will be held on Monday, April 16, 2007, at 2 p.m.

## Senate

Wednesday, April 11, 2007

The Senate met at 9:30 a.m. and was called to order by the Honorable BEN-JAMIN L. CARDIN, a Senator from the State of Maryland.

#### PRAYER

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

Let us pray. God of all life, we seek You in a world filled with challenges and problems. Prepare the Members of this body for the rigors of solving life's riddles today. Give them the wisdom to seek common opportunities, to accomplish Your divine will in our world. Make them instruments of Your love in the midst of hatred and strife. Teach them to spend and be spent for the good of others.

Lord, we intercede for them. Give them the spiritual tools for strength of thought, lightness of heart, sincerity of conviction, and clarity of purpose. Renew their commitment to You as their inspiration, their strength, their courage, their guide, and their Lord. We pray in Your omniscient Name.

Amen.

#### PLEDGE OF ALLEGIANCE

The Honorable Benjamin L. Cardin 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 read a communication to the

Senate from the President pro tempore (Mr. Byrd).

The legislative clerk read the following letter:

> U.S. SENATE. PRESIDENT PRO TEMPORE, Washington, DC, April 11, 2007.

To the Senate:

Under the provisions of rule I, paragraph 3, of the Standing Rules of the Senate, I hereby appoint the Honorable BENJAMIN L. CARDIN, a Senator from the State of Maryland, to perform the duties of the Chair.

ROBERT C. BYRD, President pro tempore.

Mr. CARDIN 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.

#### RECOGNITION OF THE REPUBLICAN LEADER

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

#### SCHEDULE

Mr. McCONNELL. Mr. President, I am told the majority leader will be out shortly. Let me just mention that the vote is likely to be moved from 5:45 to 5:55, for the information of all Senators. We have a structured order for debate for the balance of the morning and afternoon that has already been agreed to.

I yield the floor.

STEM CELL RESEARCH ENHANCEMENT ACT OF 2007

HOPE OFFERED THROUGH PRIN-CIPLED AND ETHICAL CELL RESEARCH ACT

The ACTING PRESIDENT pro tempore. Under the previous order, the Senate shall resume consideration of the following measures en bloc, which the clerk will report.

The legislative clerk read as follows: A bill (S. 5) to amend the Public Health Service Act to provide for human embryonic

stem cell research.

A bill (S. 30) to intensify research to derive human pluripotent stem cell lines.

The ACTING PRESIDENT pro tempore. Under the previous order, there is now 90 minutes of debate under the control of the Senator from Iowa, Mr. HARKIN, or his designee; 45 minutes under the control of the Senator from Minnesota, Mr. COLEMAN, and the Senator from Georgia, Mr. ISAKSON, and 45 minutes under the control of the Senator from Kansas, Mr. Brownback.

Who yields time? The Senator from Towa.

Mr. HARKIN. Mr. President, before I yield the floor to my colleague from Massachusetts, I just want to again bring people up to speed as to where we are in this debate. We will debate the two bills again today, S. 5 and S. 30, all day. We will have two votes later today at a time to be determined by the leaders but I think right prior to 6 p.m, the first vote occurring on S. 5, an up-ordown vote without amendments, and after that would be an up-or-down vote on S. 30, without amendments.

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



I intend to take some time this morning, after the Senator from Massachusetts speaks, again to outline the differences in the two bills, why S. 5 is a preferable bill and why that should be the bill we pass and send to the President for his signature and to point out that S. 5 is truly the compromise bill.

I want everyone to know that. There was some talk that S. 30 should be the compromise. Let me point out for clarity that last year we passed the stem cell research bill. There was another bill offered on the floor at the same time called the Specter-Santorum bill. That bill was supported by the Bush administration. Both bills passed, but the Specter-Santorum bill never made it through the House, and therefore the President was given the stem cell research bill. He vetoed it. He exercised the only veto of his administration to veto the stem cell bill.

In order to reach out a hand of compromise to the White House, we then incorporated in our bill, S. 5, today, the Specter-Santorum bill of last year, which is part of S. 5. So it seems to me we have gone halfway at least in reaching out to the White House to provide a compromise situation. Now the White House says they want to compromise further. They want something else. You can keep this up until there is nothing left of the stem cell bill.

I wish to make it very clear that we have compromised. We have come half-way. We incorporated the bill the President supported last year, so S. 5 really is the compromise measure we are sending to the President.

Mr. President, I yield 10 minutes or whatever time he requires to the Senator from Massachusetts.

The ACTING PRESIDENT pro tempore. The Senator from Massachusetts is recognized.

Mr. KENNEDY. Mr. President, I again thank my friend and colleague from Iowa, Senator Harkin, for his steadfast leadership in this extraordinarily important issue. We are full of hope this afternoon about the votes here in the Senate. I welcome just a few moments to express my own views about where I think we are and what I think the issues really are before the Senate.

For years, many of us have fought the same battle, the battle to give those suffering or injured every ethical option for new cures. For those speaking on the Senate floor, perhaps little changes from one year's debate to the next. We still speak of hope. We still speak of dreams denied when those hopes are dashed. We still speak of our belief that medical research should be valued.

But for those who listen to our debate, a year can make all the difference in the world. For a young man or woman bravely serving their country, a year can make the difference between vigorous active service and life in a wheelchair or a brain injury from a war wound. For someone fighting the

long and lonely battle against Alzheimer's disease, a year can make the memory of a beloved spouse or child a little fainter, a little more distant. For a patient battling against the tremors of Parkinson's disease, a year can mean more and more life activities fade out of reach.

If overturning the administration's unwarranted restrictions on stem cell research brings just one breakthrough, just one of the many that our best scientists believe are possible, that breakthrough can mean all the difference in the world for the patients who benefit. They cannot wait another year, or another day, for the help stem cell research can bring, and we should not wait in aiding them. We must take action here and now to end these unnecessary and harmful restrictions on life-saving research.

Continuing the administration's restrictions means the gap between what scientists could do and what they are allowed to do grows even wider.

Continuing the restrictions means our Nation's best scientists will go on having to waste precious time on pointless redtape and bureaucratic obstacles, time that should be spent on the search for new cures.

Continuing the restrictions means having to tell the patients who are counting on the promise of stem cell research: Wait just a little longer, dream just a little less, hope just a little more faintly.

The Senate must act, just as the House has already, to unlock the potential of stem cell research.

When the Congress has approved this needed legislation, we must turn our attention to 1600 Pennsylvania Avenue and urge the President of the United States not to veto the legislation that gives so much hope to so many.

Mr. President, just an extraordinary statement and comment from the Nation's leading scientist, Dr. Zerhouni, who is the head of the National Institutes of Health:

From my standpoint as NIH director, it is in the best interest of our scientists, our science, and our country that we find ways and the nation finds a way to allow the science to go full speed across adult and embryonic stem cells equally.

This is the statement of the head of the National Institutes of Health, an extraordinary scientist and researcher himself. It couldn't be said more clearly and more compellingly.

Finally, to remind ourselves what this really is all about—because it is basically about individuals—here are two extraordinary soldiers who served in Iraq. James Crossby, Winthrop, MA, is now in a wheelchair because of a damaged spinal column—others could have similar situations from their own States—and Sgt Jason Wittling, Marine Corps, injured in Karbala, again with spinal cord injuries. And that is one of the areas where there is such great hope.

Finally, one of the most moving letters I have received in the time I have been in the Senate was on this issue, from Lauren Stanford, from Plymouth, MA—15 years old. She wrote just after watching the President of the United States speak on this issue when he set up the regime on which we have all commented, which limits the great possibilities we have talked about during the course of this debate. This is what she said:

That night-

Referring to the night the President talked—

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 that breakthrough comes. How, I asked 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—and to give me back a life where I don't have to accept a constant, almost insane level of hourly medical intervention as "normal"? How could my nation do this to me?

That is the issue which Lauren Stanford has put before the Senate. Hopefully she will get an overwhelming, bipartisan answer this afternoon when the roll is called.

I yield the remainder of my time..

Mr. HARKIN. Mr. President, I yield 20 minutes to the Senator from North Dakota. How much time do we have remaining on our side?

The ACTING PRESIDENT pro tempore. Eighty minutes.

The Senator from North Dakota is recognized.

Mr. DORGAN. Mr. President, let me thank my colleague from Iowa for his leadership. I know he and many others in this Chamber have spent a great deal of time putting together a piece of legislation that is very important. I commend all of them.

There are times on the floor of the Senate where we are engaged in certain kinds of debates that cause folks to exhibit some temper and some concern and anxiety and impatience. This is one of those issues, however, that people feel very differently about. We will have people come to the floor on this issue of stem cell research who feel very strongly on both sides.

I respect all of those views. I respect everyone who comes to this floor with a position on this issue. But let me say, the position, as I see it, is a position that deals with life and death. This is very important. We deal with some issues on the floor of the Senate that are not so important, some that are very important. This ranks way up there in importance.

This is about life or death. It is about science, and it is about inquiry. It is about the search for unlocking the mysteries of what causes some of the dreaded diseases here on Earth and how we find cures for these dreaded diseases.

I chair a subcommittee that funds the science programs in our country, especially the science programs that have to do with, for example, energy and other related matters. I think science is fascinating. In my subcommittee, we had testimony a while ago about studying termites. We are studying the digestive system of termites because we are trying to understand why it is when a termite eats wood, the termite's digestive system produces hydrogen. How is it that a termite eats wood and produces hydrogen? Again, what an interesting scientific inquiry.

Well, we are engaged in scientific research in a whole range of issues. Especially important are the areas of scientific inquiry in this area of health. What is it that causes these terrible diseases? What kinds of approaches might give us a chance to cure some of these dreaded diseases?

Well, one of those issues is the issue of stem cell research. The language almost sounds like a foreign language in some of these discussions: somatic cell nuclear transfer, in vitro fertilization clinic, stem cell research. Those are not terms people use every day in their discussions, and yet the method of using those terms in this discussion is about life or death. It is about continuing scientific inquiry to try to unlock the mysteries of some of the most terrible diseases suffered by mankind.

We passed a piece of legislation last July that moved in this direction, and the President decided to veto it. Legislation that we hoped would perhaps give us an opportunity for treatment for things such as diabetes, cardiovascular disease, Parkinson's disease, ALS, Alzheimer's, birth defects, and spinal cord injuries.

We do not know, we cannot come to the floor of the Senate, we are not scientists to describe: Here is exactly what will happen as a result of this scientific inquiry. But we do know there are at least indications of great hope through this scientific inquiry. So the Stem Cell Research Enhancement Act, S. 5, which we now have on the floor of the Senate, would allow researchers to pursue all kinds of promising stem cell research, including embryonic stem cell research that is federally funded.

This legislation is controversial. The legislation deals, however, only with embryos that were created for fertility purposes in in vitro fertilization clinics that would otherwise be thrown away.

Now, in vitro is a relatively new term. It has been around for about 25 years. There are more than 1 million children walking this planet of ours who were born as a result of in vitro fertilization. We had testimony before one of my committees, the Commerce Committee, in which a witness said: None of them should have been born. None of these human beings are worthy. They should not have been born. It disagrees with in vitro fertilization. It is his right to do that. I do not support that.

I think the wonder of life of having 1 million people, 1 million people who

once were babies born to people, to couples who were not able to have children, is a wonderful gift. What a wonderful gift.

In vitro has been around for a quarter of a century. Because of the nature of the treatment, the infertility treatment in this process, more embryos are created than will ever be used. Rather than throwing these embryos in the waste, as hospital waste, or just waste from an in vitro clinic, it is much more life affirming, I think, to use them to better understand how we might treat devastating diseases such as diabetes, heart disease, Alzheimer's, and more.

I think Senator Jack Danforth, former Senator Jack Danforth, said it best. He is a colleague who served here with us in the Senate. He said this: It is not evident to many of us that cells in a petri dish are equivalent to identifiable people suffering from terrible diseases. I am and have always been pro-life. But the only explanation for legislators comparing cells in a petri dish to babies in the womb is the extension of religious doctrine into statutory law.

That is from former Senator Jack Danforth. What a profound statement. Do you equate the cells in a petri dish with someone suffering the ravages of Parkinson's disease or ALS? I do not think so. But that suggests somehow that those who oppose this legislation make that equation.

This legislation is not suggesting that anyone create an embryo for the purpose of research. It is saying those embryos that are about to be discarded, thrown away, thousands of them, because many more are produced than are to be used in in vitro clinics, rather than simply throwing them away, how about—with the consent of those from whom the embryos came—how about using them for a life-affirming purpose, for the needed research into unlocking the mysteries of these devastating diseases?

There are about 400,000 embryos frozen in these clinics. It is estimated 8,000 to 11,000 are scheduled to be discarded. It is interesting to me that no one has come to the floor of the Senate—that I am aware of—saying: Shut down these in vitro clinics. Shut them down. And, by the way, if someone tries to throw away an embryo, as they do every day, if they try to throw one away, have someone arrest them because you are throwing away a human being. It is, of course, not a human being. It has the potential to become a human being if it is implanted in a woman's uterus and grown to term. But it will not be implanted in a uterus. In fact, it will be discarded in a wastebasket.

The question my colleagues asks with S. 5 is: With consent, should that embryo, rather than simply be discarded, not be able to be used for this critically important research?

There are not enough stem cell lines available. We know that. My colleagues have made that case. The

President authorized some stem cell lines, but the authorized lines were never enough, and, in fact, they were contaminated, and it is just a plain fact that we are, at this point, interrupting the scientific inquiry. We are interrupting the opportunity to search for a cure for these diseases.

The embryos we are discussing on the floor of the Senate are going to be destroyed. That is certain. These embryos are going to be destroyed. Could they, should they be used to search for the cure for these dread diseases? I believe the answer is yes.

In my last campaign for the Senate, a curious commercial was run against me by my opponent. He ran a commercial which is a description of some who feel very strongly in opposition to this kind of legislation. Because I support stem cell research very strongly, my opponent ran a commercial of a man sitting around the fire, a kind of a campfire with about six or eight young children around him.

The commercial, I suppose, was meant to be humorous but about a serious subject. A young child, with eyes very big reflected in the glow of the fire, around that fireplace, said to the camp leader: Tell us a story. Tell us a scary story.

The man said: Well, there is a man named Byron—referring to me, I guess—a man named Byron. He has a plan. His plan is to implant into a mommy's uterus an egg that is fertilized, to become a fetus, so that they can harvest it during that pregnancy to use it for body parts later.

Little children around that campfire had eyes the size of dinner plates, from that scary story. Of course, that was a complete perversion of anything that remotely related to the truth, had no relationship to any of these issues.

No one is talking about implanting something in a uterus for the purpose of growing a fetus, for the purpose of harvesting body parts. That kind of unbelievable lie permeates all too often this discussion. That is not what this discussion is about.

Those of us in this Chamber—and there are many of us who have sat in the front row of a funeral—in my case of a daughter—and asked ourselves: Was there anything, was there anything more we could have done?

Is there anything that could have been done to prevent this disease? The answer, if we prevent this kind of research, the answer for everyone will be, yes, there is something we could have done. We could have continued the scientific inquiry and research, with carefully constructed guidelines, to see if we could unlock the mysteries of these diseases.

Let me show a picture of a young girl named Camille. In fact, I just saw Camille last month. This young girl has been very near death. She suffers from juvenile diabetes, the particularly acute condition of juvenile diabetes. That is Camille in the middle. I saw her mother last week in North Dakota. Camille was in Washington, DC, about

a month ago with her mother. I have known Camille for a long time, this young girl holding the clarinet in her middle school band. She has had a tough life and has lived on the edge, suffering a very significant disease, one that has cost too many, too many Americans, and especially too many young Americans, their lives.

But there are so many opportunities for research and for potential treatment. Let me give you a couple of examples. I was on an airplane one day with one of the researchers at NIH. The researchers at NIH do unbelievable work. He told me of the use of stem cells among a group of mice that had induced heart attacks, severe, debilitating heart attacks. They used stem cells to inject back into the heart muscle of those mice, and in a matter of a couple of weeks, a substantial percentage of those mice showed no evidence of having had a heart attack. A substantial portion had complete recovery.

Let me give you a couple of other examples. Researchers at Johns Hopkins report paralyzed rats have partially regained the use of previously immobile hind legs in studies in which scientists injected the rodents with stem cells from mice embryos.

As to potential to treat ALS, University of Wisconsin-Madison scientists have turned stem cells into nerve cells carrying messages between the body to the brain, offering possibilities for repairing damage caused by ALS.

Embryonic stem cell researchers at UCLA, AIDS Institute, were able to coax human embryonic stem cells into becoming mature immune T cells. I am not a scientist. All I can tell you is this: When we look, when we search, when we inquire, when we use America's best minds and research using good ethical guidelines, important guidelines, valuable guidelines, for scientific inquiry, we then find ways to unlock these mysteries. It is pretty unbelievable what we have done in a relatively short period of time.

We have a polio vaccine. We have cured smallpox. If you go to the hospital these days and take a look at the wondrous machines and the wonderful treatments and all of the things that we are doing, all of that is a matter of experimentation and developing experience from that experimentation.

The fact is, embryonic stem cell research has very broad and very strong bipartisan support. That bipartisan support is evident in the Senate. We have had Senators on both sides of the political aisle stand up in strong support of this legislation.

Now, let me use a chart that my colleague, Senator KENNEDY, just used because I believe it is so important.

Dr. Zerhouni, the Director of the National Institutes of Health, says—this is President Bush's own NIH Director: From my standpoint, it is clear today that American science will be better served, and the Nation will be better served, if we let our scientists have access to more stem cell lines.

That is from the President's own appointee to head the National Institutes of Health.

I know in political life, there are a lot of labels, pro-life, pro-choice, prothis, pro-that, anti-that. Let me observe, it is not, as some have suggested, a pro-life position to diminish or shut off critically needed research that will give people who have Parkinson's disease, diabetes, Lou Gehrig's disease, cardiovascular disease, cancer, any number of the things that kill so many Americans, it is not pro-life to diminish, restrict, or shut down research that gives people an opportunity for hope that there might be a cure for these diseases through this scientific inquiry and research. I recognize this is controversial. I respect someone who comes to the floor and says: Senator DORGAN, you are wrong about this. I respect that. This is not an easy issue. It is difficult for a lot of Members. I have not found it particularly difficult for me, because I believe those of us who have seen the ravagesand that should be most everybody in this Chamber-of these diseases to our loved ones, to friends, to so many Americans, this country would want us to do everything possible to give the tools to the best scientific minds and the best people in the medical field possible to unlock the mysteries of these diseases and find the cures. That is what this debate has been long about.

This debate, however, is even narrower than many we have had on this subject. This is about a single issue can we use embryos that are otherwise going to be discarded from in vitro fertilization clinics, that are otherwise simply going to become waste and destroyed, today, tomorrow, next week, next month, all year long, can we use, with the permission of the donors, those embryos for the scientific inquiry necessary for the extension of life and the curing of these dread diseases? Can we do that? The answer clearly ought to be yes, a loud, resounding yes coming from this Cham-

My colleague Senator HARKIN has been at this a long time. I have spoken on this a good number of times on the floor of the Senate myself. But it is not only Senator HARKIN; he is joined in a piece of legislation on a bipartisan basis by some very significant voices in the Senate, saying: Let's do this. Let's do this for this country. All of those who are suffering from these dread diseases deserve our help. They certainly don't deserve a Government that says: By the way, we understand your suffering, but we would prefer to choose to destroy and discard embryos from an in vitro fertilization clinic rather than extend the scientific research that might find a cure for what is killing you. That is not an acceptable answer from this Senate.

I thank Senator HARKIN for the time. I thank the many colleagues who have spoken in favor of this legislation and

offer the fervent hope—and I believe it exists—that we can pass this legislation with a very substantial margin within the next 24 hours.

I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from Iowa.

Mr. HARKIN. Mr. President, I thank my colleague from North Dakota for a very eloquent statement about what this is all about. I thank him for that. I thank him for his strong support of S. 5, our legislation to basically do what he encapsulated by saying this is about saving lives. That is what it is all about.

I ask unanimous consent that the previous order be modified to provide that the vote on passage of S. 5 occur at 5:55 p.m., that the Republican leader be recognized at 5:25 p.m., with the other provisions remaining in order; provided further, that the additional 10 minutes be equally divided between Senators HARKIN and COLEMAN, ISAKSON, and Senator BROWNBACK, or their designees.

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

The Senator from Georgia.

Mr. ISAKSON. Mr. President, I yield 10 minutes to the distinguished Senator from Minnesota, Mr. COLEMAN, who has worked countless hours on this very important subject.

The ACTING PRESIDENT pro tempore. The Senator from Minnesota.

Mr. COLEMAN. Mr. President, as I listened to my distinguished colleague from North Dakota, there is so much we agree on. What we agree on is we want to move science forward. We want to provide hope to those who are suffering from diseases and conditions with the possibility of stem cell research. The issue is a matter of Federal funding. What do we put Federal dollars into? Should there be any moral questions that are raised before we make that decision to put Federal dollars into something? That is a legitimate issue to discuss in the Senate. It is a reflection of the reality that in this country there is substantial disagreement about what is appropriate use of Federal dollars. This is not about shutting off research. It is not about stopping research. It is not about a lack of research going on. We still lead the world in embryonic stem cell research. With forty percent of all the publications that are offered in this country, 85 percent of the dollars from what we have provided, both embryonic and adult stem cell research, we are leading the world. That includes both Federal dollars and substantial private dollars.

When this issue arose early on, President Clinton had his own bioethics commission. They concluded the derivation of stem cells from embryos remaining following infertility treatments is justifiable only if no less morally problematic alternatives are available for advancing the research.

The reality is, we have reached a point where there are available alternatives, and we have an opportunity to pursue them. There is a political reality as well; that is, that S. 5 will pass. The President has said he is going to veto it because of his concern on Federal funding for the destruction of human embryos. As a result, from January 1 of this year, there is going to be no more research going into embryonic stem cell research tomorrow than there is today, unless we pass S. 30.

S. 5 is going to be vetoed. If you care about making more than a political statement but actually talking to the parents of kids with juvenile diabetes or adults with Parkinson's, whatever, the reality is, if you care about more than \$132 million going into human embryonic stem cell research, you have to support S. 30. That is the political reality

What S. 30 offers, in addition, is the opportunity to have a greater sense of national unity on this issue, to get beyond the culture wars, to get beyond the political division. That is what the research should be about.

Senator ISAKSON has talked about dead embryo research. I hope the description was clear enough. There was some confusion from some of my colleagues on the other side of this issue. Let me explain a little biology 101. The issue here is, can we produce pluripotent cells—embryonic cells are pluripotent—the capacity for the cell to give rise to many other different types of cells. There are adult stem cells out of bone marrow, out of blood type. Now we are looking at placental and embryonic. But there appears to be, and science will tell you, the ability of embryonic pluripotent cells.

The difference here is between pluripotent and totipotent, the ability to form an embryo, the beginning of life. Senator Isakson has talked about dead embryo research where the embryos have the ability to form pluripotent cells, those cells that have the capacity to differentiate into other types of cells. That is an opportunity without crossing a moral line. All of America can come together and say: This is a good thing, putting money into stem cell research and not dividing the Nation.

There is the process called alternate nuclear transfer. This is a process that if you look at natural fertilization, you get the sperm and the fertilized egg. You get an embryo. Under SCNT—that is the way Dolly the sheep was produced, a type of cloning—you get the egg cell. You take some adult genetic material with all the DNA, and you put that in an enucleated egg where the center is cut out. You get that fertilized egg and, boom, you get an embryo. Science is telling us today that you can, with all the natural nuclear transfer, with a range of things, what you can do is, you can take that egg, you can enucleate it, cut out the center, put in adult material. But before you transfer it, you turn off a little code. In the end, you don't get an embryo but you get this intercell mass that has the capacity

pluripotency, not an embryo but the ability to differentiate cell types and all of the elasticity and the hope and possibility you get from embryonic stem cell research without crossing a moral line.

Is that what we should be doing? This is not shutting off science. Some have said this is a diversion. Certainly it is not a diversion in the practical sense, because right now there will be, if S. 5 passes, no additional funding for embryonic stem cell research. But if S. 30 passes, we can open the world to these possibilities and additional Federal dollars. The reality is, with S. 5 there are questions that are unanswered. I was just talking about those lines that are in vitro fertilization that some say could be thrown away. What is to stop people from simply producing more, knowing the research money is going to be there? The reality is, those cells that are in those IVF clinics have limited genetic lines. If you are of a certain minority or other groups, you are not as represented in those as you are in the population. But if we look at things such as alternate nuclear transfer, you can have an unending supply of genetic material so you can deal with specific gene types and deal with specific illnesses

S. 30 also includes a provision to set up a stem cell bank for amniotic and placental stem cells, the idea that we could have 100,000 tissue samples and, by virtue of that, cover all the genetic types there are, which you do not get with what we have now under S. 5.

The bottom line in all of this is, there is a debate in this country, but it is not over moving the science forward. The debate is not over whether there should be hope. There is hope. It is important to understand some of the realities, the reality of what we are talking about today. Yesterday one of my colleagues, the Senator from Iowa, was talking about some of the work being done with dead embryos, perhaps some of the work being done with alternate nuclear transfer, and saying this could take a decade. The reality is the work being done today in embryonic stem cell research at best may take decades. So the question then ultimately is, can we as a nation decide on a process that does respect a moral line, that does say: We are not going to provide Federal funding for the destruction of a human embryo, but because we have the possibility, we should explore the possibility of doing research that propluripotency without vides for totipotency, without the creation of an embryo.

We are going to have more difficult questions as we move forward. As we look at the issue of stem cell research, one of the realities we are looking at is, if they haven't developed enough, what about the idea of developing limbs and other things. Should we let the embryo grow longer? Where do you draw that line? There is a whole range of other issues we are going to have to be debating as we kind of move along

this process with the great advances of scientists. For those of us who support S. 30, what we are saying is we have a path, we have an opportunity to do it with a sense of unity, with a sense of where we provide a moral line, a line, by the way, that has been part of our statutes for a long time. We don't provide Federal funding for the destruction of human embryos. That is what this is about. It is not about size. The reality about size is that you could fit some of these on the head of a pin. But it is about that basic moral line which has been part of our law for a long time.

So this approach we have in S. 5 is an approach that is pro-science and proresearch and pro-hope. It is the only practical one that in the end, if it passes, will result in more funding for embryonic stem cell research tomorrow than we have today.

My fear is what happened last year will happen this year. This body passed both a version of S. 5 as well as a version that provided for some alternatives. It was the Specter-Santorum bill. S. 30 provides for more than that bill. It will provide for, in fact, new dollars going to research that isn't funded today.

What the House chose to say is it is all or nothing. If you don't pass the S. 5 version, the Castle bill, then we are not going to even put in any funding. We are not going to do anything. We are not going to allow any alternatives to be pursued. That would be a shame. As I used to tell our kids, it is akin to cutting off your nose to spite your face. That would be a shame.

I hope my colleagues on both sides of the aisle—wherever they stand on this issue they can be comfortable supporting S. 30; they can be comfortable supporting a bill that provides for the moral line but at the same time opens up the opportunity for additional research. I urge its support.

I yield the floor.

Mr. ISAKSON. Mr. President, I vield myself 3 minutes. I wish to commend Senator Coleman and Senator Dorgan for the two speeches that have preceded my remarks because both of them eloquently expressed what is, in fact, the case; that is, that everybody in this Chamber, including the distinguished Senator from Iowa and myself. wants more hope for Americans who suffer. Both bills offer a path to do that. We may have our differences on those paths but no difference in the hope that it offers, I commend Senator COLEMAN for his very articulate explanation of that.

I join with the Senator from Iowa, I think, in encouraging our colleagues who may be listening, we have some time this morning that can be filled. If we have Members who want to come to the floor and speak, they should contact the cloakroom and let us know, from both parties and from both sides of every issue, because we want to fill every minute.

With that, I reserve the remainder of my time.

Mr. HARKIN. Mr. President, I concur with my friend from Georgia in that if people want to speak, they should come over now. We have a list of speakers, and I think Senator Isakson does, too, for later on in the day. I can only say to Senators, as the clock ticks, your time is going to get squeezed more and more. So that if you are scheduled to speak for, say, 10 minutes this afternoon, you may get squeezed to 3 minutes or 2 minutes or 1 minute. So if you would like to have your say about this embryonic stem cell bill. I would say now would be the time to come over. I say to all the Senators who may be in their offices right now, call the cloakrooms, and we will make the time available right now.

Mr. President, what is the situation, might I ask, right now with the time existing?

The ACTING PRESIDENT pro tempore. The Senator from Iowa has 58 minutes, the Senator from Georgia has 33 minutes, and the Senator from Kansas has 45 minutes.

Mr. ISAKSON. It is my understanding, if the Senator from Iowa will yield, that the Senator from Kansas is in the cloakroom and about to take a significant portion of that. That is my understanding. That would be a significant portion of his time, not yours and mine.

The ACTING PRESIDENT pro tempore. The Senator from Kansas is recognized.

Mr. BROWNBACK. Mr. President, I thank my colleagues for the debate, and a good one, we are having on a very important topic. The differences in this debate remind me, though, of a proverb that says there is a way that seems right to a man, but its end is the way of death. Unfortunately, if we research on young human life, it puts that young human life to death and at the same time does not produce the results for cures that we had hoped would be taking place.

I respect my colleagues who are on another side of this issue who feel as though we should research on young human life. I do not feel that is right or ethical. I will discuss that aspect here today with some of the time I have, and I also wish to discuss the exciting breaking developments that are taking place even today on the adult stem cell area that continues to produce treatments for humans.

I ask unanimous consent to enter into the RECORD after my statement an article from the Chicago Tribune online edition.

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

(See exhibit 1.)

Mr. BROWNBACK. It is dated today. It is about the latest diabetes treatments that have been taking place. A report came out from Northwestern University in the Chicago area about a new diabetes treatment developed at Northwestern University which has allowed some patients to stop taking in-

sulin for more than 2 years. They have raised questions about this process. It was done in Brazil rather than in the United States. Thirteen of the fifteen patients in this adult stem cell study went off insulin for at least 6 months, as they note, prompting cautious excitement from some researchers who have seen the results. Dr. Gordon C. Weir, a diabetes researcher and head of a transplantation program at Harvard's Medical School, Joslin Diabetes Center, said this:

Their results look better than anything I have seen so far.

What an exciting development in the adult stem cell research area and field.

Questions have been raised about this trial and some of it taking place in Brazil. I have raised questions such as why is it we are seeing these breakthroughs taking place and we are having patients from the United States go to Bangkok, go to Portugal, and these treatments are being developed in Brazil rather than in the United States. I believe if we would put our funding here that we are using in the embryonic field, the \$613 million that has produced no human treatments to date but has produced a lot of tumors in live animals, if we would put that in the adult field where we are getting results—we have invested in the adult field, but what if that \$613 million were in the adult field today? Would these breakthroughs be happening here instead of Brazil, or by U.S. researchers in Brazil? Why aren't they being done in the United States? I hope my colleagues will look at that issue.

There is another point I wish to raise with my colleagues at this point in time. Let's presume they are successful in embryonic stem cell research. Let's presume, in a decade or 20 years, they are successful with embryonic stem cell research. That is going to lead to the necessity of us moving forward with human cloning because in the development of this technology, embryonic stem cell technology, if you are using an embryo and the genetic material doesn't match up, there is going to be rejection by my body or by some body. That is going to happen. That is going to take place. So we are going to have to move into human cloning. We are going to have to harvest women's eggs, develop human clones to develop the correct type of embryonic stem cells to use in an individual so that there will be a genetic match. I think we ought to talk about that, if we continue in the progression we are on.

I acknowledge that human cloning is not specifically addressed in S. 5, the embryonic stem cell bill. However, if embryonic stem cells can ever overcome their tumor-forming tendency—and that is a huge if—and they are used in humans, human cloning will be used in order to avoid immune rejection problems. Therefore, as is hopefully evident, the issue of human cloning needs to be raised.

To this end, I recently introduced the bipartisan Brownback-Landrieu Human

Cloning Prohibition Act, which we introduced before the break with 26 other Senators who are cosponsoring this legislation.

This legislation would reaffirm that the United States places tremendous value on the dignity of each and every human person: from the young human embryo to vulnerable women who would be coerced into donating their eggs, at potentially great risk to their health. The legislation would make clear that the cloning of human persons is not something we as a society will accept.

The Brownback-Landrieu Human Cloning Prohibition Act has been endorsed by the President of the United States. It will bring the United States into conformity with the United Nations, whose General Assembly called on all member states "to prohibit all forms of human cloning." It did not reproductive. It said "all forms of human cloning" by a strong 84-to-34 margin vote in the U.N.

The problem with cloning human beings is that it violates human dignity on all sorts of levels. Cloning transgresses our heritage's most sacred values about what is good and true and beautiful. Western civilization indeed is built on the tenet that every human life has a measurable value. Human beings are ends in themselves. It is wrong to use any person as a means to an end. Upon this principle our laws are founded, and without it, laws have little basis. Human cloning—for whatever purpose—is wrong because it turns humans into commodities or spare parts.

In recent debate, human cloning has been referred to as "therapeutic cloning," "research cloning" or simply SCNT. These are presented as contrasts to "reproductive cloning." It should be noted that "therapeutic," "research," and "reproductive" are merely adjectives to describe what is done with the cloned human. SCNT, or somatic cell nuclear transfer, is the scientific description of the cloning process.

#### A CRS report for Congress notes:

A human embryo produced via cloning involves the process called somatic cell nuclear transfer (SCNT). In SCNT, the nucleus of an egg is removed and replaced by the nucleus from a mature body cell, such as a skin cell. In cloning, the embryo is created without sexual reproduction: There is no joining of egg and sperm.

Stem cell pioneer James Thomson has said:

If you create an embryo by SCNT cloning and you give it to somebody who didn't know where it came from, there would be no test you would do on that embryo to say where it came from. It is what it is. If you try to define it away, you are being disingenuous.

With "reproductive" and "therapeutic" cloning, human beings are turned into commodities or spare parts to be dissected in the laboratory, with the claim that someday they may be

administered to other humans to provide a treatment. Treatments are certainly praiseworthy but not at the expense of the destruction of other members of the human family. We all want to treat people as people, and people should be treated as people. I want to find a cure for cancer. However, it is wrong to turn humans into a means to an end.

It is also wrong to exploit women for their eggs. Here I want to develop this thought about what will take place if human embryonic stem cell research is developed, is successful. We have to develop clones that meet the genetic type of the individual seeking the treatment. You are going to have to get eggs from somewhere and you are going to have to get these from people—from women. Also, it is wrong to exploit women for their eggs, and that is the other side of the human cloning story. SCNT cloning, as proposed by proponents of the technique, would require millions of human eggs. In all likelihood, poor and disadvantaged women would be particularly vulnerable to exploitation via financial incentives for donation. This is troubling because retrieving such eggs violates the dignity of a woman and may cause serious harm to her health.

Brownback-Landrieu The Cloning Prohibition Act is the only effective ban on human cloning. Any other ban is one that is allowing therapeutic cloning and even encouraging it but certainly not banning human cloning. Others would regulate what could be done with the human clones, normally requiring its destruction, but they do nothing to prevent the process of human cloning, which violates human dignity on many levels. We should take a stand against turning young human beings into commodities. We should not destroy human life for research purposes.

I will not be voting for cloning today, and I will continue to look for an opportunity to bring this legislation forward as an amendment to other bills. Again, I point out to my colleagues that is the route we are on with this—to promote human cloning so there will be genetic matches in the human embryonic stem cell procedures. I do not believe that is the path we should follow.

I want to address some of the thoughts several colleagues have brought up about what it is we are doing. Human embryos are being destroyed for research purposes and for stem cells. Some have referred to this as "potential life," which strikes me as a bit like the debate we had on the issue of slavery, where we deemed a person three-fifths of a person at one point in time. That is a complete legal fiction. You are either a person or you are not. You are either life or you are not life. It is not potential life. Nowhere in the scientific literature is there a description of potential life. The embryo is a species at that stage of development in the life cycle. That is the scientific definition and information—the embryo is a species at that stage of development in the life cycle. We all have a life cycle. The embryo is the species at that stage. That is common sense. The embryo stage is a development stage, but it remains human life, not potential human life. It is alive and it is a life.

The embryo would continue along the life cycle continuum if we were not interfering in its normal development by keeping it in a freezer and destroying it for experiments. I think it is important that we not engage in wishful thinking or trying to define this away. A human embryo is a human life. We should not say it is a potential life. That is not a definition for what human life is. I noted in the debate earlier—I want to make this point at this time—that it appears as if at the current research rate it would take 100 or more human eggs per cloned embryo-100 you are going to have to harvest from young women to get this process to move forward with human cloning.

Mr. President, I will reserve the remainder of my time at this point. I yield the floor.

#### EXHIBIT 1

[From the Chicago Tribune, Apr. 11, 2007] HOPE, RISK IN DIABETES TRIAL (By Jeremy Manier)

A new diabetes treatment developed at Northwestern University has allowed some patients to stop taking insulin for more than two years, but it also has spurred ethical objections from researchers who say the trial put Brazilian children at unnecessary risk.

Thirteen of the 15 patients in a stem-cell study went off insulin for at least six months, prompting cautious excitement from some researchers who have seen the results, to be published Wednesday in the Journal of the American Medical Association. All of the patients had the less common form of diabetes called early-onset, or Type 1 diabetes, which normally requires close blood-glucose monitoring and long-term use of insulin injections.

The new approach, designed by Dr. Richard Burt of Northwestern, enlists a patient's own stem cells in an effort to halt the immune system's destruction of insulin-producing "beta" cells in the pancreas—the root cause of Type 1 diabetes.

Burt drafted the protocol, and doctors at the University of Sao Paulo in Brazil carried it out. The patients, some as young as 14, got intense drug treatment that wiped out their immune systems. They then received injections of their own blood stem cells in hopes of renewing the immune system without the trait that makes it target beta cells.

"Their results look better than anything I've seen so far," said Dr. Gordon C. Weir, a diabetes researcher and head of a transplantation program at Harvard Medical School's Joslin Diabetes Center.

Though small in scale, the study is significant as the first attempt to treat diabetes using a "cell-based" therapy, researchers said. Such treatments may become more common as scientists look beyond insulin and try approaches using adult stem cells or embryonic stem cells, which could directly replace the tissue damaged in diabetes. Type 1 diabetes accounts for 5 to 10 percent of the 21 million diabetes cases in the U.S.; the rest suffer from Type 2 diabetes, which is linked with obesity. "These are promising results that suggest

"These are promising results that suggest we should go further," said Burt, a specialist in immunesuppression therapy. Yet some experts doubted the protocol could have been approved in this country. Weir, like several other scientists reached for this report, said the risks of Burt's technique are high enough that he probably would not have approved the experiment if he had been responsible for reviewing it.

The problem is this: Although early-onset diabetes can have dire long-term effects such as blindness and heart disease, many patients succeed in managing their condition with insulin and lead normal lives for decades. That makes it harder to justify the risks of stem cell transplantation, which Burt has used before on diseases with few other treatment options, such as lupus or multiple sclerosis.

The immune suppression used in stem-cell transplants can cause infections and even death. None of the patients in the Brazilian study died, though one had severe pneumonia that required supplementary oxygen.

Several experts said the risks could have made it difficult to get the study past American institutional review boards—groups responsible for ensuring that research is safe and ethical.

"This is an incredibly invasive therapy to be tried on children without knowing if anyone will benefit from it," said Dr. Lainie Ross, associate director of the University of Chicago's MacLean Center for Clinical Medical Ethics.

Ross said she would not have authorized such a study unless it enrolled only adults. She said research ethics guidelines state that risky experimental therapies should not be used on children unless it's impossible to test them on adult subjects—and in this case, adult diabetes patients were available.

In fact, Burt said his original protocol included a cutoff age of 18, but a Brazilian review board changed it to allow younger patients in the study. Ages of the subjects ranged from 14 to 31, with eight participants younger than 18.

Burt said the study was done in Brazil not to avoid the need for an American review board, but because he couldn't find an American diabetes expert interested in pursuing his idea. He said Northwestern review board officials told him his collaboration with the Brazilian team was fine so long as he was not directly involved in patient care. The Juvenile Diabetes Research Foundation cautiously embraced the technique while pointing out the need for further study. A statement from the group said that in the trial, "the immune system was apparently reset or retrained, and after the procedure, the symptoms of diabetes were reversed."

But the statement also noted that because of the risks, "it is not clear whether this trial would be approved in the U.S."

One weakness of the study was its lack of a control group, said Dr. Mark Anderson of the University of California at San Francisco's Diabetes Center. Without that, it's impossible to quantify how much improvement the therapy offered. One scientist interested in taking the next step is Dr. Jay Skyler of the University of Miami, who wrote an accompanying editorial in JAMA.

"I don't think [this study] would have gotten approval at our institution out of the box." Skyler said. "But now that it's worked I would be championing it. I want to be one of the sites that's doing it."

The ACTING PRESIDENT pro tempore. Who yields time?

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

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

The assistant legislative clerk proceeded to call the roll.

Mr. KERRY. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

Who yields time?

Mr. HARKIN. Mr. President, I yield 10 minutes to the Senator from Massachusetts.

The ACTING PRESIDENT pro tempore. The Senator from Massachusetts is recognized.

Mr. KERRY. Mr. President, I thank the Chair and the distinguished manager. I thank him also for his leadership on this issue, which has been long and steady.

Last summer, I had the privilege of coming to the floor to speak on this issue, accompanied by a summer intern from my office, a college student from Massachusetts named Beth Colby. Beth was paralyzed from the chest down in a car accident when she was 14 years old. She came to Washington, like so many women, and so many young folks, period, to learn about Government. She also came here with a determination to try to fight for the scientific research that holds untold promise for her and for tens of millions of Americans. She wanted to be, as she put it to me in asking to come to the floor during the debate on stem cell research, a face Senators can see so they can see what they are voting for.

The truth is there are people like that in every single community in our country. They are all hoping to benefit one day from lifesaving stem cell therapy. Grandparents with Parkinson's disease have that hope. Soldiers coming back from Iraq who are crippled by a roadside bomb have that hope. Children who, decades from now, will suffer from a disease we are not aware of yet, or that we know well, hope stem cell research might be able to cure them.

Since we first heard about stem cell research several years ago, the country has been on a journey together. We have discussed it. A lot of folks have sat around their kitchen tables and in their living rooms and have talked about stem cell research. Everybody has debated it. We have learned a lot more about the promise and the peril of stem cell research. At first, our natural reaction was to temper our excitement with a well-founded fear that this technology perhaps posed insurmountable ethical hurdles. The President himself deliberated. He appointed a task force. He studied and debated the fine points with teams of bioethicists. He reached what he felt was a reasonable compromise. In August of 2001, he announced to the American people that Federal funds would be used only for research on a few lines of stem cells that were already harvested. Back then, he said stem cells "offer both great promise and great peril. I have decided we must proceed with great care."

That was the President speaking. Since then, America's understanding of

this issue has evolved. We have learned that the lines available for research are far less useful than we had initially hoped. We learned the technology is as promising as we dreamed it might be. We have come to understand that empacing stem cell research does not condemn us to the slippery slope of human cloning.

Since the President's decision, stem cell research funded by the private sector and by the States has gone ahead across the country. But it has gone ahead slower than many of us might like in the absence of crucial Federal funding—fast enough to fill the pages of major medical journals with exciting new discoveries. But this research has taken place on a large enough scale at our most important educational research institutions to be able to tell us it addresses our major fears. What in the summer of 2001 might have seemed a well-founded suspicion has completely proven to be unfounded. As Newt Gingrich told me yesterday, after reversing himself and acknowledging the threat posed by global warming is both urgent and real, serious legislators change their stances over time. That is permissible. That is the product of thinking, the product of additional information and additional input.

Look at the Senate. Republicans such as John McCain, former majority leader Bill Frist, the Senator from Utah, Orrin Hatch, who is on the floor now, have looked carefully at the scientific facts and have searched their own consciousness. They have all reached the same conclusion: Opposing stem cell research is the opposite of a pro-life policy.

Last summer, 63 Senators, Republicans and Democrats alike, and 235 House Members voted in favor of stem cell research. That was a responsible bill, a consensus bill. It was designed specifically to address the concerns of lawmakers who are worried about the bioethics—and appropriately worried, I might add. It is difficult to get 63 Senators to agree on anything more controversial than the sort of standard fare of America, and it is especially difficult on a polarizing, emotionally charged issue. But we came together as a Senate. We hammered out our differences and they came together in the House, and we arrived at a smart, thoughtful, sensitive piece of legislation that reflected a consensus and respected our collective conscience. When we did so, we were confronted by a President who promised to proceed with great care, whose commitment to deliberation has calcified into a stubborn refusal to confront reality or reengage in a changing debate.

America has evolved on this issue, but the President has stood still. That is why over an overwhelming bipartisan Senate majority, the President finally dusted off the veto pen and offered up the first and, to date, the only veto of his entire Presidency. The President has signed good and bad leg-

islation—torture bills, pork, giveaways to oil companies, and tax cuts for millionaires. But when it came to a strong emerging national consensus on an issue that brings hope to families across the country, the President chose to shut down the debate and block Federal funding for scientific research.

Make no mistake, this is a personal issue—deeply personal for each of us in this Chamber, and for the President. I understand that. I am confident when the President made his decision about stem cell research over 6 years ago, he searched his mind and his heart, as all of us who care passionately about this issue have done. If he vetoes stem cell research again, that will send a message that this country no longer intends to be the global leader in scientific knowledge and discovery. It would send a message to Americans suffering from Parkinson's, spinal injuries, and countless ailments that their well-being is not important to us. We are telling these people we could do more to cure you, but we choose not to. We are telling them help is not on the

The current policy is eroding our national advantage on stem cell research. It is undermining the hopes and dreams of millions of Americans. We are tying our scientists' hands behind their backs and holding them back from the possibilities of the future.

We need a Federal policy that builds on the advances being made in our States and our universities, in our private foundations, and in our research centers, all of which have proceeded in a thoughtful and commonsense way to the ethics concerned in this issue. The research now is already showing tremendous promise. In my State of Massachusetts, some of the best scientists in the world are working at the Whitehead Institute for Biomedical Research at MIT and the Harvard Stem Cell Institute. We are still in the early stages of this line of research, but there is here the kind of discovery that we are already making.

Let me explain. The Harvard Stem Cell Institute identified cells that they call "master cardiac" stem cells, which is a single cell type that gives rise to the major cellular building blocks of the mammalian heart. That discovery rewrote the story of cardiac development and contributed a significant building block toward what could become revolutionary new treatments for heart disease. We are already seeing cures for diseases in our labs.

At the Whitehead Institute, a leading stem cell researcher and his team used stem cell therapy to cure a mouse suffering from an immune deficiency disease. As you can see, the research is still in the early stages, so we cannot say what the immediate results are going to be for humans. But, rest assured, today's breakthroughs in mice have often become tomorrow's cures for humans.

Now we can all hope that alternatives to embryonic stem cell research hold similar promise. But you

cannot wish away what our scientists are telling us. Research on embryonic stem cells is incredibly promising, pivotal to this new field, and not easily sidestepped. Nobel Prize winners past and present, and most likely future, believe this is the future biology of medical science.

People of good will and good sense can resolve these complicated ethical issues without stopping lifesaving research. The country has led the world in revolutionary discoveries, with our breakthroughs and our beliefs moving ahead together, symbiotically. Senate passage of this bill with a veto-proof majority can put us, again, on that path.

We are giving this administration yet another chance to consider a misjudgment with profound consequences. We are working to create a framework for ethical, federally funded research. Like the bill passed last summer, this legislation provides important ethical safeguards by extending federally funded research only to embryos that are, one, donated by in vitro fertilization clinics; two, created specifically for fertility treatment, not for research; three, in excess of treatment needs and would otherwise be discarded; and four, donated by treatment-seeking individuals who provided written, informed consent and were not offered financial inducements. I cannot think of any way to more effectively and thoughtfully address the ethical issues that are concerned here.

Mr. President, I ask unanimous consent for 2 more minutes. Is that possible?

The PRESIDING OFFICER (Mr. Brown). Without objection, it is so ordered.

Mr. KERRY. Mr. President, what may not have been clear to us initially—and it should be clear now—it just doesn't make sense to allow in vitro fertilization to create millions of embryos that will never become human beings and then prohibit science from using them to cure sick people and relieve human suffering but to simply discard those embryos.

Valuing the mysteries and sacredness of human life is something all of us should do. It underlies every religion on this planet. Stem cell advocates are no different. Here in the Senate and across this country, Americans are approaching an ethical consensus which bans human cloning, which is thoughtful about the use of embryos that would be discarded, and which respects life and also respects that life by protecting stem cell research.

We don't have the luxury of patience, not when 100 million Americans suffer from illnesses that might one day be cured with stem cell therapy, not when more than 3,000 Americans die from diseases every day that one day may be made treatable by stem cell research.

If we can get 67 votes out of 100 Senators—4 more than we had last summer—then we can send the President a veto-proof message. Last summer, the

Senate sent the administration a strong message by passing a bill that would responsibly fund this research, and the American people showed their agreement last November when they sent an even larger majority back to Washington to vote in greater numbers to support lifesaving scientific research. Sixty-three votes are not enough. We hope we receive more today so that we can open the doors to this promising future.

I thank the Chair.

The PRESIDING OFFICER. Who yields time?

Mr. ISAKSON. Mr. President, I yield 10 minutes to the distinguished Senator from Tennessee, Mr. CORKER.

The PRESIDING OFFICER. The Senator from Tennessee is recognized

Mr. CORKER. Mr. President, I will probably take more like 5 minutes, if the Senator from Georgia wants to allocate the time elsewhere.

Mr. President, I thank you for the opportunity to speak today. As you can tell by my location in the Senate, I am new to the Senate. I spent a great deal of time, as many people did, over the course of the last 2 years visiting with citizens in our State. I think there is nothing that touches us in the public arena more than seeing people who have needs and trying to address those needs. That is the reason many of us are in the public arena...

Few of us are untouched by the many illnesses that plague Americans. I know all of us have people who have diseases, such as diabetes, various forms of cancers, heart disease, Alzheimer's. I know my own family has been touched by Alzheimer's disease. My father has it. All of us are aware of issues that are affecting human beings. We also want to see breakthroughs take place.

It is amazing, the breakthroughs that are taking place today with stem cell research—research from adult stem cells, research that is taking place from matter from amniotic fluids, research that is taking place from cord blood matter. So there are amazing cures taking place in America today with this research, and I doubt there is a Senator in this body—not a Senator in this body—who doesn't support stem cell research. The issue really comes down to embryonic stem cell research.

Mr. President, I want you to know that over the course of the last 2 years. I spent a tremendous amount of time looking into this issue, reading white papers, talking to researchers all across America, visiting embryonic adoption centers where embryos were actually being adopted and creating human beings. Because of this issue, because of the ethical divide this issue seems to create for so many Americans, a tremendous amount of time was put forth by myself and my staff, but myself firsthand, to reach a conclusion about this issue and to be able to communicate that to Tennesseans and Americans.

There are four points I have learned about this issue. The Senator from Massachusetts just spoke. He and I have a very different view on this issue. What I have learned about this issue is that honorable people can disagree. Honorable people who truly want to see cures take place for Americans and for people all across the world can disagree as to their viewpoint as it relates to embryonic stem cell research. Again, all of us support adult stem cell research.

The second point I have learned is that there are tremendous breakthroughs, as I have already mentioned, regarding research that is taking place with adult stem cells, cord blood stem cells, and amniotic fluids have matter that is creating stem cells. Tremendous cures are being created with these stem cells.

The third point is that science is going to absolutely outpace our ability to deal with this issue. There is no question that even if we pass legislation today, science is going to continue to outpace us as it relates to our ability to deal with this fascinating area of science. But I also believe science and these breakthroughs are going to allow us to continue to achieve these cures for Americans and for people all across this world without creating this ethical divide of destroying human embryos.

So I am here to strongly support and applaud the Senator from Georgia and the Senator from Minnesota who have put forth the HOPE Act. I am here to strongly support S. 30, which allows additional research to take place on stem cells without breaking that divide. I am also here to voice opposition to S. 5, which actually uses Federal dollars to destroy human embryos.

Mr. President, I yield back my time. The PRESIDING OFFICER. Who yields time? The Senator from Iowa is recognized.

Mr. HARKIN. Mr. President, first, I say to my friend from Tennessee, there is not one dime in S. 5 that would be permitted to be used for the destruction of embryos—not one dime. That is prohibited by the Dickey-Wicker amendment. This bill does not override that amendment. Not one dime in this bill can ever be used for the destruction of any embryos. I just want to make that very clear.

Mr. President, I yield 20 minutes to my colleague, someone with whom I have worked on health issues now going back—let me think about this—almost 13 years, I guess, back to 1993, someone with whom I have worked very closely on a number of health issues and for whom I have a great deal of respect for his approach on this issue and so many others. I yield 20 minutes to the distinguished Senator from Utah, Mr. HATCH.

The PRESIDING OFFICER. The Senator from Utah is recognized.

Mr. HATCH. Mr. President, I thank my colleague from Iowa. I appreciate the arguments he has been making about this issue. Mr. President, I rise to speak in support of embryonic stem cell research.

First, I plan to vote in favor of both bills that will be considered today, S. 5, the Stem Cell Research Enhancement Act of 2007, and S. 30, the Hope Offered through Principled and Ethical Stem Cell Research Act.

I call upon my colleagues to vote in favor of and pass these bills.

And I call upon the President to sign both bills into law.

However, let me make one point perfectly clear while I will be voting for both S. 5 and S. 30, I believe that S. 5 is clearly preferable to S. 30. S. 5 permits Federal funding for embryonic stem cell research; S. 30 does not.

I want everyone to understand that the votes we cast today could tomorrow mean the difference between a healthy life and one of misery for many, many Americans.

I commend my good friends and colleagues for their hard work on S. 5—first, Senator ARLEN SPECTER and Senator TOM HARKIN, who held over 15 bipartisan hearings on embryonic stem cell research over the last several years.

Next, I recognize Senators Kennedy, SMITH and Feinstein for their courageous leadership and commitment to this important issue.

And, in the House of Representatives, Representatives MIKE CASTLE and DIANA DEGETTE must be singled out for their principled leadership on the companion embryonic stem cell research measure, which was approved by a strong bipartisan vote.

Each day, the Congress must address consequential events—and even momentous threats to our Nation—but it is not often that we have the opportunity to cast a vote that is filled with as much hope and promise for the future as the embryonic stem cell research bill we are considering today.

It reminds me of our country's quest for space many years ago, which was no more than a dream when the effort began. Yet what was only a vision when it was conceived, yielded wonders beyond anything we could have imagined.

The American space program has spawned many important new advances. When I think of space exploration, I ponder the gift of global positioning technology. I consider the weather mapping that we depend upon to warn us of impending natural disasters. I marvel at the revolution of instantaneous worldwide communication.

As a science, embryonic stem cell research today is where the space program was when we first dreamed of it. When I think of embryonic stem cell research, I imagine diabetics without insulin pumps. I dream of patients with Parkinson's Disease who sprint rather than shuffle. I conceive of patients with spinal cord injury who stand up and walk again.

I think of 16-year-old Tori Schmanski of Orem, UT, who sustained a severe

brain injury. I imagine Tori going back to the snowboarding and dancing that she loved. Tori Schmanski's parents flew her to China for stem-cell therapy. Her father said something that struck me. He said, "Our hope is that next time we do this, we won't have to go to China." America has long been the world leader in ethical biomedical research, and we should not lightly cede this ground.

When I consider the potential of stem cell research, I think of people like 17-year-old Travis Ashton of Highland, UT, whose brain was injured in a car accident. Today, he is struggling to dribble a basketball. I hope tomorrow he will be able not only to dribble a basketball but dunk a couple of baskets as well.

And I think of my great friend, President Ronald Reagan, whose genius and energy were sapped away in what were to have been his golden years by the ravages of Alzheimer's disease. I imagine him finishing his days with his characteristic humor and vitality.

Last year when Congress voted on the Stem Cell Research Enhancement Act of 2005, Former First Lady Nancy Reagan sent me a letter urging the Senate to support the bill. Let me remind you what it so poignantly said:

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 United States Senate action has been very difficult and hard to comprehend

I understand that the United States 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

As we all know, last year, the Senate did approve this legislation, but President Bush vetoed it.

And while I think we all know how this vote will come out today, it remains my fervent hope and prayer that President Bush—a person whom I greatly respect and with whom I share strong belief in the right to life—will sign this bill into law.

I have received many letters from constituents who ask me, "Senator HATCH, how can you support embryonic stem cell research when adult cell research is so promising?" They ask, "Why don't you realize that cord blood research makes embryonic stem cell research unnecessary?"

My answer is simple. Who among us can know which will yield the greatest breakthroughs? Who among us dares to predetermine the outcome by limiting the possibilities of ethical scientific research at the outset of this new field of research?

The stories I have just related compel me to advocate for all types of ethical stem cell research—adult, cord blood, amniotic, and embryonic.

Indeed, it must be recognized that in August, 2001, President Bush became the first President to support Federal funding for embryonic stem cell research. The President has my respect and admiration for his decision. At that time, he announced that 78 embryonic stem cell lines would be eligible for Federal support. It was a good start.

It was also a decision that recognized discarded embryos can, and should, be used to advance our Nation's scientific inquiry. That is fundamentally still the issue before us today.

The President's policy has not lived up to its promise.

In the past 6 years, much has changed. What was once thought to be over 70 stem cell lines has dwindled. A number of scientists have told me that in reality the number of usable cell lines has shriveled to merely a dozen or fewer.

Scientists have told me that these lines are not enough to represent the general population anyway—they have been genetically distorted by years of replication. Furthermore, they are contaminated with so-called animal feeder cells and, therefore, can never be approved for use in human therapy.

Existing Federal policy has created what I have characterized as hand-cuffed science. By this I mean that scientists are forced to go to extreme lengths to comply with Federal law. When they are able to scrounge up private funding for fresh embryonic stem cell lines, the scientists find their hands bound.

They are afraid of violating Federal law by mixing research between the limited, contaminated, federally sanctioned stem cells and cells with the new cell lines lawfully developed with non-Federal funds. No equipment purchased with NIH funds touches the new, lawful cell lines and the result is that equipment purchased with Federal money lays underused while limited precious money is used to purchase duplicate equipment and supplies.

Dr. Linda Kelley is an Associate Professor of Medicine at the University of Utah. Dr. Kelley told me that the limited number of currently federally sanctioned cell lines is so unstable that, in her words, "You are lucky if you can recover 10 percent of the cells they send you." She said the cells have been reused for so long that they have degraded and no longer represent the comprehensive human population.

I do not want Utah's scientists moving to California or America's scientists moving overseas so they can do their research.

Just as we are a nation that would never want to allow a situation to exist where American citizens must go abroad for best medical treatment, we should neither allow nor accept an atmosphere where our best doctors and scientists must go abroad to develop and provide the best medicine.

I do not want U.S. scientists walking away from embryonic stem cell research because there are too many impediments to pursuing it in our country for our citizens.

Dr. Marie Cseta is a cell biologist from Emory University and is one of the many scientists who firmly believe that embryonic stem cells hold unusual promise. She is unable to send her NIHfunded, post doctoral fellows to qualified laboratories to learn new procedures because those laboratories work with the new cell lines. She told me that the restrictions that current Federal policy places upon her and her colleagues are, in her words "... so odious that many scientists just do not try."

I want scientists to try.

I think we will see after today's vote that most Senators want scientists to trv.

I am sure my friends, neighbors, and constituents in Utah want our best scientists to try.

In forming my opinions and views on this topic, I met with many leading experts in the field of science, ethics, law and, yes, religion. I met with a number of Nobel Laureates including Dr. Harold Varmus, former Director of the National Institutes of Health; Dr. Thomas Cech of the Howard Hughes Institute of Medical Research and Dr. Paul Berg of Stanford University.

I met with other leading experts including: Dr. Curt Civin and Dr. John Gearhart both of Johns Hopkins University; Dr. Irv Weissman of Stanford University; and the University of Utah's own Dr. Mario Capecchi.

Let me tell my colleagues that we have some great scientists in the State of Utah. In fact, Dr. Capecchi, a leading research professor at the University of Utah, is widely recognized as one of the true pioneers of embryonic stem cell research. He has been working on embryonic stem cell research throughout his 40-year career. He has been the recipient of the prestigious Lasker Award which is considered the most prestigious American award in the biomedical sciences. It is often the case that Lasker Award winners go on to receive Nobel prizes.

When I was home in Utah last week, I spent a lot of time talking to Dr. Capecchi. I asked him if he could provide me with what he believed are the top reasons why our government should fund embryonic stem cell research. He shared the following with me:

- 1. Potential source of cures. Embryonic stem cell research provides the potential to cure or ameliorate some of the most devastating and costly diseases faced by our Nation including diabetes, Parkinson's disease, and Alzheimer's disease.
- 2. Embryonic stem cells grow quickly and are versatile. Two inherent properties of embryonic stem cells, not shared with adult stem cells, make

them especially attractive cells for cell transplantation-based therapies: rapid cell division and ii) versatility.

Rapid cell division is critical if we want to use any stem cells for transplantation therapy, as we must quickly expand a limited number of cells to the large mass required for therapeutic effect. Embryonic stem cells are almost unique in their capacity for rapid growth without loss of developmental function.

The versatility of embryonic stem cells is truly remarkable. In the mouse, embryonic stem cells have been unequivocally demonstrated be to pluripotent. capable of generating every cell type present in the adult body. Studies in cell culture indicate that human embryonic stem cells also possess this remarkable pluripotency.

- 3. Adult stem cells grow slowly. In contrast, adult stem cells divide slowly and normally require a very specialized and undefined cellular environmentcalled a niche-for their survival and growth. For example, removal of adult intestinal stem cells from their biological niche leads to their automatic, programmed cell death. Blood stem cells, obtained from the bone marrow, are among the few adult stem cells currently in clinical use, but they cannot yet be expanded in culture without losing their developmental function, and hence their limited therapeutic utility.
- 4. Adult stem cells are very restricted in what cell types they can produce. Whereas embryonic stem cells are extremely versatile in their capacity to generate different cell types, adult stem cells appear to range in versatility from quite restricted—for example, blood stem cells that can generate multiple types of blood cells, but nothing else—to completely restricted, for example, muscle stem cells that generate only muscle cells.
- 5. Many important organs do not have adult stem cells. Many tissues such as liver, pancreas, and blood vessels do not appear to have a corresponding adult stem cell population. Therapies of diseases involving these tissues would therefore not be readily approachable by adult stem cell-based therapy, but could be approached using embryonic stem cell-based therapies.
- 6. The usefulness of existing embryonic stem cell lines is extremely limited. The approved set of human embryonic stem cell lines, authorized nearly 6 years ago for federally funded research, is woefully inadequate. Some of them apparently do not exist at all, others are embroiled in extensive proprietary agreements and all of them though suitable for some research purposes, will never be suitable, due to problems with contamination, for therapeutic purposes.

More importantly, ongoing search—funded by private foundations and industry, or performed abroad—has brought about improvements in how laboratories isolate and grow embryonic stem cells. Mouse embryonic stem cells were first characterized over 25

years ago, yet the cell lines that researchers use today are far superior to the ones available 5 or 10 years ago. With the hope of further improvements, we continue to isolate new mouse embryonic stem cell lines.

So long as the Federal funding ban remains in place, the majority of American researchers cannot make similar progress with human embryonic stem cells, nor exploit the advances made by others. With the limits currently in place, American human embryonic stem cell researchers are in the unfortunate and unique position of being frozen in time, trapped by the technical limitations of mid-2001, while other disciplines continue to advance. This makes no sense from a medical or scientific perspective.

Although today's debate focuses on the use of spare embryos to develop embryonic stem cell lines, the next two points that Dr. Capecchi makes center on a different method of producing embryonic stem cell lines.

For the last three Congresses, Senator Feinstein and I have introduced legislation that addresses this form of embryonic stem cell research. Although this issue is not squarely before us today, I hope that the majority leader will allow us to take up this important matter sometime this Congress.

7. Somatic cell nuclear transfer as a research tool. A limitation of IVF embryo-derived stem cells is their potential of rejection by the patient because of immunological incompatibility. A potential solution is the generation of "customized" embryonic stem cells by somatic cell nuclear transfer, SCNT, which has been demonstrated in proof of concept experiments in mice.

While, at present, nuclear transfer using human eggs to generate customized embryonic stem cells for therapy would be too complex and too controversial to be applicable for routine transplantation medicine, it represents an important tool for investigating the mechanism of converting a somatic cell such as skin cell into an embryonic stem cell.

We need to learn the "reprogramming rules" the egg uses to convert the adult nucleus into an embryonic state following nuclear transplantation. One goal of research in this field is to convert a somatic cell to a pluripotent embryonic stem-cell-like state in culture without SCNT.

We need to use eggs temporarily to learn how to reprogram the adult nucleus without the need for human eggs. Progress toward this goal can only be assured if Federal funding would be able to support research in this field in the best academic institutions of our country.

8. Embryonic stem cells to study human disease. Because SCNT allows production of patient-specific embryonic stem cells, this approach would allow establishing research tools for the investigation of complex human diseases such as Alzheimer's, Parkinson's, ALS, or diabetes in cell culture.

An embryonic stem cell line derived from such patients would carry in its genome all genetic alterations that caused the disease. Thus, differentiating these patient-specific embryonic stem cells in culture to a cell type that is defective in the patients may provide crucial insights into the pathology of the disease and may provide a critical platform to identify drugs that help prevent, ameliorate, or cure the disease.

9. Lack of government commitment means lack of future researchers. The brightest young researchers in our country are currently not engaging in human embryonic stem research because they are aware of its uncertain future, the low level of commitment by our government to its support and of the cumbersome restrictions faced by scientists participating in this research. We are losing the scientists that will carry this critical research into the future.

10. Health and economic implications. The health and economic implications of human stem cell research are enormous and other countries have recognized this potential. They are heavily investing in embryonic stem cell research. Our country is in grave danger of falling behind in one of the most promising fields of biomedical research.

Dr. Capecchi gives very compelling reasons for funding embryonic stem cell research. I believe that all ethically responsible avenues of stem cell research should be pursued and that is the Congress's obligation to the American public to see that they all are pursued.

But let me caution that no one should imagine that one bill is a substitute for the other.

S. 30, introduced by Senator NORM COLEMAN, directs the Secretary of Health and Human Services to conduct and support research on pluripotent stem cells that do not damage a human embryo. It also specifies work on naturally dead embryos.

But, the concept of alive-but-naturally-dead embryos is based upon limited research that has not yet been duplicated widely.

It is promising research, but it is no more than that at this stage. In fact, some scientists are worried that these arrested embryos are defective and would, therefore, produce defective stem cells. And it is by no means certain that an arrested embryo can be differentiated from one that could develop further.

In short, this idea may not pan out. Recently, there was another flurry of activity around the possibility that certain cells in amniotic fluid behave similarly to stem cells. But even Dr. Anthony Atala who characterized these cells has said that it is a mistake to assume that they are a substitute for embryonic stem cells.

The vote that counts in the minds of our best and brightest scientists—and should count for my colleagues in the Senate and the American public—is your vote for S. 5, the Specter-Harkin bill that has already passed the House by a broad bipartisan vote. Our leading scientists, including more than 40 Nobel Laureates, tell us at this time there is no known scientific substitute for embryonic stem cells.

Yet I understand that the vote I ask you to cast is ethically troubling for some of my colleagues.

I have a long, proud and strong record as a right-to-life Senator.

I stand against abortion on demand, and I think that Roe v. Wade should never have been decided the way it was

As a member and former chairman of the Senate Judiciary Committee, I worked toward a constitutional amendment banning abortion.

In the 108th Congress, I was at the President's side when he signed the bill banning the barbaric practice of partial birth abortion. I was chairman of the House-Senate conference committee that finalized the bill.

So why does a pro-life Senator support embryonic stem cell research? Because I do not consider a frozen embryo to be a human life until it is implanted in a woman's uterus. S. 5 allocates Federal research funding to embryonic stem cells derived from frozen embryos that are to be discarded. In fact, thousands of such embryos are routinely discarded each year.

I should explain why frozen embryos exist and why they are discarded.

As part of the fertility treatment process, multiple embryos are created and only one or a few of those that are created are ultimately used. The rest can be stored for years in liquid nitrogen. About 11,000 embryos per year are discarded by their donors and could be used for research.

I see ethics as being on the side of creating human life through fertility treatments. I see it as trying to cure human misery through ethical stem cell research as is provided through S. 5

When I first took this position in 2001, it was over the objection of some of my constituents in Utah. Utah is a very conservative State. Since that time, however, the majority of Utahns and the majority of Americans have come to support the use of Federal funds for embryonic stem cell research conducted under ethical guidelines.

This year, as in past years, I have had a steady stream of Utahns with chronic diseases visiting my office urging me to continue to push for stem cell research. One young man who has been afflicted with diabetes since youth now has a son with the disease. He urged me to continue with this fight so that maybe his son might be spared the ravages of the disease. A woman disabled with multiple sclerosis earnestly told me to persist. A constituent with Parkinson's disease told me to do whatever it takes. They all want hope.

NIH support is the bedrock of scientific research in the United States

and really around the world. And without NIH support, embryonic stem cell research will never reach its full potential.

While constrained by his position in the administration about what he can and cannot say about the legislation before the Senate, in testimony before the Congress, NIH Director Dr. Elias Zerhouni recently made it abundantly clear that—based on consideration of science alone—embryonic stem cell research presents great opportunities for scientific advancement. And Dr. Zerhouni is not alone.

As I emphasized, one reason is that the limited and continually shrinking number of federally sanctioned contaminated cell lines are so tired that they no longer adequately represent the genetic code of the larger human family.

A second is that the logistics of investigation are burdensome and impractical because of the need to separate funding sources for research with the limited, deficient federally sanctioned stem cell lines and the newer cell lines lawfully developed within Federal support.

A third reason is that scientists cannot now use Federal funds for research on any embryonic stem cell line that they could implant in humans—these federally sanctioned lines are contaminated with animal cells.

A fourth reason is the need to be able to bring the fruits of basic research to the patient. It is one thing to find several hundred thousand dollars of private money to complete an early stage research project on stem cell lines in the laboratory. However, when it comes time for clinical testing, the costs of research are in the millions of dollars, not the hundreds of thousands of dollars per experiment. Typically, this kind of private money is not available unless it is from industry. Clinical research with stem cells will hit the wall without NIH funding when that time comes.

The private sector will not want to invest millions of dollars into stem cell lines that we already know will never yield ethical human treatments. Nor should Congress and the public allow the status quo to continue.

If we unlock the shackles on our scientists, I believe we can materially shorten the time between basic and applied research—the time between the test tube and the patient's bedside. Let me give you just a few examples of what has been accomplished since the Senate last debated this issue.

In last October's Nature, biotechnology investigators reported that they could convert human embryonic stem cells into cells capable of synthesizing insulin, the missing hormone in diabetics. This work was conducted on privately funded stem cell lines.

At the University of California, Los Angeles researchers demonstrated that they could coax embryonic stem cells into becoming T-cells of the immune system, the missing cell line in AIDS patients.

And in my own State of Utah, Dr. Raymond D. Lund, a professor of the Moran Eye Center at the University of Utah, reported that human embryonic stem cells injected into the eyes of blind rats improved their vision. This important work was conducted with private funding.

An Israeli team partially funded by the Israel Science Foundation reported engineering a small piece of heart tissue derived from human embryonic stem cells that contracted rhythmically, carrying promise for future cardiac replacement therapies.

Last month, Dr. Dachun Wang and Dr. Rick A. Wetsel at the University of Texas reported a procedure that differentiates human embryonic stem cells into the lung cells that are missing from many lung diseases. The work was funded with a grant from a private donor.

Finally, in a recent Nature Medicine Journal, human embryonic stem cells delayed the onset of the mouse equivalent of a degenerative brain disease by 70 percent. The approach described in the article holds exciting potential for treating dreadful diseases such as ALS and Alzheimer's disease.

As you can see, there is a lot of promising work being done in the field of embryonic stem cell research. Unfortunately, due to the limitations and restrictions placed on the few cell lines eligible for Federal research assistance, much of most promising work is being done outside the normal channel of the NIH research network.

Yet with all this progress, is science progressing as fast as it should? I recently asked this question of an eminent neuroscientist who directs the National Institute of Neurological Diseases and Stroke, Dr. Story Landis.

At the Health, Education, Labor and Pension Committee's hearing entitled "Can Congress Help Fulfill the Promise of Stem Cell Research," committee members heard from scientists, from a young patient who suffered from diabetes, and from Dr. Landis. I asked Dr. Landis if NIH funds were made available for research on all ethically obtained embryos from in vitro fertilization, would the probability of finding cures for human diseases increase?

Her response was as follows:

Absolutely it would increase. There is no question about it. We would have a real opportunity. I can give you one specific example. Huntington's disease is an inherited disease. It caused a particular kind of nerve cell in the brain to die . . . If we had embryonic stem cells derived from discarded embryos that were not implanted, we would be able to make extraordinary inroads into therapeutics for that disease.

Much is weighing in the balance on today's vote.

I ask my colleagues to consider carefully the positions they take today.

In the interests of all those who suffer from debilitating diseases and hope for deliverance, I urge my colleagues to vote for S. 5.

Let me close by making a point I made to President Bush back in 2001.

In the opening days of your term in office, scientists have completed the task of sequencing the human genome. While this accomplishment—the work of many in the public and private sectors—is of historical significance, it is only the end of the beginning in a new era of our understanding of the biological sciences. Over your next eight years in office, you have an unprecedented opportunity to provide the personal leadership required to see to it that your Administration will be remembered by future historians as the beginning of the end for such deadly and debilitating diseases as cancer, Alzheimer's and diabetes.

That is what S. 5 is all about—providing a potential new avenue of research that may lead to treatments and cures for many diseases that afflict many families across our Nation and the world.

Mr. President, while I have no objections to S. 30, let us not delude ourselves into thinking it is the best solution to this. Again, while I will be voting for both S. 5 and S. 30, I believe that S. 5 is clearly preferable to S. 30. S. 5 permits Federal funding for embryonic stem cell research, S. 30 does not. S. 5 is the bill that will clearly make a significant difference in the future of medical research.

I urge all of my colleagues to vote in favor of S. 5.

Mr. HARKIN. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. Eighteen and a half minutes.

Mr. HARKIN. Mr. President, I yield 13 minutes to the distinguished Senator from Oregon, Mr. SMITH.

Mr. SMITH. Mr. President, I am very grateful the Senate is considering the issue of stem cell research today. This debate marks the culmination of years of work by many of my colleagues and certainly by myself and a host of dedicated advocates.

I thank Senators Harkin and Specter for their leadership on this issue, as well as Senators Hatch, Feinstein, and Kennedy. Working together for almost a decade, the six of us have over the years laid the groundwork for the Senate to overwhelmingly approve Federal funding for embryonic stem cell research.

We did this last July but, as we all know, unfortunately, that bill was ultimately vetoed by the President. That is behind us now, and with a new Congress comes a new opportunity to revisit this important issue, the issue of embryonic stem cell research.

I hope the experiences of the past have helped my colleagues to gain a fresh perspective on this issue. I know they certainly have for me. Some may view the vote we will take later today on S. 5 and S. 30 as a one-or-the-other option. In my opinion, that is simply shortsighted.

I intend to vote for both measures. At the end of the day, they both accomplish the goal of advancing stem cell science in the hopes of finding cures for debilitating illnesses such as Parkinson's, Alzheimer's, and diabetes, to name but a few.

S. 5, the Stem Cell Research Enhancement Act of 2007, would allow Federal dollars to support research on stem cells derived from human embryos created through in vitro fertilization.

S. 30, the so-called alternative bill, would provide the support for other means of deriving pluripotent stem cells. In that regard, both measures deserve the Senate's support. I find it troubling that these measures should be pitted against one another. Many argue that S. 5 is a must-pass legislation, and I would tend to agree with them.

But that should not detract from the importance of alternative forms of stem cell research sanctioned in S. 30. As research on embryonic and other forms of stem cells like amniotic or the placental therapies is still in its infancy, we need to support them all to fully realize the potential they might hold.

Since the Senate last considered stem cell research, we have all had additional time to reflect on the sensitive issues underlying this debate. As a prolife Republican, I initially had some uneasiness with endorsing this type of research that so heavily relies on human embryos.

Drawing from my deeply held religious beliefs, scientific evidence, and countless stories of individuals living with terrible illnesses, I fashioned my position on the basis that I truly believe it supports the sanctity of human life.

The real tension surrounding this issue, I believe, pits the potential medical benefits stem cells hold against the ethical uncertainties or the religious convictions some of my colleagues might have with what this kind of research entails. Based upon my personal struggle with this issue, I now believe any reservations with embryonic stem cell research are misplaced, especially when one truly considers the question of when life begins.

For me, it begins with the mother, with the implantation of the embryo.

I believe the Scriptures provide ample support showing that flesh and spirit become one within a mother. This is one of womankind's supernal gifts. I find verses in the Old and the New Testament, in Genesis, Jeremiah, the Psalms, Job, as well as in the Gospels.

All of these things lead me to feel comfortable with an ethical conclusion that life begins when flesh and spirit are united in a mother's womb and not before.

Embryos created as part of the in vitro fertilization process were intended to provide infertile couples the gift of life, the chance to become parents. Those that go unused in infertility treatments should still have the opportunity to give the gift of life either by later implantation or to those living with debilitating diseases through stem cell research.

Without being implanted in a mother's womb, an IVF embryo is a group of

cells growing in a petri dish. If those cells are stored in a lab for 1,000 years, they have no possibility of developing into anything more than a group of cells. They remain the dust of the Earth, one of the building blocks leading to life.

It is the act of implantation within a mother that gives them life. It is the act of implantation that is the essential missing ingredient in this debate. So instead of destroying or discarding unused embryos, we have the opportunity to use them to derive much needed stem cell lines for the advancement of stem cell science.

It is not more moral to simply throw them away. While many of my pro-life colleagues may not agree with my position, I know they do support the intent of embryonic stem cell research; that of finding cures for a number of chronic diseases and debilitating health conditions. That is why I still struggle with describing S. 30 as an alternative to S. 5. It is not an alternative or a substitute, it is a perfect complement.

To fully realize the benefits that all types of stem cell research offer, I urge my colleagues to vote affirmatively for both measures we are considering today.

The promise of embryonic stem cell research is very real. Those suffering from Parkinson's, Alzheimer's, diabetes, cardiovascular disease, and many cancers believe in that promise, and so do I.

But we have yet to unleash the potential behind this science because of the restrictions we have placed upon stem cell research. While I appreciate the President allowing the research to move forward on a limited number of stem cell lines, we all know that over time those lines have been degraded, and scientists are in desperate need of new, uncontaminated lines.

We cannot expect scientists to make progress in developing today's treatments if we limit them to yesterday's science.

I believe the Federal Government has a vital, moral role to play in the development of stem cell science to ensure that appropriate ethical guidelines are followed. It is uncertain where we will end up if embryonic stem cell research becomes an entirely private sector venture.

With lack of sufficient funding and ethical boundaries, who knows where we will wind up? The Federal Government can guide research in the right direction. I fear if we fail to show up to work on this issue, we will run into very serious problems in the long run.

Over the last 7 years it has become increasingly clear to me that being pro-life requires protecting both the sanctity of human life and the quality of human life. By allowing research on stem cell lines derived from unused IVF embryos, we could forge a path that would one day lead to cures for some of mankind's most dreadful medical maladies

If only one life-improving application of stem cell science comes from my vote in favor of S. 5, then I believe I have done my job, and done it correctly; for I have chosen to err on the side of hope, healing, and health.

I encourage all of my colleagues, even those who have some ethical reservations or contrary religious feelings on this issue, to do the same. I have heard some refer to embryonic stem cell research as a conflict between science and religion. I do not believe that is the case. One of the greatest qualities and aspects of life in the United States is our religious pluralism. It is something we see an absence of, tragically, in too many places around the world.

We do not serve the public well by taking the narrowest theological position and trying to impose it on public policy. The American tradition is open enough to include other considerations of ethical ideas, Scriptural interpretations, and scientific hope.

I am not a scientist, and I am not a theologian. But as I use my agency to interpret what I know in the Scriptures, and the complexities of medicine, I have come to the conclusion that we are all made of dust. Dust thou art and unto dust thou shall return, as the Lord said to Job.

In that regard, pluripotent stem cells are one of the building blocks of life, the dust of the Earth. I believe we miss the understanding of the importance of the spirit, the breath of life, the spirit within mankind, as the essential ingredient which causes life to begin.

I do not find that religion and science are in conflict in the Senate today. I believe they are in harmony. I believe we should have a broad enough view to include the many views that comprise American pluralism.

To that point, Mr. President, I turn to the Scriptures even to find wisdom that I do not have of myself. In the earliest pages of the Old Testament, I find this statement:

And the Lord God formed man of the dust of the ground and breathed into him, his nostril the breath of life, and man became a living soul.

Mr. President, there are two conjunctions. The dust of the ground "and" the breath of life "and" then man becomes a living soul. Until you have both, you do not have life.

I cannot end my comments today without mentioning also my own family's history. It has played a role in shaping my views on embryonic stem cell research. My mother's name was Jessica Udall. I watched my grandmother Lela Lee Udall die of Parkinson's. I watched my uncle Addison Udall die of Parkinson's. I watched my cousin, former Democratic Presidential candidate and Arizona Congressman, Morris K. Udall, die of Parkinson's, To watch people die of such a malady is to instill in one's heart a desire to err on the side of health, hope, and healing. We will all die, but no one should have to die as they died.

I yield the floor and urge my colleagues to vote for both of these meas-

ures. They are complementary. They are headed in the same direction. They are not putting science and faith at odds with one another.

The PRESIDING OFFICER (Mr. CASEY). Who yields time?

Mr. ISAKSON. Mr. President, I yield 15 minutes to the distinguished Senator from Florida, Mr. Martinez. The PRESIDING OFFICER. The Sen-

The PRESIDING OFFICER. The Senator from Florida is recognized.

Mr. MARTINEZ. Mr. President, this is indeed a difficult issue and debate. I respect so much my colleague from Oregon. I know he speaks with passion and heart as he deals with these contentious but important issues. I must express some disagreement with him, while I agree with most of what he said.

The issue of stem cells is a vital and emotional one, and we need to deal with it carefully as we move forward in the Senate.

The embryonic stem cell debate stimulates some of us to defend the inherent human desire to make discoveries and to build on them; likewise, this debate galvanizes others of us who defend human life and believe it should be valued in all its forms. The engineered creation or destruction of a human embryo for the sake of scientific advancement cannot be the answer to any of our ever-growing challenges.

In this great country of ours, and around the world, there are many suffering from debilitating conditions and ravaging diseases such as multiple sclerosis, diabetes, and Alzheimer's. These people are in need of medical treatment. Thanks to the brilliant minds and innovative ways of doctors and scientists across the globe, many medical treatments are now available. We can credit advances in stem cell research with this expanding treatment.

Stem cell research holds tremendous opportunities for our society to help treat and cure people's diseases and illnesses; and some would like to extend the success found through federally funded adult stem cell research to embryonic research. They have proposed that we harvest these human embryos—which were created with the knowledge that many of them would be destroyed—to be used for research.

While I, and others, understand the great need, we also know that there has to be a better way. In fact, I know there is. That is what I want to discuss today.

The legislation currently being considered will direct Federal taxpayer dollars specifically for the destruction of human embryos to develop cells that might lead to treatments for various health problems. This raises moral objections with me because of my deeply held religious beliefs.

We are currently funding research on nonembryonic stem cells derived from adult stem cells, amniotic cord blood or placenta sources. These have proven their ability to target many, if not eventually all, of the conditions expected to be addressed through embryonic stem cell research.

The University of Florida has one of the top five adult stem cell research centers in the world and their findings are already making a difference.

At the University of Florida, researchers are making great headway with stem cell research. They have in the works treatments for heart disease. a cure for diabetes, and preventions for diabetic eve diseases. Additionally, researchers at the University of Florida are making significant strides on the path toward reversing adult blindness, treating neurological conditions, and rebuilding human brain cells. Researchers in Gainesville are also leading the world in identifying cancer stem cells a primary step toward identifying therapies to cure various forms of cancer.

It is worth noting that all of these advances have a vital common thread; each of the aforementioned breakthroughs came about thanks to non-embryonic stem cells.

At the end of 2005, President Bush signed a bill that aims to further develop our Nation's cord blood inventory to allow for increased availability of existing and future stem cell treatments; and I was very proud to have supported this legislation.

As my colleagues know, this legislation made its way through Congress with tremendous success. The House of Representatives passed it with only one dissenting vote, and in the Senate it passed it unanimously.

The Stem Cell Therapeutic and Research Act of 2005 created a new Federal program to collect and store cord blood. In addition, the law expands the existing bone marrow registry to include cord blood.

New programs utilizing cord blood, such as the recently created CORD:USE Center at the Winnie Palmer Hospital in my own home State of Florida, are building on this valuable and expanding foundation. These programs are advancing science without compromising morality.

Winnie Palmer Hospital for Women and Babies in Orlando is now able to contribute a diverse and increased supply of cord blood. This is reassuring news for the thousands of people who would otherwise die unnecessarily each and every year were it not for the large, genetically-diversified stem cell bank that is now available. The uses of cord blood are fascinating and they speak of breakthroughs.

Stephen Sprague, one of the first adults to receive a stem cell transplant from umbilical cord blood, recently visited Winnie Palmer Hospital and its cord blood bank to express his gratitude for what they are doing. Stephen was diagnosed with chronic myelogenous leukemia in 1995, and when chemotherapy and other treatments did not work, and a match for a bone marrow transplant could not be found, he was informed that essentially nothing more could be done. Luckily, Stephen's oncologist was able to enroll him in one of the first clinical trials using umbilical cord blood.

A wonderful mother agreed to donate her placenta; from that, the lifesaving cord blood was collected. Ten years after receiving the stem cell transplant, Stephen remains completely cancer-free. Not only this, but before his cord blood transplant, Stephen was an insulin-dependent diabetic. Following the transplant, Stephen has not needed to use insulin; through taking only oral diabetic medications, his sugar levels have remained normal.

So, not only was Stephen's life saved by the transplant, his quality of life was improved. It is no wonder that Stephen has now dedicated his life to telling his cord blood story of hope to patients and mothers who can also give the gift of life through the donation of their cord blood.

Umbilical cord blood stems cells have now been used in thousands of patients requiring a potentially lifesaving stem cell transplant and with good results.

The collection of these cells from the delivery of a healthy newborn baby can result in a stem cell transplant desperately needed to save someone else's life. Essentially, new life is helping to stimulate more life.

This allows us to help countless people in need without the moral dilemma presented by the embryonic alternative which, from my perspective, is no true alternative.

Cord blood is currently being used to treat nearly 80 diseases.

Adult stem cells have made, and will continue to make, a recognizable contribution to helping those with leukemia, sickle cell disease, and other potentially fatal illnesses and conditions

Proponents of embryonic stem cell research say they want to make available for research only those embryos that are, in their words, "unwanted." One of my colleagues recently asserted, "If these embryos were going to create life, we wouldn't be supporting research on them.

Yet, there is proof that these embryos are living things and that they are wanted. Yes, these embryos can, and are, growing into fully formed babies. Known as "snowflake babies," these babies are born from adopted embryos—excess embryos from successful in vitro fertilization parents that are donated and adopted by a couple where fertilization techniques were forgone or unsuccessful.

To date, 133 snowflake babies have been born, with nearly another two dozen on the way.

Had these—in the words of the critics, "unwanted" embryos—been tossed aside, human life would have literally been discarded.

Many Americans agree that we need to move forward on this issue with prudence, and in a way that respects and values human life. As we stand to balance our interests in helping those in need without destroying human life, there is a good piece of legislation being considered that I want my colleagues to consider.

Under the HOPE Act, no living embryo would be damaged or harmed for the sake of research. What the HOPE Act would do is allow scientists for the first time to apply for Federal funds to perform research on embryos that have died naturally during the in vitro process. For those hoping to find a cure through embryonic stem cell research, this would be a modest and principled step toward achieving that goal.

It would also be the right step to take, because it is the only option that opens up new frontiers without damaging human life; a move in this direction would not detract from the real results we have seen through federally-sponsored adult stem cell research. I encourage my colleagues to strongly consider voting in favor of the HOPE Act.

We must be dedicated only to research which preserves and protects lives. Adult stem cells hold great promise, have had more proven success in lab trials and actual applications, and they do not require the destruction of human life. This is where our Federal funding should remain focused.

At this time, efforts to federally fund a different area would siphon money from proven research.

If it is possible to simultaneously defend human life and help others in need, why on earth would we not do it? Why wouldn't that be the better option? We know it is possible to do both at the same time. It seems to me to be the reasonable thing to do. That is why I urge my colleagues today to support the HOPE Act, to support a way of continuing to advance the frontiers of research while at the same time avoiding the troublesome and meddlesome moral dilemmas that funding for embryonic stem cells would present.

There is an option. There is an alternative. There is an opportunity to advance stem cell research of the embryonic type, knowing we have already had great success with adult stem cells, with cord blood, and all of the other usages, but at the same time not tampering with the moral dilemma we would have to cross if we are destroying embryonic life in order to have stem cell research in that direction.

I yield the floor.

The PRESIDING OFFICER. The Senator from Kansas.

Mr. BROWNBACK. Mr. President, I thank my colleague from Florida and my colleague from Oregon as well. I want to address a couple of issues in response to some of the statements that have been made and also get us back to what we are discussing.

On S. 5, the central issue is, will we sanction the destruction of nascent human life with Federal taxpayer dollars? There is currently no prohibition

against embryonic stem cell research in this country. Any private group in Illinois or Kansas or Pennsylvania that wants to develop an embryonic stem cell line can do so. There is no prohibition. The question is, will we use Federal taxpayer dollars to destroy human life to develop additional stem cell lines? That is what S. 5 is about.

The second point is, if we want to talk about cures, which I believe that is what the debate should be centered on, is it appropriate to divert taxpayer dollars from adult stem cell research, from cord blood research, from placental research, from amniotic fluid research into these areas of highly speculative embryonic stem cell research that has not produced results to date and is unlikely to produce results in the near future, if at all. If it does produce results, it is going to lead us toward human cloning, because we are not going to have a genetic match on the embryonic stem cell line. You are going to need a genetic match so you will have to develop human cloning to get a genetic match to produce the cure you want.

Cloning is not on the table today, but that is what this moves us toward, because that is what is going to have to happen, if this will ever work. But it doesn't need to go that route. I want to get us back on those central questions.

Let's talk about the facts on these questions. We have invested heavily as a country in embryonic stem cell research. We have invested in adult stem cell research. We have invested nearly \$613 million on embryonic stem cell research. In total, since 2002, \$613 million invested in embryonic stem cell research. So to say that we are not funding, we are not doing work in this area, is false. We have invested a considerable amount of work and effort in this field.

Now, individuals are saying: OK, yes, you have put money into this field, but the lines on which you allow research are contaminated. I wish to draw attention to this article from Nature magazine—excuse me. I want to get this one up. This article: "Bush Stem Cell Line Contamination is Exaggerated." This is from a CEO of a stem cell company:

So the stuff you hear published—

I am reading the quotation—

—that all of these lines are irrevocably contaminated with mouse materials that could never be used in people—hogwash. If you know how to grow them, they're fine.

That is in an article where one of the key individuals, the CEO of a stem cell company, is saying that. So we have \$613 million that is in human and nonhuman embryonic stem cell research. The idea that the lines are contaminated is hogwash. They are not contaminated. They are useful. They are being used. The research is taking place. So we have this. We have \$613 million going into this area since 2002. One would reasonably expect we ought to have some results after over half a million dollars going into the field in

this period of time and a lot of efforts from the scientific community. We have known about embryonic stem cells for 25 years.

Indeed, the magazine Nature in 2006 marked the 25th anniversary of the two papers reporting the first isolation of mouse embryonic stem cells—a 25-year celebration. So we have known about embryonic stem cells for 25 years and in humans for the last 10 years. We have been able to research on them in lab animals for the last 25 years. That is an exciting development which took place a quarter of a century ago. We have invested heavily—\$613 million since 2002. We have put a lot of money into this. We put a lot of scientific effort into this.

What do we have? That should be a reasonable question all my colleagues would ask. All my colleagues would say: Well, OK. We have talked about this, we have put money in it, we have discovered it, and we have put a lot of our best scientific minds into this field. What do we have? The results for adult versus embryonic: We have invested more in adult than we have in embryonic, but it is not an inconsequential amount that we have put into embryonic—\$613 million. This chart shows the current human applications in the two fields of adult versus the embryonic. For allergy and infectious disease, embryonic stem cell research and human applications: zero. We have 15 in the adult field. Cancer Institute: zero in ESCR, 26 in adult. Child Health Institute: zero here for embryonic, 8 in adult. Diabetes and Digestive: zero for embryonic, three in the adult field. Eye Institute: one adult, zero embryonic. Zero embryonic, zero embryonic, zero embryonic in each of those fields. You can see what we have been able to do in the adult field by the investment we have there.

So from just a sheer practicality standpoint—we have known about this for 25 years, and we have put \$613 million into it. We have zero human clinical applications today taking place. We have over—and here I want to show an adjusted chart. I am sorry this is one we have had to paper over, but just yesterday we had juvenile diabetes on our board for adult stem cell application—one of the big ones. This affects a lot of people. It is one that a number of people in this body are strongly interested in, deeply interested in.

I just read to my colleagues this morning from the Chicago Tribune about this adult stem cell work treating juvenile diabetes where an individual with their own—this is type 1 diabetes—treating an individual with their own stem cells at Northwestern University. Here is a quote from a researcher who was reviewing it from Harvard Medical School:

Their results look better than anything I have seen so far.

Type 1 diabetes. We added it, gladly, to the board today. Seventy-three different human applications we have in adult stem cells. Cord blood. We don't

have amniotic fluid yet developing, which I think we should start banking the amniotic fluid from the placenta because of the rich stores of stem cells, but we haven't quite started that yet today. So we have put in money in adult and we have put money in embryonic. We have a lot of results in adult.

I held this up for my colleagues yesterday, but I hope they get a chance to look at it again. This is the front page of the research findings in the adult fields we have. It is about a 4-inch binder. That was accumulated as of April 2006—last year. We did an addendum from June 2006 to March 2007. These are the findings. These are the successful results in the adult cord blood field that we have. I don't have my empty binder to show what we have on embryonic stem cell. It is a legitimate question, just a legitimate question about what we should be investing in that is yielding results in the adult versus embryonic field that is taking

There is the tumor problem. My colleague from Utah was saying we can get over this tumor problem which is taking place. Unfortunately, I have a stack—and I put it into the RECORD yesterday—of 10 research papers, and that was really just a sampling of the papers where the embryonic stem cells are producing tumors. This is real. It is significant. It is not going away, these tumor-formation problems with embryonic stem cells.

This is in a publication called "Stem Cells": "The presentation of the insulin gene could be demonstrated only when the cells differentiated in vivo into teratomas"—into tumors. These are tumors which are taking place. This is just one of a stack of research papers saying this is a problem. It is a difficulty we have.

Let's talk about patients again because, to me, that is what we really have to get to—the bottom line. We have to bring this back to the patients.

We now have this exciting development which is taking place with type 1 juvenile diabetes. Unfortunately, it is taking place in Brazil instead of the United States. I wish we were having the researchers doing this in the United States. I guess they—whether they are being attracted overseas to do adult stem cell work and not in the United States—but this was Northwestern University which was doing this in Brazil.

I want to look at Parkinson's. One of my colleagues raised the issue of Parkinson's, which is a very difficult, terrible disease that confronts and confounds us as a society and as individuals. I wish to point out to my colleagues an individual who came to testify in 2004 who was a Parkinson's patient and testified about his treatment with his own stem cells that was taking place, a Parkinson's patient, Dr. Dennis Turner, and he was Parkinson's free for a period of 5 years. We tried to get him in to testify a number of different times. We had trouble. He was

out doing African safaris after his stem cell treatment as he was doing so well from it.

My point is that we have tried this. We have tried it aggressively. We have tried it ethically to say: OK, let's try embryonic stem cell work on lines where a life-and-death decision has already been made. That was the President's determination in 2001. He was saying: We don't know at this point in time where this science will lead us. Let's try it on these ethical lines because somebody has already made the life-and-death decision. Let's put money into it. Let's start in the nonhuman area first because we want to develop this in the animal models, which is clearly the right way to go. Let's invest heavily in it, which I noted in the earlier chart where I pointed this out, the amount of animal trials, the money that has been put into animal trials on embryonic stem cell work-in 2006 alone, \$110 million; \$481 million for 2002 through 2006—trying to find out: Is there a place? Is there a way? Can we make this work? We continue to have this tumor problem which keeps coming up in almost all of the studies. Yet we are saying: Let's try it on human embryonic and these lines that have already been developed, and we still are not getting the results. So why would we continue to fund in this area?

Now we want to expand the funding in this area and we want to expand the lines and we want to-not only go there, we want to cross the big moral divide that many of us have different opinions on but all of us have to say is a profound question: the use of taxpayer dollars to fund the destruction of young human life. We are all troubled about that. One way or the other, we are all troubled about that. That is the question on this particular bill and why it is so divisive. We all want cures. I think people are troubled about the lack of scientific results in one area and the fact that we are now at, in clinicaltrials.gov., 1,422 human clinical trials now going on, being recruited for or no longer recruiting for using adult stem cell work right now. So this is going on. It is going on well. We are not seeing any of it in the embryonic.

Now we want to take another step. We want to use taxpayer dollars. We want to destroy young human life. We want to create more embryonic stem cell lines. Never mind that it hasn't worked to date. Never mind that we are getting a lot of results in this other field. Never mind that a good portion of our electorate finds this ethically very troubling. We are going to do it. We are going to go with it. We think we ought to do it.

I don't think this is a wise move. I don't think it is wise practically. I don't think it is wise ethically in spite of the thoughts others might have. Ronald Reagan said: If you didn't know if somebody was alive or dead, you wouldn't bury them. If you weren't sure, you wouldn't bury them, just as a commonsense thought.

My colleague from Oregon did a very good discussion of the ethical issues here, yet I could even detect in his thoughts that this is a troubling question. It is a tough one. So if we are not sure if it is alive or dead, would you bury them? No, you wouldn't. And if we have a moral question about this and we have a route where we can use this \$613 million to get treatments for people like Dennis Turner, whom I put up here, and where we have had some successes, if we can get treatments for diabetes that are being developed by Northwestern University—but for some reason, we are not having enough interest here to do them here, we are having to do them in Brazil. I want people to get treatments. I want Parkinson's treatment to take place. We have a route to do this. We are not unlimited on money resources in the health care field. I think we should invest more in the health care field. We have a route to go here. We have a route that can use the resources. If we are at 1,422 clinical trials now, my guess is there would be a lot more we could try.

I put up pictures of people here yesterday who are having to go to Portugal for spinal cord injury treatment. I want to put a picture back up here again. She wonders why we couldn't do this here.

I might also note to my colleagues that it is critical that this is done quickly. They are finding in these early research results that the sooner you can get the treatment for a spinal cord injury, the more likelihood of success. So how many people here can afford to fly to Portugal for the treatment, and how much better would it be if this were done in Chicago or in Kansas City where people could go in this country? This lady from central Illinois was having to go to Portugal.

We are finding this in the diabetes area. They are saying the sooner the treatment is taking place—and this is common sense to most of us as well we know that the sooner you catch something, the more likelihood you have success if you get quick treatment. Should we be forcing people, then to go to Brazil and Portugal and Thailand to get these adult stem cell treatments, many of which were developed in the United States, being done by U.S. researchers, and now are being conducted abroad? Why? I understand we are all after this goal of treatments, and I would hope—and I give that to my opponents, that is what they are after as well-they see this hope and

I can't cross the ethical boundary they have been able to cross. I find that each of these lives—and here, I am not quoting from a religious source; I am quoting from a biology textbook, an embryology textbook, 1996 human embryology textbook that says this about when life begins, not talking about the theology but the biology. It says:

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 Presiding Officer wouldn't be here if he was destroyed as an embryo. If we have somebody in the future who in this body—I want to show Hannah who was in this body who was createdor, excuse me, was started in an IVF clinic, was a frozen embryo at some point in time, she is destroyed as a frozen embryo, she isn't going to be here as a U.S. Senator. This life is a continuum. We all know this. This is not something which is new to anybody. Here is man who is a snowflake baby, a frozen embryo, who was adopted. We have another route to go on these frozen embryos. We could really push an adoption technique. If she is destroyed at this early phase, she obviously isn't here at a later phase. We know that. We know what the embryology textbook says, and we know each of us started out as an embryo, so why would we do this? I understand people are saying: Well, because we want cures. And I do, too. We have an ethical route to go on the cures. We have a route which is producing enormous successful results and one which is producing

Now, maybe it will, in a decade or two, over large U.S. expenditure, over a great ethical divide that we all are troubled about, and then we will expand into human cloning to be able to get a genetic match, because it will have to. Otherwise, if you do this with embryonic stem cells and implant them and the genetic type doesn't match up with that of the body, you going to have to have are immunosuppressants being used all your life. Is it likely we are going to continue that route? No. We are obviously going to have to do human cloning, develop young human clones that genetically match the individual being treated. You are going to have to harvest thousands, if not millions, or hundreds of thousands of women's eggs to get the human eggs to develop the clones.

Do we want to go there with women? You are probably going to have to incentivize and pay women in poorer countries to get the human eggs to develop the clones that genetically match so you can implant them. This leads down several paths we don't want to go. So why would we start down there if we don't want to go there and we have an ethical route in which to go?

I plead with my colleagues that we don't need to do this. We don't need to jump over this ethical divide, and we don't need to ignore this definition. We don't need to create a legal fiction that, yes, it is alive but it is not a life, which we are doing now with this discussion. We don't need to go back to the old debate of treating human life as property and that you can patent it and own it and manipulate it, and treat it for your own purposes. We have been there before. We have always regretted

it. Why would we do that now? We don't need to go there. I say to my colleagues, let's not go there. Let's go this route we can all agree on. Let's do amniotic fluid banking. Let's do banking of those stem cells and create more treatments. Let's invest more heavily in the adult stem cell field so we can create and find those cures. Let's have treatments done in the United States and not force people to travel overseas to go there.

We don't need to get women into a position to pay them to harvest their eggs. We don't need to go down the route of human cloning, creating life for our own purposes. We have done that before and have deeply regretted it.

This is a turning point for us. I have no doubt how the vote will come out today. It will be in favor of S. 5. I think that is regrettable. I believe the President when he says he is going to veto it. I hope he does. I will be strongly in support of him doing that. Instead of having a culture that looks at using life, let's have a culture that values life, that sees every life as dignified, beautiful, sacred, a child of a loving God, not to be used for other purposes but has dignity because of who it is, because of the beauty of who it is. What is wrong with that? Let's find cures, and we can do it.

Mr. President, I yield the floor.

The PRESIDING OFFICER. Who yields time?

The Senator from Georgia is recognized

nized.
Mr. ISAKSON. Will the Chair advise

us of how much time remains.

The PRESIDING OFFICER. The Senator from Georgia controls 14 minutes.

The Senator from Iowa controls 6½ minutes.

Mr. ISAKSON. Mr. President, the Senator from Illinois will speak next and he told me he needed extra time. In the spirit of cooperation, I will be glad to yield 5 of our minutes to the Senator from Illinois so he will have 11 minutes, and then I will conclude. Is

that fair?

Mr. HARKIN. Yes. We will yield 5 minutes to the Senator.

Mr. ISAKSON. You have 6 minutes left. I am giving him 5 and I will take a closing. Is that fair?

Mr. HARKIN. That sounds good to

Mr. DURBIN. Mr. President, I thank my colleague from Georgia for his gracious gesture. I also thank my colleague from Iowa, Senator HARKIN, along with Senator SPECTER, for introducing this bill on stem cell research.

Some important things have been said on the Senate floor today. Senator SMITH of Oregon made an exceptionally moving statement on this issue. I thank him for sharing his views. This is a tough issue. It is not easy. I totally respect those who see it differently than I do, including the Senator from Kansas. They are trying to apply to this important political debate their

own conscience. That is an important thing in this business, that we bring our conscience to the Senate Chamber. I know, as most people do, that as we meet and debate this issue on the floor of the Senate, the lives of Americans continue. All across America, in sterile laboratories, there are doctors and scientists at work today trying to help loving couples create human life. These are men and women, husbands and wives, who want a child and, because of some physical problem, they cannot conceive. So they spend enormous sums of money—thousands of dollars on the chance that in a little glass dish in a laboratory life can be created that will end up being the child they will love for the rest of their lives. It is a beautiful story of love that is repeated every day in America in these laboratories. I have a friend who recently had a baby girl—2 weeks ago. Eight days after she was born, I was giving her a bottle. I thought I had lost all those talents, but they came back to me. My wife was admiring her and telling the mom how proud we were. She talked about going through this process and how when they went into this laboratory and looked at all of the possible embryos that could lead to the birth of the child, they picked the healthiest and strongest ones, naturally.

But other embryos were not chosen. What happens to those? At the end of the day, what happens to those that are not chosen to end up becoming a baby? They are thrown away, discarded. Now, Senator BROWNBACK has referred to these as "nascent" human life, young human beings. I see this a little differently. I cannot understand how we can condone legally a process that will end up at the end of the day with these embryonic stem cells being thrown away and discarded, when we know if those same stem cells that are about to be thrown away are given, under appropriate guidelines, with strong ethical standards, to laboratories, they could lead to cures for serious illnesses. Is it better morally to throw them away or is it better morally to use them in a positive way to enrich and save human life? That is what this debate comes down to, as far as I am concerned.

I have many friends and there isn't a family in America that hasn't been touched by Alzheimer's, Parkinson's, spinal cord injuries, ALS, or diabetes. We all know the stories. That is part of American family life today. When you are a parent of a child who suffers from one of these illnesses or diseases, the first thing you want to know is: Doctor, what can be done? Is there a cure? Is there a place I can take my daughter to where they are going do surgery or a procedure—something—to save her from this disease? That is the first question a parent asks.

Because President Bush decided over 4 years ago to close down Federal funding in this area of research, it limits the opportunity to find those cures. The President has said he is asserting

his moral belief, his ethical position on this issue. Well, everybody brings their moral and ethical positions to these issues, but you have to ask the larger question: Is it right for the President to impose on all of the families in America who are afflicted with diseases his moral and ethical views?

I think what Senator HARKIN has done is more reasonable. He has said we will have strong ethical guidelines for this kind of research. No one is going to make a dollar off this. You cannot direct this research toward any person. This is strictly scientific, closely guarded, with strong ethical guidelines. Senator ISAKSON has come up with an approach, too, to use a different form of these cells. I also applaud his approach. Let us try everything we can ethically find that moves us forward toward finding cures. That is what this should be about. If you believe the embryos not used in in vitro fertilization are human life, as described here, I think you have a moral obligation to outlaw in vitro fertilization because, frankly, at the end of the day these "nascent" human lives will be destroyed. We know that. But you have not heard that suggestion. Those opposing stem cell research are not opposing in vitro fertilization; they say go forward with that, knowing the choice would be made to discard the stem cells rather than use them for medical research. I don't follow that logic. I think it is morally consistent for them to oppose embryonic stem cell research and prohibit in vitro fertilization. But they have not gone that far.

We have tough choices ahead of us in this bill. I think they are obvious choices. We understand what Senators HARKIN and SPECTER have done. They open the door for funding Federal research in this area. I am glad the Governor of Illinois found money to initiate this research in Illinois. California and many other States are also doing this. Why are we doing it State by State, not as a national Government, as we do all medical research? The President doesn't view this the same as other people. He used his veto pen once as President and that was to veto stem cell research. I think that is inappropriate.

As I get into this debate, I think about a lot of people I have met who are victims of multiple sclerosis, Parkinson's, ALS, cancer, and spinal cord injuries. I think about visiting the Heinz VA Hospital yesterday and seeing a quadriplegic who has been bedridden since the Korean war. Imagine that, if you will. I think about those who have suffered spinal cord injuries who want the chance, the possibility, that this research will allow them to lead a more complete and full life. I also think of my colleague from the House of Representatives, Lane Evans. He came to Congress in 1982 as a wonderful, great young man, a Marine Corps veteran of the Vietnam era. He had to give up his congressional career last year because of Parkinson's. It got

to the point where he could not continue his official duties. He used to come to the floor and beg for this bill to pass so others suffering from Parkinson's would have a chance.

I dedicate my vote in support of this bill in support of Lane Evans, the veterans, and so many others who are counting on us to move this research forward. Dr. Elias Zerhouni, the Director of the NIH, stated our Nation would be better served if federally funded scientists had access to embryonic stem cells for research. He separated himself from the Bush administration's official position. He said:

It is not possible for me to know how we can continue the momentum of science and research with the stem cell lines we have at NIH that can't be funded. From my standpoint as director of the NIH, it is in the best interest of our scientists, our science, and our country that we find ways and the nation finds a way to go full speed across adult and embryonic stem cells equally.

I am not going to argue against research using cord blood, adult stem cells, the type of stem cells described by Senator ISAKSON in his bill. But I think we have a moral obligation to the men and women who are counting on us to open this research to find cures. This is our chance, with passage of this bill.

I will vote in favor of both S. 5, the Harkin bill, and S. 30, the Isakson bill, to support all ways of deriving stem cells in a positive way to save lives. If you are in favor of human life and making it better, this is your chance. What matters most in this debate is that we aim to make good on the promises we vowed to keep. Let's support the research that can lessen so much pain for so many and support S. 5.

I reserve the remainder of my time. The PRESIDING OFFICER. The Senator from Georgia.

Mr. ISAKSON. Mr. President, I will be brief. I will take a portion of the remainder of our time and yield back the rest. I compliment Senator DURBIN on his excellent remarks. Referring back to Senator DORGAN's and Senator SMITH's speeches and so many other speeches, I think this has been a terrific debate.

I compliment the Senator from Iowa tremendously. We all gained a great deal of education. I think, with rare exception, we have seen exhibited a passion to further embryonic stem cell research. The questions are not if that is what we should do but how we go about doing it.

What I have tried to do, and Senator Harkin and I had a great exchange last night when we educated one another on our positions, but what I tried to do is open a door that already existed, a door that brought about 5 of the 21 embryonic stem cell lines that are currently under NIH approval. But as Senator Harkin and others have stated, those lines have now been experimented on for 5½ years, using mice, they have developed pollution or less-than-quality lines. It is time for us to find a way to further the science, to

reach out for those discoveries and do so. S. 30, which I am here to advocate for, affords that opportunity because it allows the NIH to invest future funds in embryonic stem cell research on embryos derived from Level III Gardner principle remainders and in vitro fertilization, arrested embryos, as they are referred to in some cases, dead embryos as referred to in other cases, but in all cases embryos that are no longer going to become a life but do generate and contain pluripotent embryonic stem cells.

In the end, I feel that approach satisfies the questions raised at the White House and affords us an opportunity of a bill that will be signed by the President and does what everybody on this floor supports, with rare exception, I believe, or maybe no exception once done, and that is the expansion and the extension of the research.

I end where I began with my remarks a minute ago. I compliment Senator HARKIN and others who have spoken and the advocacy that has been here today and the level and quality of this debate on this subject. I look forward to this afternoon and the remaining 3 hours as we lead up to the votes.

I guess I would say the same thing the Senator from Iowa would say. If any Members want to speak this afternoon, it is time to let us know now rather than later because we will have 3 hours equally divided between four different groups.

With that said, I yield back the remainder of my time.

Mr. HARKIN. Mr. President, I 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. HARKIN. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

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

#### RECESS

Mr. HARKIN. Mr. President, I ask unanimous consent that the Senate now stand in recess until the hour of 2:15 p.m.

The PRESIDING OFFICER. Under the previous order, the Senate will stand in recess until the hour of 2:15 p.m.

Thereupon, the Senate, at 12:23 p.m., recessed until 2:15 p.m. and reassembled when called to order by the Acting President pro tempore.

### STEM CELL RESEARCH ENHANCEMENT ACT OF 2007

HOPE OFFERED THROUGH PRIN-CIPLED AND ETHICAL STEM CELL RESEARCH ACT—Continued

Mr. ISAKSON. Mr. President, I suggest the absence of a quorum and ask that the time that runs count equally

against both sides for the remainder of the debate.

The ACTING PRESIDENT pro tempore. Without objection, it is so ordered. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. HARKIN. Mr. President, I ask unanimous consent the order for the quorum call be rescinded.

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

Mr. HARKIN. Mr. President, I ask unanimous consent that Senator STEVENS be added as a cosponsor of S. 5.

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

Mr. HARKIN. I suggest the absence of a quorum.

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

The assistant legislative clerk proceeded to call the roll.

Mr. BROWNBACK. Mr. President, I ask unanimous consent the order for the quorum call be rescinded.

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

Mr. BROWNBACK. I believe under the previous agreement I have 30 minutes at this time, may I inquire of the Chair?

The ACTING PRESIDENT pro tempore. Approximately 30 minutes—44 minutes, the Senator has.

Mr. BROWNBACK. I want to introduce to the body, into the discussion, a gentleman I had a chance to meet who came in front of a Senate Commerce, Science and Transportation Subcommittee—Keone Penn. I have a picture of this young man here. I want to share his story. He was cured of sickle cell anemia. We use that term advisedly, but clearly, cured of sickle cell anemia through cord blood adult stem cell treatment—cured.

I want to do part of this to encourage other people out there who might by chance be listening or know somebody else who has sickle cell anemia who has not yet been able to get treated; to talk about cures using cord blood. We have cord blood banking. That is taking place. Cord blood is the blood between the mother and the child when the child is in the womb, and the use of it, which we have now banked-10,000 units roughly have been banked and used throughout the country for many types of illnesses and sicknesses. I want to talk about curing sickle cell anemia in some cases using cord blood.

Sickle cell anemia is a disease that afflicts more than 70,000 Americans and a disproportionate number of African Americans. Keone tells the story the best so I will just highlight what he stated in front of a Senate science subcommittee hearing that I chaired. He said:

My name is Keone Penn. Two days ago I turned 17 years old. Five years ago they said I wouldn't live to be 17. They said I'd be dead within 5 years.

I was born with sickle cell anemia. Sickle cell is a very bad disease. I had a stroke when I was 5 years old. Things got even worse after that. My life has been full of pain, crises, blood transfusions every 2 weeks, and more times in the hospital than I can count.

The year before I had my stem cell transplant I was in the hospital 13 times. I never was able to have a normal life. My stem cell transplant was not easy, but I thank God that I'm still here. I will graduate from high school and I want to become a chef because I love to cook. I think I'm pretty good at it.

Sickle cell is now a part of my past. One year after my transplant I was pronounced cured. Stem cells saved my life.

Many have heard of Keone's amazing story on previous occasions, and the effectiveness of cord blood stem cell research for such diseases rightly gives hope to millions.

Keone's story is yet another of a great litany of adult stem cell successes.

I want to focus now on the cord blood stem cell successes and why we should not be directing research dollars down other paths, such as embryonic stem cell and human cloning that have not produced these sorts of cures or these sorts of treatments, when we could do a lot more with treatments in the cord blood field.

As I noted, we started a cord blood banking program. We now have cord blood banking taking place in several places. I hope people are doing more of this across the country. As I stated, we have distributed nearly 10,000 units of this to get to matches in various places, in various individuals across the country. We need more cord blood donated because you have to match a series of six factors and at least four of those factors must match to be able to use the cord blood in a particular individual such as Keone. Therefore, you need to have a broad cross-section of cord blood in the banking supply so people can possibly find a match.

In many places it has been used as a substitute for bone marrow and the difficult collection process that takes place sometimes with marrow. We need more in the cord blood field so we can get more people treated like Keone Penn. I think that is a key avenue for us, in stem cell work, in producing the results.

Next step, the next field we need to go to is amniotic fluid. I want to show this to my colleagues. Some of them would have seen this issue. We started a cord blood banking program to get this, so we could get more matches across the country and could get a broader cross-section of individuals who have contributed from various types of blood so we could get matches.

The next area we need to bank in, I believe, is amniotic fluid. The fluid that surrounds the child as the child is in the womb is also a rich source of stem cells. It would be my hope that in this year's appropriations bill we would not only study, I hope we will begin the collection and funding of collecting amniotic fluid.

Now I urge my colleagues on all sides of this issue to say: Here is another one we can agree upon in moving forward in the stem cell field. I wanted to cite to this, because it is an exciting breakthrough of news.

This article appeared in JAMA, Journal of American Medical Association, February 28 of this year, on amniotic fluid. Amniotic fluid-derived stem cells can be coaxed to become muscle, bone, fat, blood vessels, nerves, and liver cells. It might be capable of repairing damaged tissue resulting from conditions such as spinal cord injuries, diabetes, Alzheimer's disease, and stroke.

My reason for pointing this out is this is one we can agree upon. This is one we can move forward with. The amniotic fluid is discarded after the pregnancy, is not collected. It can be collected. It could be collected. We should see about collecting this and move forward on these treatments, and some of the \$613 million we spent on embryonic stem cell research could go into this field, and likely you are going to be producing results very quickly. If the amniotic fluid some people are talking about, as well as the placenta. being able to collect stem cells from the placenta and other rich sources of stem cells—if we can take some of this \$613 million that has produced zero human clinical trials to date and put it into fields that are producing or have a high potential here in a near-term basis to be able to produce treatments or possibly even cures—no ethical problem, no ethical issues: this would be clearly a key one to go forward with.

I also want to further develop the thought about embryonic stem cells leading inevitably to human cloning. I want to put out some numbers on this, follow with the discussion on this. People certainly will understand it. If we are to collect and develop additional embryonic stem cell lines, we get these embryos from IVF clinics around the country, and you start these lines, the genetic match will not take place. That genetic material will not match anybody, because it is unique genetic material, so as soon as it is implanted into somebody else, there is going to be a rejection by the body taking place. That individual is going to have to be on immunosuppressive drugs for the remainder of their life, because the body is rejecting this foreign material.

Therefore, the answer is to move forward, saying, well, okay, we have developed this science, we can do human embryonic stem cell work, it works, but we are getting the rejection taking place. Therefore, we are going to need to do human cloning, but it is not going to be real human cloning, it is going to be SCNT-somatic cell nuclear transfer, that is the scientific name for human cloning-and we are not going to clone, because we will create the clone, we will harvest women's eggs, we will then create the clone, and we are not going to allow the implementation of it. Therefore, we can say it is not cloning because it is not going to result in a full-scale child, by all definitions. We are going to clone a person, we are going to start human life, then we are going to purposefully kill it for its stem cells, that genetic match.

That is the process this will inevitably lead to if we are successful in this science that I believe highly doubtful, given the tumor formation. But let's say we are successful in the next couple of decades, we can develop the science, the tumor issues somehow we are able to deal with, over that period of time, we get over that hurdle, we can develop it.

We have an immunosuppressant problem, so therefore now we have got to move into human cloning. Where do we get those human clones? We get them from people. We have to have an egg we get from women. We will get the genetic material from the person who needs the embryonic stem cells; that is not a problem. But we are going to have to harvest a lot of eggs.

I want to go through some of those numbers from different individuals who have looked and thought about this. I would hope my colleagues, even if they are on the other side of this, would think about where does this take us, which is a real question about the idea of doing massive amounts of human cloning, massive amounts of harvesting of women's eggs to do human cloning that is going to take place. Because you do not get a one-for-one match, you get the one human egg. you are not going to get it to necessarily take as a human clone, it is going to take a number of attempts to take place—I believe the numbers I have heard are somewhere around 200 eggs are necessary to get one clone to take.

Now, maybe we are able to develop that technology better into the future. But if we develop this line, you are probably going to look at the need for hundreds of thousands, if not millions, of embryos needed to pursue this speculative embryonic stem cell research. And for this application, you are going to need millions of eggs and millions of human clones—excuse me, I cannot call them clones—SCNT products, that is the scientific name for human clones, SCNT clones. These embryos are going to have to be developed that way to obtain sufficient embryos for this speculative research science, that will turn to human cloning, which will exploit women for their eggs, because where are we going to get hundreds of thousands of eggs? Are we going to have women in this country be willing to voluntarily go through the process, a difficult process? It can be damaging to their bodies.

Maybe we will get some to do that. Probably more likely we will be going abroad to recruit people to give eggs. It is unlikely they will give them, it is more likely they will be paid for those eggs to take place, and to go through this difficult, painful, and potentially harmful problem.

Is that the route we want to go, or would we be wiser to work with amniotic fluid, the cord blood, the placenta collection that is taking place, and take some of this money and develop that field? I think the route forward is pretty clear.

I also want to discuss the idea we were talking about, a disposable medical infrastructure, the frozen embryos. I want to put back up a chart of one of those embryos we have here, and talk about this from a standpoint. I ask my colleagues to think about this for a second.

I believe everybody is wrestling with the notion that the human embryo is alive. We all agree it is alive. Some of us will give it the status of a life; others would not. Others would call it a potential for human life. I do not believe that is the scientific term, but some would call it a potential for human life.

It is a human embryo. Here is a picture of a human embryo. That is actually a child who was adopted as a frozen embryo and implanted and grew. This is, of course, what we are looking at as a physical entity. It is human. It is in the human species. We know that. All of us are having some level of difficulty with using taxpayer funding to destroy that young human life. Well, why are we having that level of difficulty with destroying something that looks like this? I think it is because in our own being, and the natural law that resides in each of us, we believe in dignity for every human being, period. We believe everybody who is here, who is listening or watching this, is a dignified person and worthy of respect and worthy of recognition as a person. That is why when we have people on death row and facing execution, we do not sav. let's go and harvest their organs. When we hear that term, we are appalled by it, because we are saying: That is wrong.
Well, why? Because the person is

Well, why? Because the person is going to die. They were convicted of a heinous crime. Why not harvest their body parts and save some lives? Because we certainly could. That way we could save a number of lives by harvesting the organs of a person who committed a terrible crime. They are guilty. Despite the number of people having difficulty with the death penalty—and I have difficulty with the death penalty—why wouldn't we go ahead and harvest the organs? We are going to throw them away, right? We are going to dispose of them, right?

Well, but something within us says, that doesn't feel right; that seems as if that is the wrong thing to do. And it doesn't seem as if it is right because it is not the right thing to do. It violates their human dignity, that individual, even though they have committed that crime, is a dignified human being and worthy still, even though they have committed the heinous crime, is worthy of us treating them with some level of respect, and not harvesting their organs. If they decide to voluntarily give them up, that is their choice, but they are worthy of that respect. So why, when we are looking at human life here, that all of us agree is human, alive, would we say: Well, callously, we can throw them away because they do not look like us.

Well, the child at this stage starts to look like us, but it is pretty small. You can say it doesn't look much like us. Can we do it at that stage too? Then if we are uncomfortable with doing it in the early phase, or we are comfortable with doing it in an earlier phase, or when Hannah is born, can we research on her then? She cannot do a whole lot at that point in time for herself. If we leave her by herself, she will die. She can't care for herself at that point in time. So why not research on her at that point? Well, no, because she is a dignified human. So, okay, she is here. At what point? Here? Probably so. At that point? Here?

Well, I don't think so. I agree she is human. I agree she is alive, but I am not willing to give her any dignity status as a human.

What divides those? Some would say place, placement. If it is placed in a womb, it is. If it is not in the womb, it is not. Location has not determined personhood in our past. I would suggest it doesn't determine it in our future or presently. There is a natural revulsion toward this idea that we would take life from somebody for their body parts for somebody else, and here we are having difficulty saying, well, yes, but the possibilities are so promising we are going to go ahead and do it anyway.

I quarrel with the possibilities being that promising, and I have gone through this at length with my colleagues and discussed that. Even if it were, what about the human dignity of each of us? When we have an alternative that is working, and when we have more possibilities we can fund in the amniotic fluid developing, and the placenta research, why not go those avenues, where we are actually getting some possibilities, we are actually getting people treated, and we have no ethical questions, and we can go forward aggressively and happily about it?

I am pro-life and whole life. I believe life is sacred. I believe life is sacred in the womb and I believe life is sacred wherever it is. I believe a child in Darfur is sacred, I believe that person even on death row is sacred, and should be treated with dignity. I believe the youngest phase that people are is sacred and should be treated with dignity. I do not think we have to go there. And if we do go there, it leads down a path we do not want to follow in human cloning, and that we should agree with as a society.

Mr. President, I want to also note to my colleagues we can spend a lot of time on this bill. I do not believe it is going to become law because of the divide in this country, because the President is going to veto it. We will see if there are votes to sustain that veto or to override that veto. I do not think this is going to become law. So why would not we then look at this as a chance for us to work together on

areas that we know have high potential for cures and treatment and that unite us? There are plenty of things that divide us. There are clearly things in areas that unite us, there are clearly future areas of things that we can work on to unite us and to provide cures. Why would that not be a better approach? Are we so locked into a division here that we cannot find a way forward? I would submit we can find a way forward, and that we can work on these topics and provide cures so none of us is the poorer for it. We are moving forward. Unfortunately, too much of the work is happening overseas in the adult stem cell work and our people are not getting good access to it. I have cited several examples—that should not be happening overseas; it should be readily available here-of treatments that are developed here but are actually being practiced in places overseas because of either lack of interest or support that we would have here. I urge my colleagues to vote against S. 5. I urge my colleagues to work with me and others on developing this promising field in amniotic fluid. I urge others to work with me as we work in the areas of adult stem cell and cord blood that are currently treating and curing people and that we can do more of that and we can do that together and happily together and unite our country on an important topic instead of constantly dividing.

I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from Michigan.

Mr. LEVIN. Mr. President, are we operating under a UC at the moment?

The ACTING PRESIDENT pro tempore. We are operating under consented time. The Senator from Iowa controls 90 minutes.

Mr. LEVIN. I have been authorized to yield myself 10 minutes.

The ACTING PRESIDENT pro tempore. The Senator is recognized.

Mr. LEVIN. Mr. President, in the previous Congress, the Senate and the House of Representatives voted resoundingly to lift the President's burdensome restrictions on embryonic stem cell research. The President, however, used the first-and so far onlyveto of his administration to reject this potentially life-giving research which is supported by a clear majority of the American people. We are here today to try again to give our scientists the tools they need as they work to cure some of the most debilitating and dreaded diseases. We will not—and we should not—yield until we remove the obstacles the President has put in their way.

This fight is critical, because embryonic stem cell research could hold the key to curing diseases that no other research could cure. As best we know now, an embryonic stem cell is unique in nature. It alone can develop into any other type of cell in the body. Embryonic stem cells—and embryonic stem cells alone—can become a nerve cell, a muscle cell, or any of the more than 200 types of cells in the body. The promise of this unique ability is clear: If scientists could replace diseased cells with healthy cells created from embryonic stem cells, it could save an untold number of lives.

For example, 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, 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 desperatelyneeded dopamine. If those neurons can be successfully transplanted into a patient with Parkinson's disease, that person could be cured.

The list of diseases that could benefit from stem cell research is long—Alzheimer's disease, Lou Gehrig's disease, juvenile diabetes, spinal cord injuries, and many others. Stem cell research could offer the millions of Americans suffering from these diseases not just hope but cures.

Supporters of stem cell research understand that these breakthroughs will not be easy or inevitable. But the President's policy makes them far less likely. 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 about 80 stem cell lines—a woefully inadequate amount—would be available for Federal research. Most of those lines were later determined to be polluted and unusable, leaving only about 20 stem cell lines available.

Last month, the Director of the National Institutes of Health, Dr. Elias Zerhouni was asked during testimony before the Senate Appropriations Subcommittee on Labor, Health and Human Services, and Education whether "scientists have a better chance of finding new cures [and] new interventions for diseases if the current restriction on embryonic stem cell research were lifted." Dr. Zerhouni responded: "these cell lines will not be sufficient to do all the research we need to do . . . these cell lines have exhibited instability from the genetic standpoint and it's not possible for me to see how we can continue the momentum of science in stem cell research with the cell lines that we have currently at NIH that can be funded. It is clear today that American science would be better served and the nation would be better served if we let our scientists have access to more cell lines."

In issuing his executive order and in vetoing the bill we passed last year, the President did not question the scientific possibilities of stem cell research. In fact, he said the opposite. He stated in 2001:

Scientists believe further research using stem cells offers great promise that could help improve the lives of those who suffer from many terrible diseases.

The President's objection is to using embryos for research. But the key fact—and one that opponents refuse to deal with—is that any embryo not used for stem cell research is going to be destroyed anyway. The embryos created by fertilization clinics that are not going to be used for implantation will be destroyed. Why not give them a lifegiving use then? No answer has been forthcoming from the President.

RAND Health conducted a study in 2003 that found there were approximately 400,000 embryos in storage in the United States and some of these embryos will never be used because parents either had a successful pregnancy and no longer need them or because treatments were unsuccessful. In addition, the study found that only 2 percent of these embryos will be used to create pregnancies in unrelated mothers. Many will be discarded.

Last year, the Detroit News editorialized against a Michigan law restricting embryonic stem cell research and used words that apply equally well 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.

Sean Morrison, director of the University of Michigan's Center for Stem Cell Biology and one of the country's leading stem cell researchers, agrees. In an article in the Ann Arbor News last month, Dr. Morrison stated:

The thing about that that's crazy is human embryos are discarded all the time by fertility clinics...So it's legal to throw them away, but it's not legal to use them to try to help somebody.

Embryonic stem cell research is truly a life-giving process because of the extraordinary potential for healing living, breathing human beings, human beings with names and faces and families.

Members of the House of Representatives have now passed the bipartisan Stem Cell Research and Enhancement Act, H.R. 3. After we debate the companion bill, S. 5, I hope we too will again adopt it and remove the President's arbitrary prohibition against funding stem cell research on embryos. It will pave the way for hundreds or thousands of additional stem cell lines to be made available.

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 500 additional organizations. More

importantly, it has the overwhelming support of the American people. If the President again vetoes this bill, I hope Congress will override that veto.

As part of the unanimous consent agreement to consider this legislation, we are considering an additional bill as well. Senators Coleman and Isakson introduced a bill that promotes stem cell research limited to those stem cells obtained from "naturally dead" embryos. These embryos are called "naturally dead" because they are unable to divide and reproduce like other embryos. While we should pursue all types of research, I do not believe we should limit stem cell research to stem cells that may be flawed, as indicated by their inability to reproduce and divide.

Embryonic stem cell research holds enormous promise for healing and saving individuals who suffer from debilitating diseases and injuries. It is our responsibility to pursue those cures and treatments in an ethical manner. In order for our scientists to do quality research and make advances in medicine, they must have access to embryonic stem cells that are uncontaminated and viable for research, especially since they will otherwise be destroyed. S. 5 will allow our scientists to move forward to a new generation of potentially life-saving cures. It deserves the support of this body.

I yield the floor.

Mr. BINGAMAN. Mr. President, I yield myself 5 minutes from the time reserved on Senator HARKIN's side.

The ACTING PRESIDENT pro tempore. Without objection, the Senator is recognized for 5 minutes.

Mr. BINGAMAN. Mr. President, I rise in favor of S. 5, the stem cell enhancement bill of 2007. Many of my colleagues have eloquently stated reasons for supporting this bill over the past 2 days. The passage of this bill would be an important step forward for research into treatments of devastating diseases. In addition, passing S. 5 will help the United States as a leader in biomedical research, a leader in transparent and ethical research practices, and a leader in developing safe, effective treatments for diseases. I wish to see stem cell therapies developed in this country so we can ensure the safety and availability of these treatments for American families and at the same time create jobs for highly skilled workers to do the necessary research and to develop these new treatments.

Our current policy puts us at a severe disadvantage to other countries. As the Director of the NIH said at a recent hearing, our current stem cell policy is akin to working with one hand tied behind our backs. Scientists in most other countries are at an advantage to U.S. scientists because they are allowed to study the best stem cell lines and do so with government funding.

Let me explain this world stem cell policies map I have put up. It is color coded to show the different stem cell policies that exist in different parts of the world. We have essentially chosen four colors or four categories of policies I am trying to focus on. First, we have the countries in yellow which have not adopted stem cell policies. You can see those countries are fairly extensive. Next to those are those that have adopted stem cell policies. The United States is part of that group. Those are the countries in gray on this world map. The United States is among the most restrictive of those countries that are in gray, but we do have other countries that have policies that are in that category as well.

Third are the countries in light brown which allow the creation of stem cell lines from leftover embryos in IVF clinics. We can see those light-brown countries. Passing S. 5 would move the United States into that group of countries, such as France and Canada and Brazil

The final group depicted on this world map is those that are shaded in dark brown. These countries allow other laboratory techniques to be used to create embryonic stem cell lines. You will notice that many of these countries have very strong scientific research programs. I particularly mention the United Kingdom, India, and China as part of that. Scientists in these countries, other than the United States, are free to use the type of stem cells best suited to their research, whether they are adult stem cells or embryonic stem cells created before 2001 or embryonic stem cells created after 2001. In fact, many countries have been promoting stem cell research because they see this as an opportunity to get ahead in this field during a time when U.S. scientists are restricted to less useful stem cell lines.

For example, the United Kingdom has established a world stem cell bank to collect, characterize, and distribute embryonic stem cell lines to researchers around the world. The United Kingdom has also developed a comprehensive national regulatory system that requires researchers to follow strict ethical guidelines. While these regulations may slow research to some extent, embryonic research is an area that merits extra care and transparency and oversight. We should not relinquish our duty to uphold high ethical research standards to other countries or to individual States within this country or to the market more generally.

I ask unanimous consent for an additional 2 minutes.

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

Mr. BINGAMAN. Many other countries, including Singapore, Korea, and Australia, also have federally funded centers for embryonic stem cells. However, it will be difficult for the United States to capitalize on the research advances that are made in these other countries since federally funded scientists in the United States are restricted from collaborating with for-

eign scientists who use the stem cell lines that were generated after 2001.

Furthermore, we can't leave this important field of science to the private sector alone. We have a long history of bipartisan support for basic science research in this country precisely because it does not make financial sense for industries to invest substantially in early-stage research. Any scientist will tell you that human embryonic stem cell research is still in its early stages and that it has gone more slowly than it would have otherwise gone because of the restrictions currently in place in our own policy. Furthermore, most cell-based therapies, including bone marrow stem cell transplants, were first developed in academic research hospitals and have never been widely utilized. This means Federal funding is even more important for cell-based therapies such as stem cell transplants than it is for other types of treatments.

Mr. President, I urge my colleagues to support S. 5. It is an important step to keep the United States a world leader in the field of biomedical research, and it will give hope to many of our citizens for the treatments they desperately need.

Mr. President, I yield the floor.

The PRESIDING OFFICER (Mr. SANDERS). The Senator from Maryland.

Ms. MIKULSKI. Mr. President, I rise today to speak with some great urgency on the need to pass the Stem Cell Research Enhancement Act of 2007, S. 5.

We must pass this bill because if we do not, the American people will continue to suffer, our brilliant researchers will be discouraged and think about leaving the field of scientific research and, No. 3, we are also outsourcing our intellectual capital because other research is going overseas.

We have to have a sense of urgency because stem cell research takes a long time. We cannot have science on demand or scientists on demand. If we do not act now, we are going to be discouraging very important research and wonderful young people from going into this field.

Every year we wait, we fall 3 years behind in our research—another time where a patient might have been saved, a family might not have had to watch a loved one suffer, and also where we would not have to watch our great ideas going somewhere else.

Stem cell research is very important to the American people. It is very important to Maryland. It is very important to me. I am a firm, clear, unabashed supporter of expanded stem cell research and, at the same time, that this research be conducted under the strictest bioethical standards. That is why I like S. 5. This legislation is based on sound cellular biology science and also good, sound ethical principles.

This legislation is so important not because legislation is important but because it opens more opportunity to do stem cell research. What does that mean? It means that currently the existing law under President Bush restricts stem cell research to adult cells, to some vague 21 lines that are becoming tired and toxic. But under our legislation, it would open it up to embryonic stem cell research where embryos are garnered that are discarded in in vitro processes in which the donors themselves have to make that informed choice.

What does this do, though? Well, I will tell you, stem cell research is the kind of research that could find a cure for Parkinson's disease, diabetes, diseases of the brain and the immune system, multiple sclerosis, and spinal cord injury. Imagine if scientists could find a cure for Alzheimer's or Parkinson's, or if they cannot find a cure, to be able to regenerate new kinds of brain cells to give people a cognitive or functioning stretchout. Think about the impact on families, but also think about the impact on our nursing home budget.

Think about research in juvenile diabetes, type 1 diabetes, where little children, every day—whether they are 5 or 9 or 11—have to be testing their blood sugar. They cannot eat the way other kids do. They have to watch how they pace themselves when they play ball or do other things so they do not induce hypoglycemia. As they get older and their cells get even more tired, they fear they could lose a kidney or lose their eyesight.

If we could find more breakthroughs in juvenile diabetes, we would give them their childhood back. We would give them a life that has a future full of promise. That is why we are fighting here. It is not about ideology. It is not about party. It is about our American people. And what we invent here could help save lives everywhere.

Yesterday, I went to Johns Hopkins University to discuss this stem cell research. I wanted to be sure I was on the right track: sound science, good, solid ethical frameworks. I said to the scientists: Tell me what you are doing and tell me what impedes you now working under the Bush framework?

Well, they gave me an earful. First, it is inspirational—inspirational—in what they are doing in pediatric leukemia, in juvenile diabetes, in multiple sclerosis. Also, to give an example, in talking to Dr. Doug Kerr, he is working now through stem cells—yes, it is with paralyzed rats—to not only regenerate the spinal cord but to have those cells connect to muscle so not only for whether you are regenerating spinal cords that have been injured or severed, but also to connect the muscle so you could walk again. That was the dream of Christopher Reeve. But that is the dream of every paraplegic right now-whether it has come from a diving accident, if you are an athlete, or whether you have been injured in Iraq or Afghanistan.

Don't we want Dr. Kerr to do what he is doing now and to be able to extend that? But they do not get the clinical

trials because they are restricted in the types of cells they can use.

So we saw a cornucopia, again, of opportunity there. But I said to the docs at Hopkins: Why can't we do this with private or State funds? They said: Senator Mikulski, you have to have a national framework. First, that is where you get your bioethical guidelines. It is done not while there is one set of guidelines for States that can afford research and that there is another set of guidelines for those States that can't. Also, there is not enough in private philanthropic funds to be able to do this.

Private funds function like venture capital. But at the same time, what happens with States? Maryland is now in a bidding war with our \$25 million against California. We have scientists who are leaving Maryland to go to California. Hats off to them. But also, then, we have scientists in Maryland and California who are leaving the country because they can do work in Sweden or Singapore that they cannot do in their own country. These are American scientists who want to do their own work in their own country. But we are driving them out with our narrow-minded ideological sense of politicizing science.

So we cannot do this with State funds, and we cannot do it with private funds. As I said, right now we are outsourcing this to China, to Singapore, to Australia, to Germany. I am not saying there are good countries or not good countries, but what are we doing? We are losing our intellectual capital. We are also losing our young scientists.

Yesterday, I talked to a young doctor. I knew him as a resident. His wife was a friend of a friend of mine. I knew him through his residency. Now he is a young doctor, married, with three children. His whole field is diabetes. He is so eager to do this juvenile diabetic research. He has already started it. He is already good at it. Gosh, maybe he could win the Nobel prize one day. But guess what. There is not the money for the young scientist. Also, with the very shackling of what goes on now in these so-called Bush lines, with these ideological guidelines, they cannot do the research. He has to think hard about whether he wants to continue his life dream of finding a cure for juvenile diabetes.

You see, this man has devoted his life to getting ready to do this, and now his own Government is stopping him—not because he is not smart, not because we do not have the will, but because we have too much ideology and too little money in the wallet.

We have a President who has given us a framework where research has one hand behind its back. Scientists have been prohibited from doing new stem cell research.

Six years ago, the President restricted Federal funds for embryonic stem cell research. What did it do? It created an unregulated atmosphere. The result was federally funded stem

cell research was halted almost entirely. Stem cell research was done by private entities. A private entity has no Federal bioethical standards.

Mr. President, like you, I am a sunshine person. I believe you should have research conducted in the sunshine. That is where you have compliance with bioethical standards. That is why we need to have the kind of national framework where everybody goes by the same rules, at the same time, in the same way. Without national standards, research will be done by the well-heeled, outside of the public eye, with no national scrutiny. This is where I fear dark and ghoulish things can occur.

I acknowledge the validity of some of the concerns raised by colleagues. But as long as you shove it underground, as long as you shove it behind closed doors, then you are going to get either faulty research or very bad ethics.

I believe the legislation pending will remove the restrictions imposed by the President. It will provide the ethical and medical framework we need for federally funded stem cell research. It will create strong ethical guidelines. Most of all, it will ensure that we now open the opportunity for even greater and more expanded stem cell research so scientists will now have access to new, fresh stem cell lines which they now do not.

What does it mean? Well, I can tell you what it means. It means for the United States of America we have heard what the voters said in November. They said: Change the direction of the country. Change the priorities. Come back home, America. Remember what America is. We are the land of the free, the home of the brave, and of discovery. Let's go for it.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Iowa.

Mr. HARKIN. Mr. President, I thank the Senator from Maryland for her very eloquent statement and for her strong support of hope and health and healing, as encompassed in S. 5.

Mr. President, while I wait the arrival of our next speaker, I want to point out that time and time again I hear those who are opposed to S. 5 use the phrase that they are opposed to funds being used for the destruction of embryos. Earlier today I had corrected one Senator who said that. I said: Show me in the bill where it is. Well, then other Senators—the Senator from Kansas and others—have gotten up and talked about not using money for the destruction of embryos.

I challenge anyone, any Senator to come and take S. 5 and show me anywhere in there where there is one dime used for the destruction of embryos. It is not there. I get the feeling that a misrepresentation repeated and repeated somehow seems to take hold so that people say: Well, there must be money for the destruction of embryos in this bill. There is not. That is covered by the Dickey-Wicker amendment

which pertains to appropriations bills, and I am an appropriator, and that is covered there. So none of this money is used for the destruction of an embryo. All it is used for is for the research on stem cells that have been derived, which is what is being done today, by the way—which are derived. Now, those derivations can come from private entities or State sponsored or wherever, maybe some international, maybe foreign countries—wherever. But none of the money here in our bill, S. 5, can be used for the destruction of an embryo. period. If anyone says so, please come and show us where it is in the bill that says that.

Mr. President, I see the distinguished Senator from Missouri is here. I yield 15 minutes to the Senator from Missouri.

Mrs. McCASKILL. Mr. President, I rise to speak today on a matter of significant medical, scientific, and personal importance. Today, my colleagues and I have the opportunity to support research which will result in lifesaving cures, research which alleviates pain and suffering, and research which improves the quality of life of millions of Americans. I am speaking about research which will provide some of the most significant medical advances we have ever seen in the history of mankind.

Of course, I am speaking in the strongest support of S. 5, the Stem Cell Research Enhancement Act. I thank my distinguished colleagues, Senators HARKIN, HATCH, KENNEDY, and SPECTER, for the leadership they have offered on embryonic stem cell research legislation over the last several years.

In my short time in the Senate, I have had the occasion to speak and vote on numerous matters of significant national importance, but not every day do we have the opportunity to vote to heal the sick. Today, we have a chance to set aside partisan politics and support legislation that aims to improve the quality of life for tens of millions of Americans. It is a noble cause and one that reminds me of how proud I am to represent Missouri in the Senate.

Who would oppose such a cause, and what would their reasons be for such opposition? The opponents of embryonic stem cell research attack it on multiple fronts-public opinion, scientific fact, and moral grounds-and the war against embryonic stem cell research is fought in our communities, in the media, and today in this Congress. Unfortunately, the casualties are the medical researchers and doctors who want nothing more than to cure diseases. That is all they want. They have no grand scheme. There is no big money here. We are talking about curing diseases. Ultimately, the casualties are the patients who would benefit from those cures.

My greatest disappointment in this debate has been the numerous inaccurate statements made in this Chamber by opponents of embryonic stem cell research. Because this issue was on the ballot in Missouri last year, I had the opportunity to learn a great deal about this field during the months we campaigned for the U.S. Senate, as this issue was debated in great detail across my State. Let me talk about a few of the misrepresentations that have been made in this debate.

Claim: Adult stem cell research and stem cells derived from umbilical cord blood and amniotic fluid are adequate and we don't need embryonic stem cell research and there are 72 adult stem cell treatments for human diseases. The truth: In the medical journal Science, July of 2006, Dr. William Neaves of the Stowers Institute for Medical Research in Kansas City and Dr. Steven Teitelbaum of Washington University Medical School in St. Louis detail that this false claim originates from David Prentice of the Family Research Council. Mr. Prentice asserts that there were over 1.000 ongoing clinical trials of adult stem cell therapies. A review of the record at the NIH Web site that tracks clinical trials, however, showed that Mr. Prentice grossly misinterpreted the data. He searched the database for any entry containing the word "stem" and counted items such as "brain stem," "system," and "stem from," which is a verb. There were numerous other errors and omissions that served as the basis for this claim. In fact, there are only a handful of clinical trials with adult stem cells, and only nine conditions have adult stem cell treatments that are approved by the FDA.

In addition, as the Senator from Iowa so eloquently outlined yesterday, most scientists and patient advocacy groups agree that adult stem cell research is not a substitute for embryonic stem cell research. All research is good, but we cannot substitute an inferior form of research for the type of research that holds the most promise for these elusive cures.

Many organs do not have adult stem cells, and adult stem cells and cord stem cells are not pluripotent. That means they don't have the ability embryonic stem cells do to develop into any type of cell, and therefore their use is limited.

Claim: Tumors are a necessary product of implanting embryonic stem cells. The truth: Tumors will only develop if undifferentiated stem cells are injected into mice. Undifferentiated cells are those which have not developed into their final state. For example, a cell that has not developed into its final state is a blood cell or a bone cell or a nerve cell. In fact, tumor formation is exactly how scientists determine that a cell is pluripotent—in other words, able to develop into a multitude of different types of cells. However, nobody is suggesting that undifferentiated stem cells be injected into humans. The FDA has monitored this question, and there is no evidence that cells differentiated from embryonic stem cells cause tumors.

Claim: The 21 viable embryonic stem cell lines we have currently funded are plenty. It is sufficient. The truth: As Dr. John Gearhart told the Committee on Aging, the federally approved lines are not genetically diverse, meaning we don't have the cell lines needed that will allow us to fully utilize this vital research. Importantly, minorities are the greatest affected group due to the lack of genetic diversity in these cell lines. In addition, many of the federally approved lines are contaminated with mouse feeder cells. Finally, some of these cell lines are involved in proprietary arguments and are not available for research purposes. Asking America's scientists to work with only 21 viable embryonic stem cell lines is hamstringing them and impeding this important progress.

Claim: This legislation will use tax dollars to fund destruction of human embryos. The truth: Each year, Congress attaches the Dickev-Wicker amendment to the Labor-HHS appropriations bill stating that no Federal funds can be used to destroy human embryos. That has not changed. This bill simply allows Federal funds to be used to study stem cell lines that are derived from human embryos that otherwise would have been discarded. How many times do we need to say it: "that otherwise would have been discarded." Not a dime of Federal money will fund the destruction of human embryos.

Claim: If embryonic stem cell research was such a promising field, it should have produced hundreds of cures by now. Over 30 years of research into embryonic stem cells has proved fruitless. The truth: The first of human embryonic stem cells were not isolated until 1998, and research with embryonic stem cells was not awarded Federal funding until 2002. That was only 5 years ago. To put this in context, from the first research into a vaccine for polio, over 20 years passed before doctors first developed the first effective polio vaccine. Hundreds of Nobel laureates agree that embryonic stem cell research has great potential for developing cures, but this will take both funding and time. The NIH has provided over half a billion dollars each year in Federal funding for stem cell research since fiscal year 2003, but only a small fraction of those funds has gone to embryonic stem cell research.

Claim: There are inadequate ethical guidelines in S. 5. In fact, this proposed legislation has tougher ethical guidelines than those which currently exist. This legislation provides the ethical framework we need for this legislation. This proposed legislation makes sure that, first, the only embryos that can be used are those which are created for fertility treatments and which are in excess of the clinical need and would be discarded; second, there must be written, informed consent from the donors; third, donors can receive no financial reward for their donations.

These two facts are important to me as I listened to the misinformation

about the way we are going to subject women to egg-harvesting and this rampant practice of selling eggs on the open market. Both of those things are prohibited in this legislation. Donors cannot receive financial reward for their donations, and it has to be only eggs that would otherwise be discarded.

Fourth, the Director of the National Institutes of Health must issue guidelines 60 days after the enactment of this legislation.

Finally, it is interesting to note that some of the 21 stem cell lines that are currently being used for embryonic stem cell research might not even meet the strict guidelines that are contained in this legislation.

Families all across America are using medical research to participate in the miracle of birth.

Fact: The process of using medical research to enhance the likelihood of pregnancy produces an excess of eggs. I have heard no claims to the contrary because that is the fact.

Fact: Thousands of these eggs are going to be destroyed. I have heard a lot of claims in this Chamber, but no one is arguing with a straight face that the process of producing eggs for in vitro fertilization does not produce thousands of excess eggs.

Fact: Thousands of these eggs are going to be destroyed. It is just that simple.

Here is the question. This is the question of the day: Is it better to use these eggs to save lives as opposed to throwing them away? It really boils down to that. Ultimately, if some of our colleagues say it is wrong to use these eggs to save lives, then surely these same colleagues must believe it is wrong to throw them away. Where is their legislation outlawing their destruction? In other words, where is their legislation outlawing in vitro fertilization? Because inherent in that process is the destruction of human embryos.

I come from Missouri, where we say what we think and we mean what we say. Two of Missouri's finest and most respected leaders have spoken quite eloquently on the subject of embryonic stem cell research.

Senator John Danforth, a former Republican Member of this body, strongly supported the stem cell initiative that was put successfully before voters in Missouri in 2006. An Episcopalian minister, Senator Danforth voted many times in this Chamber as a Senator who believed that abortion should not be legal in this country. An Episcopalian minister, Senator Danforth has also worked through the moral and ethical issues he had with embryonic stem cell research. When asked about the equality of a multicelled embryo in a petri dish and the life of a human child suffering from a debilitating disease, he put it in context by asking simply: If a house were on fire and you had to make the choice, would you rescue a petri dish or a 3-year-old child?

Doctor William Neaves is the president of the Stowers Institute for Medical Research in Kansas City, one of the finest research institutions in the Nation. One of the most spiritual and thoughtful men I have known, Dr. Neaves has studied the moral and ethical implications of in vitro fertilization and stem cell research over the last 25 years with his wife, who is also a bioethicist and an ordained Methodist minister. He struggled with his position on these issues due to his faith and upbringing, but in the end, upon reflection and studying the Bible, he concluded that embryonic stem cell research is morally and ethically acceptable.

I will close with Dr. Neaves' words:

Two elements have been pivotal in forming my belief. The first is the biological fact that in normal human reproduction, most blastocysts, or embryos, perish rather than implant in the uterus. The second is Ecclesiastes 11:5 in the English Standard Bible:

As you do not know the way the spirit comes to the bones in the womb of a woman with child, so you do not know the work of God who makes everything.

God who makes everything.

Many people of faith believe that research with embryonic stem cells represents a perfectly moral means of fulfilling the biblical mandate to heal the sick. Other people of faith disagree. Should Federal policy disqualify a field of research from competing for Federal funds because some Christians object to it? As a Christian who supports this research, I certainly hope not.

I yield the floor.

Mr. HARKIN. I thank the Senator from Missouri for a very eloquent and poignant statement. I know the Senator mentioned that recently she came off a campaign in Missouri. I know that, in listening to her statement, she is reflecting the wishes and hopes of so many people in her own State who want to make sure we move ahead and find cures and treatments. I thank her for her eloquence and for her forthright statement on behalf of embryonic stem cell research.

Mr. President, I now yield 10 minutes to the distinguished Senator from Colorado.

The PRESIDING OFFICER. The Senator from Colorado is recognized.

Mr. SALAZAR. Mr. President, I rise today to discuss the question currently before the Senate regarding whether to allow Federal funding for embryonic stem cell research. Let me start out my remarks, first, by acknowledging Senator HARKIN and the great work he has done in this field. It is beyond a doubt that he is an expert on embryonic stem cell research, one of our national leading experts in terms of health care, and having been an advocate in that area, he is recognized across this country. I admire his work on this legislation, as well as the work that has been put into this legislation by a number of colleagues, including many on the Republican side of the aisle who have joined this bipartisan coalition to make stem cell research a reality for the people of America.

At the end of the day, S. 5 is about hope—about hope for over 1 million

Americans who today suffer from the trembling caused by Parkinson's disease. It is about hope for the over 1 million people in America who suffer from Alzheimer's disease. It is about hope for the 17 million Americans who suffer from diabetes, including the hope that we should be giving to those young people who are suffering from juvenile diabetes and have to look at a life of dealing with the difficulties of that illness. It is about hope for the more than 64 million Americans who today suffer from one or more forms of heart disease. So the debate on the floor today is, in fact, about the hope and aspirations of all Americans, including people, many of whom are related to Members in this Chamber

Scientists in America agree that, without a doubt, embryonic stem cell research holds great potential for curing these and other diseases. It is remarkable that against the conclusive determination of the scientific community, we have the Federal Government in a position where it is actively withholding the financial support that is needed to carry on this very important research for America. That is not the American way. The American way is to open new doors of hope. We ought to be opening new doors of hope as well with the passage of this legislation later today.

The reason that scientists are so excited about the potential of embryonic stem cell research—and the reason that this kind of research may hold the cure for a whole host of diseases—is that embryonic stem cells have the potential to become virtually any kind of cell in the human body, such as brain cells, heart cells, or cells that produce insulin.

The difficult part of embryonic stem cell research for scientists is controlling the process by which embryonic stem cells become other, more specialized kinds of cells. Much more research into that process is needed. To quote a document prepared by the National Institutes of Health, "the promise of stem cell therapies is an exciting one, but significant technical hurdles remain that will only be overcome through years of intensive research."

The Federal funding this legislation authorizes will provide a critical boost to that effort.

Mr. President, like millions of other American families, my family has been touched by the ache of loss brought about by Alzheimer's disease. My father died of complications related to the disease only a few years ago. At the end of his life, I wanted nothing more than to be able to help ease his suffering. Now, as I reflect on that difficult time, I think of the families that are currently enduring the same pain mine did, and I want to help them.

I trust the vast majority of the scientific community that believes embryonic stem cell research may hold the key to the cures these families are seeking. I also believe that our Govern-

ment can work to promote this science responsibly by paving the way for treatments that will save millions of lives without destroying others.

Toward that end, I believe the legislation passed by Congress last year and before the Senate today represents a measured, responsible step toward tapping into the vast potential that embryonic stem cell research has with respect to finding cures for Alzheimer's, Parkinson's, diabetes and a wide range of other devastating diseases.

In millions of cases, this legislation could mean the difference between a normal life and one of pain and suffering. In millions of other cases, it could mean the difference between life and death. And by authorizing Federal funding only for research on embryonic stem cells that will never become human life and that are donated willingly, it achieves its objectives without destroying the potential for life.

To be sure, support from private funds for this research has been welcome. But it is simply not enough. I have heard from scores of scientists in my home State of Colorado—working in university labs as we speak, trying to find cures for our most devastating diseases—who tell me that the Federal funding this legislation would authorize would boost their capabilities exponentially.

In addition to the practical impact on American laboratories, however, there is something else to consider. I can think of no other Nation that should lead this research with strict guidelines than the United States.

Throughout our Nation's history, America has been the leader in making monumental scientific strides that have made life easier and better for people in our country and all over the world. In a field with such great promise, and at a time where American competitiveness is at the forefront of the Congressional agenda, I believe we must once again be the global leader.

Mr. President, I want to be clear that I also believe we should promote alternative methods of creating embryonic stem cells. For that reason, I strongly support the other proposal that is currently before the Senate, S. 30, which would intensify research into these alternative methods.

I yield the floor.

Mr. HARKIN. Mr. President, how much time do we have remaining?

The PRESIDING OFFICER. The Senator from Iowa has 37 minutes.

Mr. HARKIN. I yield until 3:45 to the Senator from New York, Senator SCHUMER.

Mr. SCHUMER. Mr. President, first, I rise in strong and profound praise of my colleague from Iowa. He has led this fight dauntlessly, always being both dogged and smart. That is why we are where we are today.

I rise in support of S. 5, the Stem Cell Research Enhancement Act. Today, as we stand on the brink of scientific breakthroughs, we cannot let politics pull us backward. A modern nation

loses its greatness, its preeminence, when it turns its back on science. That is what history has shown.

Stem cell research is the key to hope for 100 million Americans and their families who suffer from debilitating diseases. Talk about it any way you want, spin it any way you want, talk about all these alternatives; the bottom line is very simple: A "no" vote is a vote against science, a vote against the millions who are anxiously awaiting a cure for diabetes, Alzheimer's, Parkinson's, spinal cord injuries and other diseases and injuries.

Unfortunately, we all know someone with a disease such as diabetes, heart disease, Parkinson's, ALS or cancer who could benefit from embryonic stem cell research. Every one of us has looked into the eyes of somebody who needs help-in my case, a young mother with a little girl about 5 years old who had juvenile diabetes who said: Senator, the doctors tell me the odds are high that my child could be blind at age 20 if we don't do embryonic stem cell research. How can we say no to that mother and to that child? Scientists are on the cusp of making incredible progress through stem cell research, a process that has the potential to cure diseases that have been with us for centuries, such as diabetes and heart disease.

When their progress was stalled in 2001 when President Bush limited federally funded stem cell research to only 19 sources that are truly viable, every family who had hope was set back. With that Executive order, the President shut the door on hope for all those families.

With that one action, the President not only stopped current research in its tracks, he sent a message to future scientists that they should not pursue this line of work.

As they see a limited funding stream for the work they do, fewer and fewer graduates are specializing in this type of research, and those who are deeply committed to it tend to go overseas. That is not a great America—an America that turns its back on science and puts politics in its place. We want all the best minds in the country to be working together to find a cure for these debilitating diseases.

S. 5 would answer the prayers of millions of families. It would increase the number of stem cell lines that can be used by researchers who are funded by Federal grants.

These stem cell lines are not made from new embryos that would be created for the purpose of research. They would not be harvested from women, like some people think. These lines would be made from leftover embryos created by couples who were trying to conceive through in vitro fertilization but are not used and are going to be destroyed. With passage of this bill, those embryos could contribute to critical research instead of being thrown away.

Let's think about the good that having these new stem cells could do by looking at juvenile diabetes. As many as 3 million Americans have Type I diabetes, with over 13,000 children newly diagnosed each year. These children must be injected with insulin multiple times each day and prick their fingers to test their blood sugar as many as six times a day.

That doesn't have to be the reality forever. Researchers have already demonstrated they can produce insulin-producing cells from undifferentiated embryonic stem cells. This has the real potential to develop a cure for juvenile diabetes, providing relief to the 3 million Americans and their families who are burdened with the implications of the disease every day.

Without being able to use Federal funding for their research, innovative stem cell research is being relegated more and more to only those individuals and institutions that can afford it.

Because NIH-funded research activities have to be housed in different buildings from stem cell research labs, which has created enormous headaches and financial barriers for researchers in my State of New York and has hampered both research on stem cells and research using other methods, unless we vote yes on S. 5, we are not going to make progress.

This bill would provide enormous hope to growing numbers of Americans. It would accelerate the movement toward a cure for devastating diseases, while strengthening the rules on ethics that must be involved in this research. This is one of those issues that hits home more than anything else. Everyone knows a mother with Alzheimer's or a neighbor with diabetes. They are gut-wrenching situations.

What is most heartbreaking is to think the President's first veto was to stop us from alleviating all this terrible pain. I urge my colleagues to look into the eyes of a young child with juvenile diabetes, look into the eyes of a middle-aged couple who has a parent suffering from Alzheimer's. Don't say no to them.

I yield the floor, and I yield the remainder of my time back to the Senator from Iowa.

Mr. ENZI. Mr. President, throughout the history of our Nation, generations of American scientists have looked for ways to improve the human condition and address the problem of disease and the afflictions of old age. Working in labs either spartan or spacious, they have toiled together over the years to find cures for the health conditions that continue to plague mankind.

As they conducted their research, each scientist's work built on the discoveries that preceded it, and the results they achieved over the years have enabled us to live longer, healthier, more productive lives. The list of medical miracles and marvels that have come from their work has made the phrase "American ingenuity" known around the world for the creativity it represents and the results it has so often provided.

From time to time, however, there is a breakthrough—or possible breakthrough—in medical science that has the potential to revolutionize not only our ability to diagnose or treat an affliction but our basic understanding of how the human body operates. When that occurs, a debate ensues as society attempts to evaluate the new procedure's potential to address the diseases that threaten our health as well as the ethics of putting the new procedures into practice.

Such a possible breakthrough is stem cell research. At present, its promise and potential for changing the way we view health and disease seems limitless. In theory, stem cells may be capable of doing everything we can possibly imagine—and more. Unfortunately, there is often a wide gap between what is possible in theory and what is practical and possible in the real world. What the future of stem cells will be no one knows for certain. Still, the possibilities are more than intriguing and certainly worth an in-depth look.

The research that has been conducted into stem cells so far has been so exciting because of the very nature of these cells. Stem cells have the capacity to renew themselves and then become specialized cells. Most of the cells that are in the body are created and committed to performing a specific function. A stem cell remains "on the fence," however, uncommitted until it is given a signal by the body to develop into a specialized cell.

That ability to change and become a cell that can be used almost anywhere in the body has fascinated scientists who are studying the ability of the body to repair itself through the use of using these "uncommitted" cells.

We have all heard the saying-you don't have to be a weatherman to know which way the wind is blowing. In this case, however, you really do need a strong background in science to understand fully the specifics of stem cell research and its implications for the future. Fortunately, we are not here to predict the impact stem cells will have on our health care system in the years to come. We are here to make a determination as to the wisdom of using taxpayer dollars to finance additional work in this area—and then pick the best vehicle to support it. There is a big difference.

In debating and voting on the two bills before us today, we are not making a judgment about the science itself, as others have stated. Rather, we are making a judgment about whether that science should be supported by taxpayer dollars. We are deciding the appropriate moral construct for the work of those key scientists in manipulating and possibly even destroying the basic building blocks of human life. We are reaffirming how we as a society view the embryo and its function.

Every year, within our appropriations bills, we make a judgment about how we want to treat embryos—the very beginning of human life. The

Dickey-Wicker amendment is clear. Federal dollars cannot be used for creating human embryos for research purposes or for research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to the risk of injury or death greater than that allowed for research on fetuses in utero. Therefore, every year, as part of the appropriations process, we reaffirm that science must be guided by moral values, and our values as a society compel us to place certain limits on the pursuit of science. Today's debate will consider whether our values as a society compel us to maintain certain limits on taxpayer funding of embryonic stem cell research.

Without question, science must be guided by morality. There have been too many instances over the course of human history in which terrible things have been done in the name of science. Scientific exploration is important and we should do everything we can to further our knowledge of ourselves and our world, but not at the expense of disregarding the moral viewpoints of millions of Americans who don't believe their taxes should pay for something they find abhorrent.

In determining how to proceed, we of course must consider the promise of stem cell research. But in considering that promise, we must make it clear that while stem cells may someday lead to therapeutic advancements for devastating diseases like Alzheimer's, diabetes, Parkinson's, leukemia, and spinal cord injuries, that day has not come yet. That is why we must be careful not to oversell the promise of this research to the American people because this field of research has not yet resulted in human clinical trials. Every reputable scientist will admit that any possible cure or advanced treatment using embryonic stem cells are many years away. There are currently no cures waiting to be plucked off laboratory shelves after our votes on these bills.

So, while the research provides great hope for millions of Americans, at this point, the full benefits have not yet been realized. They fire our imagination as we consider the possibilities that may or may not come to pass. Whether embryonic stem cells will fulfill their promise someday is still very much in question, and much work is already ongoing to see whether we can get an answer.

In this context, I want to further discuss S. 5, the Stem Cell Research Enhancement Act of 2007. A similar bill was passed the House on January 11, 2007, by a vote of 253 to 174. S. 5 would allow additional research on embryos from in vitro fertilization procedures, under some limited circumstances.

However, even in these rather limited circumstances, I must oppose S. 5, because the limits it imposes on tax-payer-funded science do not respect the moral value of a human embryo. It does not fully recognize our decision within Dickey-Wicker and other con-

texts to treat the human embryo as more than simply material for scientific research.

The supporters of this bill will acknowledge that it does not limit research to human embryos that are currently frozen but extends the window for that research well into the future. By doing so, the bill creates an incentive for the creation of embryos solely for research purposes. This is contrary to what Congress reaffirms within the Dickey-Wicker language each year.

And, although the bill prohibits financial and other inducements for the parents of the embryo, it does not eliminate financial or other inducements for the clinics and doctors that create the embryos. Thus, it does not eliminate the financial incentives for in vitro fertilization clinics to create more embryos than are absolutely necessary to help parents conceive a child. This loophole will further erode the prohibition congressional through Dickey-Wicker against the creation of human embryos solely for research purposes.

I am not opposed to embryonic stem cell research, but I am opposed to the provisions of S. 5. I would welcome the opportunity to debate amendments to the bill, but the agreement that governs our debate does not permit amendments. And, without an opportunity to amend S. 5, I have no choice but to vote against it.

However, I will support alternatives, such as the Isakson-Coleman bill, so that we can allow greater Federal support for embryonic stem cell research. I believe we can and should unite behind a bill that respects the diversity of our views on human embryos, but still pushes the science forward. The Isakson-Coleman legislation is such a bill.

A vote for or against S. 5 is not a vote for or against scientific advances. After all, if we truly trust science, we ought to give science a chance to solve this dilemma over embryonic stem cell research. As outlined by the report from the President's Council on Bioethics, researchers are exploring at least five different ways by which we can create stem cell lines without harming or destroying embryos. If these researchers are successful, then the arguments against Federal funding of embryonic stem cell research will fall away.

Further, States and private research organizations are already plowing billions of dollars into human embryonic stem cell research that goes beyond the parameters of President Bush's policy. Let those efforts continue, while we continue working in Congress to support stem cell research that doesn't involve harming or destroying an embryo, which is something that the vast majority of Americans could support.

Mr. BUNNING. Mr. President, I would like to take a few minutes to talk about the two bills before us today dealing with stem cell research.

One of these bills is wrong, while the other offers us a chance to advance sci-

entific research using stem cells while still protecting the sanctity of life.

Stem cell research remains a controversial issue in the medical, scientific and religious communities as well as in Congress. In fact, just last July, we were debating this very topic, and here we are again today.

I am not opposed to stem cell research. I believe that many forms of stem cell research offer great hope to millions of Americans suffering from various diseases, including research using adult and umbilical cord stem cells. We are already seeing medical advances in this type of research. In fact, adult stem cells have proven effective in combating several serious conditions, such as diabetes and spinal cord injury.

Also, just recently in the papers, scientists announced that amniotic fluid may be a promising source of stem cells. This shows we have a lot to learn about stem cells.

I am 100 percent opposed to embryonic stem cell research, however. This is why I will be voting against S. 5, the Stem Cell Research Enhancement Act of 2007.

This bill would remove all current protections against the destructive use of embryos for harvesting embryos for stem cells. I believe it is morally wrong to take embryos in the early stages of life and destroy them, even for research purposes. We should protect human life—not destroy it.

Back in 2001, the Bush administration began allowing Federal funding for embryonic stem cell research on a limited number of stem cell lines that were already in existence. As an opponent of the destruction of human embryos, I opposed the Bush administration decision to allow some embryonic stem cell lines to be used for Federal research.

However, S. 5 goes even further than the current policy by removing the current limitations set by the President on federally funded embryonic stem cell research. The bill allows Federal funds to be used for this type of research on embryos created for fertility treatments.

This is the wrong direction for us to go. It is immoral for us to conduct medical research on these budding lives, and American taxpayers should not be forced to pay for this type of research. Some people have argued that these embryos are "excess" and will be destroyed anyway. I firmly believe that we cannot create a human life and then destroy it in order to save a life. Ethically, it is unjustifiable.

In fact, it is important to remember that embryonic stem cell research is not illegal. There are just limitations on the Federal funding for it. Anyone can conduct embryonic stem cell research. They just have to live by the federal regulations or rely on other sources of money.

The other bill we are considering today, S. 30, the Hope Offered Through Principled and Ethical Stem Cell Research Act, offers us an opportunity to

further stem cell research in an morally defensible manner. The bill would allow stem cells to be derived from embryos that die naturally, and reinforces the current policy that federally funded research should not involve destroying or discarding embryos.

This bill provides access to embryonic stem cells, but protects human life and avoids the ethical pitfalls of S. 5. It seems to me that we should all be able to support this bill. It places reasonable restrictions on additional embryonic stem cell research, while also protecting human life. I urge my colleagues to support this bill.

No one likes to see people with medical conditions suffer, and like many Americans my family and friends have certainly been stricken with terrible diseases over the years. However, we are at an ethical crossroads with this issue, and we must stay true to our values of respecting life.

It seems foolish to barrel ahead with Federal funding for embryonic stem cell research as S. 5 does, when other alternatives are available that offer real hope to patients and promise in research

In closing, I firmly believe that we cannot create life and then destroy it, even if to save another life. I urge my colleagues to vote against S. 5, and vote for S. 30.

Mr. DOMENICI. Mr. President, I rise today in opposition to S. 5, the Stem Cell Research Enhancement Act of 2007. Although I am not opposed to stem cell research and in fact enthusiastically support some types of stem cell research, I cannot support this bill.

This is a very difficult vote for me to cast. I have spent a considerable amount of time thinking about the issue of Federal funding for stem cell research involving the destruction of embryos. Over the last several years, scientific developments in human genetics have been proceeding at a rapid pace. This kind of research has the potential to be very helpful in the understanding of human development and the treatment of human diseases. However, this type of research also raises serious ethical and public policy questions that must be confronted. What limits do we place on research with human embryos?

Experimentation with embryonic stem cells is considered by some to be a revolution in medical research. Many in the medical, public and scientific communities believe that embryonic stem cell research could lead to the cure for such sicknesses as Parkinson's disease, Alzheimer's and diabetes. However, human embryos must be dever, human embryos must be destroyed in order to derive embryonic stem cells and this is where my ethical dilemma arises.

It is my deeply held and personal belief that an embryo is an actual living being; it is not merely a potential living human being. The possibility of helping those who are sick may be a very powerful motivation, but I strongly believe that human embryos deserve

the same respect as any other human being and it is never morally or ethically justified to kill one human being in order to help benefit another. It is for this reason that I cannot support the use of human embryonic material for research even if it has the potential to save others. I cannot accept the diminished status of the human embryo in order to justify their destruction in the course of research solely because they may theoretically provide potential benefits for another human being sometime in the future.

I want to make it clear that my ethical problem is not with the research itself but rather with the destruction of embryos. I believe there is potential for advances in stem cell research that does not involve the moral dilemma of destroying an embryo in the process. It is for this reason that I support S. 30, The Hope Offered through Principled and Ethical Stem Cell Research, HOPE, Act.

The HOPE Act will advance alternate forms of stem cell research by intensifving research on methods that do not involve the destruction of human embryos. This bill instructs the Secretary of Health and Human Services to develop techniques for the isolation, derivation, production, and testing of stem cells, provided that such techniques do not involve the creation of human embryos for research purposes; or the destruction or discarding of, or risk of injury to, a human embryo. Research that can benefit others without the destruction of human life is in my opinion the best path forward.

Scientists have shown they have the skill and ability to pursue the potential benefits of stem cell research without endangering human life in the process. I support these alternative approaches because I truly believe that they have the potential to help people while still maintaining ethical guidelines. This is the best way to allow Federal science-research on stem cells without offending the beliefs of millions of Americans.

Mr. ALLARD. Mr. President, I rise today to clarify my position on stem cell research. As a veterinarian I understand the need for research and scientific advancement. Current law does not prohibit any sort of stem cell research. In fact, all forms of stem cell research have flourished under current law

I can not and will not support legislation that would drive abortion. Therefore I cannot support S. 5. This legislation would allow for Federal dollars to be used to incentivize the further destruction of human embryos for research purposes. I do not support this use of Federal funds. I will not oppose private industry from doing embryonic stem cell research, but it would be very irresponsible to use Federal taxpayer dollars to fund such a contentious issue.

Science is advancing. Over the past weeks and months research using adult stem cells has had many breakthroughs. The use of amniotic fluid and placental stem cells has much of the same potential that embryonic stem cells have, but they are not as controversial. S. 30 provides resources to further research in the area of adult stem cell research. Because of the emphasis on adult stem cell research, I support S. 30 and will vote in favor of S. 30 later today.

I not only understand the need for scientific advancement, but also for ethical boundaries. We should not be using Federal dollars to drive abortion, when there are alternative opportunities for scientific advancement that are not as contentious.

Mr. KYL. Mr. President, we live in an age when medical miracles are occurring every day, many in my home State of Arizona. Breakthroughs are treating and curing children and adults who could have died from their diseases just a few years ago. And some of these cures and treatments are the result of stem cell research.

For example, thanks to the Cord Blood Registry located in Tucson, children and adults are being treated, and often cured, of once terminal diseases such as leukemia, aplastic anemia, cerebral palsy, and sickle-cell anemia. And these are just a handful of the 72 diseases that have undergone clinical trials or been treated using stem cells obtained from bone marrow and umbilical cord blood.

I favor the broadest possible effort to pursue promising medical technologies within appropriate ethical limits. Scientists have derived stem cells from two principal sources: the tissues, fluids, and organs of adults, and cells from human embryos. Human embryonic stem cells have only been obtained through a process that destroys the embryo.

In the last Congress, we passed, and the President signed into law, the Stem Cell Therapeutic and Research Act of 2005. This legislation was intended to spur additional advances by establishing an infrastructure to facilitate the collection and dissemination of two of the most promising categories of adult stem cells: those derived from bone marrow and those derived from umbilical cord blood. Based on reports in the media over the past 2 weeks, I would say this bill has been a success.

For example, the New York Times reported on a coming revolution to sports medicine from adult stem cells that could be able to heal and rehabilitate tendons, ligaments, muscle and cartilage.

More significantly, ABC News reported that adult stem cells are being shown to be useful in repairing damaged heart muscle. While this has been known for some time in other countries, U.S. doctors and scientists are now embarking on the first human clinical trials. This may turn out to be one of the most significant breakthroughs in recent history for treating the most deadly disease in the United

States—heart disease—which last year claimed the lives of almost 500,000 Americans.

What's more, a recent study conducted by the Wake Forest University School of Medicine promisingly resulted in scientists harvesting stem cells from amniotic fluid, which is the fluid that surrounds a baby before it is born. These amniotic stem cells offer many of the benefits found in embryonic stem cells, and without its ethical complications, demonstrating just how much faster science is moving than politics. Those researchers at Wake Forest found that amniotic-fluid stem cells proved successful in producing bone, heart muscles, fat, nerve, and liver tissues. All of this was possible without destroying the nascent life in an embryo.

By contrast, embryonic stem cell experiments have not yielded any treatments for human patients. Nevertheless, researchers believe there is much potential there, so a great deal of private and public money has been raised to pursue it.

In 2001, the President issued an Executive order that made available for the first time Federal funding for embryonic stem cell research using embryos that had already been destroyed. In the subsequent 6 years, the Federal Government has spent more than \$130 million on this type of stem cell research and has spent more than \$2.5 billion on all stem cell-related research.

In 2006, the Senate considered legislation that would have overturned a key element of the current policy: the stipulation that Federal taxpayers' money cannot provide an incentive for the further destruction of human embryos. While this bill was approved by Congress, it was later vetoed by the President.

I voted against this legislation because I believe that taxpayers should not have to subsidize the destruction of nascent human life, especially when a number of State governments and large universities have directed significant resources to embryonic stem cell research. Since there are already billions of dollars available for embryonic stem cell research on lines from newly destroved embryos, increases in Federal funding and a change in the Federal policy are not necessary.

S. 5, which we are debating today, and which is similar to legislation already passed by the House, is essentially the same legislation as that the President vetoed last year. There is one difference: added to S. 5 is legislation that was passed unanimously by this body last year—the Alternative Pluripotent Stem Cell Therapies Enhancement Act. I supported that legislation, which was not passed by the other body. However, that very positive legislation is attached to legislation I cannot support because it would force taxpayers to subsidize the destruction of nascent life.

Thankfully, S. 30 is also being considered today. I fully support this legisla-

tion offered by Senators Coleman and ISAKSON. Their leadership has brought to the floor a bill that would build on the research that is treating patients now. This legislation would direct the Department of Health and Human Services to seek out alternative sources of stem cells and to study the possibility of establishing an amniotic and placental stem cell bank, similar to the bone marrow and cord blood stem cell bank, while reaffirming a policy that prohibits research that destrovs human life.

We can all agree: stem cell research holds promise and has already provided life-saving treatments and cures. And we should continue to support that research within appropriate ethical restrictions. I urge my colleagues to oppose S. 5 and support S. 30.

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 efforts to ensure consideration of stem cell legislation. The bottom line is, there is research we should 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 am an original cosponsor of the Stem Cell Research Enhancement Act.

The promise of stem cell research 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 future therapies because in so many diseases, cells in the body are damaged or destroyed, and their role is often irreplaceable. Stem cells offer an opportunity to actually replace the function which was lost.

Consider today that 20 million Americans live with diabetes. Despite treatment with drugs and insulin, many diabetics 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 an effective therapy to replace the function which individuals lost or damaged cells can no longer provide. Today there are limited treatment options for brain disorders such as Parkinson's disease and ALS or Lou Gehrig's disease. For such diseases, stem cell therapies offer promise that we could alleviate the suffering that millions now experi-

This week the Senate is considering two bills. The first of these promotes stem cell research. It encourages research which is already underwaywhich is eligible today for both private and public funding. And while that research should be encouraged, it is not

facing impediments, save for the fact most of us would like to see greater progress in biomedical research funding—and stop the erosion of the budgets of the National Institutes of

Yet since no impediment exists to the work described this first bill describes, this legislation is—despite its positive aspects—a distraction from a crucial question. That is, whether we will continue to impede progress in human embryonic stem cell research.

The problem is, that while scientists are tackling stem cell research on multiple fronts, to ensure success they try to predict the path most likely to be successful. In that regard, we know that embryonic stem cells have the potential to develop into any cell type of the body. That is why scientists have sought to use them in their race to create cures.

Today, Federal funding for research is restricted to a small number of embryonic stem cell "lines" that were established prior to August 9, 2001. Unfortunately, only 19 of those 78 stem cell lines in existence are available to researchers, as many were found to be contaminated or otherwise unusable. We recognize today that even when a stem cell line is created, it simply cannot reproduce indefinitely.

So, many scientists are frustrated, are perplexed that a Federal funding restriction would essentially block their efforts to develop cures. Some have proposed they should use adult stem cells. Yet those involve a detour in the journey to a cure

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 cannot directly use them to produce many of the types of cells we need to produce new therapies. Some advocates of adult stem cell research say we could try 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 an efficient way to get where you are going. And any scientist will tell you, the more steps you must take, the more chance there is that something simply won't work.

Recently some have proposed that scientists could use other types of cells. We have learned recently about stem cells which are found in amniotic fluid—"amniotic stem cells"—which also appear to have potential to develop into different types of tissues. This is an encouraging development, yet much remains to be learned about those cells. The leader of the research group which has just described these

cells—Anthony Atala—was recently asked whether his research ends the argument over whether embryonic stem cells are needed. He answered that question simply:

It does not, mainly because it's another stem cell choice. And I think you really can't tell which cell is going to be best for which indication, and all cells have advantages and disadvantages.

That is truly the statement of a scientist. Because we do not yet know about the full potential of these alternatives to embryonic stem cells. But we do know that embryonic stem cells. But we do know that embryonic stem cells. That is why losing years in which we could have made progress is so tragic. There is so much that scientists have yet to learn, and while we always hope for quick cures, experience shows that medical breakthroughs typically result from years of concentrated effort—and we cannot wait any longer to embark on that journey.

That is why I am a cosponsor of the second bill which we are consideringthe Stem Cell Research Enhancement Act. This legislation addresses the critical issue which has inhibited research here in the U.S.—the restriction of Federal funding to only those few stem cell lines which were in existence back in 2001. Our legislation would ensure that Federal research would only use stem cells from embryos which would otherwise be destroyed and would require full consent from the donor before coming into use. I thank Senators SPECTER and HARKIN for their leadership on embryonic stem cell research.

The legislation which they have championed 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. This legislation 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. 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 this legislation. 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.

I think back to President Reagan's passing nearly 3 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 this legislation does, and that is why we must send this bill to the President and he must sign it.

Mr. OBAMA. Mr. President, I stand in full support of the Stem Cell Research Enhancement Act as I did when this bill was introduced and sent to the President's desk in the 109th Congress. I am proud to be an original cosponsor of this bill.

I am frustrated by the opposition this bill has generated and saddened

that we are preventing the advancement of important science that could potentially impact millions of suffering Americans. The study of stem cells holds enormous promise for the treatment of debilitating and lifethreatening diseases. However, in order to reach this level of medical achievement, much more research is necessary to understand, and eventually harness, the amazing potential of stem cells. Instead of creating roadblocks, we must all work together to expand Federal funding of stem cell research and continue moving forward in our fight against disease by advancing our knowledge through science and medi-

Each year, 100,000 Americans will develop Alzheimer's disease, with impaired memory, ability to understand, and judgment. Over 1 million adults will be diagnosed with diabetes this year, and risk complications that include blindness, damaged nerves, and loss of kidney function. We all know or have met individuals with spinal cord injuries, including national celebrities, local war heroes, and loved ones from our own families and circles of friends, who are struggling to maintain mobility and independence.

For most of our history, medicine has offered little hope of recovery to the 100 million 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 lifesaving applications of adult stem cell research. Patients with leukemia or lymphoma often undergo bone marrow transplants, a type of stem cell transplant, which can significantly prolong life or permanently get rid of the cancer. This therapy has been used successfully for decades, and is saving lives every day.

Yet this breakthrough has its serious limitations. Adult stem cells, such as those used in bone marrow transplants, can only be collected in small quantities, may not be a match for the patient, which can lead to rejection, and have limited ability to differentiate or transform into specialized cells.

Similarly, the promising advances of stem cell use from a patient's own cord blood, as illustrated by the success stories of Dr. Joanne Kurtzberg from Duke University, also have their limitations. If, for example, a young cord blood recipient's condition should deteriorate after his or her initial treatment or should develop another illness, there simply are not enough cord blood cells left for a second use. The few remaining cells would have to be cloned to get enough cells for future treatment, or stem cells would have to be obtained from another source.

Two of my constituents, Mary Schneider and her son Ryan, are well aware of the potential of cord blood treatments. Her son, diagnosed with cerebral palsy at 2 years of age, has made what appears to be a full recovery after treatment with his own cord blood. Despite the compelling results witnessed by the Schneider family, they also firmly believe and support expanded research of embryonic stem cells to combat disease

A recent scientific paper about stem cells derived from amniotic fluid has drawn much attention. While this offers an exciting alternative to regenerative medicine therapies, the author of that report, Dr. Anthony Atala, has himself urged that his work on amniotic stem cells will not replace the continued need for investigation into treatments with stem cells derived from embryos.

All of these alternative treatments are just that, alternatives, and are not substitutes for 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. We should expand and accelerate research using these embryos, just as we should continue to explore the viability of adult stem cell use, cord blood use, and amniotic fluid use.

The promise of embryonic stem cells has come to light in a recent achievement by researchers at Johns Hopkins. They were able to repair damaged nerves and restore mobility in paralyzed rats through embryonic stem cells. One can't help but wonder when, not if, this research will be translated into techniques that will help human patients who have lost the ability to walk.

Of course, any work in this area must have appropriate oversight. Embryonic stem cell research demands comprehensive, thoughtful, and carefully crafted ethical and scientific guidelines. We must not only look to guidance from the National Institutes of Health and the Food and Drug Administration but also to our reason, our morals, and our compassion.

The President's veto of the stem cell bill proposed in the last Congress prevents Government funding beyond 78 previously established stem cell lines. However, recent estimates on the number of viable cell lines bring the numbers down closer to 20. Clearly, we are moving backward in our efforts with these current restrictions. Stymieing embryonic stem cell research is a step in the wrong direction. It closes the door on many Americans awaiting new treatments that could potentially provide a better quality of life or, perhaps, even save their life.

My hope, and the hope of so many in this country, is to provide our researchers with the means to explore the uses of embryonic stem cells so that we can begin to turn the tide on the devastating diseases affecting our Nation and the world.

Mr. VOINOVICH. Mr. President, I rise today to speak about the emotional, divisive, and often confusing issue of stem cell research. Let me start by expressing why I believe we should focus our scarce resources on adult and umbilical cord stem cells rather than on embryonic stem cells.

Given the tremendous results that have come from adult and umbilical cord stem cell therapy in the areas of oncology and orthopedics—and, more recently, in cardiology and neurology—I am further encouraged by the possibilities these noncontroversial, adult stem cells have to offer. In this tight budgetary environment, in which there is a choke hold on our domestic discretionary spending, we must be vigilant in the way we appropriate taxpayer dollars and concentrate our resources on those lines of medical research that hold the greatest potential.

Furthermore, in recent years, scientists have made tremendous strides in designing methods to obtain fully pluripotent stem cells that have the flexibility of embryonic stem cells, while avoiding the destruction of human embryos. The potential to extract these versatile stem cells in an ethically sound manner, coupled with my interest in seeing further research in the area of adult and umbilical cord stem cells, is why I rise to support S. 30. the HOPE Act.

Before I delve into a discussion of the two bills this body is considering, let me clarify that there are two different categories of stem cells-and, thus, of stem cell research. The first, embryonic stem cells—as their name suggests-are derived from human embryos developed from eggs that have been fertilized at an in vitro fertilization clinic. Alternatively, adult stem cells are undifferentiated cells found among differentiated cells in tissues or organs. These cells can renew themselves and eventually develop into a specific cell in the body. What is notable, however, is that these undifferentiated adult stem cells can be gathered by scientists without any harm to the individual donor.

Umbilical cord blood derived from a mother's placenta following the birth of a newborn baby is now also included in this category of adult stem cells. In fact, with the arrival of my seventh grandchild, I learned a great deal about the benefits of preserving cord blood stem cells. What at one time was considered medical waste and discarded after birth is now recognized as a rich supply of stem cells and has been used to treat a number of blood and immune-system diseases, cancers, and other physical disorders.

I was introduced to the promise of adult and umbilical stem cell research

by experts at the National Center for Regenerative Medicine in my hometown of Cleveland, OH. Several institutions make up the center, including Case Western Reserve University, the Cleveland Clinic, University Hospitals Case Medical Center, Athersys, Inc., and the Ohio State University. Together they have created an outstanding medical facility that is leading the Nation in the use of nonembryonic stem cells to regenerate new tissues in diseased organs rather than using drugs or devices to improve the function of the organs.

Since 1976, researchers at the center have been studying nonembryonic stem cells, and they performed their first stem cell transplant as early as 1980. Today, the center is capable of conducting clinical trials with cord blood stem cells for gene therapy and for heart and blood vessel repair. Investigators at the center are now able to cure leukemia and lymphomas with nonembryonic stem cell transplantation, as well as repair unstable bone fractures and treat genetic disorders.

I have had the chance to meet several patients whose lives have been transformed by this new medicine. Elisabeth, who was a patient at the National Center, was in a motorcycle accident and had compound fractures in her right femur and right tibia. Even though she was rushed into emergency surgery after the accident, her bones did not heal properly, and she was told she would never walk again. Elisabeth sought out a second opinion from a doctor at the National Center who operated a second time, using some of his adult stem cell gel. This gel takes on the characteristics of the surrounding bone cells and helps with the healing of broken bones. I am happy to report, Elisabeth is now walking, living a healthy life, and pursuing a future in physical therapy at the Ohio State University.

Elisabeth is not alone.

I recently visited the National Center for Regenerative Medicine, and I had the chance to meet Ashley. Ashley is 8 years old and was successfully treated for her leukemia at Rainbow Babies and Children's Hospital of University Hospitals Case Medical Center. She was first diagnosed with acute lymphatic leukemia, ALL, in January 2006, and she underwent a stem cell transplant from an unrelated donor in June 2006. But since her transplant, Ashley has done wonderfully.

Even more encouraging is the potential for scientists to leverage all this great medicine into new fields, including cardiology and neuroscience. Researchers at the National Center for Regenerative Medicine are hopeful that in the not so distant future they will make inroads in the treatment of degenerative arthritis, will decrease the severity of graft versus host disease after stem cell transplantation, and will 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.

I am concerned, however, that not enough Americans are aware that some of the most advanced medicine today can be attributed to adult—and not embryonic—stem cells. What I find even more disturbing is that many supporters of embryonic stem cell research have been kept in the dark about the advances of umbilical and adult stem cell treatments and have been over-sold on embryonic stem cell research, which is still in its infancy.

I want to remind my colleagues who support the Stem Cell Research Enhancement Act that embryonic cells have not been successfully used to treat even one disease yet I have had the opportunity to meet numerous people whose lives have been saved by adult stem cell therapy. In fact, adult stem cells have been used to treat 72 diseases, including breast cancer, multiple sclerosis, rheumatoid arthritis, sickle cell anemia, spinal cord injuries, and others. That is why I continue to be encouraged by the possibilities adult stem cells have to offer.

In recent years, medical research has made tremendous strides, and it is now widely believed that new technology can lead to methods of obtaining fully pluripotent stem cells that have the flexibility of embryonic stem cells without destroying potential life. That is why I rise today to support S. 30, the HOPE Act.

Despite all this progress, scientists around the world agree that there is still a great deal that remains unknown about the potential for stem cell therapy. That is why I support this legislation introduced by my colleagues from Minnesota and Georgia that can help us tap even more potential cures and therapies.

The HOPE Act would continue to encourage Federal research on adult and umbilical cord stem cell therapies that are already proving successful, while requiring the Secretary of Health and Human Services to develop techniques to identify and derive pluripotent stem cells that have the flexibility of embryonic stem cells without destroying a human embryo. There is evidence that these alternative methods may make it easier for scientists to genetically match patients with therapies and could reduce the complications, like tumor formation, that have been seen with embryonic stem cells.

The HOPE Act would also require the Secretary to prioritize stem cell research that will reap near-term clinical benefit and take into account the findings of the President's Council on Bioethics along with other appropriate techniques and research. 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. This legislation paves a path forward for Federal scientists, while respecting the principles and morals of millions of taxpayers.

I believe it is my moral responsibility to direct the Federal Government's dollars toward research that has the greatest near-term potential to help the largest number of Americans.

Over the past several years, Congress has increased total NIH funding for medical research—including increasing the amount of money available for stem cell research—from \$15.1 billion in fiscal year 1999 to \$28.9 billion in 2007. However, in recent years the cost of fighting the war in Iraq, defending our homeland, and protecting against natural disasters like Hurricane Katrina has left very few resources for domestic discretionary spending. In fact, today, the Federal Government spends only one-sixth of its annual budget on nondefense discretionary spending, and I am afraid that exploding entitlement spending threatens to soak up every Federal dollar, leaving no revenue for things like scientific research. There is a tremendous need to pursue treatments for many diseases, but we face a reality of limited fund-

We have to be smart about spending our money. In the current budget environment, I have concerns that increasing funding for research on embryonic stem cells will take away opportunities for research in areas like adult and umbilical research that has proven its ability to save human lives—or even for new techniques to help us remove pluripotent stem cells without destroying human embryos.

I have the greatest sympathy for patients and their families who continue to struggle with a wide range of fatal diseases. I understand what it is like to watch a loved one suffer and the tragedy of losing a member of your family—especially a young child. I lost my father to diabetes and my young nephew C.T.—who was only 14—to bone cancer. Like many here today, I have been a witness to the devastating effects of Alzheimer's, arthritis, and many other debilitating diseases. That is why I am sympathetic with my colleagues' efforts to seek out a panacea. But I fear that too often proponents of embryonic stem cell research make exaggerated claims about this line of research and offer false promises when the evidence is just not there.

I read a great op-ed in The Washington Post by Charles Krauthammer—who has long supported legal abortions and doesn't believe that life begins at conception—in which he issued a stern warning against pursuing embryonic stem cell research. As he said, he has a very healthy respect for "the human capacity for doing evil in pursuit of good." And, that is exactly what I see happening in this Chamber today. Too many of my colleagues are focused exclusively on embryonic stem cell research, and they are missing potential that is right under their noses.

I am reminded of Aesop's fable, "The Stag at the Pool," in which a stag stops at a spring to drink some water. He looks down at his shadow reflected in the water and greatly admires the size and shape of his beautiful horns, all the while thinking that his feet are too slender and too weak. Just as he is looking at his reflection, a lion appears at the pond. The stag sees the lion in the water and runs as fast as he can to safety. As he enters the woods, though, his horns get tangled in the tree branches, and the lion catches up to him. Finally, at that moment, the stag realizes that it was his feet that could have saved him and his antlers that led to his demise.

The moral of the story is: What is most truly valuable is often underrated. I think the same is true on the subject of stem cell research. We have been so focused on what we perceive to be the future of medical research that we have been willing to overlook successful treatments and therapies that are already taking place right under our noses.

In light of all the advances and results science has provided with adult and umbilical cord stem cells, I urge my colleagues to direct Federal funding toward research that will have the greatest near-term impact on human life.

Mr. KOHL. Mr. President, I rise today in support of S. 5, the Stem Cell Research Enhancement Act of 2007, a bill that will expand the number of stem cell lines eligible for federally funded research, ensuring scientists at NIH and laboratories around the country have access to new, uncontaminated stem cell lines.

Many families in America have experienced the tragedy of watching a loved one suffer through a deadly or debilitating illness. Diseases like Parkinson's and Alzheimer's take a terrible toll on families' lives and livelihoods. While we have made great strides in biomedical research in recent years, we still don't have all the keys to unlock the secrets of disease.

That is why the potential of embryonic stem cells is so exciting. Embryonic stem cells have the ability to develop into virtually any cell type in
the human body. Scientists tell us that
harnessing the power of these cells
could one day lead to new treatments,
and maybe even cures, for a number of
diseases that afflict American families.
Important research is being done every
day on stem cells. I am proud that
some of this research is being done at
the University of Wisconsin in Madison, which was the first to isolate
human embryonic stem cells.

We all understand that this research is not without controversy. I respect the concerns that some people have about the use of embryonic stem cells in research, and I agree that we must closely monitor this research to ensure that it is done ethically. However, scientists and disease advocates are warning us that the current limits on Federal funding for stem cell research are seriously inhibiting our potential to find new cures. Without expanded Federal support, we risk slowing down the

tremendous progress that could be made to alleviate human suffering.

It would be unconscionable for the Federal Government to turn its back on the discoveries that expanding stem cell research promises. Now more than ever, it is important to grasp this opportunity in an ethical manner by making sure that potentially lifesaving research keeps moving forward.

Mr. AKAKA. Mr. President, I am proud to be a cosponsor of S. 5, the Stem Cell Research Enhancement Act. We must enact this legislation so that researchers are able to move forward on ethical, federally funded research projects that develop better treatments for those suffering from diseases. Human embryonic stem cells have such great potential because they have the unique ability in developing into almost any type of cell or tissue in the body. Stem cell research holds great promise to develop possible cures or improved treatments for a wide range of diseases and injuries, such as diabetes, cancer, Parkinson's disease, Alzheimer's, autism, heart disease, spinal cord injuries, and many other afflictions. We must not limit research that could improve the lives of so many suffering from diseases that we have limited ability to prevent, treat, or cure.

In August 2001, the President implemented an unworkable, flawed policy that made a small number of human embryonic stem cell lines eligible. The President's restrictions on stem cell research prevent Federal funds from being used for research on newer, more promising stem cell lines. In addition, embryonic stem cell lines now eligible for Federal funding are not genetically diverse enough to realize the full therapeutic potential of this research. The President's stem cell policy prevents researchers from moving ahead in an area of research that is very promising. We must enact this legislation to help move research forward that could alleviate the pain and suffering of individuals.

If we fail to enact S. 5, our researchers are likely to fall further behind the work being done in other countries. Australia, Canada, Finland, France, Japan, Singapore, Sweden, and the United Kingdom have provided substantial governmental support for stem cell research.

Too many of my constituents suffer from Alzheimer's, Parkinson's, diabetes, and other diseases. S. 5 provides some hope for the development of improved treatments that could improve the lives of so many people.

Mr. McCAIN. Mr. President, I will vote in support of the two bills under consideration today, S. 5 and S. 30, which would provide a framework for Federal support of stem cell research under strict guidelines and ethical criteria. I supported similar legislative proposals during the last Congress.

Stem cell research has the potential to give us a better understanding of deadly diseases and spinal cord injuries affecting millions of Americans. One day, these efforts may lead to cures and treatments for these devastating diseases and conditions. At the same time, it is important and right to recognize the ethical and moral concerns that have been raised by individuals inside and outside of the medical research community regarding one particular type of stem cell research that involves embryonic stem cells. I believe that these two bills will provide an appropriate framework for moving stem cell research forward in a responsible way.

We must create a framework for Federal support of stem cell research now. since research involving embryonic stem cells is also proceeding outside the United States. While we have had a robust and needed debate on the ethical and moral concerns of embryonic stem cell research, as reflected by the President's Commission on Bioethics. the same cannot always be said of private industry and scientific research communities in other parts of the world. I am deeply concerned where unregulated research may lead us if researchers are left without ethical and moral guidance and stringent regulations and oversight.

It does not have to be that way. One bill before us today, S. 5, is similar to H.R. 810, a bill that I supported and that passed the Senate on July 18, 2006. S. 5 will provide the same strict ethical guidelines for stem cell research that the Senate supported last year. This bill would authorize Federal support for embryonic stem cell research, but limits appropriately that support to scientists who use embryos originally created for reproductive purposes, and now frozen or slated for destruction by in vitro fertilization clinics. Before there is even consideration of whether to donate unused embryos for research, the legislation would require that the patient who is the source of the embryos be consulted and a determination be made that these embryos would otherwise be discarded, and would never have been implanted in the patient or another woman.

S. 5 also provides support for alternative stem cell research methods by offering increased Federal funding and support for research that does not involve the use of human embryos. Such alternative research was unanimously supported in the Senate last July and deserves our full support again today. Researchers believe that this type of stem cell research holds tremendous potential and I strongly support their efforts. Millions of Americans affected by many diseases and conditions stand to benefit from the future cures provided by this type of research.

I am also supportive of the other measure that is before us today, S. 30. This bill will also offer increase Federal funding and support for adult stem cell research and other research that does not involve the use of human embryos. Additionally, S. 30 would allow research to be performed on embryonic stem cells taken from naturally dead

embryos. This research shows some promise but only additional research will tell whether it can lead to cures and treatments, and we should embrace the opportunity that would be afforded under this legislation to determine the research potential that might exist.

The United States offers an ideal climate for scientific and medical research because of the quality of our educational institutions, the strength of our economy, and the scope of our comprehensive legal and regulatory system for protection of intellectual property rights. The guidelines and requirements contained in S. 5 do not exist currently, and this sort of embryonic stem cell research remains largely unregulated in the private sector and in many scientific communities overseas. Enacting S. 5 would provide the Federal oversight necessary to ensure that embryonic stem cell research does not expand into ethically objectionable ground in balancing the promise on the foreseeable horizon of stem cell research with the protection of human life.

It should be clearly recognized that embryonic stem cell research will occur with or without Federal approval and guidance. Keeping that in mind, I believe embryonic stem cell research is best carried out under strict Federal guidelines and oversight. With the limited Federal support and stringent guidelines afforded under this legislation, we can promote the benefits of stem cell research while maintaining clearly our ethical and moral values and obligations, which we must never sacrifice at any price.

Mr. LEAHY. Mr. President, I wish to express my support for the bill before the Senate this week, S. 5, the Stem Cell Research Enhancement Act of 2007. This legislation will put us on the path of progress by reversing the President's policy a policy that is holding back the promise of stem cell research.

It is unfortunate that the Congress must even spend time debating this measure. The majority of Americans support stem cell research, as does the Director of the National Institutes of Health, Dr. Elias Zerhouni. It has been 6 years since the President announced his administration's restrictive policy on stem cell research, which limited the number of stem cell lines available for use with Federal funding. Now we know that all of these lines are contaminated by the use of mouse feeder cells, and they will probably never meet the standards required for human treatment.

It is clear that, because of the President's policy, we are now years behind in developing therapies and cures for diseases such as diabetes, Alzheimer's and cancer. That is time that millions of Americans simply do not have to waste. For millions of others, this wasted time has dampened hope.

Some families who hold out hope for the potential of stem cell research are from Vermont. Many are either afflicted by, or know someone one who is suffering from, multiple sclerosis, Parkinson's or Lou Gehrig's disease. I have met these Vermonters, many of whom are advocating not for themselves, but for future generations who they hope will not endure the debilitating nature of these diseases.

There are others in Vermont who know firsthand the good this research could bring. These are the scientific researchers at the University of Vermont and Dartmouth College who are doing groundbreaking work that needs the support of our federal government to be truly successful. These scientists know that the most viable method for progress in research is to expand the number of embryonic stem cell lines that are available.

I would like to take a moment to also address some of the myths perpetrated about what S. 5 will and will not do. Let us be clear: This bill will not allow Federal funds to be used for the destruction of human embryos. While Federal dollars can be used for research on stem cell lines that are derived from human embryos, the creation of these lines cannot be funded with Federal moneys. S. 5 will do nothing to change this policy.

This legislation will also ensure that Federal funding will be used only for researching stem cells lines that are derived from human embryos that have been donated from in vitro fertilization clinics. The in vitro fertilization process creates more embryos than are needed, and the remaining embryos will simply never be used. There are more than 400,000 of these embryos that are frozen in fertility clinics, the majority of which will ultimately be destroyed.

This week the Senate will vote on two stem cell bills. While I support both, only one of these bills will take us solidly forward. The time for passage of this legislation is now, and I urge the President not to veto this critical bill.

I hope that the President will heed the advice of his own chief medical researcher in the United States, NIH Director Dr. Zerhouni who, when he testified before the Labor, Health and Human Services Appropriations Subcommittee, said that American science would be better served, and the Nation would be better served, if we let our scientists have access to more cell lines

As Congress is poised to send this legislation to the White House, I hope the President will take note of Dr. Zerhouni's remarks. I hope that he will also listen to Congress and the millions of Americans who believe that we should support all angles in stem cell research, and sign this bill.

• Mr. DODD. Mr. President, I rise today in support of the Stem Cell Research Enhancement Act. In the coming hours, the Senate will vote to pass this bill like it did last year and unlock the door for researchers across the country to use embryonic stem cells to better understand diseases like Parkin-

son's and juvenile diabetes so that we may one day find a cure. With each day that has passed since the President vetoed this legislation, nearly 4,100 Americans were diagnosed with diabetes, 3,800 were diagnosed with cancer, and 160 were diagnosed with Parkinson's. What we are talking about here is research that may one day provide relief to the more than 100 million Americans suffering from Parkinson's, diabetes, spinal cord injury, ALS, cancer, and many other devastating conditions for which there is still no cure.

The legislation we are about to vote on would expand the number of embryonic stem cell lines available for federally funded research by allowing the use of stem cells derived through embryos from in vitro fertilization clinics that would otherwise be discarded. Strict ethical requirements apply to the use of these stem cell lines. In fact. I believe these ethical requirements are one of the most essential provisions of the bill. Since the HELP Committee first began consideration of the President's policy toward embryonic stem cell research in 2001, I have maintained that the pursuit of scientific research that may benefit millions of Americans and their families was as important as ensuring that science did not outpace ethics.

Under this legislation, the only embryonic stem cells that can be used for federally funded research are those that were derived through embryos from in vitro fertilization clinics that were created for fertility treatment purposes and were donated for research with the written, informed consent of the individuals seeking that treatment. Any financial or other inducements to make this donation are prohibited. These embryos will never be implanted in a woman and would otherwise have been discarded. The ethical requirements contained in this bill are stronger than current law. In fact, it is possible that some of the 21 stem cell lines approved for Federal funding, the socalled "NIH-approved lines," may not meet the strict ethical criteria contained in this bill.

I have heard some of my colleagues who oppose this legislation argue that this legislation allows, even encourages, taxpayer-funded destruction of human embryos. That is totally false. There is a provision called the Dickey amendment which is attached to every annual Labor-HHS appropriations bill prohibiting any Federal funds from being used to destroy human embryos. This provision is not affected by the embryonic stem cell legislation before the Senate today. Federal funds can be used to study stem cell lines that were derived from human embryos that meet the ethical requirements I just laid out, but the derivation process itself cannot be paid for with Federal money.

I have also heard some of my colleagues who oppose this legislation argue that embryonic stem cell research is unnecessary given the ad-

vances in adult stem cell research. There is no question that adult stem cells such as those found in bone marrow and cord blood have led to great advances in patients suffering from leukemia, Hodgkin's disease, sickle cell anemia, among others. I was a coauthor, along with Senator HATCH and others, of a bill that is now law to advance bone marrow and cord blood stem cell collection for use in adult stem cell transplantation, and I believe it is essential that we arm researchers and physicians with every possible therapeutic weapon in their medical arsenal. I urge my colleagues to join me in supporting full funding for this important law, which passed unanimously in the Senate, in the upcoming Labor-HHS-Education appropriations

The fact remains that there will always be limits to the use of adult stem. cells when compared with embryonic stem cells, and that is why the legislation before us is so important. Our Nation's best scientists, including many Nobel laureates, believe that embryonic stem cell research has a unique potential to ease human suffering and that is because embryonic stem cells, unlike adult stem cells, can become any cell in the body. Embryonic stem cells can become heart cells, lung cells, brain tissue, and that property—called pluripotency—is unique to their embryonic state.

The expansion of embryonic stem cell research may one day unlock the mysteries behind so many deadly and debilitating diseases that afflict millions of Americans and their families. I urge the President to reconsider his position on this legislation and not stand in the way of our Nation's scientists who simply want to find the key that will ease the burden of suffering.

Mrs. CLINTON. Mr. President, I welcome the vote on this important piece of legislation, the Stem Cell Research Enhancement Act of 2007.

Stem cell research holds great hope of providing cures for chronic, incurable conditions from which millions of Americans suffer. But unless we act, the Bush administration will continue to meet this unparalleled moment of scientific discovery with unbridled ideology—and the American people and scientific community will pay the price.

The President's stem cell ban amounts to a ban on hope for millions of Americans. It's time this Congress put an end to the Bush administration policy which is holding science back and holding our Nation back in the race to new medical treatments and discoveries.

We all expect that this bipartisan legislation will pass both the Senate and the House. There is a broad consensus in the Congress, among medical experts, scientists, and patient advocacy organizations, and among the American people, demanding that we open the doors to scientific innovation—instead of barring those doors shut.

Even within the Bush administration, there is a desire to pursue stem cell research. The Director of the National Institutes of Health, Doctor Elias Zerhouni, has gone on record supporting expanded access to new lines of embryonic stem cells.

I am deeply concerned, however, that we have been down this road before a road that begins with the promise of new cures and ends, not with discovery, but with ideology and a veto by the President.

The promise of stem-cell science is crystal clear—and already being demonstrated. Embryonic stem cells develop into a variety of more specialized types of cells—like nerve cells or muscle tissue that could be used to replace or repair tissue lost or damaged from illness.

In New York, researchers at Memorial Sloan-Kettering Cancer Center have been using embryonic stem cells to develop bone, cartilage or muscle replacement therapies. And in 2006, a team of researchers from Columbia University and another team from Cornell published research on new ways of turning embryonic stem cells into treatments for Parkinson's disease.

These are just several examples, but the work of these scientists and scientists around the world is inspiring hope for millions in New York and the country living with chronic diseases, or caring for a loved one with these conditions

In fact, New York is leading the way-letting science, not politics, guide research. My State will soon invest \$600 million in stem-cell and regenerative medicine research over the next decade. Thanks to this stem cell funding plan, New York researchers will benefit from expanded resources for all types of stem cell research, including embryonic stem cells, adult stem cells, and somatic cell nuclear transfer. And our economy will benefit as well, as we draw great American scientists and innovators pursuing the next great American scientific innovations.

This is encouraging news for New York, but as a Nation, the leadership vacuum under the Bush administration has left the scientific community holding its breath. The Bush administration has put a ban on certain kinds of research, prohibiting Federal funding for any research on stem cell lines created after August 9, 2001.

Federally-funded scientists are limited to less than 20 stem cell lines, instead of the 78 lines advertised. And not all of these lines are even suitable for research. Some may be contaminated with mouse cells, which can increase the risk of creating strains of diseases which can more easily pass to people. Other problems because of the ban include genetic instability, which is associated with formation of tumors, and practical issues associated with using so few lines—preventing scientists from collecting evidence they need.

While American scientists are being held back, other countries are racing ahead, putting billions of dollars into stem cell science—creating research institutions, clinical centers, and investments of all kinds to attract scientists from the United States and elsewhere who will come to pursue this research.

We are losing ground instead doing what Americans do best: leading the world in innovation, ingenuity, and new ideas. The Bush administration's stem cell policy is impeding science and compromising America's ability to remain at the forefront of biomedical research.

At the same time, the Bush ban is a ban that affects more than 100 million Americans who suffer from Alzheimer's disease, Parkinson's disease, diabetes, muscular dystrophy, cancers as well as for their friends, families, and caregivers.

These are real people I meet every day in New York and across the country. It's an adult with type I diabetes—or a mom whose son or daughter has the disease. It's a senior citizen struggling with Parkinson's disease or a son or daughter with a parent struggling with Alzheimer's.

These are Americans crossing every divide imaginable—hopeful if not for themselves or their children, then for their grandchildren and great grandchildren. My dear friends Christopher and Dana Reeve, whom we lost in the past several years, were eloquent, passionate advocates for this research. Christopher, from his wheelchair, performed his greatest role after his accident, to try and bring the best of American ingenuity to bear on the worst kinds of illnesses and diseases.

I respect my friends on the other side of the aisle who come to the floor with grave doubts and heartfelt concerns. This is a balancing act and we must never lose sight of our ethics and values. But we can strike that balance—and I believe we have in this bill

When the promise of embryonic stem cell research became apparent in the 1990s, the Clinton administration, working through the National Bioethics Advisory Commission and the NIH, examined the ethical and medical issues involved with such research.

In September 1999, the National Bioethics Advisory Commission released its report, "Ethical Issues in Human Stem Cells Research." In this report, it recommended that research using cells from embryos created, but not used for, infertility treatment, should be eligible to receive Federal funding.

By August of 2000, the NIH had released guidelines for research using stem cells. These guidelines would have allowed funding for research from lines derived from embryos voluntarily donated which would have otherwise been discarded. These recommendations are followed in this bill, which also includes funding for non-embryonic stem cell research, such as work with stem cells derived from amniotic fluid.

As we wade into these new scientific waters, we must always be steered by our values and morals, which is why I have stood against, and voted to ban, human cloning. We must make a strong legal and ethical stand, but we cannot simply stand still as scientific opportunity passes us by and new cures remain just out of reach.

I applaud the leadership of Senators Harkin, Specter, and Kennedy on this bill. I am hopeful that we can send the Stem Cell Research Enhancement Act to the President, and end the ban on research and hope for Americans looking to us to fund the next great medical discoveries.

Mr. FEINGOLD. Mr. President, as we debate this important legislation regarding stem cell research, we are reminded of the millions of patients and families across America who await treatment and cures for our most deadly and tragic diseases. Scientists believe that over half of Americans over 85 may suffer from Alzheimer's disease, and at least half a million Americans currently have Parkinson's disease. People of all ages suffer from spinal cord injuries, diabetes and other chronic conditions. As we all know, these kinds of serious diagnoses affect not only the patient, but that patient's family, friends, and community.

I am a strong supporter and proud cosponsor of the Stem Cell Research Enhancement Act. I have heard from many of my constituents in Wisconsin in support of this legislation, and I am glad that the Senate is again addressing this issue and responding to the requests of millions across the country. It is important that we approve this legislation as expeditiously as possible, and provide the resources that scientists need to develop treatments and cures for these diseases. Millions of patients and their families across the Nation cannot afford to wait any longer for enactment of this urgently needed legislation.

Researchers believe that they can unlock enormous potential in stem cell research if Congress and the President will only give them the keys. At the University of Wisconsin in 1998, Dr. James Thomson became the first scientist to break into this new frontier by isolating human embryonic stem cells. Since then, researchers at the University have continued to be leaders in this science. But despite the incredible promise this research holds, it has been limited by the President since 2001. As others have noted, even Story Landis, director of the NIH's National Institute of Neurological Disorders and Stroke and interim chair of the agency's stem cell task force, acknowledges that the President's stem cell policy is holding back potential breakthroughs. Congress must act to provide more stem cell lines to scientists so that this research can go forward, without the Federal Government standing in the

The Stem Cell Research Enhancement Act would allow federally funded

research to be conducted on stem cell lines derived from excess embryos originally created for in vitro fertilization-IVF-that are no longer needed and are donated by couples for research. It is estimated that there are hundreds of thousands of embryos created for fertility treatments that could be used for research and will otherwise be destroyed. This bill does not interfere with alternative stem cell research, but it supports all avenues of research within the ethical limits Congress has already established. This bill will open doors for scientists to access new, healthy, uncontaminated stem cell lines that are currently off-limits to federally funded research under President Bush's restrictions.

The embryos that could potentially be used for research are those that will never be implanted. Thanks to this legislation, embryos that would otherwise be discarded could be used for research that could save pain and suffering for millions of people, and the lives of millions more.

While I support the Stem Cell Research Enhancement Act, I have concerns about the other bill we are considering today, S. 30. The language in that bill has not been properly vetted through the scientific community, and it is unclear what effect it might have. S. 30 could potentially limit the scope of current research, even further restricting the availability of stem cells for federally funded research. For these reasons, I oppose this legislation.

There is much work that needs to be done to further understand the role that embryonic stem cells can play in providing answers to some of the most troubling medical diseases and conditions that affect so many Americans. The Stem Cell Research Enhancement Act will help our Nation's researchers get closer to unlocking what this research holds by increasing the quantity and quality of stem cells lines available for research.

Embryonic stem cell research is very important to me and to Wisconsin. I am proud that the University of Wisconsin has played a prominent role in stem cell research in this country. I know that my constituents, and Americans across the country, are eagerly awaiting the benefits that this research will provide.

I hope my colleagues will join me in supporting this incredibly important science which would expand our research horizons, and bring hope to so many people.

Mrs. FEINSTEIN. Mr. President, I rise in opposition to the Hope Offered through Principled and Ethical Stem Cell Research Act, S. 30.

My objection to this bill is simple. This legislation will do nothing to overturn President Bush's failed policy that is restricting access to viable stem cell lines.

The United States Senate must be very careful when incorporating scientific concepts, and scientific definitions, into legislation. This bill relies on the notion of so-called "naturally dead" embryos to provide viable stem cells. It defines these embryos as:

having naturally and irreversibly lost the capacity for integrated cellular division, growth, and differentiation that is characteristic of an organism, even if some cells of the former organism may be alive in a disorganized state.

We do not know what the implications of this definition may ultimately be. And the fact is, neither do many scientists. As the leadership of The American Society for Cell Biology wrote yesterday.

Naturally dead is a scientifically meaningless idea. To our knowledge, there is no scientifically credible way to determine this.

#### They continue:

It is critically important that the Senate proceed with caution as it continues its work in the area of scientific policy. Legislation based on inaccurate science could have a detrimental impact on the course of the American biomedical research enterprise.

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

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

(See exhibit 1.).

Mrs. FEINSTEIN. I could not agree more. This debate should be about providing Federal funding, and a consistent policy, for embryonic stem cell research. It is not the place of the U.S. Senate to rely on concepts and definitions that are "scientifically meaningless."

The truly important vote will occur on the passage of S. 5, the only legislation that will reverse what the majority of Americans, and the majority of the medical and scientific community believe to be a flawed policy.

S. 30 will very clearly leave in place President Bush's August 9, 2001 Executive Order, which limits Federal funding to stem lines derived before that date. We need to overturn this policy, not affirm it.

I urge my colleagues to join me in opposing S. 30.

#### Ехнівіт 1

THE AMERICAN SOCIETY FOR CELL BIOLOGY, Bethesda, MD, April 10, 2007.

Hon. HARRY REID,

Senate Majority Leader, U.S. Senate, Washington, DC

DEAR SENATOR REID: We would like to express our views about the upcoming Senate debate on stem cell research, as the President and Public Policy Committee Chair respectively for the American Society for Cell Biology. Our nonprofit, professional society of more than 11,000 members includes many of the leading scientists working in this area.

As you know, it is critically important that science policy be carefully crafted to allow ethically sound scientific research to proceed. This is particularly difficult to do when the science behind the policy is as complicated as in the current policy debate on stem cell research.

We are particularly concerned about a major provision of S.30, the "Hope Offered through Principled and Ethical Stem Cell Research Act." The expressed purpose of S.30 is to "promote the derivation of pluripotent

stem cell lines without the creation of human embryos for research purposes and without the destruction, discarding of, or risk of injury to a human embryo or embryos other than those that are naturally dead."

S.30 relies on the false premise that scientists can determine whether a human embryo is "naturally dead." However, naturally dead is a scientifically meaningless idea. To our knowledge, there is no scientifically credible way to determine this. In fact, we think that to establish sufficiently precise scientific or clinical standards about the quality of embryos at the very early stages of development would require experiments that the bill itself would not permit.

It is critically important that the Senate proceed with caution as it continues its work in the area of science policy. Legislation based on inaccurate science could have a detrimental impact on the course of the American biomedical research enterprise. Not only do we risk driving research and researchers to other countries more interested in cutting edge research but we also delay the day when our fellow Americans who suffer from some of the most debilitating diseases finally realize the benefits of scientific research.

Sincerely,

BRUCE ALBERTS,

President.

 $\begin{array}{c} {\rm LARRY\ GOLDSTEIN,} \\ {\it Chair,\ Public\ Policy\ Committee.} \end{array}$ 

Mr. DURBIN. Mr. President, today we made an important step forward for the hope of millions of patients and their families.

Unfortunately, with this important step forward, there was also a small step backward.

I had initially stated that I would vote in favor of S. 30, but after carefully reviewing the language, I decided to vote against it.

I will ask to have printed in the RECORD a letter from the Joint Steering Committee on Public Policy that supports S. 5 and opposes S. 30.

The Joint Committee is a group made up of the American Society for Cell Biology, the American Society for Clinical Investigation, the Genetics Society of America, Science Service, and the Society for Neuroscience.

Many of us here believed that S. 30 was a harmless bill.

After all, it is an initiative that would show we are supportive of all forms of embryonic stem cell research.

And I believe that some still feel that way.

But after hearing from a variety of research organizations and scientists, I have serious reservations.

After carefully reviewing the legislation, it is now clear that S. 30 sends the wrong message to the scientific community.

S. 30 puts forth a number of scientific issues that negatively position the scientific debate around what constitutes life and death and raises concepts that may not even be scientifically defined.

As elected officials discussing complex science issues, we are already in somewhat unfamiliar territory.

If we are to delve deeper into this discussion and the details of it, we need the scientific community on our side.

I stand for the advancement of medical research and I hope that this vote has made it clear.

Mr. President, I ask unanimous consent to have the aforementioned letter printed in the RECORD.

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

JOINT STEERING COMMITTEE FOR PUBLIC POLICY, Bethesda, MD, April 9, 2007.

Hon. HARRY REID, Senate Majority Leader, U.S. Senate, Washington, DC.

DEAR SENATOR REID: On behalf of the Joint Steering Committee for Public Policy (JSCPP), I would like to express our support for S. 5, the "Stem Cell Research Enhancement Act of 2007." S. 5 would expand the current federal policy regarding federally funded embryonic stem cell research to allow the use of cells derived since August, 2001, from embryos originally generated for reproductive purposes that would otherwise be destroyed

I would also like to express the JSCPP's opposition to S. 30, the "Hope Offered through Principled and Ethical Stem Cell Research Act." The purpose of S. 30 is to "promote the derivation of pluripotent stem cell lines without the creation of human embryos for research purposes and without the destruction, discarding of, or risk of injury to a human embryo or embryos other than those that are naturally dead."

S. 5 represents an important step forward for human embryonic stem cell research, a new field that offers great promise for the replacement of damaged cells, the understanding of the mechanics of disease, and the development and testing of new drugs. Unfortunately, current federal policy, in place since 2001, has not kept pace with the speed of scientific discovery and is today of limited value to the scientific community, a position endorsed by the Director of the National Institutes of Health, Elias Zerhouni, at a recent Senate appropriations hearing.

While the JSCPP is supportive of S. 5, we strongly oppose S. 30. S. 30 is proposed as an alternative to S. 5, but contains no substantial measure to reverse current limitations on embryonic stem cell research and simply endorses research avenues that are already open under current law. We oppose the bill because it contains unnecessary provisions and places confusing and short-sighted restrictions on biomedical research.

The prohibitions in S. 30 against the use of government funds to derive stem cells with methods that generate embryos for research purposes or that involve the destruction of embryos are unnecessary, because the annual Departments of Labor, Health & Human Services and Education Appropriations bill has, for many years, included the same prohibitions.

Furthermore, the central provision of S. 30 appears to allow research on embryos considered to be "naturally dead." We are particularly concerned about this requirement because the term "naturally dead" is not a scientific term, and there are no scientific or clinical standards for determining the quality of embryos at the early stages of embryonic development.

We are also concerned about the provision in S. 30 that requires a priority to be placed on research "with the greatest potential for near-term clinical benefit." Not only is it impossible to know the benefits of research in advance, but limiting the scope of research in this way places a muzzle on the scientific process, placing short-term incremental advances ahead of the more challenging goals of preventing or curing diseases such as diabetes.

For these reasons, we believe that passage of S. 30 would be a significant step back-

wards for human embryonic stem cell research and for biomedical research in America. Therefore, we urge a "yea" vote on S. 5 and a "no" vote on S. 30.

Sincerely,

Harold Varmus, MD, Chair, Joint Steering Committee for Public Policy.

Mr. ISAKSON. Will the Presiding Officer give us the allocation of time remaining?

The PRESIDING OFFICER. The Senator from Iowa has 31 minutes remaining

Mr. ISAKSON. Thirty-one minutes?

The PRESIDING OFFICER. Thirtyone. The Senator from Kansas has 25 minutes. The Senators from Minnesota and Georgia have 45 minutes.

Mr. ISAKSON. With all due respect, Mr. President, we reached an agreement at the end of the previous time that we would equally divide 2 hours 30 minutes between Senator HARKIN, Senator BROWNBACK, Senator COLEMAN, and Senator REID. We are in the fourth of those 30-minute blocks now, which would be ours, and then we go to four 10-minute blocks equally divided; is that correct?

I believe I am correct. How much of our time do we have left of the 30minute block?

The PRESIDING OFFICER. Forty-five minutes for the Senator from Georgia.

Mr. ISAKSON. Mr. President, I am pleased to yield 10 minutes to the distinguished Senator from Oklahoma, Mr. COBURN.

The PRESIDING OFFICER. The Senator from Oklahoma.

Mr. COBURN. Mr. President, I listened with interest to the Senator from New York. As a practicing physician and somebody who has delivered over 4,000 children, I cared for both toddlers and young adults with type 1 diabetes. There is nobody who doesn't want to see that disease fixed. The problem is, we shouldn't promise things we don't know are accurate.

What we do know is that yesterday on CNN, an article was released from JAMA showing the treatment of 13 young Brazilians who had type 1 diabetes who are now free from using exogenous insulin. They are on no medicine whatsoever and their sugar is totally controlled. That is one step going forward in all the areas of medicine.

The other comment I will make before I make my final points is, if you talk to anybody in the area of research on Alzheimer's-Alzheimer's, and we heard it time and time again, is a devastating disease for individuals who have it, and it is a devastating disease for families who care for their loved ones with it—I don't know of anybody in embryonic stem cell research or in research in medicine by themselves who has great hopes for a cure of Alzheimer's with embryonic stem cells. We have heard that claim time and time again. It is not a great hope for Alzheimer's. There is hope. There is beta secretase, which is an enzyme that causes Alzheimer's to be laid

down. There are great medicines coming forward. Some are in trials in primates right now that tend to stop Alzheimer's in its tracks.

We ought not to be promising things we don't know or are not realistic in terms of Alzheimer's. That is the case.

I want to sum up where we are, the differences between the two bills. One bill, S. 5, has lots of positives in it. We hear it is not going to destroy any other embryos, there is going to be a grandfather of the embryos that have been created since. We heard the Senator from New York say something different. We heard the Senator from California yesterday talk about the 400,000 embryos that are frozen today, of which only 2.8 percent are available and less than that number—so less than 250 lines—could totally be created out of all the embryos that are available in this country today.

The answers are kind of sleight of hand. To have an effective embryonic stem cell program, other than what is provided in S. 30, means we are going to use Federal taxpayer dollars, indirectly or directly, to destroy embryos. You can say you are not, but the fact is that will happen.

What are the positives of S. 30? The positives of S. 30 are that it looks at everything. It looks at all the new and upcoming methods. One is altered nuclear transfer. No. 1, you don't destroy any embryo, you don't create an embryo, but yet you get identical cells to what an embryonic stem cell would be, totally pluripotent, totally capable of doing everything an embryonic stem cell can do.

Why is there resistance to that? Why would there be any resistance to that? There shouldn't be.

The second point is what we call germ cell pluripotent stem cells. Those are made from the testes and ovaries of us, each of us, and we can have treatments designed for ourselves. Every tissue type in the body has now been produced from germ cell pluripotent stem cells, either ovarian or testicular, again, applying the same pluripotent stem cells you get from an embryo, but you never destroy a life.

My friend from Minnesota, one of the coauthors of this bill, makes a great point. Whatever happens at the end of the day—right now this glass of water represents what is happening on embryonic stem cell research with Government funds in this country. There is a whole lot of other research going on with embryonic stem cells outside the Government. It has not dead stopped. As a matter of fact, it is advancing forcefully without Government money. But this represents what is there. If S. 5 is passed out of this body and the House, this is what we will see next year: the same amount, because this bill is going to be vetoed.

However, if S. 30 is passed, what we will see is this much research, a doubling of the research next year. So one says help people play the political game when we know it is going to be

vetoed. S. 30 says let's do something real. Let's give an answer to the hope. Let's double it up and let's do it in a way that is an ethically good way.

The final point I wish to make is to anybody who wants us to do embryonic stem cell research, anybody who has a family member with a chronic disease, anybody who has a child with diabetes, anybody who has any need that has hope coming from "embryonic stem cell research," the question I put forward to them is this: If we can show you the science is going to give us exactly the same results with never destroying an embryo, what would your choice be-destroy an embryo and get the results or do not destroy an embryo and go one of the multitude other ways to accomplish exactly the same purpose?

That is the real question that is facing this body. That is the question the American people ask. The science is 2 to 3 years ahead of the debate in this body today.

A lot of times my colleagues accuse me of not making much sense on the floor when I talk about these issues because it is a medical issue, it is a scientific issue. I am a doctor. I understand the science, so I tend to not use the words as plainly as I should. But the ethical question still arises: Do you want a doubling of the research to go forward and answer the very human need that is out there or do you want to play the political game and have exactly what we have today?

I say to Senator HARKIN, that is what will happen if S. 5 goes through. It is going to be vetoed. It will not be overridden in the House. Or we can have S. 30 that does as much or more than S. 5 and we will see a difference for the American people.

The hope my colleagues talk about will be realized when S. 30 gets passed, when S. 30 gets signed. The President has said he will sign it. It makes available everything we will need and still accomplishes the same goals but does it twice as fast. That is the real question: Do we want to play politics with this issue? Do we want to say somebody's legitimate position of valuing life, that they have an illegitimate position because they value life at the expense of somebody with chronic disease, or can they value life, come with an answer that actually accomplishes the same purpose in a better timeframe with better results with S. 30? That is the real question for us.

I understand the political game we are playing. I understand the diseases. But when you read the basic raw research that is going forward today, we are not even close to what is happening, we are not even talking about

what is happening out there.

Final point. Make sure you understand that if you believe in embryonic stem cell research as a viable ethical alternative, you also have to believe in cloning because the only way you will get a treatment that is good for you without rejection, without rejecting

the very treatment that is being given to you, is for you to clone yourself. That is the dirty little secret nobody wants to talk about in this debate because once we accomplish with true embryonic stem cells versus altered nuclear transfer, any treatment will require antirejection drugs or you having to clone yourself.

The language is very specific. There is no cloning as far as implanting into a uterus, but it doesn't mean you don't clone yourself and destroy yourself to meet a need for you.

It is a very complicated ethical issue about which we ought to be very clear. It is not just destroying embryos. It is going the next step now to have an effect from that treatment.

I believe there will be good treatments come out of embryonic stem cell research. I don't have any doubt about that. I believe exactly those same treatments will come and be better from altered nuclear transfer, from dedifferentiation, which is a term that says you take a cell that is more mature and dedifferentiate it back to a pluripotent cell, or from germ cells, either ovarian or testicular.

We can accomplish the desires of everybody who is hurting in our country today who has a hope and do it in a realistic way with S. 30 that will deliver the goods, deliver taxpayers' dollars to make a difference. S. 5 will deliver nothing, nothing for at least 2 years, because this President won't sign it.

So the consequence and the question that comes back to us is: Are we going to do something that is meaningful or are we going to play the political game that in the long term has no meaning, at least for the next 2 years?

I yield back my time to the Senator from Georgia.

Mr. ISAKSON. Mr. President, I thank the Senator from Oklahoma.

I yield up to 15 minutes of our time to the distinguished Senator from Minnesota, Mr. COLEMAN.

The PRESIDING OFFICER. The Senator from Minnesota.

Mr. COLEMAN. Mr. President, I thank my colleague from Oklahoma, who brings a physician's perspective. We hear so often on the floor of the Senate that we need to look in the eyes of young kids with juvenile diabetes and say: Are we doing all we can do? My colleague from Oklahoma has dealt with that on a regular basis. He stands with me, and I thank him for his support.

In the end, there is a practical conclusion, as he demonstrated with the glasses of water. If you want an answer, if you want to look those kids in the eyes, talk to the families of folks with ALS or heart disease, if you support S. 30, you can look them in the eye and say: Today I have done what I can do to move the science forward, to have additional Federal support for embryonic stem cell research but research which, in the end, is unifying re-

Dr. William Hurlbut, who is one of the authors of a technique known as al-

tered nuclear transfer, used a phrase that I borrowed. It is an island of unity and a sea of controversy. That is what S. 30 offers, an island of unity and a sea of controversy. There is disagreement in this country about the use of Federal dollars for the destruction of a human embryo. That is a reality. In the end, scientific advancement should be something that is unifying. It shouldn't be tearing this country apart. You shouldn't worry, if you are going into a hospital for some kind of treatment, whether there is some moral line that has been crossed for you as an individual. You shouldn't have to do that. We shouldn't put people in that position.

The good news is we don't have to. It is fascinating. I think the science has gotten ahead of the politics. I have no doubt, as I listened to this debate, these are people of good will on both sides of this debate, supporting both proposals, but I believe the same ultimate kind of vision to improve quality of life, to enhance scientific research, to put an end to debilitating and threatening disease and illness, is the kind of common bond we have, people

of good will.

I suppose a number of years ago, individuals of good will, good moral background, religious background, may have come to a conclusion that they would support the destruction of a human embryo for the opportunity to do good today for someone who is here. It is a line some of us can't cross. We bring deeply held moral perspectives to this issue. I understand others of good faith and strong character solid religious background and belief, say this is the line, this is the right thing to do.

I heard my colleagues on the other side quote scriptures and pastors and others-my friends, of good will, and good heart. In the past, that may have been the only path to where we wanted to go.

The Clinton administration looked at this. In fact, this is the language they used. In 1999, President Clinton's National Bioethics Advisory Commission issued a report entitled "Ethical Issues in Human Stem Cell Research" acknowledging that a week-old human embryo is a form of human life that deserves respect. The Commission stated:

In our judgment, the derivation of stem cells from embryos remaining following infertility treatments-

These are the embryos we are talking about here, IVF-

is justifiable only if no less morally problematic alternatives are available for advancing the research.

Science has moved ahead of where we were in 1999. I was on the phone a little while ago with a Dr. Landry from, I believe, Columbia University. Dr. Landry talked about a stem cell line coming from dead embryos that has all the capacity, pluripotency of the stem cell lines from fertility clinics. So a "less morally problematic alternative" is available.

My friend and colleague from Georgia, the coauthor of this legislation, knows from Georgia experience that scientists worked on dead embryos. I thought about it, and I believe it is part of the 21 lines the President authorized for embryo research. The work is being done. The reality is there are cell lines available today that are not eligible for Federal funding. That is because we have a policy that says no Federal funding for embryo stem cell research. But if we pass S. 30, and S. 30 gets signed into law, then we have available Federal funding for embryonic stem cell research that would not be available today.

That is then "morally less problematic" because it does not involve the destruction of a human embryo.

When we talk about a dead embryo, my colleague from Georgia has done a very good job. My colleagues may have said: It is a dead embryo. What can you get out of a dead embryo? Let me explain two concepts. They are at the heart of this debate. I am not a scientist, but I have learned a lot about pluripotency, the capacity of a cell to give rise to many different cell types. Embryonic stem cells, those that have come from in vitro fertilization clinics. they have pluripotency. They have this elastic capacity to recreate any kind of cell. So maybe sometime in the future you can create stronger heart muscles. Today, in fact, with some types of stem cell research, that is being done. Maybe you can grow limbs. Maybe you can cure ALS. There is an incredible capacity, pluripotency.

There is also this concept of totipotency. Totipotency is the capability of a zygote or other cell to develop into a complete, integrated human being. The line we are talking about today between S. 5 and S. 30 is the line between pluripotency and totipotency. We all support research that will provide for pluripotent stem cells, pluripotent cells that have the

capacity to be almost anything.

The dividing line, though, is whether you have totipotency, so with a human embryo, cells that are involved in a fertility clinic-I am going to switch charts and talk about a couple of other techniques that involve pluripotency but not totipotency. What we look at with dead embryos are cells that are pluripotent. I don't know if it is a great analogy, but even after death we can harvest organs that have the ability to serve the function you want them to serve. So dead embryos are embryos that have no totipotency but have pluripotency. You get pluripotent cells.

The other approach is an approach known as altered nuclear transfer. That, by the way-I say "the approach." There are a number of other approaches out there. My colleague from Oklahoma talked about that. I talked think he about dedifferentiation, talked about germsthere are a number of different procedures and techniques that have strong scientific support that allow us to produce pluripotent cells without

totipotency. They allow us to produce embryonic stem cells that have all the capacity for research that gives the hope we are talking about without creating a human embryo that does not involve, then, the taking of human life; that does not involve the moral line that many Americans feel is there.

Not all. There is a difference in this. That is why I am saying, what S. 30 does is it gives us this island of unity in the sea of controversy. What it does is allow all of us-and I do hope all my colleagues, wherever you are on this issue—support for S. 30. Why would you be opposed to Federal funding for embryonic stem cell research that advances us?

My colleague from Oklahoma used the two glasses of water. If you support S. 5, all you are going to get tomorrow—in January 2008, S. 5 passes. It passes in the Senate, passes in the House, it is vetoed. We have this much right now—I believe it is about \$130 million. That is what this glass represents in research, embryonic stem cell research. Those are the 20-something lines left the President authorized.

In January of 2008 you are going to get \$132 million of federally funded stem cell research. But if we pass S. 30, what we have then is the opportunity for research in a range of other areas, perhaps doubling and maybe more-I would hope much more-of stem cell research, or pluripotent stem cells, to get the capacity to do all the treatments and provide the hope.

We are, by the way, a long way away in reality from human treatments, but it is hope. That is what this bill is, this is the HOPE bill.

One of the other mechanisms we talked about is altered nuclear transfer. Just to explain, in the natural fertilization process, biology 101, you have the sperm, you have the egg, you get the fertilized egg, and you get the em-

In the clone what you have is the egg cell, you enucleate it—you take out the center. This may come from a fingernail or skin, whatever, a cell with all the DNA, and you insert it into this enucleated egg. You activate it and then you get an embryo. I think that is the way Dolly the sheep came about.

By the way, my colleague from Oklahoma talked about this. If we are going to do stem cell research from here, and we are going to take this embryo and we are going to create stem cells and we put that into you or me, you are going to have an immune reaction, and your whole life—if you put this in you, you are, for your whole life, going to have to deal with immune reaction suppression and the drugs. The only way around that is the Dolly approach. If you create stem cells from your own cells there is no immune reaction.

We are not talking about that, although there are those of us who raise the concern: How do you get ultimately where you want to go without that possibility?

Another way is the altered nuclear transfer. You take the genetic material, the somatic cell, fingernail or something, and what you do before you insert it into this enucleated egg is touch off a trigger mechanism that shuts off the ability to create the embryo, but it still creates an inner cell mass with pluripotent cells—the capacity of a cell to give rise to many different types of cells. Do all the research you want.

So S. 5 provides funding for new stem cell research. It provides the opportunity to do all that one wants to do without crossing the moral line. Why wouldn't we get there?

My great fear is that what will happen this year is what happened last year. In the Senate there was a bill, the Specter-Santorum bill, which, by the way, did not provide for all that we have in S. 30. It did not provide for the dead embryo research. I think it may have provided for some sort of ANT. The good news is that is included in S. 5, but S. 5 is going to be vetoed so that doesn't go anywhere.

Last year that passed, 100 to 0, a bill with some alternative measures. But, again, we have gone way beyond last year, this year, in terms of the science.

The House refused to hear it. They took an all-or-nothing approach: If you don't support the destruction of a human embryo to do stem cell research we are not passing anything. Where is the hope in that? As you look at this I challenge my colleagues on the other side of the aisle to tell their colleagues in the House: Give hope, the hope we have talked about on this floor, the hope we all agree on, the hope that there is just consensus on that we want to move the research forward. Do not let some kind of politics that I cannot understand stop us from moving forward with the opportunity to move research that can produce hope.

There are many scientists who have kind of said: Yes, we looked at ANT and we know it can work and we need to put our efforts into that. I will read a couple of quotes:

Research results suggest that altered nuclear transfer may be able to produce human pluripotent stem cells—in a manner that is simpler and more efficient than current methods.

That is by Hans Scholer, chair of the Department of Cell and Developmental Biology at the Max Planck Institute in Germany.

Recently, multiple labs in the United States and from around the world have published or reported experiments in which adult cells were converted not to embryos but directly to pluripotent embryonic-like cells. The resulting cells were virtually indistinguishable from embryonic stem cells derived from embryos. The techniques used included altered nuclear transfer, cell fusion and chemical reprogramming. The results were obtained from top scientists in the field and published in the best journals.

That was by Markus Grompe, M.D., Oregon Stem Cell Center.

It is fascinating, those scientists that support just embryonic stem cell research without anything, they will tell

you nothing else works; this is the whole ball of wax; my way or the highway. Then you have scientists who support these alternatives who say: Yes, this is the best way to go.

Maybe it is about Federal funding. Maybe if you don't believe your way is the only way you are not going to get Federal dollars. We have to get past the politics. We have to get past the petty scientific divisions and simply look at what we have out there and embrace and seize the opportunity to move forward in a way that is cohesive, that gets this Nation outside of the culture wars, outside of the battles over Federal funding for the destruction of human life. Put it aside. We don't have to go there today. Science is offering us a better path.

The PRESIDING OFFICER (Mr. Brown). The time of the Senator has expired.

Mr. COLEMAN. I urge my colleagues to take a look at S. 30, regardless of where you are on S. 5. This is a bill that deserves unanimous support. In the end, let's work on our friends and colleagues in the House to pass the law so that we have, in the end, one the President will sign, one which offers and delivers true hope.

I vield the floor.

Mr. ISAKSON. How much of our time remains?

The PRESIDING OFFICER. The Senator from Georgia has 17 minutes.

Mr. ISAKSON. I will acknowledge, given the agreement we previously made, I think I will only take 5 of those. I recognize myself for 5 minutes.

The PRESIDING OFFICER. The Senator from Georgia is recognized.

Mr. ISAKSON. I acknowledge the patience of the Presiding Officer. I know the Presiding Officer was in the chair last night when the Senator from Iowa and I had an exchange. I want to repeat some of what was said, so I apologize to the distinguished Presiding Officer, but in the end I want to try to synthesize what got me to the point of being a part of S. 30.

In August 2001, when the directive came down, I started learning about stem cells. When the veto took place last year, I wondered what more I needed to know to try to find a way to deal with the concerns of some but the compassion of everyone. I stumbled upon a professor at the University of Georgia, Dr. Steven Stice. I really didn't stumble upon him; one of my interns, an honor student, directed me to him. He said he was doing research in this area.

As it turned out, he was operating three stem cell lines, lines BGO1, BGO2, and BGO3. So I went to the university and spent 2 days going through what their research team was doing and the way in which they were derived. I came to learn that Dr. Stice and his team, like teams in California, Wisconsin, and other States that have since derived embryonic stem cells this way, derived them from what is known as naturally dead or arrested embryos. Those are embryos that after 7 days

following in vitro fertilization stopped cellular division. The embryo itself is clinically dead, as is a human being who is brain dead, although all their other organs are working. But contained within that embryo are stem cells. So it has gone through a natural death, not one at the hands of a doctor or anyone else, and it produces these stem cells.

After reading everything I could on it, I want to read one sentence from just one study which verified the pluripotency, the undifferentiation, and the independence of those lines:

Lines BGO1, BGO2, and BGO3, human embryonic stem cells are, therefore, independent, undifferentiated and pluripotent lines that can be maintained without an accumulation of karyotypic abnormalities.

It took a long time to practice those last two words and say them right, but what that practically means is exactly what we all seek.

That is, embryonic stem cells that have the full potential for research, to answer the hope all of us in this room have expressed today, can, in fact, be derived from embryos that are not destroyed by the human hand but through the natural process of the life cycle.

So I asked myself this question: Well, if this is a legitimate debate—which it is a legitimate debate—if science has found there is a way to derive these stem cells without the destruction of the embryo, and if—which is true—5 of the 21 lines currently exempted by the Presidential order of 2001, are, in fact, 5½ years of study side by side with stem cells derived by destroying the embryo, and if we have clear evidence they are undifferentiated, they are pluripotent, and they do not have abnormalities, then this is the answer to thread the needle to solve the problem.

The White House has acknowledged they will sign the bill. So with respect for every Member of this Senate who has eloquently spoken on behalf of the hope of furthering research, I do not know what the results of the research are going to be, but I know this: If we do not do it, we will never know, and if there is a way to do it and accelerate it and thread the needle, which this does, then I submit we should do it.

I would encourage all of my colleagues to support S. 30.

I acknowledge the tremendous work of the Senator from Minnesota and others who have helped. I appreciate the time allotted to us in this debate. In the end, I think the most used word in the last 2 days has been "hope." There is now a hope that we actually bring about the reality of scientific development for the cure of deadly and terrible diseases and do so in a way that recognizes the natural process of the life cycle and the advancement of the science.

With that, I yield back our time in this cycle.

Mr. President, my understanding is— I am going to repeat this—it is my understanding that we now have a period

of 30 minutes that is open, at which time, following that, each of the four designees will have a closing 10 minutes.

I see the distinguished Senator from Kansas is on the Senate floor. My understanding of that 30-minute division. Senator Brownback, is you would have up to 7½ minutes of that 30, and if—I would ask-I am going to try this. I ask unanimous consent that the next 30 minutes be divided, with 15 minutes under the control of Senator HARKIN, 7½ under the control of Senator BROWNBACK, 7½ under the control of myself and Senator COLEMAN, and then the remaining 40 minutes would be equally divided between the four designees: Senator HARKIN from Iowa, myself and Senator COLEMAN, Senator BROWNBACK, and Senator REID, and then lastly, the leaders will have 30 minutes equally divided.

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

Mr. ISAKSON. From what I understood of that agreement, I think the Senator from Kansas would have 7½ minutes, then the Senator from Iowa would have 15, then I would have 7½. Is that fair?

The PRESIDING OFFICER. The Senator from Kansas is recognized for 7½ minutes.

Mr. BROWNBACK. Mr. President, if the Chair would please remind me when I have a minute left of my time.

The PRESIDING OFFICER. The Chair will do that.

Mr. BROWNBACK. I wish to start by entering into the RECORD four documents and briefly covering them as much as possible. I ask unanimous consent that all four of these documents appear directly after my testimony.

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

(See Exhibits 1 through 4.)

Mr. BROWNBACK. This first one is the list of 72 current clinical applications using adult stem cell therapy. No ethical problems on these. Actually, the list now is 73. I will cover that in just a minute, but I want to get that in.

I want to back this letter up, or this statement up, with a letter that appeared in the magazine Science, January 19, 2007, that was refuting the article—that was a letter put forward by other individuals questioning this level of adult stem cell therapy and treatment.

Then this letter which was in the Journal of Science was backed up by the third document we have here, which is a list of 14 pages of the peerreviewed scientific articles on adult stem cell therapies and the benefits those have produced.

Then the final document we have here in this stack that I will be putting forward is the article that just appeared out even today from JAMA, the Journal of American Medical Association, on Type 1 juvenile diabetes being treated with the use of adult stem cells. The results—I am just going to

read these, because they are just so phenomenal, from this JAMA article: During a 7- to 36-month followup, 14 patients became insulin free: one for up to 35 months with this treatment.

This was an adult human stem cell treatment. One patient was not able to become insulin-independent.

The reason I cite that is it is such an exciting set of results. People have been talking on the floor a great deal about curing diabetes. Here we have a JAMA article, as I have noted to my colleagues earlier. The unfortunate thing is the actual test took place in Brazil instead of the United States even though it was designed and much of it was done by U.S. scientists at Northwestern University and other places. The work should be being done in the United States.

Point one being, we don't have to go there with the taxpayer funding destroying this young human life. I would hope my colleagues would say that in and of itself is enough information for me to say we do not need to cross this ethical boundary. The ethical boundary we are talking about yet again is using taxpaver dollars to fund the destruction of human life so we can research on these entities. Some would refer to it as potential for human life; that is human life, so we can research on it.

Do we want to cross that ethical boundary that has everybody in somewhat of a question of whether they want to do this or not? I would submit, No. 1, we do not need to; we have routes to go that work. No. 2, we should not do that in researching on human life because of the respect we have and the dignity afforded to each and every human life at all stages, at all places, for the human existence this individuals has.

Proverbs tell us this: There is a way that seems right to a man, but its end is the way of death. There is a way that seems right to a man, but its end is the way of death.

That would seem to really highlight this debate—the way that seems right to a man. Let's just research on these embryos; they are going to be disposed of anyway. Why not do it instead of throwing them away? Why not do it instead of having them being adopted? Why not do it? Why not research on someone who is on death row? Why

There is a way that seems right to a man, but its end is the way of death. Well, we shouldn't because it does continue that continuation of us breaching human dignity—at a very early stage, granted, but nonetheless human by all definition of what a human species and an individual is. It does breach that, and we should not go there with taxpayer dollars.

As I have noted to my colleagues, it is legal to do in the United States. States can fund it, private individuals can fund it. I have noted to my colleagues that private individuals are not funding it. They are not funding it be-

cause it is speculative, it is not producing results, and it is producing tu-

I have entered into the RECORD previously a large set of different studies in various areas done by various groups. These embryonic stem cells are producing tumors. That is what is taking place. There is a way that seems right to a man, but its end is death. Do we want to put tumors in individuals? Is that the route we are going forward with? I don't think so. I don't think we should.

I emphasize as well to my colleagues that we have another route to go on this that we can work on together. I would hope we could work on the amniotic fluid and banking of amniotic fluid. I think that would be an important key route for us to work together.

I am disturbed that at this point in time in the legislative session, the first half of the year after an election, we are spending this amount of time on a topic that is going to be vetoed—S. 5 is going to be vetoed; unlikely that the veto override is going to occur; maybe it is going to be able to happen but unlikely—when we have other routes we can work on that will work and will produce results. Are we going to continue this effort for division? It is all about dividing. It is all about causing a fight and somebody scoring some political points, when we have a hopeful route that is producing results that we can work on together, that we can get more funding for, and everybody wants cures and we can get more funding for this route which is working, and we can start a new area in amniotic fluid and placenta or we can go along with my colleagues from Georgia and Minnesota on a route upon which we can agree.

The PRESIDING OFFICER. The Senator has 1 minute remaining.

Mr. BROWNBACK. I think we can do those things. Yet we continue down this route of division. Why would we do that when in the balance sit patients in this country and around the world who seek our help? I have shown you many pictures of those who have gotten help but need more and are having to travel overseas for these treatments. Let's not force them to do that.

Let's stop the politics of division. Let's start working together and have a culture that respects human dignity. We can do that. Reject S. 5.

#### EXHIBIT 1

72 CURRENT HUMAN CLINICAL APPLICATIONS USING ADULT STEM CELLS

(LIST UPDATED MARCH 2007)

ANEMIAS & OTHER BLOOD CONDITIONS

Sickle cell anemia Sideroblastic anemia Aplastic anemia

Red cell aplasia (failure of red blood cell

development)

Amegakarvocytic thrombocytopenia

Thalassemia (genetic [inherited] disorders all of which involve underproduction of hemoglogin)

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 muscular 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

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: Angioim-

munoblastic 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 kid-

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 adrenoleukodystroph

"It is nearly certain that the [human] clinical benefits of the [embryonic stem cell] research are years or decades away. This is a message that desperate families and patients will not want to hear."—Science, June 17, 2005

#### EXHIBIT 2

TREATING DISEASES WITH ADULT STEM CELLS

In their letter "Adult Stem Cell Treatments for Diseases?" (28 July 2006, p.439), S. Smith et al. claim that we misrepresent a list of adult stem cell treatments benefiting patients. But it is the Letter's authors who misrepresent our statements and the published literature, dismissing as irrelevant the many scientists and patients who have shown the benefits of adult stem cells.

We have stated that adult stem cell applications have "helped," "benefited," and "improved" patient conditions. Smith et al.'s Supporting Online Material repeatedly notes patient improvement from these cells. We have never stated that these treatments are "generally available, "cures," or "fully tested in all required phases of clinical trials and approved by the U.S. Food and Drug Administration (FDA)." Some studies do not require prior FDA approval, and even the nine supposedly "fully approved" treatments aclmowledged by Smith et al. would not be considered "cures" or "generally available" to the public at this stage of research.

The insistence that no benefit is real until after FDA approval is misplaced. Such approval is not a medical standard to evaluate patient benefit, but an agency determination that benefits outweigh risks in a broad class of patients. Physicians and patients use an evidentiary standard. Our list of 72 applications, compiled from peer-reviewed articles, documents observable and measurable benefit to patients, a necessary step toward formal FDA approval and what is expected of new, cutting-edge medical applications.

Smith et al. also mislead regarding citations for testicular cancer and non-Hodgkin's lymphoma, referring to "[t]he reference Prentice cites . . ." as though only one reference existed in each case, and not mentioning four other references that, according to their own SOM, show "improved long-term survival" of patients receiving adult stem cells. There are currently 1238 FDA-approved clinical trials related to adult stem cells, including at least 5 trials regarding testicular cancer and over 24 trials with non-Hodgkin's lymphoma. They also disregard studies showing successful stimulation of endogenous cells for Parkinson's.

The ethical and political controversy surrounding embryonic stem cell research makes scientific claims especially prone to exaggeration or distortion. All such claims should receive careful scrutiny, as recently acknowledged by the editors of this journal after two articles claiming human "therapeutic cloning" success were revealed to be fraudulent. This scrutiny should be directed equally to all sides. We note that two of our critics, Neaves and Teitelbaum, are founding members of a political group whose Web site lists over 70 conditions that "could someday be treated or cured" using embryonic stem

cells. High on this list is Alzheimer's disease, acknowledged by experts as a "very unlikely" candidate for stem cell treatments, with one NIH expert describing such a scenario as a "fairy tale". The entire list, in fact, is based on no evidence of benefit in any human patient from embryonic stem cells and little evidence for its claims in animal models. No one should promote the falsehood that embryonic stem cell cures are imminent, for this cruelly deceives patients and the public.

#### CSC EXHIBIT 3

PEER-REVIEWED REFERENCES SHOWING APPLICATIONS OF ADULT STEM CELLS THAT PRODUCE THERAPEUTIC BEN-EFIT FOR HUMAN PATIENTS

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 chemo-

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; ct. 19, 2000.

Lumphoma

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

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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

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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.

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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 transplantation", Lancet 365, 1934–1941, 4 June 2005. Josting, A; "Treatment of Primary Pro-

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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.

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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

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Gorin NC et al.; "Feasibility and recent

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Bruserud O et al.; "New strategies in the

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Chronic 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.

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 Lymphadenopathy 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 al., 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 al.; "Transplantation of

Bensinger WI et al.; "Transplantation of bone marrow as compared with peripheralblood 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 posttransplantation 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.

Koc, ON et al.; "Rapid Hematopoietic Recovery After Coinfusion of Autologous-Blood Stem Cells and Culture-Expanded Marrow Mesenchymal Stem Cells in Advanced Breast Cancer Patients Receiving High-Dose Chemotherapy"; J Clin Oncol 18, 307–316; January 2000.

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Kawa, K et al.; "Long-Term Survivors of Advanced Neuroblastoma With MYCN Amplification: A Report of 19 Patients Surviving Disease-Free for More Than 66 Months"; J Clin Oncol 17:3216-3220; October 1999

Renal Cell Carcinoma

Barkholt L et al., Allogeneic haematopoietic stem cell transplantation for metastatic renal carcinoma in Europe, Annals of Oncology published online 28 April 2006.

Arya M et al., Allogeneic hematopoietic stem-cell transplantation: the next generation of therapy for metastatic renal cell cancer, Nat Clin Pract Oncol. 1, 32–38, Nov 2004.

Childs R et al., "Regression of Metastatic Renal-Cell Carcinoma after Nonmyeloablative Allogeneic Peripheral-Blood Stem-Cell Transplantation", New England Journal of Medicine 343,750-758; Sept. 14, 2000.

Childs, RW; "Successful Treatment of Metastatic Renal Cell Carcinoma With a Nonmyeloablative Allogeneic Peripheral-Blood Progenitor-Cell Transplant: Evidence for a Graft-Versus-Tumor Effect:; J Clin Oncol 17, 2044–2049; July 1999.

Soft Tissue Sarcoma

Blay JY et al.; "High-dose chemotherapy with autologous hematopoietic stem-cell

transplantation for advanced soft tissue sarcoma in adults"; J. Clin. Oncol. 18, 3643–3650; Nov 1, 2000.

Ewing's Sarcoma

Drabko K et al., Megachemotherapy followed by autologous stem cell transplantation in children with Ewing's sarcoma, Pediatric Transplantation 9, 618–621, 2005.

Various Solid Tumors

Pedrazolli P et al., High dose chemotherapy with autologous hematopoietic stem cell support for solid tumors other than breast cancer in adults, Annals of Oncology published online 17 March 2006.

Nieboer P et al.; "Long-term haematological recovery following high-dose chemotherapy with autologous bone marrow transplantation or peripheral stem cell transplantation in patients with solid tumours"; Bone Marrow Transplant 27, 959–966; May 2001.

Lafay-Cousin L et al.; "High-dose thiotepa and hematopoietic stem cell transplantation in pediatric malignant mesenchymal tumors: a phase II study"; Bone Marrow Transplant 26, 627-632; Sept. 2000.

Michon, J and Schleiermacher, G. "Autologous haematopoietic stem cell transplantation for paediatric solid tumors", Baillieres Best Practice Research in Clinical Haematology 12, 247–259, March–June, 1999.

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Anagnostopoulos A et al.; "High-dose chemotherapy followed by stem cell transplantation in patients with resistant Waldenstrom's macroglobulinemia"; Bone Marrow Transplant 27, 1027–1029; May 2001.

Hemophagocytic Lymphohistiocytosis

Matthes-Martin S et al.; "Successful stem cell transplantation following orthotopic liver transplantation from the same haploidentical family donor in a girl with hemophagocytic lymphohistiocytosis"; Blood 96, 3997–3999; Dec 1, 2000.

POEMS Syndrome (Osteosclerotic Myeloma)

Dispenzieri A et al., Peripheral blood stem cell transplantation in 16 patients with POEMS syndrome, and a review of the literature, Blood 104, 3400–3407, 15 November 2004

Myelo fibrosis

Cometta K et al., Umbilical cord blood transplantation in adults: results of the prospective Cord Blood Transplantation (COBLT), Biol Blood Marrow Transplant 11, 149–160, February 2005.

Cervantes F, Modern management of myelofibrosis, Br J Haematol 128, 583-592, March 2005.

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Thiele J et al., Dynamics of bone marrow changes in patients with chronic idiopathic myelofibrosis following allogeneic stem cell transplantation, Histol Histopathol 20, 87–89, July 2005.

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Benesova Pet al., [Complete regression of bone marrow fibrosis following allogeneic peripheral blood stem cell transplantation in a patient with idiopathic myelofibrosis] [Article in Czech], Cesk Patol 40, 167–171, October 2004.

ADULT STEM CELLS—IMMUNE SYSTEM REPLACEMENT

AUTOIMMUNE DISEASES

Systemic Lupus

Burt RK et al., Nonmyeloablative hematopoietic stem cell transplantation for systemic lupus erythematosus, Journal of the American Medical Association 295, 527– 535, February 1, 2006.

Burt RK et al., "Induction of tolerance in autoimmune diseases by hematopoietic stem cell transplantation: getting closer to a cure?", Blood 99, 768–784, 1 February 2002. Wulffraat NM et al.; "Prolonged remission

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Rosen O et al.; "Autologous stem-cell

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Traynor AE et al.; "Treatment of severe systemic lupus erythematosus with high-dose chemotherapy and haemopoietic stemcell transplantation: a phase I study"; Lancet 356 701-707; August 26, 2000

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Traynor A and Burt RK; "Haematopoietic stem cell transplantation for active systemic lupus erythematosus"; Rheumatology 38, 767-772; August 1999.

Martini A et al.; "Marked and sustained improvement 2 years after autologous stem cell transplant in a girl with system sclerosis"; Rheumatology 38, 773; August 1999.

Sjogren's Syndrome

Rabusin M et al.; "Immunoablation followed by autologous hematopoietic stem cell infusion for the treatment of severe autoimmune disease"; Haematologica 85 (11 Suppl), 81–85; Nov. 2000.

Myasthenia

Rabusin M et al.; "Immunoablation followed by autologous hematopoietic stem cell infusion for the treatment of severe autoimmune disease"; Haematologica 85 (11 Suppl), 81–85; Nov. 2000.

Autoimmune Cytopenia

Passweg, JR et al., Haematopoetic stem cell transplantation for refractory autoimmune cytopenia, British Journal of Haematology 125, 749-755, June 2004.

Rabusin M et al.; "Immunoablation followed by autologous hematopoietic stem cell infusion for the treatment of severe autoimmune disease"; Haematologica 85 (11 Suppl), 81–85; Nov. 2000.

Scleromyxedema

A.M. Feasel et al., "Complete remission of scleromyxedema following autologous stem cell transplantation," Archives of Dermatology 137, 1071–1072; Aug. 2001.

Scleroderma

Burt RK et al., "Induction of tolerance in autoimmune diseases by hematopoietic stem cell transplantation: getting closer to a cure?", Blood 99, 768–784, 1 February 2002.

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 $Crohn's\ Disease$ 

Kreisel W et al., Complete remission of Crohn's disease after high-dose cyclophosphamide and autologous stem cell transplantation, Bone Marrow Transplantation 32, 337–340, 2003.

Burt RK et al., "High-dose immune suppression and autologous hematopoietic stem cell transplantation in refractory Crohn disease", Blood 101, 2064–2066, March 2003.

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Hawkey CJ et al.; "Stem cell transplan-

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#### Behcet's Disease

Rabusin M et al.; "Immunoablation followed by autologous hematopoietic stem cell infusion for the treatment of severe autoimmune disease"; Haematologica 85 (11 Suppl), 81–85; Nov. 2000.

#### Rheumatoid Arthritis

Burt RK et al., "Induction of tolerance in autoimmune diseases by hematopoietic stem cell transplantation: getting closer to a cure?", Blood 99, 768–784, 1 February 2002.

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I M de Kleer et aI., Autologous stem cell transplantation for refractory juvenile idiopathic arthritis: analysis of clinical effects, mortality, and transplant related morbidity, Ann Rheum Dis 63, 1318–1326, 2004.

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Saccardi R et al., Autologous HSCT for severe progressive multiple sclerosis in a multicenter trial: impact on disease activity and quality of life, Blood 105, 2601–2607, 15 March 2005.

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#### Alopecia Universal

Seifert B et al., Complete rfemission of alopecia universalis after allogeneic hematopoietic stem cell transplantion, Blood 105, 426–427, 1 January 2005.

#### Buerger's Disease

Kim D-I et al., Angiogenesis facilitated by autologous whole bone marrow stem cell transplantation for Buerger's disease, Stem Cells 24, 1194–1200, 2006.

#### IMMUNODEFICIENCIES

Severe Combined Immunodeficiency Syndrome

Grunebaum E et al., Bone marrow transplantation for severe combined immune deficiency, Journal of the American Medical Association 295, 508–518, 1 February 2006.

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ADULT STEM CELLS-REPAIR/REPLACEMENT OF SOLID TISSUES

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#### EXHIBIT 4

[From the Journal of the American Medical Association, Apr. 11, 2007]

AUTOLOGOUS NONMYELOABLATIVE HEMATOPOI-ETIC STEM CELL TRANSPLANTATION IN NEWLY DIAGNOSED TYPE 1 DIABETES MELLITUS

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Context: Type 1 diabetes mellitus (DM) results from a cell-mediated autoimmune attack against pancreatic beta cells. Previous animal and clinical studies suggest that moderate immunosuppression in newly diagnosed type 1 DM can prevent further loss of insulin production and can reduce insulin needs

Objective: To determine the safety and metabolic effects of high-dose immunosuppression followed by autologous nonmyeloablative hematopoietic stem cell transplantation (AHST) in newly diagnosed type 1 DM.

Design, Setting, and Participants: A prospective phase 1/2 study of 15 patients with type 1 DM (aged 14-31 years) diagnosed within the previous 6 weeks by clinical findings and hyperglycemia and confirmed with positive antibodies against glutamic acid decarboxylase. Enrollment was November 2003-July 2006 with observation until February 2007 at the Bone Marrow Transplantation Unit of the School of Medicine of Ribeirão Preto, Ribeirão Preto, Brazil. Patients with previous diabetic ketoacidosis were excluded after the first patient with diabetic ketoacidosis failed to benefit from AHST. Hematopoietic stem cells were mobilized with cyclophosphamide (2.0 g/m2) and granulocyte colony-stimulating factor (10 µg/ kg per day) and then collected from periphblood by leukapheresis and cryopreserved. The cells were injected intravenously after conditioning with cyclophosphamide (200 mg/kg) and rabbit antithymocyte globulin (4.5 mg/kg).

Main Outcome Measures: Morbidity and mortality from transplantation and temporal changes in exogenous insulin requirements (daily dose and duration of usage). Secondary end points: serum levels of hemoglobin  $A_{\rm IC}$ , C-peptide levels during the mixed-meal tolerance test, and anti-glutamic acid decarboxylase antibody titers measured before and at different times following AHST.

Results: During a 7- to 36-month follow-up (mean 18.8),14 patients became insulin-free (1 for 35 months, 4 for at least 21 months, 7 for at least 6 months; and 2 with late response were insulin-free for 1 and 5 months, respectively). Among those, 1 patient resumed insulin use 1 year after AHST. At 6 months after AHST, mean total area under the Cpeptide response curve was significantly greater than the pretreatment values, and at 12 and 24 months it did not change. Anti-glutamic acid decarboxylase antibody levels decreased after 6 months and stabilized at 12 and 24 months. Serum levels of hemoglobin A<sub>1C</sub> were maintained at less than 7% in 13 of 14 patients. The only acute severe adverse effect was culture-negative bilateral pneumonia in 1 patient and late endocrine dysfunction (hypothyroidism or hypogonadism) in 2 others. There was no mortality.

Conclusions: High-dose immunosuppression and AHST were performed with acceptable toxicity in a small number of patients with newly diagnosed type 1 DM. With AHST, beta cell function was increased in all but 1 patient and induced prolonged insulin independence in the majority of the patients.

Trial Registration: clinicaltrials.gov Identifier: NCT00315133.

The PRESIDING OFFICER. The Senator from Washington is recognized.

Mrs. MURRAY. Mr. President, I yield myself 10 minutes from this side.

Mr. President, I come to the floor today to speak out in strong support of the promising research that can save lives and bring hope to millions of Americans. I will vote for the Stem Cell Enhancement Act of 2007, and I urge all of our colleagues to do so.

More importantly, I urge President Bush to finally hear the voices of scientists, medical leaders, patients, and more than 500 organizations that have said loudly and clearly that it is time for promising research to move forward in this country. It is time to take the handcuffs off of our scientists, those who say they will then be able to pursue what all Americans are hoping for and promising research for so many diseases that impact so many of our families. For too long, this President has allowed politics and ideology to trump lifesaving research. We have to correct that mistake. The bill, S. 5, we are considering today shows us how.

Throughout this country, Americans are suffering from diseases such as Parkinson's, Alzheimer's, diabetes, multiple sclerosis, and they and their families are looking to us for help. We have scientists and researchers who are so eager to provide that help, but today, as we all know, their hands are tied by the arbitrary restrictions President Bush imposed back in 2001.

I believe we can allow research on embryonic stem cells, and we can do so with strong ethical guidelines that are required under this legislation.

Back in August of 2001, President Bush greatly limited the number of embryonic stem cells that were available for federally funded research. Those limits were based on inaccurate science and ideology, and they have restricted our ability to make progress. At the time, the White House said there were 78 stem cell lines available for federally funded research, but now we know there are only 21 such lines. Researchers, those men and woman whom we count on to find cures to the diseases that impact so many, believe it is imperative to have access to newer, more promising stem cell lines that do not pose the risk of contamina-

The first consequence of the President's restriction has been to limit hope and to limit progress for families who suffer from these diseases. The second impact has been to push embryonic stem cell research overseas. That means that our country is falling behind other countries in a cutting-edge field.

Because of the President's imposed arbitrary limits, we are now in this country surrendering our scientific leadership to other countries. That can have far-reaching consequences for our economy and for our future.

My State of Washington is home to world-class research institutions such as the University of Washington. I want our country and institutions such as that to be the leading edge of scientific frontiers so our country and all of us can benefit from the new advances

The bill we are considering today and will vote on this evening will lift the President's arbitrary restrictions and put in place expanded research under strict ethical guidelines. It would direct the Department of Health and Human Services to conduct and support research on stem cells that are derived from frozen embryos that are now stored in fertility clinics that would otherwise be destroyed. This bill also promotes research into finding alternative ways to derive stem cells that do not involve the destruction of an embryo. This bill imposes strong ethical guidelines. In fact, the guidelines in this bill are even stricter than the President's policy.

Embryonic stem cell research is a relatively young field. These cells were not even isolated in humans until 1998. Scientists believe that embryonic stem cells are more valuable than adult stem cells because they can develop into any type of cell or tissue in the body. Think of all the veterans who are coming home from the war in Iraq who have spinal cord injuries. Think of all the veterans of the first gulf war who are now being diagnosed with multiple sclerosis and who could be helped by this promising research.

In my own family, I have seen up close and personally the impact a disease such as multiple sclerosis can have. When I was 15 years old, my dad was diagnosed with multiple sclerosis.

I saw him in just a few years going from working to being someone who was home in a wheelchair every single day every single minute. For the rest of his life, my father was confined to a wheelchair. I can't tell you what a profound impact that had on my family. My mom had to stay home and raise myself and my six brothers and sisters. She had to go back to work and get a job and she had to stay home and take care of him, all at the same time. It was a very difficult time for my family. The medical bills were amazing. The challenges my family went through because of my dad's illness were incredible. I can only imagine what it might have been like had there been a cure for MS for my family and for thousands of others. When I was growing up, the promise of this type of research was not even on the horizon. Today that potential is in our hands. We need to do everything we can to make sure that that research is done so families such as mine have hope and opportunity in the future.

I hope we don't see it continually blocked by an ideological policy that puts politics over science. It is time to change course and put our Government on the side of the patients and their families and to give them hope again.

Last month the Director of the National Institutes of Health told us:

[I]t is clear today that American science would be better served and the nation would be better served if we let our scientists have access to more cell lines . . .

The NIH Director said that existing lines will not be sufficient for the research that needs to be done, and he said that adult stem cells do not have the same potential as embryonic stem cells. That is the scientific view of the Director of the National Institutes of Health. The Senate and the President would be very wise to heed his counsel.

I know what it is like to grow up with someone who has a serious illness. I can only imagine what it would have been like to know there was hope and a chance for a cure. I know of many families out there who have been waiting for this day in the Senate, for us to vote and pass this important stem cell research bill. I commend Senator HAR-KIN for his perseverance in coming back and again pushing at this as one of the first pieces of legislation we consider in this Congress. We all know it has a ways to go. We know the President has said he might veto it. I hope he doesn't. I hope he sends a message to some young girl out there whose dad has just been diagnosed with multiple sclerosis that we are a country of hope once again.

I urge my colleagues to vote for S. 5. I look forward to its passage today, moving through conference. I hope it will be signed by the President.

I yield the floor.

Mr. HARKIN. Mr. President, how much time remains?

The PRESIDING OFFICER. The Senator from Iowa has 7 minutes remaining.

Mr. HARKIN. Mr. President, we are getting close to the end of the debate, we have some floor time in the next hour or so to go back and forth. I thought I might take a few moments now to talk about why it is so necessary to have NIH do this kind of research, to oversee this research. The Senator from Oklahoma said that a lot of research is going on now on embryonic stem cells. To be sure, it is. It is going on in different States, in private institutions, in England and Australia and France and Japan and Singapore and a few other countries. Why do we want to get the Federal Government involved? First, there is no other area of medical research in which we say the Federal Government should step aside and let the States do it. I know of no other area of medical research.

I always look at the human genome project. What if we had said to the States: We are not going to do it. You do it. They might have sequenced one gene or another or let the private sector do it. They would have been getting patents on it or everything like. Now we have the mapping and sequencing of the entire human gene, and you can go online and get it, free to everybody. Any researcher anywhere can get it. Now they may take that and develop it into drugs and therapies. That is fine. That is that sort of symbiotic relationship we have developed very well between the private pharmaceutical industry and the basic research industry, which is NIH.

Again, our National Institutes of Health should be involved in overseeing this, because if we don't have a coherent Federal policy on stem cells, each State writes its own rules. That means that different States may have different ethical guidelines. One State would be different from another. You would wind up with a patchwork quilt of laws. Then you would wind up with States competing against each other. So California gets to doing stem cell research, and what it does is, it hires researchers away from Missouri. Then Missouri is hiring people away from Iowa and then Ohio. Then New York is trying to bid people away from Ohio. You get this terrible State-versus-State kind of competition in stem cell research.

We don't want that. We ought to be doing it on a national basis, a national effort, and we should not lose the international leadership we have always had in biomedical research. Should we give it up to Singapore or to Korea or England? No. We have always been the leader in the world in biomedical research, and we should continue.

Secondly, the issue of why we have to expand our stem cell policy. Again, I repeat, for the sake of emphasis, of those 78 cell lines that were supposedly available on August 9, 2001, only 21 have been available. A lot of them are sick. They are not propagating properly. They are unhealthy. Right now NIH is only using between four and six of these lines and even they, I have

been told, are not very healthy. So the restrictions we have had by the Bush administration, since August 9, 2001, have resulted in a situation where fewer and fewer viable good stem cell lines are available for NIH researchers. However, during that same period of time in other sectors, we have derived over 400 different cell lines. Yet no one who gets NIH funding is able to do any research on these healthy embryonic stem cell lines. That is why we need to develop these. We need to expand it.

That is what S. 5 does. S. 5 takes off the handcuffs. It lets us use, under strict ethical guidelines, those embryos that are slated to be discarded at IVF clinics. With all due respect to my friend from Georgia, S. 30 does not do that. S. 5, if passed, will do everything that S. 30 wants to do. If S. 5 passes, what they want to do in S. 30 can be done by NIH. The problem with S. 30 is, if S. 30 passes and S. 5 doesn't, then S. 30 is very limited. It says you can only use these few embryos that are naturally dead which, by the way, I don't think there is such a scientific term, but it has been bandied about here and it is in the bill. There is no such scientific delineation of what is naturally dead.

So that is the situation we are in. S. 5 will do both. It will open new stem cell lines with ethical guidelines. It will allow them to extract stem cells from these nonviable embryos. S. 30 will not. S. 30 still will not permit us to get the healthy stem cell lines our researchers need. That is why we need to pass S. 5.

Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator has  $2\frac{1}{2}$  minutes remaining.

Mr. HARKIN. I will conclude my 2½ minutes then by referring to the other chart. Again, we have to keep in mind that the policy now in effect, the policy in effect right now says we could use Federal money to examine and do research on embryonic stem cells that were derived prior to 9 p.m., August 9, 2001. But we can't use Federal money to examine or to do research on stem cells derived after 9 p.m., August 9, 2001. Those are morally unacceptable. Before 9 p.m., August 9, 2001, that is morally OK. After 9 p.m., it is not morally OK. Who decided that 9 p.m. on August 9, 2001, was some kind of moral dividing line, that stem cells derived before that, that is OK, but stem cells derived after that, that is not OK? Only one person decided that, and that was President Bush.

The people of this country didn't decide that. Ethicists didn't decide that. Theologians didn't decide that. Scientists didn't decide that. President Bush decided that. It is sheer hypocrisy to say we can fund those before, but we can't fund those after. That is the situation we find ourselves in today.

Let's take off the handcuffs. Let's get rid of that fake moral dividing line that has no substance in reality and let's get on with finding the cures for people with Parkinson's and Alzheimer's and spinal cord injuries. That is what S. 5 is all about.

I yield the floor.

The PRESIDING OFFICER. Who vields time?

The Senator from Minnesota.

Mr. COLEMAN. Mr. President, I thank my colleague, the Senator from Georgia, for his leadership on this issue, his passion, his knowledge. He is not a biologist, but I have learned more about God and principle and stem cell lines from that former real estate guy than the many doctors I have talked

. I also thank my colleague from Iowa. I went to law school at the University of Iowa. I think I have some Iowa roots. The Senator from Iowa has been a champion of those with disabilities, of disability rights, a champion of hope for a long time. In this debate there is so much we agree on. Where we disagree, though, is that S. 30 is not about a few small lines. S. 30 is about opening up embryonic stem cell research, research on pluripotent embryonic stem cells, in part, one technique being dead embryos; another technique being alternate nuclear transfer, all of which have numerous scientists who say there is hope for moving the science forward, and we could do it in a way that doesn't involve the destruction of the human embryo so we don't cross a moral line but we have all the research we want

You may ask: How can something so small be so important? To my right is a chart showing a pinhead. These are the embryonic stem cells right there. They are the size of a pinhead. That is how big they are. How could something so small be so important? Size is not the measure of moral meaning. If you look at it, this point of view from outer space, and look at the people, that is small, but that crowd has meaning. If you look at it from a universe perspective to the Earth, boy, that is really small. You can't even see it. It is not even the size of a pinhead. Or our galaxy, if I had a picture of the universe, our galaxy would be the size of a pinhead. What we are talking about today has meaning. We have an opportunity in this country to come together and put the politics aside, the ideological divisions aside. The debate over Federal funding, which has been longstanding Federal policy, we do not provide Federal funding for the destruction of a human embryo, and we don't have to. We come together with the same intention. We come together with the same perspective, with the same hope.

There are two paths to follow. One is S. 5, which will be vetoed and, in the end, what we will have tomorrow in terms of research is what we have today, well intentioned, but again, unfortunately, because the moral line is crossed and the division that will create, it will be vetoed. There will be no movement forward.

But if we pass S. 30, we have the opportunity to move the science forward,

to create a full range of pluripotent embryonic stem cells. By the way, if you are just using IVF stem cells, it is a narrow universe. But with the dead embryo and the altered nuclear transfer, you can cover every race and ethnic group in America.

The science has gotten way ahead of the politics. We can put ideology aside. We can put political division aside. We can offer real hope and real advancement without crossing a moral line. Why wouldn't we do that? I hope my colleagues see the wisdom in offering hope, in moving the science forward, and not falling victim to a Presidential veto, but that, in the end, by next year saying we have more Federal dollars going into embryonic stem cell research, research on pluripotent stem cells, stem cells that have the capacity to be perhaps anything. We don't know, but there is still hope.

There is a lot of research that has to go into it, but we can open the doors with the passage of S. 30. I urge my colleagues to vote for S. 30.

With that, I yield the floor and yield back the remainder of our time.

The PRESIDING OFFICER. The Senator from Georgia.

Mr. ISAKSON. Mr. President, it is my understanding, according to the unanimous consent agreement, we have four 10-minute periods.

The PRESIDING OFFICER. The Senator is correct.

Mr. ISAKSON. Mr. President, it is further my understanding the first of those four periods is controlled by me; is that correct?

The PRESIDING OFFICER. Each Senator controls 10 minutes in no particular order.

Mr. ISAKSON. Mr. President, I will take that time as allocated.

The PRESIDING OFFICER. The Senator from Georgia is recognized for 10 minutes.

Mr. ISAKSON. Mr. President, I thank the Senator from Iowa and the Senator from Minnesota for their diligent work over the last 2 days on the floor of the Senate dealing with this issue. I admire the passion of both. I am so pleased their passion is rooted in their belief, which I share, that we can move science forward, that we can enhance research for what are currently incurable diseases, and that we can do so in the public domain.

Senator HARKIN made a very good statement-he has made a number of good statements, but he made a good statement a little bit ago about why NIH is important. NIH is important because the research gets in the public domain, not in the proprietary domain of an investor or someone who is hoping to find something but does not want to share that with anybody else. So it is important to find a way to get the NIH investment in the embryonic stem cell research. S. 5 and S. 30 approach it from a different direction, but the goal in the end is the same; that is, to further the science and to find cures.

I grew up in the 1950s and 1960s. In the 1960s, I am reminded of a statement I heard—often repeated—by then Senator and previously Attorney General Robert Kennedy. I remember a particular speech he made, when, having returned from Biafra, where there was a terrible famine at that time, he said: Some people see things as they are, and ask, why?—referring to famine. I—meaning him—see things as they never were and ask, why not?

That is what this is all about. Why not find cures? And why not find ways to seek those cures that pass the test we desire to pass that S. 30 portends? I have stated on more than one occasion the methodology and the derivation of these stem cells. It has been questioned a couple of times, but facts are stubborn, BGO1, BG02, and BG03, currently under the investment domain of the National Institutes of Health-lines for which diabetes research, neurological progenitor cell research, and other research takes place at this very daywere all derived from embryos that had passed the seventh day following in vitro fertilization, were naturally dead or arrested but contained pluripotent embryonic stem cells.

I might add, in vitro fertilization takes place every day in the United States of America. My family has been touched by it. Many families have been touched by it. In each of those processes, the development of those embryos goes through the three stages I have referred to: Gardner principle I, the first 72 hours; Gardner principle II, the next 4 days; and then those thereafter where the cells stop dividing, where the pluripotent stem cells exist but the embryo is not implanted.

Now, there have been some who have talked about: Well, there is no evidence of success vet in stem cells. I join Senator HARKIN in his statement that the only way you find out about evidence of success is by doing the research. But, I want to read something I think is important and I am proud to share because research that has been done on BGO1 and 03-two of those three lines derived in this methodology—have had significant research conducted on them in a number of areas. This has a little bit of technical language, but it expresses the promise and the hope the Senator from Iowa and I and the Senator from Minnesota have all talked about. I quote:

The directed differentiation of BGO1 and BG03 cells to neuroepithelia and multiple differentiated neuronal lineages, including cells expressing multiple markers of the midbrain dopaminergic lineage, has previously been demonstrated.

"Previously been demonstrated." That statement was confirming the research on BG01 and 03, designed to see if there was a way to develop neurological cells that could carry the hope for cures to spinal cord injury and, in fact, to neurological cell or brain cell injury.

From the research on those three lines, a patent is now pending on a neurological progenitor cell process, which is a real advancement from embryonic stem cell research, from embryonic stem cells derived from level III Gardner principle derivation or those derived from an arrested or a dead embryo.

So I would submit my passion for S. 30 is in the hope of finding cures, in the hope of avoiding a veto, and, instead, having an investment in the furtherance of science that can grow exponentially because of the unlimited moral and ethical access that would exist toward these stem cells.

I conclude by encouraging all the Members of the Senate to thoughtfully consider S. 30 and encourage them to vote for it as a step in the right direction, the opening of a door that has, in fact, not been shut but stuck, and an opportunity to do what everybody in this Chamber has stated affirmatively they want to do; that is, provide hope for those who do not have it, expand research in the public domain at the National Institutes of Health, and invest tax dollars ethically in a process that brings a promise of hope to every single American.

Mr. President, I yield back my time. The PRESIDING OFFICER. The Senator from Iowa is recognized.

Mr. HARKIN. Mr. President, again, let me ask, we have, I guess, 20 minutes: is that right?

The PRESIDING OFFICER. The Senator from Iowa controls 10 minutes. The designee of the majority leader controls 10 minutes.

Mr. HARKIN. Yes. I yield 5 minutes to the Senator from Utah.

Mr. HATCH. I thank my colleague. The PRESIDING OFFICER. The Sen-

The PRESIDING OFFICER. The Senator from Utah is recognized for 5 minutes.

Mr. HATCH. Mr. President, I am going to vote for S. 30. I do not think it does anything more than the current law is but, nevertheless, I appreciate the intentions of the two Senators, my dear friends, who have done this.

Mr. President, as this debate draws to a close, I want to take one last opportunity to give my strong endorsement to the need for our country to provide a better level of support for a very promising line of scientific inquiry: embryonic stem cell research.

While I will vote in favor of both bills, it is S. 5, the Stem Cell Research Enhancement Act of 2007, that provides the promise of making a dramatic, yet ethical, difference in the lives of so many. S. 5 offers people hope who have no hope today. S. 5 has the potential to save lives. S. 5 opens up a door to medical research that offers much promise to both the scientific community and the patient community. And why is that? Because S. 5 allows the Federal Government to fund the most promising line of stem cell research—embryonic stem cell research—and S. 30 does not.

Make no mistake about it. Under the current policy, the President's policy, our Government does support embryonic stem cell research. All S. 5 would do is expand that policy.

To those who raise questions about the ethicality of this bill, I answer this way: If it was ethical to implement such a policy in 2001—and I have heard little criticism about that—then it should be ethical to adopt S. 5 as well.

Let me underscore the need for this bill with what one of the leading embryonic stem cell researchers in our country has had to say. I am speaking about the University of Utah's eminent researcher, Dr. Mario Cappecchi.

For the benefit of each Senator, the doctor has boiled down the arguments in favor of the Government funding embryonic stem cell research. I think it bears repeating, as this is knowledge crucial to each Member's understanding of what is one of the most critical issues facing this body today.

Indeed, I believe history will judge us very harshly if we allow this great opportunity to pass us by. We have to support this research which to date holds forth more promise than other types of stem cell inquiry. In the interest of all those who suffer from debilitating diseases and hope for deliverance, I implore my colleagues to vote for S. 5 and send a clear message to the American people that we want this research to be expanded for the good of mankind—of all mankind.

There should be Federal funding for embryonic stem cell research because: No. 1, it is a potential source of cures; No. 2, embryonic stem cells grow quickly and are versatile; No. 3, in contrast, adult stem cells grow slowly; No. 4, adult stem cells are very restricted in what cell types they can produce; No. 5, the tissue in many important organs does not have adult stem cells so therapies for diseases involving those tissues would not be readily approachable by adult stem cell-based therapy; No. 6, the usefulness of existing embryonic stem cell lines is extremely limited; No. 7, somatic cell nuclear transfer is an important research tool; No. 8, SCNT allows production of patient-specific stem cells to treat complex human diseases like Alzheimer's and Parkinson's; No. 9, lack of Government commitment means lack of future researchers; and No. 10, the health and economic implications of human stem cell research are enormous. Other countries have realized this; we are in grave danger of falling behind.

I read Dr. Cappecchi's points again for one reason—I want all of my colleagues to recognize that much is weighing in the balance on today's vote.

Therefore, I ask my colleagues to consider carefully the positions they take today.

In the interests of all those who suffer from debilitating diseases and hope for deliverance, I urge my colleagues to vote for S. 5.

Let me close by making a point I made to President Bush back in 2001:

In the opening days of your term in office, scientists have completed the task of sequencing the human genome. While this accomplishment—the work of many in the pub-

lic and private sectors—is of historical significance, it is only the end of the beginning in a new era of our understanding of the biological sciences. Over your next eight years in office, you have an unprecedented opportunity to provide the personal leadership required to see to it that your Administration will be remembered by future historians as the beginning of the end for such deadly and debilitating diseases as cancer, Alzheimer's and diabetes.

That is what S. 5 is all about—providing a potential new avenue of research that may lead to treatments and cures for many diseases that afflict many families across our Nation and the world.

While I have no objections to S. 30, let us not delude ourselves into thinking it is the best solution. S. 5 is the bill that will clearly make a significant difference in the future of medical research for all of the reasons I have outlined today.

For those who oppose any type of embryonic stem cell research, let me say this: For the life of me, I cannot understand how we can destroy 7,000 to 20,000 live in vitro fertilized eggs every year-just destroy them, kill themwithout using those for the benefit oflet's just choose one malady-kids with diabetes, virulent diabetes, who might lose their eyes, their hands, their feet. Why wouldn't we do everything in our power to utilize those rather than cast them aside as hospital waste? I cannot understand that. That is not pro-life; that is prodeath. Frankly, being prolife is not just caring for the unborn, it is caring for the living as well.

While I will be voting for both S. 5 and S. 30, I believe that S. 5 is clearly preferable to S. 30. S. 5 permits Federal funding for embryonic stem cell research, S. 30 does not. S. 5 is the bill that will clearly make a significant difference in the future of medical research for all of the reasons I have outlined today.

I urge all of my colleagues to vote in favor of S. 5.

The PRESIDING OFFICER. The Senator has used 5 minutes.

Mr. HATCH. I thank my dear colleague for allowing me to make those remarks on the floor. This is an important debate. I hope we can get the 67 votes that are essential because we are going to get them someday. It is just, why put it off another 2 years?

I thank my colleague.

The PRESIDING OFFICER. The Senator from Iowa is recognized.

Mr. HARKIN. Mr. President, I thank my colleague, my friend from Utah, for a very strong, very powerful, poignant statement. There has been no stronger leader in this Senate on health, life issues than Senator HATCH. I thank him for his support of S. 5.

Mr. President, I yield 5 minutes to Senator SMITH of Oregon.

The PRESIDING OFFICER. The Senator from Oregon is recognized.

Mr. SMITH. Mr. President, I thank Senator HATCH and Senator HARKIN for their leadership on this vital issue.

The Senate today has conducted a very dignified debate on an issue that

brings us right to the edge of science and faith. I have argued for several years now that science and faith need not be in conflict on this issue. I have always supported in vitro fertilization, believing that is a noble way to help infertile couples to be parents.

Today in America there are probably a million children who are now Americans because of this process. The inevitable consequence, however, of in vitro fertilization is that excess embryos are created. The question we are debating is, frankly, whether they constitute human life, when does life begin.

My colleague, Senator HATCH, has argued nobly and long for the proposition that life begins not with a scientist, it begins with a mother. It begins when cells and spirit are joined to create a living soul. If you have an embryo in a petri dish and you leave it there for 1,000 years, at the end of that time, you will have an embryo in a petri dish for the simple, logical reason that life begins with mom. Life begins with the joining of flesh and the spirit. Then the question becomes: Is it more moral to throw all these embryos away or is it more moral to allow them to be utilized for medical miracles? I have reached the conclusion that we cannot have tomorrow's miracles if we tie scientists' hands with yesterday's rules.

I believe we can, consistent with religion, faith, science, and logic, allow embryonic stem cell research to proceed. We should do this because it is morally right. We should do this because the U.S. Government needs to show up to work on this vital issue. We should do this because the resources we can provide and the ethical boundaries we can create are essential for this new area of science to go forward, giving us a chance to cure some of the most horrible maladies that afflict humankind. whether it is Lou Gehrig's, whether it is Parkinson's, childhood diabetes. cancer, and more. We can't overpromise, but the people afflicted with this that I see all the time in the State of Oregon need our best effort, and they need us to keep hope alive.

So I urge my colleagues to vote for both the bills before us today because it is a morally right thing to do. It is a pro-life thing to do. It is important that an ethic of life care for the unborn as well as for those who are living, both the sanctity of life and the quality of life.

I believe life begins with mom, not in a science lab. Because of that, I am voting for this, and I do so with respect for the feelings of my colleagues who have a different theological conclusion. I believe that scripture and science are not in conflict on this issue and that life begins with mother.

With that I yield the floor, and I urge and affirm the vote on both these important pieces of legislation.

The PRESIDING OFFICER (Mr. OBAMA). Who yields time?

Mr. HARKIN. Mr. President, how much time remains?

The PRESIDING OFFICER. The Senator has 10 minutes of time as designee of the majority leader.

Mr. HARKIN. I thought I had 12 minutes left, until 5:15. Well, anyway, in closing, first let me thank my colleagues, Senator ISAKSON, Senator COLEMAN, Senator BROWNBACK, and others who have participated in this debate. It has been a very informed and a very good debate over the last 2 days. I thank my colleague. Senator ISAKson, for his many courtesies. There were a lot of things we agree on and obviously there are things we disagree on, but that is the march of legislation in the Senate. I wish to thank Senator ISAKSON and others for their speeches and for their insight into this very important issue. I particularly wish to thank Senator HATCH and Senator SMITH for their great leadership on this and so many other health issues in the Senate and for their very poignant, very powerful statements they made on the Senate floor.

I started this whole debate yesterday morning by talking about hope, hope for cures for Parkinson's, to repair spinal cord injuries, to end the scourge of juvenile diabetes, to lift the death sentence of those afflicted with Lou Gehrig's disease, or ALS, hope for families with someone lost to Alzheimer's disease. S. 5. the bill before us that will be our first vote, is a bill that provides this hope, not a hope based on dreams or fiction but based on solid scientific foundation. It is why 525 disease-related groups and research institutions and universities all support S. 5, because it has solid scientific foundation. It is why the Director of NIH, Dr. Zerhouni, recently said more embryonic stem cell lines needed to be investigated:

It is clear today that American science would be better served and the Nation would be better served if we let our scientists have access to more cell lines.

That is what S. 5 does: provides more

It is why the former Director of NIH, Dr. Varmus, a Nobel laureate, supports S. 5, to take the handcuffs off our scientists. I wish to make it again abundantly clear, as there has been a lot of misinformation in the last couple of days on the floor, that S. 5 somehow contains money for the destruction of embryos. That is not true. I challenge anyone to show me in the bill anywhere where it contains any money for the destruction of embryos. It is simply not true. Anyone who says otherwise is simply not being accurate.

There are those who say: Well, the Federal Government shouldn't get involved. We can leave it up to the States and private entities. Well, we can't do that. We need coherence. We need to have the crown jewel of the Federal Government, the National Institutes of Health, to oversee this so we have good, strong ethical guidelines, so we have compatibility, so we have the kind of interplay between scientists that is necessary to advance scientific

research. To leave it up to the States means we will have a patchwork quilt of laws all over this country when it should be a national effort—a national effort. Then we will have States bidding against one another for scientists to come to their States to do this research. We don't want that to happen.

Lastly, we cannot afford to lose our global leadership in biomedical research. We, the United States of America, have always been the world's leader in biomedical research. All the great scientific discoveries, whether it is the polio vaccine, smallpox, all these things that have made our lives better: all the new drugs we have for fighting AIDS around the world came from the United States. All the cancer interventions, the reason cancer is now on the decline is because of biomedical research in this country. We can't afford to lose that to other countries. We need to keep it in America.

So what it comes down to in the final analysis is simply this: If you want to promote good science, vote for S. 5. If you want strong ethical standards, S. 5 has the strongest ethical guidelines, stronger than what the Bush administration has right now and stronger than any other bill that has come before the floor of the Senate. If you want to move ahead with more cell lines, as Dr. Zerhouni wants, S. 5 is the bill that will provide those cell lines. If you want to put embryonic stem cell research into overdrive, to make it a national priority to do this research, S. 5 will put it into overdrive. If you want to say to Karli Borcherding right here, age 12, using 120 needles a month to give herself insulin shots because she has juvenile diabetes; if you want to say to Karli Borcherding and all the other kids with juvenile diabetes, if you want to say to them that we are going to give you hope, we are going to give you hope that your diabetes will be cured, hope that you can live a full and normal life; if you want to say to those families who have a loved one suffering from Alzheimer's, we are going to give you hope; if you want to say to those who have a family member suffering from Parkinson's disease or under the death sentence of ALS, we are going to give you hope—hope not based upon fiction, not based upon some will-of-the-wisp thoughts that somebody might have but hope based on solid science that scientists know we can use.

We have already taken embryonic stem cells and made nerve cells, motor neurons, bone cells, heart muscle cells. We know that it can be done. Yet our scientists are handcuffed today because of the policy laid down by President Bush on August 9 of 2001. It is time to lift those restrictions.

Some say the President will veto this bill. We can't decide what we do around here because a President—any President—threatens to veto something. We have to do what is right. We have to do what the people of America want us to do. We have to do what is in the best

interests of this country as we see our duty to do it. I hope the President will sign this bill. I hope he will see we have made our compromises, that we have strong ethical guidelines, that this is the way to give hope to Karli Borcherding.

So I hope we don't fall prey to: Well, we can't pass this because the President will veto it. We have to do what we think is right. The right thing to do is to support S. 5. As Senator HATCH so eloquently said, let those thousands of embryos that are being discarded every vear in in vitro fertilization clinics, let them be used to provide life to other people, hope to Karli Borcherding, hope for people suffering from multiple sclerosis, spinal cord injuries. To me, that is the true ethical course to take. That is the guideline I think we must follow. Let those embryos be used to provide hope to these people.

Mr. President, I see my colleague and a cosponsor of our bill who has been a leader on this issue for so many years, and I yield the remainder of our time to Senator SPECTER of Pennsylvania.

The PRESIDING OFFICER. The Senator from Pennsylvania is recognized.

Mr. SPECTER. Mr. President, on so many merits, the support has been overwhelming to allow Federal funds to be used for embryonic stem cell research. There are 400,000 of these embryos which will be discarded. If they can produce life, no one would want to have research done. The fact is we appropriated \$2 million and only about 135,000 of those 400,000 embryos have been used. So it is a matter of use them or lose them, pure and simple.

The only reason not to advance this research is on the life issue, and that is gone. We have had some of the staunchest pro-life supporters in this Chamber endorsing this bill and this concept. The potential for medical research to cure or ameliorate the worst maladies of our era will be present with the use of embryonic stem cell research. What is involved here is when the people of the United States will demonstrate sufficient political will to insist that the Congress and the White House adopt legislation to use Federal funding for embryonic stem cell research. That is the only question.

We started this on December 2, 1998, with the first hearing, and we have made a fair amount of progress. It is my hope the President will sign the bill and not veto it, but he has already said he will veto the bill. So with 110 million Americans directly, personally, or indirectly, through families with a stake on their health and on their family's health, it is a question of when America will move to insist the Congress act and, if necessary, override a Presidential veto. It is not a question of if it will be done, it is a question of when. I hope this discussion and the proceedings now will motivate the American people to say to Washington: Get it done

The PRESIDING OFFICER. The Senator's time has expired.

The Senator from Kansas, under the previous agreement, is now controlling time and has 10 minutes.

Mr. BROWNBACK. Mr. President, I want to give two numbers to my colleagues: 613 and zero—\$613 million spent on embryonic stem cell research since 2002 and the number of human treatments we have to show for it, which is zero, 613 to zero. I think those are two important numbers to remember when what we are after is cures, and we have cures to show. We have cures that are working, and we can take the next \$613 million and invest it in places that are getting cures, such as adult stem cells, cord blood, and amniotic fluid.

Do we want to spend another \$613 million and use Federal taxpayer dollars to destroy young human life in the process—an ethical boundary we have not thought wise to cross before? Do we want to cross that boundary and spend more money and still not get results, when we have a proven route we can take?

I urge my colleagues to reject and vote against S. 5 on two grounds. No. 1, ethical grounds. Embryonic stem cell research, even if presented in supposedly ethical terms, remains unethical, with the destruction of human life. No. 2, practical grounds. We don't have an infinite budget, and in the stem cell field, we need to put our money into areas where we are getting real results—the adult field—and not divert them to the speculative embryonic stem cell field. Let the private sector or the States do it. If they want to go into these areas, they can do so.

Let me discuss ethics. Will we sanction the destruction of nascent human life with Federal taxpayer dollars? That is the central question surrounding S. 5. Those voting for it would say yes. I say no. I respect my colleagues who look at this differently, but those are the facts.

No. 2, individuals should be treated with respect, whoever they are, wherever they are located, at whatever age or stage of life they are in. We should avoid prejudices. Each individual has an inalienable right to life.

Claims that embryos are merely "potential life" are not supported by the science. From biology textbooks, we learn:

Although life is a continuous process, fertilization is a critical landmark because, under ordinary circumstances, a new, genetically distinct human organism is thereby formed. . . .

It takes place in the beginning. The embryo is not "potential life," it is human life at that particular stage of development in the life cycle continuum. That is not SAM BROWNBACK; that is biology. The embryo would continue along the life cycle continuum if we were not interfering in its normal development by keeping it in a freezer or destroying it for experiments.

With the scientific fact in hand, we evaluate the facts in light of our ethical framework. For instance, we know

the human embryo is a human life, so how should we treat it?

Human life has immeasurable value—we can all agree on that—from the youngest to the oldest. Human beings are ends in themselves. It is wrong to use any human as a means to an end, period. That has happened in human history before. It has always been regretted. Our value is intrinsic. Yes, we want to help and treat people with medical conditions, but we must not trample upon any human to achieve such a good end.

Treatments. There remain no embryonic human treatments or applications despite 25 years of embryonic work in animal models and a decade of work with human embryonic stem cells, and \$613 million has been invested since 2002 at the Federal level. That doesn't include States, private, and other governments.

What we have learned about embryonic stem cells is that these cells form tumors when implanted. The scientific literature abounds with such stories. If you read this article from "Stem Cells," you will find this:

The expression of the insulin gene could be demonstrated only when the cells differentiated in vivo into teratomas.

Those are tumors.

Moving from the ethical to the practical, should we put millions or billions of dollars into speculative research on these tumor-forming embryonic stem cells or should we put our money where we are already getting strong results with adult stem cells?

I have this. It is the front page of the research journals on adult and cord blood stem cell research and the successes since 2002. Are there similar files for embryonic stem cells? No, there are none. Adult stem cells have no ethical strings attached. You can get them from an adult without causing the patient harm; you can harvest them from rich cord blood, and, as noted in the Journal of the American Medical Association on March 7 of this year, they can be obtained from amniotic fluid without causing harm to the unborn child.

When we started this debate yesterday, we were aware of at least 72 peerreviewed, real human treatments and applications using adult stem cells. Now, with the breaking news yesterday on juvenile diabetes from Northwestern University in Chicago, worked on in Brazil, we are at 73. Again, there remain no embryonic stem cell applications.

I say to my colleagues, remember Jacki Rabon, a lady from Illinois, a constituent of the Senators from Illinois, who has spinal cord injuries. She had to go to Portugal to be treated. Do not divert funds away from successful adult stem cell treatments and force your constituents to go to Portugal at great personal expense. Vote against S. 5 and put the money into adult stem cell research.

Remember David Foege. For your constituents who have heart disease,

do not divert funds away from successful adult stem cell treatments. Do not force your constituents to go to Bangkok at great personal expense. Vote against S. 5.

Remember Dennis Turner. For your constituents with Parkinson's, don't divert funds away from successful adult stem cell treatments. Let us provide these treatments here in America. Vote against S. 5.

Remember the 13 diabetes patients whom we learned about yesterday who have gone 3 years insulin-free using a treatment with their own adult stem cells. Don't divert these funds away from this area. Vote against S. 5.

Mr. President, the Proverbs tell us that there is a way that seems right to man, but its end is the way of death. That seems right to some people. I respect their opinion and I respect them, but its end is the way of death. Killing young human life harms us as a culture, when we treat human life as property. We have done that, and we don't like the history associated with it.

These embryonic stem cells form tumors. Tumors remind me of death. Do we want to go that way, even though it may seem right? These embryos are going to be destroyed, so why not? Somebody on death row is going to be destroyed, so why not? Because they have dignity, and they remain dignified. We should treat them with dignity, as we should here. Vote against S. 5.

I yield the floor.

# HONORING OUR ARMED FORCES

STAFF SERGEANT BRADLEY D. KING

Mr. BAYH. Mr. President, I rise today with a heavy heart and deep sense of gratitude to honor the life of a brave young man from Gas City. Bradley King, 28 years old, was killed on April 2 while deployed in Al Amiriyah, Iraq, when a roadside bomb exploded near his humvee. With his entire life before him, Bradley risked everything to fight for the values Americans hold close to our hearts, in a land halfway around the world.

Bradley attended Mississinewa High School, enlisting in the National Guard in 1997, a year before his graduation in 1998. Bradley enjoyed the military and felt a sense of duty to serve his community and country. The day before he was deployed, Bradley told his mother that he felt "called to serve in the military for his country." His aunt described Bradley as "a responsible young man determined to do his best for the people he loved."

Bradley was killed while serving his country in Operation Iraqi Freedom. He was a member of the 2nd Battalion, 152nd Infantry Regiment, 76th Infantry Brigade, Marion, IN. MSG Bill Wallen, King's supervisor, told local media, "he was a heck of a human being, he's what everybody else needs to be in this world." Staff Sergeant King leaves behind his wife Adrian and 15-month-old son Daethan.

Today, I join Bradley's family and friends in mourning his death. While we struggle to bear our sorrow over this loss, we can also take pride in the example he set, bravely fighting to make the world a safer place. It is his courage and strength of character that people will remember when they think of Bradley, a memory that will burn brightly during these continuing days of conflict and grief.

Bradley was known for his dedication to his family and his love of country. Today and always, Bradley will be remembered by family members, friends, and fellow Hoosiers as a true American hero, and we honor the sacrifice he made while dutifully serving his country

As I search for words to do justice in honoring Bradley's sacrifice, I am reminded of President Lincoln's remarks as he addressed the families of the fallen soldiers in Gettysburg: "We cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here." This statement is just as true today as it was nearly 150 years ago, as I am certain that the impact of Bradley's actions will live on far longer than any record of these words.

It is my sad duty to enter the name of Bradley D. King in the official RECORD of the U.S. Senate for his service to this country and for his profound commitment to freedom, democracy, and peace. When I think about this just cause in which we are engaged and the unfortunate pain that comes with the loss of our heroes, I hope that families like Bradley's can find comfort in the words of the prophet Isaiah, who said, "He will swallow up death in victory; and the Lord God will wipe away tears from off all faces."

May God grant strength and peace to those who mourn, and may God be with all of you, as I know He is with Bradley.

# 1ST LIEUTENANT NEALE SHANK

Mr. President, I also rise today with a heavy heart and deep sense of gratitude to honor the life of a brave young man from Fort Wayne. Neale Shank, 25 years old, died on March 30 while deployed in Baghdad on Operation Iraqi Freedom. With his entire life before him, Neale risked everything to fight for the values Americans hold close to our hearts, in a land halfway around the world.

Neale has been a lifelong Hoosier, graduating from Concordia Lutheran High School in Fort Wayne in 1999. First Lieutenant Shank graduated from the U.S. Military Academy at West Point in 2005. His valor over the course of his service in Iraq exemplifies Hoosier values and courage. He decided to attend West Point because, as he put it, "it is not a job and it is not a way of life, the Army is my life." Neale en-

joyed the military, and he believed that throughout all the hardships they faced he and his company were helping the Iraqi people. His grandfather described his grandson to local media outlets as an adventurous, active person saying, "He was all boy, he wasn't no inside kid."

Neale died while serving his country in Operation Iraqi Freedom. He was a member of the Headquarters and Headquarters Troop, 1st Squadron, 89th Cavalry Regiment, 10th Mountain Division based in Fort Drum, NY.

Today, I join Neale's family and friends in mourning his death. While we struggle to bear our sorrow over this loss, we can also take pride in the example he set, bravely fighting to make the world a safer place. It is his courage and strength of character that people will remember when they think of Neale, a memory that will burn brightly during these continuing days of conflict and grief.

Neale was known for his dedication to his community and his love of country. Today and always, Neale will be remembered by family members, friends, and fellow Hoosiers as a true American hero, and we honor the sacrifice he made while dutifully serving his country.

As I search for words to do justice in honoring Neale's sacrifice, I am reminded of President Lincoln's remarks as he addressed the families of the fallen soldiers in Gettysburg: "We cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here, have consecrated it, far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here." This statement is just as true today as it was nearly 150 years ago, as I am certain that the impact of Neale's actions will live on far longer than any record of these words

It is my sad duty to enter the name of Neale M. Shank in the official RECORD of the U.S. Senate for his service to this country and for his profound commitment to freedom, democracy, and peace. When I think about this just cause in which we are engaged and the unfortunate pain that comes with the loss of our heroes, I hope that families like Neale's can find comfort in the words of the prophet Isaiah who said, "He will swallow up death in victory; and the Lord God will wipe away tears from off all faces."

May God grant strength and peace to those who mourn, and may God be with all of you, as I know He is with Neale. PRIVATE FIRST CLASS ORLANDO E. GONZALEZ

• Mr. DODD. Mr. President, I rise today to pay my respects to Private First Class Orlando E. Gonzalez, who last month lost his life in the service of our country.

On the morning of Sunday, March 25, Private First Class Gonzalez was handing out candy to Iraqi children in the province of Diyala when a suicide bomber killed him and three other soldiers. Private First Class Gonzalez was only 21 years old.

Born in Bridgeport, CT, Orlando is being remembered today for his dedication to the U.S. Army, and for his warm and giving nature. "He always had a smile on his face," said his high school principal, Brian Cashman. "He was kind of a handful, but you couldn't help but like him."

Private First Class Gonzalez rose above what his principal described as a "rough" background to find purpose and discipline: first at a faith-based camp for students, and then as an American soldier.

"We just loved him around here," said Patrick LeBlanc, director of Summit Grove Camp. The first thing that came to LeBlanc's mind on hearing of Orlando's death was his infectious playfulness. LeBlanc recalled seeing a wild rabbit on the camp grounds, and telling Orlando he was fast enough to catch it. Orlando only nodded—and a few hours later, knocked on LeBlanc's door, petting the rabbit and beaming.

But it was in the Army that Private First Class Gonzalez found, as so many have found before him, meaning and a second home. "I think the Army is what he needed," said Principal Cashman. Patrick LeBlanc agreed: "It was the second happiest place I'd seen him, other than camp here. . . . He was doing what he wanted to do."

As a scout javelin gunner for the 82nd Airborne Division, 3rd Brigade Combat Team, 5th Squadron, 73rd Cavalry Regiment, Private First Class Gonzalez immediately distinguished himself. "On a daily basis, Private First Class Gonzalez displayed courage, honor, and selfless service in the struggle to keep America safe and improve the nation of Iraq," said Captain John Carson of the 73rd Cavalry. Private First Class Gonzalez was already highly decorated at the time of his death, and we can only wonder what an outstanding career might have been waiting for him.

Instead, Private First Class Gonzalez leaves behind two grieving parents, Orlando G. Gonzalez of Bridgeport, and Carmen Diaz of New Freedom, PA. But he leaves behind, as well, an example of dedication that won't soon be dimmed.

"This hero will be sorely missed and will forever live in our memories," said Captain Carson.

Orlando, though, might have used other words. "Call him a hero and he would get mad," Orlando's friend and pastor, the Reverend Paul Juchniewich, said in a funeral sermon. "He would just say he was doing his duty to rescue those who are in peril. He did not die in a conventional battle, but rather a battle for the hearts and minds of the future generation."

The struggle's outcome is still uncertain. But we will keep fresh the memory of one man who advanced it with all his strength, Private First Class Orlando E. Gonzalez, whose last act on this Earth was to give.●

# LOCAL LAW ENFORCEMENT ENHANCEMENT ACT OF 2005

Mr. SMITH. Mr. President, I rise today to speak about the need for hate crimes legislation. Each Congress, Senator Kennedy and I introduce hate crimes legislation that would add new categories to current hate crimes law, sending a signal that violence of any kind is unacceptable in our society. Likewise, each Congress I have come to the floor to highlight a separate hate crime that has occurred in our country.

On April 7, 2007, in New York City, NY, Akino George pleaded guilty for his part in the beating of a gay man. George and three other men attacked Kevin Aviance, a popular entertainer, after he left a gay bar. The four men threw bags of garbage and a can of paint at Aviance before knocking him to the ground, punching and kicking him. Aviance suffered several injuries including a broken jaw. George testified in his plea that Aviance was targeted for being gay.

I believe that the government's first duty is to defend its citizens, to defend them against the harms that come out of hate. The Local Law Enforcement Enhancement Act is a symbol that can become substance. I believe that by passing this legislation and changing current law, we can change hearts and minds as well.

#### TRIBUTE TO THE PEACE CORPS

Mr. CONRAD. Mr. President, today I wish to congratulate the Peace Corps on its 46th anniversary and to pay tribute to the many volunteers both at home and abroad for their dedicated service to our country.

Since its inception in 1961, the Peace Corps has helped change the lives of millions of people all over the world. There is no organization that better demonstrates America's commitment to developing nations than the Peace Corps.

I recently had the opportunity to travel to South America and was able to meet with Peace Corps volunteers in the Andean region. The numerous projects they have been working on to help the local communities are truly impressive. I have known several individuals—members of my staff, former interns and my own family members—who have volunteered their service to the Peace Corps. The stories of their experiences are remarkable.

The gift of service is driven by a passion for something greater than one's self. The men and women of the Peace Corps possess this passion and have shown what a difference one person can make. By helping individuals in developing countries who seek a better life for themselves, their children, and their communities, the Peace Corps shows the world that Americans do truly care. It is vital that the organization and its volunteers continue this important work. Their service is great-

ly appreciated, and I commend the Peace Corps and its volunteers on 46 years of successful service.

# SECOND CHANCE ACT

Mr. OBAMA. Mr. President, I rise today to speak in favor of the Recidivism Reduction and Second Chance Act, a bill to strengthen community safety and reduce poverty by improving the reintegration of people returning from prison. I am pleased to work with Senators BIDEN, SPECTER, BROWNBACK, and LEAHY as a cosponsor of this very important bill.

It is estimated that approximately 650,000 prisoners are released into communities across America every year. They have paid their debt to society and now return to their homes and neighborhoods, to their families, and back to their lives.

The problem is that for most of these returning prisoners, their families, neighborhoods, and prior lives often lack what it takes to ensure successful reintegration.

In the best of cases, incarcerated individuals maintain contact with their families and receive rehabilitation services while in prison; they are released to a network of law-abiding peers and quickly find a rewarding job that provides the skills and career development for long-term opportunity. Released prisoners can help support their families, become active in their churches and other community organizations, stay off drugs, away from trouble, on track, and out of jail.

Unfortunately, that rarely happens. Up to two-thirds of all released prisoners nationwide end up back in prison within just 3 years. They don't manage to find and keep effective jobs and to care for themselves and their families. Many become a drain on their families and a drain on the system. They are more likely to resort to criminal activity and to perpetuate poverty and family dysfunction.

Their failure is our failure since we all share the high cost, lost opportunities, and other burdens of unemployment, crime, community failure, and cycles of recidivism.

Fortunately, people have been hard at work in hundreds of communities and community organizations across the country to improve the process of reintegrating prisoners. As one example, the Safer Foundation in Illinois has managed to cut the State's recidivism rate by almost 50 percent for the people who receive Safer's supportive employment services. And Safer has further demonstrated that ex-prisoners who are still employed after 12 months of supportive services have a recidivism rate of lower than 10 percent. One of Safer's program models, funded by the U.S. Department of Labor, provides participants with job placement and support services, and matches them with mentors from the neighborhoods where the participants reside. Only 2 percent of the participants in this community and faithbased program recidivated over a 2-year period.

One of the most effective reentry strategies that Safer, the Heartland Alliance for Human Needs and Human Rights, and other nonprofit organizations have devised is transitional jobs, a strategy that worked for welfare to work, and is now working for prison returnees. In a transitional jobs program, former prisoners with employment challenges are hired and paid a wage for legitimate employment in a timelimited, subsidized job. The program not only offers real work, income, skill development, and a letter of reference and experience to add to their resume. it also offers coaching and support services to help participants overcome substantial barriers to employment, such as substance abuse or mental health issues. The program focuses heavily on placement into unsubsidized work at the earliest possible time and job retention services after placement.

The participants in transitional jobs programs gain an immediate source of legitimate income upon release. They also gain paid work experience, access to professional counseling and training services, and a clear path to unsubsidized employment in the community. Employers gain access to a pipeline of supported workers who have demonstrated an ability to do the job and remain employable. Most of all, our communities gain by helping ex-prisoners to contribute positively to family, neighborhood, and the larger environment.

Too many people are caught up in the criminal justice system. Especially within the African-American community where nearly a third of Black males will enter State or Federal prison sometime during their lifetime. Communities are protected and strengthened when people who break the law are punished appropriately. But communities—all communities, including yours and mine—are weakened if we neglect the challenges of rehabilitation and reentry.

To improve the integration of former prisoners and to reduce recidivism is in all of our best interests. A well-designed reentry system can enhance public safety, reduce recidivism, reduce costs, and help prisoners achieve long-term integration. The Second Chance Act is an important effort to strengthen America's communities. The bill is supported by a wide range of organizations, and I urge my colleagues to join us in passing this important legislation.

#### CONGRATULATING ZACH JOHNSON

Mr. GRASSLEY. Mr. President, I am pleased today to have the fortunate opportunity to recognize and congratulate a fellow Iowan on a magnificent achievement. On Sunday, 31-year-old Zach Johnson won the prestigious Masters golf tournament at the famed Augusta National Golf Club in Augusta, GA. I am joined by my colleague, Sen-

ator HARKIN, in submitting a Senate resolution congratulating Zach for his victory.

Zach not only won one of the most difficult golf tournaments in the world, he also won quite possibly one of the most difficult of all the Masters' tournaments in history. Gusting winds and bitterly cold weather combined with the traditional challenges of the golf course to create one of the toughest tournaments. His winning score of one-over-par 289 tied the highest winning score in Masters history. In the process, he beat fellow golf champions Tiger Woods and Retief Goosen by two-strokes.

Zach was born in Iowa City and grew up in Cedar Rapids, playing golf at Elmcrest Country Club in Cedar Rapids. He went on to play golf at Drake University in Des Moines, graduating in 1998. To continue his pursuits as a professional golfer, Zach counted on the support of family and friends in Cedar Rapids who believed in him. His success didn't happen overnight; his dedication to the game and his hard work ethic helped him earn the prized green jacket.

Even in the aftermath of winning one of golf's highest achievements, he remained humble in his acceptance. He attributed much of his success to his perseverance and patience. He recognized his family and friends who believed in him even when he wasn't so sure himself, and as a man of faith he knew there was another power guiding him.

Through it all, he continued to insist that he's just a normal guy from Cedar Rapids, IA. I am proud of Zach Johnson for his brilliant win, and I am proud of him as an Iowan. I know Iowans are honored and blessed to have a person like Zach Johnson representing us in the world of professional golf. So I congratulate him on his outstanding victory, and I wish him and his family all the best.

# ADDITIONAL STATEMENTS

#### RECOGNIZING STELLA WILDRICK

• Mr. STEVENS. Mr. President, today I want to recognize the devoted service of Stella Wildrick, who will retire on April 27, 2007, after 15 years as Postmistress for Lake Minchumina, AK.

Lake Minchumina is situated near the geographical center of Alaska, 65 miles north-northwest of our great Denali National Park. A remote and rural community accessible only by air, Lake Minchumina depends upon mail service for the delivery of food, clothing, and supplies, as well as correspondence.

As Postmistress, Stella has been a very important person in this community where everything that cannot be harvested or made from the land must be flown in

Throughout the past 15 years, Stella has also been an asset to the U.S. Post-

al Service as a professional, friendly, dependable and always helpful representative. With advances in technology, Postmistress Wildrick has overseen many changes to the mail service in Lake Minchumina.

The people of Lake Minchumina and Alaska are deeply grateful for her sacrifice and willingness to go above and beyond the usual to ensure quality mail service.

I commend Postmistress Wildrick for her dedication to the Lake Minchumina community and wish her all the best in her well-deserved retirement.•

# COMMENDING THE WORK OF STUDENT EMPLOYEES

• Mr. COLEMAN. Mr. President, today I recognize and celebrate students who work while attending college as part of the University of Minnesota Duluth's, UMD, National Student Employment Week.

During the week of April 9–13, 2007, UMD will honor the approximately 1,500 student employees during their National Student Employment Week. I applaud these students for going above and beyond their studies to give back to UMD, and I encourage employers to thank them for their contributions.

I would like to give special congratulations to UMD's 2007 National Student Employment Week Awardees: Derric Johnson, Student Employee of the Year; Carly Moritz, First Runner Up; and Meghan Keil and Phong Yang, Second Runners Up.

I also commend the work of Marinda Batzlaff, Josh Baumann, Ann Beacom, Samuel Bradley, Ruta Embaye, Courtnev Grandahl, Kelly Gunelson, Christine Hirsch, Brittany Jurek, Krista Kniffin, Bryan LaCore, Cal Larson, Christina Lashyro, Abigail Linder, Emily Lubbert, Jessica Lutgen, Aaron Miller, Calley O'Neil, Ashton Portner. Hilary Ramsey, Thomas Rieck, Jessica Bud Rodecker, Anthony Robey. Rostvold. Taryn Runck, Michael Schumacher, Clay Sharkey, Sheena Stueber.

Again, I thank all of these students for their hard work and wish them the best of luck at UMD and in their future careers.

#### MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Ms. Evans, one of his secretaries.

#### EXECUTIVE MESSAGES REFERRED

As in executive session the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations and two withdrawals which were referred to the appropriate committees.

(The nominations received today are printed at the end of the Senate proceedings.)

#### MESSAGE FROM THE HOUSE

#### ENROLLED BILL SIGNED

At 5:18 p.m., a message from the House of Representatives, delivered by one of its clerks, announced that the Speaker has signed the following enrolled bill:

S. 1002. An act to amend the Older Americans Act of 1965 to reinstate certain provisions relating to the nutrition services incentive program.

# 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-1271. A communication from the Administrator, Fruit and Vegetable Program, Department of Agriculture, transmitting, pursuant to law, the report of a rule entitled "Fee for Inspecting Fruits and Vegetables, Processed" (RIN0581-AC56) received on April 4, 2007; to the Committee on Agriculture, Nutrition, and Forestry.

EC-1272. A communication from the Administrator, Agricultural Marketing Service, Department of Agriculture, transmiting, pursuant to law, the report of a rule entitled "Tomatoes Grown in Florida; Change in Handling Requirements" (Docket No. AMS-FV-06-0208) received on April 4, 2007; to the Committee on Agriculture, Nutrition, and Forestry.

EC-1273. A communication from the Administrator, Agricultural Marketing Service, Department of Agriculture, transmitting, pursuant to law, the report of a rule entitled "Hazelnuts Grown in Oregon and Washington; Establishment of Final Free and Restricted Percentages for the 2006-2007 Marketing Year" (Docket No. AMS-FV-06-0175) received on April 4, 2007; to the Committee on Agriculture, Nutrition, and Forestry

EC-1274. A communication from the Administrator, Risk Management Agency, Department of Agriculture, transmitting, pursuant to law, the report of a rule entitled "Common Crop Insurance Regulations; Almond and Walnut Crop Insurance Provisions" (RIN0563-AC08) received on April 10, 2007; to the Committee on Agriculture, Nutrition, and Forestry.

EC-1275. A communication from the Chairman, Defense Nuclear Facilities Safety Board, transmitting, pursuant to law, its annual report relative to the Board's health and safety activities relating to defense nuclear facilities; to the Committee on Armed Services.

EC-1276. A communication from the Director, Defense Procurement and Acquisition Policy, Department of Defense, transmitting, pursuant to law, the report of a rule entitled "Electronic Submission and Processing of Payment Requests" (DFARS Case 2005–D009) received on April 10, 2007; to the Committee on Armed Services.

EC-1277. A communication from the Director, Defense Procurement and Acquisition Policy, Department of Defense, transmitting, pursuant to law, the report of a rule entitled "Prohibition on Acquisition from Communist Chinese Military Companies" (DFARS Case 2006–D007) received on April 10, 2007; to the Committee on Armed Services.

EC-1278. A communication from the Director, Defense Procurement and Acquisition Policy, Department of Defense, transmitting, pursuant to law, the report of a rule en-

titled "New Designated Countries" (DFARS Case 2006–D062) received on April 10, 2007; to the Committee on Armed Services.

EC-1279. A communication from the Director, Defense Procurement and Acquisition Policy, Department of Defense, transmitting, pursuant to law, the report of a rule entitled "Free Trade Agreements—Guatemala and Bahrain" (DFARS Case 2006–D028) received on April 10, 2007; to the Committee on Armed Services.

EC-1280. A communication from the Director, Pentagon Renovation and Construction Program Office, Department of Defense, transmitting, pursuant to law, an annual report on the Office's work in progress, completed and planned before March 1, 2007; to the Committee on Armed Services.

EC-1281. A communication from the Deputy Chief of Legislative Affairs, Department of the Navy, transmitting, pursuant to law, a report relative to the Department's performance decision to transfer certain functions to contract workers; to the Committee on Armed Services.

EC-1282. A communication from the Principal Deputy, Office of the Under Secretary of Defense (Personnel and Readiness), transmitting, pursuant to law, a report relative to the critical skills retention bonus program; to the Committee on Armed Services.

EC-1283. A communication from the Principal Deputy, Office of the Under Secretary of Defense (Personnel and Readiness), transmitting, the report of (10) officers authorized to wear the insignia of the grade of brigadier general in accordance with title 10, United States Code, section 777; to the Committee on Armed Services.

EC-1284. A communication from the Under Secretary of Defense (Acquisition, Technology and Logistics), transmitting, pursuant to law, the annual Selected Acquisition Reports for the quarter ending December 31, 2006; to the Committee on Armed Services.

EC-1285. A communication from the Deputy Secretary of Defense, transmitting, pursuant to law, a report relative to the threat posed by improvised explosive devices; to the Committee on Armed Services.

EC-1286. A communication from the Paralegal, Federal Transit Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Clean Fuels Grant Program" (RIN2132-AA91) received on April 3, 2007; to the Committee on Banking, Housing, and Urban Affairs.

EC-1287. A communication from the Counsel for Legislation and Regulations, Office of the Secretary, Department of Housing and Urban Development, transmitting, pursuant to law, the report of a rule entitled "Revisions to the Public Access to HUD Records Under the Freedom of Information Act Regulations" (RIN2501-AD22) received on April 4, 2007; to the Committee on Banking, Housing, and Urban Affairs

EC-1288. A communication from the Counsel for Legislation and Regulations, Office of Community Planning and Development, Department of Housing and Urban Development, transmitting, pursuant to law, the report of a rule entitled "Timeliness Expenditure Standards for the Insular Areas Program" (RIN2501-AD15) received on April 4, 2007; to the Committee on Banking, Housing, and Urban Affairs.

EC-1289. A communication from the Assistant to the Board, Federal Reserve System, transmitting, pursuant to law, the report of a rule entitled "Expanded Examination Cycle for Certain Small Insured Depository Institutions and U.S. Branches and Agencies of Foreign Banks" (Docket No. R-1279) received on April 4, 2007; to the Committee on Banking, Housing, and Urban Affairs.

EC-1290. A communication from the Chairman and President of the Export-Import

Bank of the United States, transmitting, pursuant to law, a report relative to a transaction involving U.S. exports to Singapore; to the Committee on Banking, Housing, and Urban Affairs.

EC-1291. A communication from the Acting General Counsel, Department of Housing and Urban Development, transmitting, pursuant to law, the report of the designation of an acting officer for the position of General Counsel, received on April 10, 2007; to the Committee on Banking, Housing, and Urban Affairs

EC-1292. A communication from the Acting Assistant Attorney General, Office of Legislative Affairs, Department of Justice, transmitting, pursuant to law, a report relative to the Department's activities during calendar year 2006 under the Equal Credit Opportunity Act; to the Committee on Banking, Housing, and Urban Affairs.

EC-1293. A communication from the Chairman, Securities and Exchange Commission, transmitting, pursuant to law, a report relative to the Buy American Act; to the Committee on Banking, Housing, and Urban Affairs.

EC-1294. A communication from the Chairman and President of the Export-Import Bank of the United States, transmitting, pursuant to law, a report relative to transactions involving U.S. exports to the United Arab Emirates; to the Committee on Banking, Housing, and Urban Affairs.

EC-1295. A communication from the Executive Director, National Credit Union Administration, transmitting, pursuant to law, a report on the use of category rating; to the Committee on Banking, Housing, and Urban Affairs.

EC-1296. A communication from the Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Revision of Methods for Renewing and Replacing Permits Issued Under the West Coast Highly Migratory Species Fishery Management Plan" (RIN0648-AU91) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1297. A communication from the Attorney Advisor, Office of the Secretary, Department of Transportation, transmitting, pursuant to law, the report of a nomination for the position of General Counsel, received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1298. A communication from the Secretary, Federal Trade Commission, transmitting, pursuant to law, the Commission's annual report relative to the implementation of the Do Not Call Registry; to the Committee on Commerce, Science, and Transportation.

EC-1299. A communication from the Assistant Secretary, Office of Legislative and Intergovernmental Affairs, Department of Homeland Security, transmitting, pursuant to law, a report relative to the Critical Skills Retention Bonus program; to the Committee on Commerce, Science, and Transportation.

EC-1300. A communication from the Assistant Administrator for Fisheries, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries off West Coast States; Pacific Coast Groundfish Fishery; Biennial Specification and Management Measures; Correction" (RIN0648-AU57) received on April 10, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1301. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Temporary Rule; Inseason Summer Flounder

Quota Transfer from NC to VA'' (ID No. 031207A) received on April 10, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1302. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Elephant Trunk Scallop Access Area Closure for General Category Scallop Vessels" (ID No. 031307A) received on April 10, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1303. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Catcher Vessels Using Trawl Gear in the Bering Sea and Aleutian Islands Management Area" (ID No. 030907A) received on April 10, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1304. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in Statistical Area 610 of the Gulf of Alaska" (ID No. 032007A) received on April 10, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1305. A communication from the Honors Attorney, Office of the Secretary, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Procedures for Reimbursement of General Aviation Operators and Service Providers in the Washington, D.C. Area" (RIN2105-AD61) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1306. A communication from the Senior Attorney, Office of General Counsel, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Time Zone Boundaries in the State of Indiana" (RIN2105-AD53) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1307. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class D Airspace; Griffiss Airfield, Rome, NY" ((RIN2120-AA66)(Docket No. 06-AEA-014)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1308. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E Airspace; Newton Field, ME" ((RIN2120-AA66)(Docket No. 06-ANE-01)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1309. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E Airspace; Bethel Regional Airport, ME" ((RIN2120-AA66)(Docket No. 06-ANE-02)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1310. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E Airspace; Santa Cruz, CA" ((RIN2120-AA66)(Docket No. 06-AWP-17)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1311. A communication from the Program Analyst, Federal Aviation Administra-

tion, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Change to Controlling Agency of Restricted Area 2312; Fort Hauchuca, AZ" ((RIN2120-AA66)(Docket No. 06-ASW-11)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1312. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Revocation of Low Altitude Reporting Point; AK" ((RIN2120-AA66)(Docket No. 06-AAL-30)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1313. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Revision of Class D and E Airspace; Big Delta, Allen Army Airfield, Fort Greely, AK" ((RIN2120-AA66)(Docket No. 06-AAL-31)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1314. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment, Modification and Revocation of VOR Federal Airways; East Central United States" ((RIN2120-AA66)(Docket No. 06-ASW-1)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1315. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment, Modification and Revocation of VOR Federal Airways; East Central United States" ((RIN2120-AA66)(Docket No. 06-ASW-1)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1316. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Revision of Class D Airspace, Mesa, AZ" ((RIN2120-AA66)(Docket No. 06-AWP-016)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1317. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Change to Time of Designation of Restricted Area 6320; Matagorda, TX" ((RIN2120-AA66)(Docket No. 06-ASW-12)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1318. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Modification of VOR Federal Airway V-2; East Central United States" ((RIN2120-AA66)(Docket No. 06-ASW-13)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1319. 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 and A300-600 Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-288)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1320. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; McDonnell Douglas Model DC-8-55, DC-8F-54, and DC-8F-55 Airplanes; and Model DC-8-60, DC-

8-70, DC-8-60F, and DC-8-70F Series Airplanes' ((RIN2120-AA64)(Docket No. 2001-NM-183)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1321. 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 A310-300 Airplanes" ((RIN2120-AA64)(Docket No. NM-065)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1322. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Dassault Model Mystere-Falcon 50 and 900, and Falcon 900EX Airplanes; and Model Falcon 2000 and Falcon 2000EX Airplanes' ((RIN2120-AA64)(Docket No. 2006-NM-113)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1323. 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 DHC-8-400 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-209)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1324. 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 A330-200, A330-300, A340-200, A340-300, A340-500, and A340-600 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-274)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1325. 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 Aerospace LP Model Gulfstream 100 Airplanes, and Model Astra SPX and 1125 Westwind Astra Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-286)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1326. 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 A310 Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-247)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1327. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Turbomeca Arriel 2B1 Turboshaft Engines" ((RIN2120-AA64)(Docket No. 2007-NE-02)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1328. 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, Weather Takeoff Minimums; Miscellaneous Amendments" ((RIN2120-AA65)(Amdt. No. 3204)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1329. 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 (62)" ((RIN2120-AA65)(Amdt. No. 3206)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation

EC-1330. 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 B4-605R Airplanes and Model A310-308, -324, and -325 Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-146)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1331. 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. 2006-NM-121)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1332. 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 Airplanes" ((RIN2120-AA64)(Docket No. 2005-NM-261)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1333. 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-172)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1334. 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 737-100, -200, -200C, -300, -400, and -500 Series Airplanes' ((RIN2120-AA64)(Docket No. 2005-NM-141)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1335. 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 Airplanes; Model A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F Airplanes; and Model A310 Airplanes" ((RIN2120-AA64)(Docket No. 2003-NM-123)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1336. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E Airspace; Ridgway, PA" ((RIN2120-AA66)(Docket No. 06-ANE-03)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1337. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class D Airspace; Griffiss Airfield, Rome, NY" ((RIN2120-AA66)(Docket No. 06-ANE-014)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1338. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E-2 Airspace; Griffiss Airfield, Rome, NY" ((RIN2120-AA66)(Docket No. 06-AEA-015)) re-

ceived on April 1, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1339. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Establishment of Class E-2 Airspace; Griffiss Airfield, Rome, NY" ((RIN2120-AA66)(Docket No. 06-ANE-015)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1340. 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 (34)" ((RIN2120-AA65) (Amdt. No. 3202)) received on April 1, 2007; to the Committee on Commerce, Science, and Transportation

EC-1341. 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-004)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1342. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EADS SOCATA TBM 700 Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-62)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1343. 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 Deutschland Ltd. and Co. KG Tay 611-8, Tay 620-15, and Tay 651-54 Series Turbofan Engines" ((RIN2120-AA64)(Docket No. 2006-NE-19)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1344. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; DORNIER LUFTFAHRT GmbH Model 228-212 Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-86)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation

EC-1345. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Dassault Model Mystere-Falcon 900 and Falcon 900EX Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-244)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1346. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Pratt and Whitney PW2000 Series Turbofan Engines" ((RIN2120-AA64)(Docket No. 2006-NE-11)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1347. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Reims Aviation S.A. F406 Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-91)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1348. 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 DHC-8-400 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-078)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1349. 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 DHC-8-100, -200, and -300 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-077)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1350. 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 DHC-8-400 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-130)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1351. 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 Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-053)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1352. 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 SUD, 747-200B, 747-300, 747-400, 747-400D, and 747SP Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-092)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1353. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Turbomeca Arriel 1 Series Turboshaft Engines" ((RIN2120-AA64)(Docket No. 2006-NE-28)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1354. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EADS SOCATA Model TBM 700 Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-43)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1355. 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 747-400 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-090)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1356. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Short Brothers and Harland Ltd. Models SC-7 Series 2 and SC-7 Series 3 Airplanes" ((RIN2120-AA64)(Docket No. 2000-CE-17)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1357. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule

entitled "Airworthiness Directives; Sicma Aero Seat, Passenger Seat Assemblies" ((RIN2120-AA64)(Docket No. 2006-NE-04)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1358. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EADS SOCATA Model TBM 700 Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-65)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1359. 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 Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-150)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1360. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Gippsland Aeronautics Pty. Ltd. Model GA8 Airplanes' ((RIN2120-AA64)(Docket No. 2007-CE-006)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1361. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Turbomeca S.A. Makila 1A and 1A1 Turboshaft Engines" ((RIN2120-AA64)(Docket No. 2006-NE-39)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1362. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Pilatus Aircraft Ltd., PC-6 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-CE-54)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1363. 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 Airplanes; A300 B4-600, B4-600R, and F4-600R Series Airplanes, and Model A300 C4-605R Variant F Airplanes; and A310 Airplanes" ((RIN2120-AA64)(Docket No. 2005-NM-18)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation

EC-1364. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Superior Air Parts, Inc., Cast Cylinder Assemblies Part Numbers Series: SA47000L , SA47000S, SA52000, SA55000, SL32000W, SL32000WH SL36000TW, SL36000W, SL32006W, SL36006W" ((RIN2120-AA64)(Docket No. 2006-NE-32)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1365. 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 DHC-8-102, -103, and -106 Airplanes; and Model DHC-8-200 and DHC-8-300 Series Airplanes" ((RIN2120-AA64)(Docket No. 2006-NM-206)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1366. 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-194)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1367. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EADS SOCATA Model TBM 700 Airplanes" ((RIN2120-AA64) (Docket No. 2006-CE-60)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1368. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; CFM International CFM56-5 and -5B Series Turbofan Engines" ((RIN2120-AA64) (Docket No. 2001-NE-49)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1369. 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 Aircraft Company 65, 90, 99, 100, 200, and 1900 Series Airplanes, and Models 70 and 300 Airplanes' ((RIN2120-AA64) (Docket No. 2003-CE-51)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1370. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EADS SOCATA TBM 700 Airplanes" ((RIN2120-AA64) (Docket No. 2006-CE-64)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1371. 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, -100 SU, -200 LR, -200 STD, and -200 SU Airplanes and Model ERJ 190 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-221)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1372. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; EXTRA Flugzeugproduktions- und Vertriebs- GmbH Models EA-300, EA-300S, EA-300L, and EA-300/200 Airplanes' ((RIN2120-AA64) (Docket No. 2006-CE-56)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1373. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Alpha Aviation Design Limited R2160 Airplanes" ((RIN2120-AA64) (Docket No. 2006-CE-81)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1374. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Fokker Model F.28 Mark 0070 and 0100 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-097)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1375. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Fokker Model F.28 Mark 0070 and 0100 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-198)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1376. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Construcciones Aeronauticas, S.A., Model C-212 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-291)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1377. 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 B2 and B4 Series Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-115)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1378. 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-071)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1379. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Pilatus Aircraft Limited PC-12 and PC-12/45 Airplanes" ((RIN2120-AA64) (Docket No. 2006-CE-70)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1380. 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 Airplanes; and Model A300 B4-600, B4-600R, and F4-600R Series Airplanes, and Model C4-605R Variant F Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-186)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1381. 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, -300, and -300ER Series Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-080)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1382. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Fokker Model F27 Mark 050 and F.28 Mark 0070 and 0100 Airplanes" ((RIN2120-AA64) (Docket No. 2005-NM-259)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1383. 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 A310 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-149)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1384. 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 Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-168)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1385. 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. 2006-NM-051)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1386. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Saab Model SAAB-Fairchild SF340A and SAAB 340B Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-067)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1387. 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. 2003-NM-269)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1388. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; McDonnell Douglas Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, and DC-10-30F Airplanes; Model DC-10-40 and DC-10-40F Airplanes Equipped with Pratt and Whitney JT9-20 or JT9-20J Engines; and Model MD-10-10F and MD-10-30F Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-177)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1399. A communication from the Program Analyst, Federal Aviation Administration, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Airworthiness Directives; Learjet Model 23, 24, 24A, 24B, 24B-A, 24C, 24D, 24D-A, 24E, 24F, 24F-A, 25, 25A, 25B, 25C, 25D, 25F, 28, 29, 31, 31A, 35, 35A, 36, 36A, 55, 55B, and 55C Airplanes" ((RIN2120-AA64) (Docket No. 2006-NM-083)) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1390. A communication from the Honors Attorney, Office of the Secretary, Department of Transportation, transmitting, pursuant to law, the report of a rule entitled "Participation by Disadvantaged Business Enterprises in Airport Concessions" (RIN2105-AD51) received on April 3, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1391. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pacific Cod by Vessels Catching Pacific Cod for Processing by the Inshore Component in the Western Regulatory Area of the Gulf of Alaska" (ID No. 030607D) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1392. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant

to law, the report of a rule entitled "Temporary Rule; Inseason Bluefish Quota Transfer from VA to NY" (ID No. 030607B) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1393. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in Statistical Area 630 of the Gulf of Alaska" (ID No. 022807A) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1394. A communication from the Deputy Assistant Administrator for Regulatory Programs, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Atlantic Herring Fishery; Amendment 1 to the Fishery Management Plan" (RIN0648–AQ87) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1395. A communication from the Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Delayed Effective Date for Vessel Monitoring Systems under Amendment 18A" (RIN0648-AN09) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1396. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Reallocation of Pacific Cod in the Bering Sea and Aleutian Islands Management Area" (ID No. 030207A) received on April 4, 2007; to the Committee on Commerce Science and Transportation

EC-1397. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Decrease the Commercial Trip Limit for Gulf Group King Mackerel in the Southern Florida West Coast Subzone" (ID No. 022207A) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1398. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in Statistical Area 610 of the Gulf of Alaska" (ID No. 030707B) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1399. A communication from the Acting Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Fisheries of the Exclusive Economic Zone Off Alaska; Pollock in Statistical Area 630 of the Gulf of Alaska" (ID No. 030707A) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1400. A communication from the Director, Office of Sustainable Fisheries, Department of Commerce, transmitting, pursuant to law, the report of a rule entitled "Removal of Haddock Separator Trawl Requirement and Establishment of a 5,000-lb Georges Bank Yellowtail Flounder Trip Limit for the Eastern U.S./Canada Management Area" (ID No .030107A) received on April 4, 2007; to the Committee on Commerce, Science, and Transportation.

EC-1401. A communication from the Secretary of Energy, transmitting, pursuant to law, a report relative to state and regional policies that promote energy efficiency programs carried out by electric and gas utilities; to the Committee on Energy and Natural Resources.

EC-1402. A communication from the Acting Chief Financial Officer, Department of Energy, transmitting, pursuant to law, the Department's Operating Plan for fiscal year 2007; to the Committee on Energy and Natural Resources.

EC-1403. A communication from the General Counsel, Federal Energy Regulatory Commission, transmitting, pursuant to law, the report of a rule entitled "Mandatory Reliability Standards for the Bulk-Power System" (FERC Docket No. RM06-16-000) received on April 8, 2007; to the Committee on Energy and Natural Resources.

EC-1404. A communication from the Electric Energy Market Competition Task Force, transmitting, pursuant to law, a report relative to competition within the wholesale and retail markets for electric energy in the United States; to the Committee on Energy and Natural Resources.

EC-1405. A communication from the Assistant Secretary (Policy, Management and Budget), Department of the Interior, transmitting, the report of draft legislation entitled "Range Improvement Fund Amendment Act of 2007"; to the Committee on Energy and Natural Resources.

EC-1406. A communication from the Secretary of Energy, transmitting, pursuant to law, a report relative to the construction of a repository at Yucca Mountain; to the Committee on Energy and Natural Resources.

EC-1407. A communication from the Attorney, Office of Assistant General Counsel for Legislation and Regulatory Law, Department of Energy, transmitting, pursuant to law, the report of a rule entitled "Corrections and Updates to Technical Guidelines for Voluntary Greenhouse Gas Reporting" (RIN1901-AB23) received on April 3, 2007; to the Committee on Environment and Public Works.

EC-1408. A communication from the Administrator, General Services Administration, transmitting, pursuant to law, a report relative to the Administration's intent to adjust the dollar thresholds for submission of construction, alteration, lease, and lease alteration prospectuses; to the Committee on Environment and Public Works.

EC-1409. A communication from the Principal Deputy Associate Administrator, Office of the Administrator, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled "Approval and Promulgation of Air Quality Implementation Plans; Wisconsin; Prevention of Significant Deterioration" (FRL No. 8296-3) received on April 10, 2007; to the Committee on Environment and Public Works.

EC-1410. A communication from the Principal Deputy Associate Administrator, Office of the Administrator, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled "Approval and Promulgation of Implementation Plans; Tennessee; Approval of Revisions to the Knox County Portion of the Tennessee State Implementation Plan" (FRL No. 8297-4) received on April 10, 2007; to the Committee on Environment and Public Works.

EC-1411. A communication from the Principal Deputy Associate Administrator, Office of the Administrator, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled "Tetraconazole; Pesticide Tolerance" (FRL No. 8121-3) received on April 10, 2007; to the Committee on Environment and Public Works.

EC-1412. A communication from the Principal Deputy Associate Administrator, Office of the Administrator, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled "Approval and Promulgation of Air Quality Implementation Plans; Arkansas; Prevention of Significant Deterioration and New Source Review;

Economic Development Zone for Crittenden County, Arkansas; and Stage I Vapor Recovery' (FRL No. 8297–6) received on April 10, 2007; to the Committee on Environment and Public Works.

EC-1413. A communication from the Assistant Administrator, Office of Administration and Resources Management, Environmental Protection Agency, transmitting, pursuant to law, a report relative to the Buy American Act; to the Committee on Environment and Public Works.

EC-1414. A communication from the Chairman, U.S. Nuclear Regulatory Commission, transmitting, the Commission's latest quarterly report relative to the status of its licensing and regulatory duties; to the Committee on Environment and Public Works.

EC-1415. 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 State Plans for Designated Pollutants and Facilities; Rhode Island; Negative Declaration" (FRL No. 8295-6) received on April 3, 2007; to the Committee on Environment and Public Works

EC-1416. A communication from the Secretary of Transportation, transmitting, pursuant to law, a report relative to the States and Indian tribes that have entered into maintenance agreements; to the Committee on Environment and Public Works.

EC-1417. A communication from the Principal Deputy Associate Administrator, Office of the Administrator, Environmental Protection Agency, transmitting, pursuant to law, the report of a rule entitled "Approval and Promulgation of Air Quality Implementation Plans; Delaware; Update to Materials Incorporated by Reference" (FRL No. 8291–7) received on April 3, 2007; to the Committee on Environment and Public Works.

EC-1418. A communication from the Secretary of Health and Human Services, transmitting, pursuant to law, a report entitled "Second Report to Congress on the Evaluation of the Medicare Coordinated Care Demonstration"; to the Committee on Finance.

EC-1419. A communication from the Secretary of Labor, transmitting, the report of draft legislation entitled "Black Lung Disability Trust Fund Debt Restructuring Act"; to the Committee on Finance.

EC-1420. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Tier I—Transfer of Intangibles Offshore and Section 482 Cost Sharing Buy-in Payment Issue Directive No. 1" (LMSB-04-0307-027) received on April 6, 2007; to the Committee on Finance.

EC-1421. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "2007 Section 45K Inflation Adjustment Factor (for Calendar Year 2006)" (Notice 2007-38) received on April 6, 2007; to the Committee on Finance.

EC-1422. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Tier I Issue Research and Experimentation Credit Claims Directive No. 1" (LMSB-04-0307-025) received on April 6, 2007; to the Committee on Finance.

EC-1423. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Updated List of Areas Included in the North American Area" Under I.R. C. Section 274(h)" (Rev. Rul. 2007–28) received on April 6, 2007; to the Committee on Finance.

EC-1424. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Limitations on Benefits and Contributions Under Qualified Plans" ((RIN1545-BD52)(TD 9319)) received on April 6, 2007; to the Committee on Finance.

EC-1425. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Guidance Regarding the Simplified Service Cost Method and the Simplified Production Method" ((RIN1545-BE57)(TD 9318)) received on April 6, 2007; to the Committee on Finance.

EC-1426. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "ICE Futures Section 1265(g)(7)(C) Qualified Board or Exchange Revenue Ruling" (Rev. Rul. 2007–26, 2007–16) received on April 6, 2007; to the Committee on Finance.

EC-1427. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "GO Zone Bonus Depreciation Additional Guidance" (Notice 2007–36) received on April 6, 2007; to the Committee on Finance.

EC-1428. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "United States Dollar Approximate Separate Transactions Method" ((RIN1545-BF67)(TD 9320)) received on April 6, 2007; to the Committee on Finance.

EC-1429. A communication from the Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Renewable Diesel" (Notice 2007-37) received on April 6, 2007; to the Committee on Finance.

EC-1430. A communication from the Acting Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Coordinated Issue: Like-Kind Exchanges Involving Federal Communications Commission Licenses Guide" (UIL No. 1031.02-00) received on April 6, 2007; to the Committee on Finance.

EC-1431. A communication from the Acting Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Statute of Limitations and Exchange of Information Concerning Certain Individuals Filing Income Tax Returns with the USVI" (Notice 2007–31) received on April 6, 2007; to the Committee on Finance.

EC-1432. A communication from the Acting Chief of the Publications and Regulations Branch, Internal Revenue Service, Department of the Treasury, transmitting, pursuant to law, the report of a rule entitled "Bureau of Labor Statistics Price Indexes for Department Stores—February 2007" (Rev. Rul. 2007-27) received on April 6, 2007; to the Committee on Finance.

EC-1433. A communication from the Commissioner of the Social Security Administration, transmitting, pursuant to law, a report entitled "Report on Acquisitions Made from Foreign Manufacturers for Fiscal Year 2006"; to the Committee on Finance.

#### REPORTS OF COMMITTEES

The following reports of committees were submitted:

By Mr. LIEBERMAN, from the Committee on Homeland Security and Governmental Affairs, without amendment:

S. 343. A bill to extend the District of Columbia College Access Act of 1999 (Rept. No. 110-52).

By Mr. KENNEDY, from the Committee on Health, Education, Labor, and Pensions:

Report to accompany S. 558, a bill to provide parity between health insurance coverage of mental health benefits and benefits for medical and surgical services (Rept. No. 110–53).

# 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. THUNE:

S. 1085. A bill to require air carriers to publish customer service data and flight delay history; to the Committee on Commerce, Science, and Transportation.

By Mr. BAUCUS (for himself and Mr. PRYOR):

S. 1086. A bill to provide stronger protections to parents regarding their children's access to sexually explicit material over the Internet; to the Committee on Commerce, Science, and Transportation.

By Mr. HARKIN (for himself, Mr. Kennedy, Mrs. Murray, Ms. Mikulski, Mr. Brown, Mr. Akaka, Mr. Feingold, Mrs. Boxer, Mr. Leahy, Mr. Kerry, Mr. Sanders, and Mr. Durbin):

S. 1087. A bill to amend the Fair Labor Standards Act of 1938 to prohibit discrimination in the payment of wages on account of sex, race, or national origin, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

By Ms. STABENOW (for herself and Mr. LOTT):

S. 1088. A bill to amend the Federal Food, Drug, and Cosmetic Act with respect to market exclusivity for certain drugs, and for other purposes; to the Committee on Health, Education, Labor, and Pensions.

By Ms. MURKOWSKI (for herself and Mr. STEVENS):

S. 1089. A bill to amend the Alaska Natural Gas Pipeline Act to allow the Federal Coordinator for Alaska Natural Gas Transportation Projects to hire employees more efficiently, and for other purposes; to the Committee on Energy and Natural Resources.

By Ms. STABENOW (for herself and Mr. DOMENICI):

S. 1090. A bill to amend the Agriculture and Consumer Protection Act of 1973 to assist the needlest of senior citizens by modifying the eligibility criteria for supplemental foods provided under the commodity supplemental food program to take into account the extraordinarily high out-of-pocket medical expenses that senior citizens pay, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

By Mr. CORKER (for himself and Mr. Bennett):

S. 1091. A bill to amend the Federal Election Campaign Act of 1971 to repeal the limitation on party expenditures on behalf of candidates in general elections; to the Committee on Rules and Administration.

By Mr. HAGEL:

S. 1092. A bill to temporarily increase the number of visas which may be issued to certain highly skilled workers; to the Committee on the Judiciary.

#### ADDITIONAL COSPONSORS

S. 5

At the request of Mr. HARKIN, the name of the Senator from Alaska (Mr. STEVENS) was added as a cosponsor of S. 5, a bill to amend the Public Health Service Act to provide for human embryonic stem cell research.

S. 316

At the request of Mr. Kohl, the name of the Senator from South Dakota (Mr. Johnson) was added as a cosponsor of S. 316, a bill to prohibit brand name drug companies from compensating generic drug companies to delay the entry of a generic drug into the market.

S. 327

At the request of Mr. McCain, the name of the Senator from California (Mrs. Boxer) was added as a cosponsor of S. 327, a bill to authorize the Secretary of the Interior to conduct a special resource study of sites associated with the life of Cesar Estrada Chavez and the farm labor movement.

S. 358

At the request of Ms. SNOWE, the name of the Senator from Arkansas (Mr. PRYOR) was added as a cosponsor of S. 358, a bill to prohibit discrimination on the basis of genetic information with respect to health insurance and employment.

S. 394

At the request of Mr. AKAKA, the names of the Senator from Connecticut (Mr. LIEBERMAN) and the Senator from Maryland (Mr. CARDIN) were added as cosponsors of S. 394, a bill to amend the Humane Methods of Livestock Slaughter Act of 1958 to ensure the humane slaughter of nonambulatory livestock, and for other purposes.

S. 460

At the request of Ms. Snowe, the name of the Senator from North Dakota (Mr. Conrad) was added as a cosponsor of S. 460, a bill to make determinations by the United States Trade Representative under title III of the Trade Act of 1974 reviewable by the Court of International Trade and to ensure that the United States Trade Representative considers petitions to enforce United States Trade rights, and for other purposes.

S. 465

At the request of Mr. Nelson of Florida, the name of the Senator from Rhode Island (Mr. Whitehouse) was added as a cosponsor of S. 465, a bill to amend titles XVIII and XIX of the Social Security Act and title III of the Public Health Service Act to improve access to information about individuals' health care options and legal rights for care near the end of life, to promote advance care planning and decisionmaking so that individuals' wishes are known should they become unable to speak for themselves, to engage health care providers in disseminating information about and assisting in the preparation of advance directives, which include living wills and durable powers of attorney for health care, and for other purposes.

S. 590

At the request of Mr. SALAZAR, the name of the Senator from Vermont (Mr. SANDERS) was added as a cosponsor of S. 590, 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. 626

At the request of Mr. Kennedy, the names of the Senator from Indiana (Mr. Lugar), the Senator from Rhode Island (Mr. Whitehouse) and the Senator from Indiana (Mr. Bayh) were added as cosponsors of S. 626, a bill to amend the Public Health Service Act to provide for arthritis research and public health, and for other purposes.

S. 628

At the request of Mr. Coleman, the name of the Senator from Georgia (Mr. ISAKSON) was added as a cosponsor of S. 628, a bill to provide grants for rural health information technology development activities.

S. 645

At the request of Mr. Thomas, the name of the Senator from Minnesota (Mr. Coleman) was added as a cosponsor of S. 645, a bill to amend the Energy Policy Act of 2005 to provide an alternate sulfur dioxide removal measurement for certain coal gasification project goals.

S. 691

At the request of Mr. Conrad, the names of the Senator from Tennessee (Mr. Alexander) and the Senator from Michigan (Ms. Stabenow) were added as cosponsors of S. 691, a bill to amend title XVIII of the Social Security Act to improve the benefits under the Medicare program for beneficiaries with kidney disease, and for other purposes.

S. 700

At the request of Mr. CRAPO, the names of the Senator from Michigan (Ms. STABENOW) and the Senator from Alabama (Mr. SESSIONS) were added as cosponsors of S. 700, a bill to amend the Internal Revenue Code to provide a tax credit to individuals who enter into agreements to protect the habitats of endangered and threatened species, and for other purposes.

S. 718

At the request of Mr. Durbin, the name of the Senator from Connecticut (Mr. Lieberman) was added as a cosponsor of S. 718, a bill to optimize the delivery of critical care medicine and expand the critical care workforce.

S. 721

At the request of Mr. ENZI, the name of the Senator from North Dakota (Mr. CONRAD) was added as a cosponsor of S. 721, a bill to allow travel between the United States and Cuba.

S. 731

At the request of Mr. SALAZAR, the name of the Senator from Kansas (Mr. BROWNBACK) was added as a cosponsor

of S. 731, a bill to develop a methodology for, and complete, a national assessment of geological storage capacity for carbon dioxide, and for other purposes.

S. 746

At the request of Mr. Allard, the names of the Senator from Colorado (Mr. Salazar), the Senator from California (Mrs. Boxer), the Senator from Maine (Ms. Collins) and the Senator from Illinois (Mr. Obama) were added as cosponsors of S. 746, a bill 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. 766

At the request of Mrs. CLINTON, the name of the Senator from Vermont (Mr. SANDERS) was added as a cosponsor of S. 766, a bill to amend the Fair Labor Standards Act of 1938 to provide more effective remedies of victims of discrimination in the payment of wages on the basis of sex, and for other purposes.

S. 769

At the request of Mr. SALAZAR, the name of the Senator from Michigan (Mr. LEVIN) was added as a cosponsor of S. 769, a bill to amend the Elementary and Secondary Education Act of 1965 to ensure that participants in the Troops to Teachers program may teach at a range of eligible schools.

S. 770

At the request of Mr. Harkin, the name of the Senator from Alaska (Ms. Murkowski) was added as a cosponsor of S. 770, a bill to amend the Food Stamp Act of 1977 to permit participating households to use food stamp benefits to purchase nutritional supplements providing vitamins or minerals, and for other purposes.

S. 795

At the request of Mr. OBAMA, the name of the Senator from Illinois (Mr. DURBIN) was added as a cosponsor of S. 795, a bill to assist aliens who have been lawfully admitted in becoming citizens of the United States, and for other purposes.

S. 796

At the request of Mr. Bunning, the name of the Senator from North Dakota (Mr. Conrad) was added as a cosponsor of S. 796, a bill to amend title VII of the Tariff Act of 1930 to provide that exchange-rate misalignment by any foreign nation is a countervailable export subsidy, to amend the Exchange Rates and International Economic Policy Coordination Act of 1988 to clarify the definition of manipulation with respect to currency, and for other purposes.

S. 812

At the request of Mr. HATCH, the name of the Senator from West Virginia (Mr. ROCKEFELLER) was added as a cosponsor of S. 812, a bill to prohibit human cloning and protect stem cell research.

S 831

At the request of Mr. Durbin, the names of the Senator from Iowa (Mr. Harkin) and the Senator from California (Mrs. Boxer) were added as cosponsors of S. 831, a bill to authorize States and local governments to prohibit the investment of State assets in any company that has a qualifying business relationship with Sudan.

S. 839

At the request of Mr. ROBERTS, the name of the Senator from Nebraska (Mr. HAGEL) was added as a cosponsor of S. 839, a bill to amend the Internal Revenue Code of 1986 to exclude amounts received as a military basic housing allowance from consideration as income for purposes of the low-income housing credit and qualified residential rental projects.

S. 844

At the request of Mrs. Feinstein, the name of the Senator from Ohio (Mr. Brown) was added as a cosponsor of S. 844, a bill to provide for the protection of unaccompanied alien children, and for other purposes.

S. 858

At the request of Mr. Wyden, the name of the Senator from Minnesota (Mr. Coleman) was added as a cosponsor of S. 858, a bill to amend the Internal Revenue Code of 1986 to extend the transportation fringe benefit to bicycle commuters.

S. 902

At the request of Mr. Harkin, the name of the Senator from Washington (Mrs. Murray) was added as a cosponsor of S. 902, a bill to provide support and assistance for families of members of the National Guard and Reserve who are undergoing deployment, and for other purposes.

S. 911

At the request of Mr. Coleman, the name of the Senator from Georgia (Mr. ISAKSON) was added as a cosponsor of S. 911, a bill to amend the Public Health Service Act to advance medical research and treatments into pediatric cancers, ensure patients and families have access to the current treatments and information regarding pediatric cancers, establish a population-based national childhood cancer database, and promote public awareness of pediatric cancers.

S. 969

At the request of Mr. Dodd, the names of the Senator from Montana (Mr. Tester) and the Senator from Rhode Island (Mr. Whitehouse) were added as cosponsors of S. 969, a bill to amend the National Labor Relations Act to modify the definition of supervisor.

S. 970

At the request of Mr. SMITH, the names of the Senator from Kansas (Mr. ROBERTS), the Senator from Idaho (Mr. CRAPO), the Senator from North Dakota (Mr. CONRAD) and the Senator from North Carolina (Mrs. Dole) were added as cosponsors of S. 970, a bill to

impose sanctions on Iran and on other countries for assisting Iran in developing a nuclear program, and for other purposes.

S. 974

At the request of Ms. Collins, the names of the Senator from Ohio (Mr. Voinovich), the Senator from Connecticut (Mr. Lieberman) and the Senator from Mississippi (Mr. Lott) were added as cosponsors of S. 974, a bill to amend title VII of the Tariff Act of 1930 to provide that the provisions relating to countervailing duties apply to nonmarket economy countries, and for other purposes.

S. 991

At the request of Mr. DURBIN, the name of the Senator from Ohio (Mr. BROWN) was added as a cosponsor of S. 991, a bill to establish the Senator Paul Simon Study Abroad Foundation under the authorities of the Mutual Educational and Cultural Exchange Act of 1961.

S. 999

At the request of Mr. Kennedy, the name of the Senator from Hawaii (Mr. AKAKA) was added as a cosponsor of S. 999, a bill to amend the Public Health Service Act to improve stroke prevention, diagnosis, treatment, and rehabilitation.

S. 1012

At the request of Ms. Landrieu, the names of the Senator from South Dakota (Mr. Johnson) and the Senator from North Dakota (Mr. Dorgan) were added as cosponsors of S. 1012, a bill to amend the Consumer Credit Protection Act to assure meaningful disclosures of the terms of rental-purchase agreements, including disclosures of all costs to consumers under such agreements, to provide certain substantive rights to consumers under such agreements, and for other purposes.

S. 1020

At the request of Mrs. Hutchison, the name of the Senator from Missouri (Mr. Bond) was added as a cosponsor of S. 1020, a bill to move toward energy independence through a coordinated development of renewable energy sources, including wave, solar, wind, geothermal, and biofuels production.

S. 1026

At the request of Mr. CHAMBLISS, the name of the Senator from South Carolina (Mr. GRAHAM) was added as a cosponsor of S. 1026, a bill to designate the Department of Veterans Affairs Medical Center in Augusta, Georgia, as the "Charlie Norwood Department of Veterans Affairs Medical Center".

S. 1060

At the request of Mr. BIDEN, the name of the Senator from Massachusetts (Mr. KENNEDY) was added as a cosponsor of S. 1060, a bill to reauthorize the grant program for reentry of offenders into the community in the Omnibus Crime Control and Safe Streets Act of 1968, to improve reentry planning and implementation, and for other purposes.

S. CON. RES. 3

At the request of Mr. SALAZAR, the name of the Senator from Ohio (Mr. VOINOVICH) was added as a cosponsor of S. Con. Res. 3, a concurrent resolution expressing the sense of Congress that it is the goal of the United States that, not later than January 1, 2025, the agricultural, forestry, and working land of the United States should provide from renewable resources not less than 25 percent of the total energy consumed in the United States and continue to produce safe, abundant, and affordable food, feed, and fiber.

S. CON. RES. 25

At the request of Mr. Obama, the name of the Senator from Connecticut (Mr. Lieberman) was added as a cosponsor of S. Con. Res. 25, a concurrent resolution condemning the recent violent actions of the Government of Zimbabwe against peaceful opposition party activists and members of civil society.

S. RES. 65

At the request of Mr. BIDEN, the name of the Senator from Minnesota (Ms. Klobuchar) was added as a cosponsor of S. Res. 65, a resolution condemning the murder of Turkish-Armenian journalist and human rights advocate Hrant Dink and urging the people of Turkey to honor his legacy of tolerance.

S. RES. 76

At the request of Mr. FEINGOLD, the name of the Senator from Connecticut (Mr. DODD) was added as a cosponsor of S. Res. 76, a resolution calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan.

S. RES. 106

At the request of Mr. Durbin, the name of the Senator from South Dakota (Mr. Johnson) was added as a cosponsor of S. Res. 106, a resolution calling on the President to ensure that the foreign policy of the United States reflects appropriate understanding and sensitivity concerning issues related to human rights, ethnic cleansing, and genocide documented in the United States record relating to the Armenian Genocide.

S. RES. 141

At the request of Mrs. CLINTON, the name of the Senator from Washington (Mrs. MURRAY) was added as a cosponsor of S. Res. 141, a resolution urging all member countries of the International Commission of the International Tracing Service who have yet to ratify the May 2006 amendments to the 1955 Bonn Accords to expedite the ratification process to allow for open access to the Holocaust archives located at Bad Arolsen, Germany.

S. RES. 142

At the request of Mr. BIDEN, the names of the Senator from New Jersey (Mr. Lautenberg), the Senator from Illinois (Mr. DURBIN), the Senator from Wisconsin (Mr. Feingold), the Senator from Maryland (Mr. CARDIN), the Senator from Florida (Mr. NELSON), the Senator from California (Mrs. FEIN-STEIN) and the Senator from New Jersey (Mr. Menendez) were added as cosponsors of S. Res. 142, a resolution observing Yom Hashoah, Holocaust Memorial Day, and calling on the remaining member countries of the International Commission of the International Tracing Service to ratify the May 2006 amendments to the 1955 Bonn Accords immediately to allow open access to the Bad Arolsen archives.

At the request of Mr. COLEMAN, his name was added as a cosponsor of S. Res. 142, supra.

# STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Ms. MURKOWSKI (for herself and Mr. STEVENS):

S. 1089. A bill to amend the Alaska Natural Gas Pipeline Act to allow the Federal Coordinator for Alaska Natural Gas Transportation Projects to hire employees more efficiently, and for other purposes; to the Committee on Energy and Natural Resources.

Ms. MÜRKOWSKI. Mr. President, I rise today to introduce legislation that should allow the entity we created just 2½ years ago to oversee and expedite construction of a gas line to bring Alaska's huge reserves of natural gas to markets in the lower 48 States to work better and function more smoothly and quickly.

I, and Senator TED STEVENS who is co-sponsoring this legislation, are introducing this bill in an effort to help speed the full functioning of the Office of Pipeline Coordinator, the entity that we created in fall 2004 to oversee the permitting, design and then construction of an Alaska Natural Gas Pipeline project, intended to bring Alaska's reserves of gas to a Nation in need of additional natural gas supplies.

In 2004 we passed two sets of provisions. The first in that year's Military Construction Appropriations Act, H.R. 4837, P.L. 108-324/15 U.S.C. 720, set up an Office of Federal Pipeline Coordinator to oversee the 15 Federal agencies that will have a role to play in construction and financing of a pipeline system. The bill also set up a streamlined permitting and expedited court review process to limit unnecessary delays in the project—and hopefully prevent costly delays from driving up the project's price. That bill also included an \$18 billion Federal loan guarantee. The second of that year's pipeline related bills, the FSC-ETI Act (H.R. 4520/P.L. 108-357) provided the Federal financial incentives expected to be needed to aid financing of the project. They included a tax credit for the cost of the pipe in Alaska and a tax credit for the cost of construction of an Alaskan North Slope gas conditioning plant. The two credits were believed to produce about three-quarters of a billion dollars of benefit to the project.

The project itself involves building a system, either an overland pipeline through Canada or a pipeline through Alaska leading to a natural gas liquefication facility at tidewater in Alaska, to move gas to markets in the lower 48 States. Alaska has 35 trillion cubic feet of known gas in the Prudhoe Bay oil field and likely holds another 150 to 200 trillion cubic feet of gas both on and offshore in northern Alaska. Getting that gas to market would help to meet a likely gas shortage in the lower 48 States within a decade, helping to keep the United States from becoming even more dependent on imported LNG from foreign suppliers.

Currently Alaska's new Governor is in the process of calling for proposals from gas producers, pipeline companies and others interested in building the project, one currently estimated to cost between \$30 billion and about half that amount—depending on whether the line through Canada or an LNG project is deemed most economic.

Congress last year funded the creation of the Federal Coordinator's office to begin the process of bringing Federal and State agencies together to oversee the permitting, design, and construction of a pipeline. The Office of the Federal Coordinator was funded for fiscal year 2007 initially with a \$403,000 transfer of funds from the Department of Energy, with perhaps another \$450,000 to \$500,000 soon to be transferred. A coordinator, Alaskan former State Senate President Drue Pearce, was also named, confirmed and is now at work, and the office has reached an agreement with all of the 15 Federal agencies it will oversee on how a pipeline is to be permitted.

The Bush administration has proposed \$2.3 million in its fiscal year 2008 budget request to better fund the Coordinator's Office. But development of the office has shown three problems that need corrective action by Congress, the first immediately.

First, the 2004 act made the Coordinator follow Federal personnel law, specifically Title 5 that is a slow and cumbersome personnel process. This bill grants a waiver to Title 5 hiring procedures so that the Federal Coordinator can hire and fire her staff, based on their competence. That should cut the time needed to staff the office with experts in pipeline construction by 6 to 9 months. Given how important it is that the agency has specialists quickly to assist the State of Alaska in its efforts to select a pipeline builder, passing legislation to speed the hiring of Office staff is vital.

The waiver, also is common practice for smaller Federal agencies as a host of agencies, from the Election Assistance Commission to the Vietnam Education Foundation, enjoy the hiring waiver.

Second, the bill gives the coordinator the ability to establish reasonable permit filing and service fees and charges to defray the cost of regulating and the oversight of any pipeline project. While the proposed budget may pay for a half dozen to a dozen employees, nearly 400 were employed in oversight of construction of the Trans-Alaska Oil Pipeline, some 30 years ago. The bill copies the structure that is currently employed by the Bureau of Land Management's oil and gas leasing division, FLP&MA Section 304, so that it follows a known process in allowing the Federal Coordinator to set and collect fees.

Third, the bill in its Section 2 clarifies part of the original 2004 act's Section 107. That section set up an expedited review process so that any suit concerning the pipeline under its enabling legislation or concerning its compliance with the National Environmental Policy Act would go first to the U.S. Circuit Court of Appeals, D.C. Circuit. All cases would have to be filed within 60 days of an action and the court would have to "expedite" decisions on all such cases. This action simply also adds that suits stemming from the pipeline's permitting or construction that relates to the Administrative Procedures Act, the Endangered Species Act, and the National Historic Preservation Act. besides NEPA, would also go to the D.C. Circuit for expedited review. It clearly follows the original intent of the 2004 act, but does not limit litigation unfairly.

The goal of this legislation, if it can be approved quickly by this Congress, would be to help the Pipeline Coordinator staff her office more quickly and then to provide the office the possibility of a more readily available source of funding, should a pipeline applicant move to proceed: The bill also will clarify the legal process for review of a pipeline, helping to speed the project and reduce the chances for cost overruns in construction of potentially the largest private capital construction project in the world's history.

This is a vital project. It has the ability to move from 4.5 to 6 billion cubic feet of gas a day, about 5 percent of the Nation's total gas needs in 2018—the first year the pipeline could go into service, if a final overland project was selected and proposed within the next year. It would likely produce about a third of that initially, if an LNG project was selected to be built.

This should not be a controversial measure. It should have no non-appropriated costs involved in carrying out its provisions. Section 2 of the bill will save the Nation untold millions of dollars in overseeing permitting and construction of a pipeline, once a firm project is selected. Some will say that the bill is not needed since the State of Alaska has yet to reach final agreement with Alaska North Slope gas producers on a firm agreement to build a line. I would argue, however, that this bill needs to pass now to provide additional assistance to help the State

hammer out such an agreement and so the regulatory process is clearly in place, once such an agreement is reached. The Coordinator's Office is already involved in a host of discussions and actions relating to a pipeline and the pace is likely to quicken in coming months, provided the office has the expertise it needs to provide technical information to further a project.

I hope the Senate and the Congress will review and approve this bill quick-

The Alaska gas line project is too important for this Nation's energy future, for our energy security, for our national security and for our balance of payments deficit for it to be delayed needlessly. These changes will likely speed the process of proceeding with a pipeline.

> By Ms. STABENOW (for herself and Mr. Domenici):

S. 1090. A bill to amend the Agriculture and Consumer Protection Act of 1973 to assist the neediest of senior citizens by modifying the eligibility criteria for supplemental foods provided under the commodity supplemental food program to take into account the extraordinarily high out-ofpocket medical expenses that senior citizens pay, and for other purposes; to the Committee on Agriculture, Nutrition, and Forestry.

Ms. STABENOW. Mr. President, I rise today to introduce the Senior Nutrition Act, which will make needed improvements to the Commodity Supplemental Food Program to prevent our seniors from having to make the terrible choice between food and medicine as they try to balance their budg-

I am pleased to have the support of my friend. Senator DOMENICI of New Mexico, who has been one of the Senate's strongest supporters of CSFP.

Nationally, 32 States and the District of Columbia participate in CSFP, which works to improve the health of both women with children and seniors by supplementing their diets with nutritious USDA commodity foods. According to USDA, nearly half a million people each month participated in CSFP during fiscal year 2006, with the overwhelming majority being seniors.

My State of Michigan has one of the largest and oldest CSFP network in the Nation. Last year, over 80,000 people in Michigan benefited from this important program.

The bill I am introducing today will make the following important changes to CSFP.

First, categorical eligibility is granted for seniors for CSFP if the individual participates or is eligible to participate in the Food Stamp Program. No further verification of income would be necessary in such cases. The Food Stamp Program provides a medical expense deduction, which seniors may use to account for their high prescription drug costs.

Second, this bill says that the same income standard that is currently used

to determine eligibility for women, infants and children in CSFP 185 percent of the Poverty Income Guidelineswould be applied to seniors as well. The current income eligibility standard for seniors has been capped at just 130 percent. Under the current Federal poverty guidelines, a single senior cannot earn more than \$13,273 per year to qualify. By raising the standard to 185 percent of poverty, the same senior can earn as much as \$18,888 to qualify for food. This will make a major difference in the lives of so many seniors who are struggling with the high cost of prescription drugs.

This bill has been endorsed by the National CSFP Association and America's Second Harvest. I ask unanimous consent that a copy of these support letters be printed in the RECORD following my remarks.

There being no objection, the letters were ordered to be printed in the RECORD, as follows:

NATIONAL CSFP ASSOCIATION, March 19 2007.

Hon. Debbie Stabenow U.S. Senate.

Washington, DC.

DEAR SENATOR STABENOW: Thank you for your continuing support of the Commodity Supplemental Food Program (CSFP) which provides an important buffer for our vulnerable children and seniors each month. Your support has made a tremendous difference and we appreciate your tireless efforts.

The National CSFP Association strongly supports your efforts to re-introduce and pass the Senior Nutrition Act and will work diligently to see that it happens this year. As you know, 91% of our recipients are now seniors living below 130% of Federal Poverty Level. For a household of one, this is only a maximum of \$1.062 per month. While some changes have been made in Medicare to help seniors buy prescriptions, the rising medical and fuel costs are still of great concern to those on fixed incomes and many of those seniors qualifying for food stamps due to medical cost deductions will lose the deductions to income and subsequently their food stamps.

By amending the eligibility criteria for seniors served by CSFP through the Senior Nutrition Act, the neediest of seniors will continue to receive nutrition assistance. which is crucial if they are to remain in good health

Again, thank you for championing the causes of our nation's elderly.

Sincerely,

FRANK KUBIK, President.

AMERICA'S SECOND HARVEST, THE NATION'S FOOD BANK NETWORK, March 27, 2007.

Hon. Debbie Stabenow,

U.S. Senate. Washington, DC.

DEAR SENATOR STABENOW: I am writing on behalf of the more than 200 food banks and approximately 50,000 emergency feeding organizations that are part of America's Second Harvest-The Nation's Food Bank Network, to thank you for your continuing support for the Commodity Supplemental Food Program (CSFP) and your persistent efforts to improve the nutrition and health of millions of this nation's elderly.

With approximately 27 percent of our food bank members distributing nutritious food boxes through the CSFP, we know how very necessary it is to expand this program so

that it can reach more of the nation's needy seniors. Strengthening the nutrition safety net for older Americans is a matter of paramount importance as this population grows and ages.

We strongly endorse the Senior Nutrition Act and support your and Senator Domenici's effort to expand the number of elderly eligible for the program by broadening the income eligibility standards and permitting categorical eligibility for seniors who participate in or are eligible to participate in the Food Stamp Program.

As you know, the CSFP provides critical nutrients to supplement the diets of thousands of low-income elderly who could not replace this food at the same low price as that provided by the CSFP food package. Moreover, as you are aware, this program also helps to support our nation's farmers who grow the food that feeds this needy population, along with millions of others who depend on our country's food and nutrition programs.

We are very grateful for your efforts to expand eligibility for this important program and for the contribution you have always made in waging the war against hunger in America. Thank you very much.

Sincerely,

VICKI ESCARRA President and CEO.

#### AMENDMENTS SUBMITTED AND PROPOSED

SA 840. Mr. HARKIN (for Mr. LUGAR) proposed an amendment to the resolution S. Res. 76, calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan.

SA 841. Mr. HARKIN (for Mr. LUGAR) proposed an amendment to the resolution S. Res. 76. supra.

# TEXT OF AMENDMENTS

SA 840. Mr. HARKIN (for Mr. LUGAR) proposed an amendment to the resolution S. Res. 76, calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan; as follows:

On page 5, after line 25, insert the following:

(6) urges the Government of the Central African Republic-

(A) to engage in constructive and inclusive dialogue with rebels in the northwestern region of the country;

(B) to hold accountable security forces engaging in human rights violations; and

(C) to strengthen government services in order to meet the needs of affected populations

On page 6, line 1 strike "(6)" and insert '(7)'

On page 6, lines 1 and 2, strike "advocate for the appointment of" and insert "urge the United Nations Security Council to appoint"

On page 6, line 8, strike "(7)" and insert

On page 6, line 10, insert "United Nations" after "advance"

On page 6, line 11, insert "and northern Central African Republic" after "Chad".
On page 6, line 13, strike "(8)" and insert

On page 6, line 15, insert "and northern Central African Republic" after "Chad". On page 7, line 24, strike "(9)" and insert

SA 841. Mr. HARKIN (for Mr. LUGAR) proposed an amendment to the resolution S. Res. 76, calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan; as follows:

Amend the title so as to read: "Calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan."

# NOTICES OF HEARINGS/MEETINGS

SUBCOMMITTEE ON NATIONAL PARKS

Mr. BINGAMAN. Mr. President. I would like to announce for the information of the Senate and the public that a hearing has been scheduled before the Subcommittee on National

The hearing will be held on April 26, 2007, at 2:30 p.m. in room SD-366 of the Dirksen Senate Office Building.

The purpose of the hearing is to receive testimony on the following bills: S. 169, to amend the National Trails System Act to clarify Federal authority relating to land acquisition from willing sellers for the majority of the trails in the System; S. 312/H.R. 497, to authorize the Marion Park Project and Committee of the Palmetto Conservation Foundation to establish a commemorative work on Federal land in the District of Columbia and its environs to honor Brigadier General Francis Marion; S. 580, to amend the National Trails System Act to require the Secretary of the Interior to update the feasibility and suitability studies of four national historic trails; S. 686, to amend the National Trails System Act to designate the Washington-Rochambeau Revolutionary Route National Historic Trail; S. 722, to direct the Secretary of the Interior and the Secretary of Agriculture to jointly conduct a study of certain land adjacent to the Walnut Canyon National Monument in the State of Arizona; S. 783, to adjust the boundary of the Barataria Preserve Unit of the Jean Lafitte National Historical Park and Preserve in the State of Louisiana; S. 890, to provide for certain administrative and support services for the Dwight D. Eisenhower Memorial Com-

mission; and H.R. 1047, to authorize the Secretary of the Interior to conduct a study to determine the suitability and feasibility of designating the Soldiers' Memorial Military Museum located in St. Louis, Missouri, as a unit of the National Park System.

Because of the limited time available for the hearing, witnesses may testify invitation only. However, those wishing to submit written testimony for the hearing record should send it to the Committee on Energy and Natural Resources, United States Senate, Washington, DC 20510-6150, or by email to rachel pasternack@energy.senate

For further information, please contact David Brooks at (202) 224-9863 or Rachel Pasternack at (202) 224-0883.

# AUTHORITY FOR COMMITTEES TO MEET

COMMITTEE ON BANKING, HOUSING, AND URBAN AFFAIRS

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Banking, Housing, and Urban Affairs be authorized to meet during the session of the Senate on April 11, 2007, at 9:30 a.m., to conduct a hearing on "An Examination of the Availability and Affordability of Property and Casualty Insurance in Gulf Coast and Other Coastal Regions.

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

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Transportation be authorized to hold a hearing during the session of the Senate on Wednesday, April 11, 2007 at 10 a.m., in room 253 of the Russell Senate Office Building. The purpose of this hearing is to examine the property and casualty insurance industry.

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

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Commerce, Science, and Transportation be authorized to hold a hearing during the session of the Senate on Wednesday, April 11, 2007, at 2:30 p.m., in room 253 of the Russell Senate Office Building. The purpose of this hearing is to examine efforts to improve airline passenger service.
The PRESIDING OFFICER. Without

objection, it is so ordered.

COMMITTEE ON FOREIGN RELATIONS

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Foreign Relations be authorized to meet during the session of the Senate on Wednesday, April 11, 2007 at 9:30 a.m. to hold a hearing on genocide in Sudan.

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

COMMITTEE ON FINANCE

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Finance be authorized to meet during the Session of the Senate on Wednesday, April 11, 2007, at 10 a.m., in 215 Dirksen Senate Office Building, to hear testimony on "An Examination of the Medicare Advantage Program."

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

COMMITTEE ON THE JUDICIARY

Mr. HARKIN. Mr. President, I ask unanimous consent that the committee on the Judiciary be authorized to meet to conduct a hearing on "Judicial Nominations" on Wednesday, April 11, 2007, at 10 a.m., in Dirksen Senate Office Building room 226.

Witness List

Panel I: The Honorable Richard Lugar, United States Senator, R-IN.

Panel II: Debra Ann Livingston to be U.S. Circuit Judge for the Second Circuit; Roslynn Renee Mauskopf to be U.S. District Judge for the Eastern District of New York; Richard Joseph Sullivan to be U.S. District Judge for the Southern District of New York: Joseph S. Van Bokkelen to be U.S. District Judge for the Northern District of Indiana.

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

COMMITTEE ON RULES AND ADMINISTRATION

Mr. HARKIN. Mr. President, I ask unanimous consent that the Committee on Rules and Administration be authorized to meet during the session of the Senate on Wednesday, April 11, 2007, at 10 a.m., to conduct an oversight meeting on the Smithsonian Institu-

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

COMMITTEE ON VETERANS' AFFAIRS

Mr. HARKIN. Mr. President, I ask unanimous consent for the Committee on Veterans' Affairs be authorized to meet during the session of the Senate on Wednesday, April 11, 2007, to hold a hearing on the Filipino Veterans Equity Act of 2007.

The hearing will take place in room 418 of the Russell Senate Office Building beginning at 9:30 a.m.

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

SUBCOMMITTEE ON THE CONSTITUTION, CIVIL RIGHTS AND PROPERTY RIGHTS

Mr. HARKIN. Mr. President, I ask unanimous consent that the Subcommittee on The Constitution be authorized to meet on Wednesday, April 11, 2007 at 3:00 p.m. to conduct a hearing on "Responding to The Inspector General's Findings of Improper Use of National Security Letters by the FBI" in Room 226 of the Dirksen Senate Office Building.

Witness List: The Honorable Bob Barr, Former Member of Congress, Chairman, Patriots to Restore Checks and Balances Atlanta, GA; George Christian, Executive Director, Library Connection, Inc., Windsor, CT; Suzanne E. Spaulding, Principal, Bingham Consulting Group of Counsel, Bingham McCutchen LLP, Washington, DC; and

Peter Swire, C. William O'Neil, Professor of Law at the Ohio State University, Senior Fellow, Center for American Progress, Washington, DC.

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

SUBCOMMITTEE ON EMERGING THREATS AND CAPABILITIES

Mr. HARKIN. Mr. President, I ask unanimous consent that the Subcommittee on Emerging Threats and Capabilities be authorized to meet in open session during the session of the Senate on Wednesday, April 11, 2007, at 9:30 a.m., to receive testimony on nuclear nonproliferation programs at the National Nuclear Security Administration and the Cooperative Threat Reduction Program and the Proliferation Security Initiative at the Department of Defense in review of the defense authorization request for fiscal year 2008 and the future years defense program.

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

SUBCOMMITTEE ON STRATEGIC FORCES

Mr. HARKIN. Mr. President, I ask unanimous consent that the Subcommittee on Strategic Forces be authorized to meet in open and closed session during the session of the Senate on Wednesday, April 11, 2007, at 3 p.m. to receive testimony on Ballistic Missile Defense Programs in review of the defense authorization request for fiscal year 2008 and the future years defense program.

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

# PRIVILEGES OF THE FLOOR

Mr. HARKIN. Mr. President, I ask unanimous consent that Matt Castillo and Patrick Fields of my staff be granted the privilege of the floor for the duration of today's session.

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

Mr. SMITH. Mr. President, I ask unanimous consent that Lindy Hawkins, an intern in my office, and Clarita Mrena, a detailee with the Aging Committee, be accorded the privilege of the floor.

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

Mr. HARKIN. I ask unanimous consent the privilege of the floor be granted to Eleanore Edson, a fellow in the office of Senator CLINTON, during today's session.

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

Mr. LEVIN. Mr. President, I ask unanimous consent that Melanie Roberts, a fellow in Senator BINGAMAN's office, be granted the privileges of the floor for the pendency of S. 5 and S. 30.

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

The PRESIDING OFFICER. The Senator from Iowa is recognized.

Mr. HARKIN. Mr. President, there is an appointment at the desk.

#### APPOINTMENT

The PRESIDING OFFICER. The Chair, on behalf of the President pro tempore, upon the recommendation of the Democratic leader, pursuant to Public Law 105–292, as amended by Public Law 106–55, and as further amended by Public Law 107–228, appoints the following individual to the United States Commission on International Religious Freedom: Dr. Don H. Argue, of Washington, (for a term of May 15, 2007–May 14, 2009).

COMPREHENSIVE REGIONAL STRATEGY TO IMPROVE CONDITIONS IN AFRICA

Mr. HARKIN. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 103, S. Res. 76.

The PRESIDING OFFICER. The clerk will report the resolution by title

The legislative clerk read as follows:

A resolution (S. Res. 76) calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, the Central African Republic, and Darfur, Sudan.

There being no objection, the Senate proceeded to consider the resolution.

Mr. HARKIN. Mr. President, I ask unanimous consent that the amendment at the desk be agreed to; the title amendment be agreed to; the resolution, as amended, be agreed to; the preamble be agreed to; and the motions to reconsider be laid upon the table.

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

The amendment (No. 840) was agreed to, as follows:

(Purpose: To urge the Government of the Central African Republic to address human rights abuses in the northwestern region of that country)

On page 5, after line 25, insert the following:

(6) urges the Government of the Central African Republic—

(A) to engage in constructive and inclusive dialogue with rebels in the northwestern region of the country;

(B) to hold accountable security forces engaging in human rights violations; and

(C) to strengthen government services in order to meet the needs of affected populations:

On page 6, line 1, strike "(6)" and insert "(7)".

On page 6, lines 1 and 2, strike "advocate for the appointment of" and insert "urge the United Nations Security Council to appoint"

On page 6, line 8, strike "(7)" and insert "(8)"

On page 6, line 10, insert "United Nations" after "advance".

On page 6, line 11, insert "and northern Central African Republic" after "Chad".

On page 6, line  $\widehat{13}$ , strike "(8)" and insert "(9)".

On page 6, line 15, insert "and northern Central African Republic" after "Chad".

On page 7, line 24 strike "(9)" and insert "(10)"

The amendment (No. 841) was agreed to, as follows:

(Purpose: To amend the title)

Amend the title so as to read: "Calling on the United States Government and the international community to promptly develop, fund, and implement a comprehensive regional strategy in Africa to protect civilians, facilitate humanitarian operations, contain and reduce violence, and contribute to conditions for sustainable peace in eastern Chad, northern Central African Republic, and Darfur, Sudan."

The resolution (S. Res. 76), as amended, was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

#### S. RES. 76

Whereas armed groups have been moving freely between Sudan, Chad, and the Central African Republic, committing murder and engaging in banditry, forced recruitment of soldiers, and gender-based violence;

Whereas these and other crimes are contributing to insecurity and instability throughout the region, exacerbating the humanitarian crises in these countries and obstructing efforts to end violence in the Darfur region of Sudan and adjacent areas;

Whereas on January 5, 2007, the United Nations High Commissioner for Refugees (UNHCR) reported that crossborder attacks by alleged Arab militias from Sudan and related intercommunal ethnic hostilities in eastern Chad had resulted in the displacement of an estimated 20,000 people from Chad during the previous 2 weeks and posed a direct threat to camps housing refugees from Sudan:

Whereas these new internally displaced Chadians have strained the resources of 12 UNHCR-run camps in eastern Chad that are already serving more than 100,000 internally displaced Chadians and 230,000 refugees from Darfur and providing humanitarian support and protection to more than 46,000 refugees from the Central African Republic in southern Chad:

Whereas Chadian gendarmes responsible for providing security in and around the 12 UNHCR-run camps in eastern Chad are too few in number, too poorly equipped, and too besieged by Chadian rebel actions to carry out critical protection efforts sufficiently;

Whereas on January 16, 2007, the United Nations' Humanitarian Coordinator for the Central African Republic reported that waves of violence across the north have left more than 1,000,000 people in need of humanitarian assistance, including 150,000 who are internally displaced, while some 80,000 have fled to neighboring Chad or Cameroon;

Whereas in a Presidential Statement issued on January 16, 2007 (S/PRST/2007/2), the United Nations Security Council reiterated its "concern about the continuing instability along the borders between the Sudan, Chad and the Central African Republic and about the threat which this poses to the safety of the civilian population and the conduct of humanitarian operations" and requested "that the Secretary-General deploy as soon as possible an advance mission to Chad and the Central African Republic, in consultation with their Governments":

Whereas the Presidential Statement acknowledged "the position taken by the Central African and Chadian authorities in favor in principle of such a presence and looks forward to their continued engagement in preparing for it";

Whereas a December 22, 2006, report of the United Nations Secretary-General (S/2006/

1019) expressed a need to address the rapidly deteriorating security situation of Sudan, Chad, and the Central African Republic and to protect civilians in the border areas of Sudan, Chad, and the Central African Republic and recommended a robust mission that "would, among other tasks: facilitate the political process; protect civilians; monitor the human rights situation; and strengthen the local judicial, police and correctional system

Whereas the December 22, 2006, report went on to recommend that the force also be mandated and equipped to deter attacks by armed groups and react preemptively to protect civilians, including refugees and internally displaced persons, with rapid reaction

capabilities; Whereas on August 30, 2006, the United Nations Security Council passed Security Coun-Resolution 1706 (2006), authorizing a multidimensional presence consisting of political, humanitarian, military and civilian police liaison officers in key locations in Chad, including in the internally displaced persons and refugee camps and, if necessary, in the Central African Republic;

Whereas continuing hostilities will undermine efforts to bring security to the Darfur region of Sudan, dangerously destabilize volatile political and humanitarian situations in Chad and the Central African Republic, and potentially disrupt progress towards

peace in southern Sudan; Whereas a December 2006 United Nations assessment mission report outlined possibilities for a mission in Chad, including a force large enough to monitor the border, deter at-

tacks, and provide civilian protection; Whereas the United Nations Security Council has requested proposals for a United Nations force in Chad and the Central African Republic to help protect and provide humanitarian assistance to tens of thousands of civilians affected by the conflict that began in Darfur; and

Whereas a technical assessment mission was dispatched in January 2007 toward that end: Now, therefore, be it

Resolved, That the Senate-

- (1) expresses concern for the more than 1,000,000 citizens of Sudan, Chad, and the Central African Republic who have been adversely affected by this interrelated violence and instability;
- (2) calls upon the Governments of Chad and Sudan-
- (A) to reaffirm their commitment to the Tripoli Declaration of February 8, 2006, and the N'Djamena Agreement of July 26, 2006;

(B) to refrain from any actions that violate

these agreements; and (C) to cease all logistical, financial, and military support to each others' insurgent groups:

(3) urges the Government of Chad to improve accountability and transparency as well as the provision of basic services to redeem the legitimacy of the Government in the eyes of its citizens:

(4) urges the Government of Chad to take action to increase political participation and to strengthen democratic institutions to ensure that all segments of society in Chad can participate in and benefit from a transparent, open, and capable government;

(5) urges the Government of Chad, the Government of Sudan, and other key regional and international stakeholders to commit to another round of inclusive political negotiations that can bring lasting peace and stability to the region;

(6) urges the Government of the Central

African Republic-

(A) to engage in constructive and inclusive dialogue with rebels in the northwestern region of the country;

(B) to hold accountable security forces engaging in human rights violations; and

(C) to strengthen government services in order to meet the needs of affected populations:

(7) calls upon the President to urge the United Nations Security Council to appoint a senior United Nations official to direct and coordinate all international humanitarian activities on both sides of Sudan's western border and expand the response to emergency needs related to the political and humanitarian situation in the Central African Republic:

(8) urges the President to utilize the resources and leverage at the President's disposal to press for the immediate deployment of an advance United Nations mission to eastern Chad and northern Central African Republic to lay the groundwork for a robust multilateral and multidimensional presence;

(9) urges the United Nations Security Council to authorize a multilateral and multidimensional peacekeeping force to eastern Chad and northern Central African Republic with the mandate and means-

(A) to ensure effective protection of civilians, particularly refugees. and internally displaced persons, including by preempting, preventing, and deterring attacks on civil-

(B) to organize regular patrols along the western border of Sudan and implement practical protection measures for asylum seekers:

(C) to maintain the civilian and humanitarian nature of the internally displaced persons and refugee camps in Chad and facilitate the efforts of aid workers;

(D) to deter, monitor, investigate, and report attacks on humanitarian personnel and assets:

(E) to provide around the clock physical security in the camps and surrounding areas, including organized patrols to guarantee freedom of movement to all civilians and humanitarian workers;

(F) to coordinate and share information with humanitarian organizations, actively preserve unhindered humanitarian access to all displaced persons, and ensure the safety of all humanitarian workers in accordance with international humanitarian law;

(G) to collect and report evidence of human rights violations and perpetrators to the United Nations on a timely and regular basis; and

(H) to support domestic and multilateral initiatives to strengthen local judicial, police, and correctional systems in Chad; and

(10) urges the President and the international community to coordinate efforts to make available sufficient resources in support of this multilateral and multidimensional mission, as well as adequate assistance to meet the continuing humanitarian and security needs of the individuals and areas most affected by this conflict.

#### EXECUTIVE SESSION

#### NOMINATION DISCHARGED

Mr. HARKIN. Mr. President, I ask unanimous consent that the Senate proceed to executive session; that the Homeland Security Committee be discharged from further consideration of PN-288, the nomination of Claude M. Kicklighter to be Inspector General for the Department of Defense, and that the nomination be placed on the calendar.

The PRESIDING OFFICER. Without objection, the nomination will be placed on the calendar.

NOMINATION OF JAMES CLAPPER TO BE UNDER SECRETARY OF DEFENSE

Mr. HARKIN. Finally, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 59, James R. Clapper, Jr., of Virginia, to be Under Secretary of Defense for Intelligence, that the nomination be confirmed, the motion to reconsider be laid on the table, the President be immediately notified of the Senate's action, and the Senate then return to legislative session.

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

The nomination, considered and confirmed, is as follows:

#### DEPARTMENT OF DEFENSE

James R. Clapper, Jr., of Virginia, to be Under Secretary of Defense for Intelligence.

#### LEGISLATIVE SESSION

The PRESIDING OFFICER. The Senate will now return to legislative session.

#### ORDERS FOR THURSDAY, APRIL 12. 2007

Mr. HARKIN. Mr. President, I ask unanimous consent that upon conclusion of the vote on passage of S. 30 today and the clearance of any items by unanimous consent, the Senate stand adjourned until 9:30 a.m., Thursday, April 12; that on Thursday, following the prayer and the pledge, the Journal of proceedings be approved to date, the morning hour be deemed to have expired, and the time for the two leaders be reserved for their use later in the day; that there then be a period of morning business for 60 minutes, with Senators permitted to speak therein for up to 10 minutes each, with the first 30 minutes controlled by the majority leader or his designee and the last 30 minutes controlled by the Republican leader or his designee; that at the close of morning business, the Senate resume the motion to proceed to S. 372 and vote on the motion to invoke cloture on the motion to proceed.

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

HOPE OFFERED THROUGH PRIN-CIPLED AND ETHICAL STEM CELL RESEARCH ACT—Continued

The PRESIDING OFFICER. The Republican leader.

Mr. McCONNELL. Mr. President, the issue of stem cell research, when those stem cells are derived from human embryos, is one of the most profound of our time. Confronting this issue means confronting a dilemma, one I am sure every one of my colleagues has grappled with as much as I have.

On the one hand, many scientists believe that research using stem cells holds the promise of one day curing diseases. But we must also remember that the embryos from which these stem cells are derived are human life. Extracting the stem cells destroys the embryo and ends that life's possibility. The moral boundaries this research crosses is greatly troubling to me, and to many others.

But what is too often missing from this important debate is a simple fact of modern science: Encouraging medical research and protecting the sanctity of life are not mutually exclusive goals.

I have always believed that biomedical research must be conducted in an ethical manner that respects human life. Now I am pleased to report that new scientific research tells us that view is more possible than ever.

This promising new research points the way out of the moral dilemma that embryonic stem cell research has al-

ways thrust us in.

Alternative methods for research and the potential for cures are often simpler and more efficient and don't require the destruction of life.

They have scientific advantages over the older method as well. That means that everybody who wants to find a cure for any of man's most devastating diseases, and find it fast, should support this form of research wholeheartedly and enthusiastically.

With our votes, this Senate can advance this promising research through the power of Federal funds, and we can happily provide those funds without fear of offending the principles of millions of Americans.

I thank my good friend from Minnesota, Senator COLEMAN, and my good friend from Georgia, Senator ISAKSON, for sponsoring this bill and giving the Senate this opportunity. I also commend Senator Specter and Senator BROWNBACK who have led the debate on the competing measure upon which we will also be voting shortly.

The Coleman-Isakson bill. S. 30, the HOPE Act, is a solution Senators from both parties can embrace and a solution that the President will sign into law.

We should leave behind the heated debates of the past, pitting the hope for a cure to end human suffering against the need to protect life at all its stages, including its earliest.

Last year, a minority of Members in the other body voted to block legislation promoting newer methods of research, such as the methods this bill will support. I don't understand that. The only explanation would be that they value the political clash and debate more than finding common ground—and more than the hope this research can bring.

But this Senate can and should move forward united on the HOPE Act, and I urge my colleagues to support it.

I want to stress to everyone just how much the possibility of finding cures for these life-altering diseases means to me personally. I have known what it is like to feel the shadow of a debilitating disease draped over one's life. As a child, I suffered from polio.

When I was 2 years old, I came down with an infection that felt a lot like the flu. But after the fever passed, my left leg had gone lame.

The only reason I am able to stand here today unaided is because of the

heroic efforts of my mother. She was not a doctor or a nurse, but she fought as hard as she knew how to save her only son from being trapped forever in a leg brace.

For 2 years, my mother put me through a physical therapy regimen taught to her by the doctors at Roosevelt Warm Springs Institute for Rehabilitation, which was, of course, founded by President Roosevelt. That was over in Warm Springs, GA. From age 2 to 4, I was not allowed to walk or to run.

But after 2 years of my mother's care, I was able to have a normal life. A lot of kids at that time in the 1940s were not so lucky. Some were paralyzed for life. Some were sentenced to an iron lung. Many died.

So believe me, Mr. President, when I say I understand the urgency to find cures for the afflictions that are today's polio. I remember when the prayers of my mother and mothers across the country were answered when Dr. Jonas Salk developed his polio vaccine in 1955. To prove the new vaccine was safe, Dr. Salk administered it to himself, his wife, and their three children. As he did so, he was asked how he could dare his and his family's lives on his new treatment. He replied:

It is courage based on confidence, not daring-and it is confidence based on experi-

Dr. Salk's wisdom ought to guide us today. The daring path is the one that asks us to destroy a life for the possibility that we might save another. If we go down that route, we are daring to ruin America's long and proud record of upholding the highest moral and ethical standards as we seek out new solutions, new cures, and new hopes.

Then there is the path of confidence—the confidence that, thanks to new technologies and new methods of research, scientists can explore the promise of embryonic stem cell research without destroying the human embryo.

Like Dr. Salk's, this confidence is based on experience—the experience of America's best scientists who are pursuing these new methods of research.

The next Dr. Jonas Salk is out there. Providing the money for these methods of research through this bill is how this Senate can help.

I am a believer in the power of science and technology to improve people's lives. I saw it firsthand as a young boy.

Like all of my colleagues, I have great hope for the cures that we will one day find. The Coleman-Isakson bill is something Senators of both parties can support. I hope that they will. Millions of Americans with loved ones in need hope that they will. And I look forward to the successful passage of this bill so America's dominance in medicine and medical technology can continue to move forward.

Mr. President, I yield the floor.

How much time is remaining on this

The PRESIDING OFFICER. There is 7 minutes 35 seconds remaining.

Mr. McCONNELL. Mr. President, I yield the remaining time on this side to the Senator from Georgia.

The PRESIDING OFFICER. The Senator from Georgia.

Mr. ISAKSON, Mr. President, I thank the leader for his support and particularly Meg Hauck who has been of immense value to us throughout the entire process of this deliberation.

I thank majority leader HARRY REID and his staff on the floor for the equitable and fair way in which they allocated time in support of this debate.

I thank Tyler Thompson on my staff, Chris Carr, Joan Kirchner, and a former member of my staff who retired but started this journey with me some time ago, Brittany Espy; also, Dr. Steven Stice at the University of Georgia, whom I have quoted many times on this floor in the course of the last 20 hours of debate, but a scientist like many in America who seeks to find cures for diseases not yet cured, who understands the potential, the vibrance, and the hope of embryonic stem cell research and found ways to develop those embryonic stem cells that are compatible with the directive of the President of 5 years ago but offer new, expanded hope and reality for research in the future.

I particularly pay a compliment to Senator Harkin who has been the floor manager on S. 5 throughout this debate. He has been very cooperative in every way in allowing us to share our thoughts on two distinct bills. S. 5 and S. 30.

I want to quote Senator GORDON SMITH. Senator SMITH, in his speech, said these bills should not be looked at as competitors but as companions. I agree with that statement because they seek to accomplish the same thing, although they travel down a highway that differs slightly.

The minority leader has accurately expressed the hopes and dreams and aspirations of all Americans, and that is for us to be a catalyst at the Federal level, to ensure that breakthroughs in health, in medicine, and in science take place, and that we are never a hindrance or obstacle to that taking place, while at the same time respecting concerns of all Americans as we go down that path.

Senator COLEMAN of Minnesota has been a tremendous leader in this effort and has brought many of the portions of S. 30 to reality through his research, through his dedication, and through his compassion. As he said so often, he and Senator HARKIN and myself understand we can do better, we can do more, we can reach out, and we can do so without crossing those lines that cause us trouble or may become an obstacle to further research.

So I conclude my remarks by thanking my colleagues in the Senate for their patience and their listening over the last 20 hours. My sincere appreciation to Senator Harkin for his cooperation, my praise for Senator COLEMAN

and his contribution, and my hope and belief that Members of the Senate will look favorably on S. 30 so we can move science forward in the research of embryonic stem cells and the hope and promise they bring to all Americans.

I yield back the remainder of the time.

The PRESIDING OFFICER. The majority leader.

Mr. REID. Mr. President, I have risen many times over the past years in support of the legislation that is now before this body, legislation that will unlock the hope of stem cell research for millions of Americans and tens of thousands of Nevadans who suffer from cancer, Alzheimer's, diabetes, Parkinson's, spinal cord injuries, heart disease, Lou Gehrig's disease, and many other diseases.

Initially, I extend my appreciation to Senator Harkin. Others worked hard on this legislation. Senator Kennedy and Senator Feinstein have done a wonderful job, but Senator Harkin, from his position as the chair and/or ranking member of the labor subcommittee on appropriations, has worked with Senator Specter—back and forth, the two of them have worked to come up with stem cell legislation.

Senator HARKIN has been a pioneer and a leader in this cause. I admire and respect him for a lot of what he has done as a longtime Member of the Senate, but I know I have more respect for him for what he has done on this legislation.

He has a tremendously good staff: Erik Fatemi, Ellen Murray, and Adrian Hatlett. They have done good work.

I have to throw a bouquet to my longtime, very important legislative advocate whom I have working for me, Carolyn Gluck. She has worked very hard on this issue. I appreciate her hard work.

I have spoken in the past about a man I met who is in a wheelchair in Boulder City, NE. This man suffers from Parkinson's. I asked him why he was in his wheelchair. He told me. After this legislation was vetoed by President Bush, he felt so bad because he believes with this legislation he will be able to walk again and not be confined to that wheelchair.

I have spoken of an 18-year-old twin from Las Vegas. She came to Washington for the first time when she was a little girl. She has suffered from juvenile diabetes for most of her life. She has had tens of thousands of needle pricks over these years—tens of thousands. But this 18-year-old girl still remains optimistic because of this legislation—optimistic for a healthy adulthood. Not only does she feel that way but her twin sister feels the same way.

I have spoken of a 23-year-old man from Henderson who just weeks after his high school graduation was in a car accident which left him a quadriplegic and whose mother wrote to me a plaintive letter hoping, praying because of this legislation her son one day will lead a more normal life.

The plight and suffering of these friends and neighbors pains my heart. But sadly, their stories are far from unique. Mr. President, 100 million Americans suffer just like them. Those who suffer are parents, are children, are friends, are our neighbors. They know that stem cell research is not a guarantee or imaginable, but they know it holds promise, they know it holds hope, real hope, yes, scientific hope. They know it because the world's leading experts tell us so.

In a letter to President Bush, 80 Nobel laureates wrote:

... 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.

This is a statement from 80 Nobel Prize winners.

According to the National Academies of Science, research on both embryonic and adult stem cells is needed "to most effectively advance the scientific and therapeutic potential of regenerative medicine."

In a letter dated a few days ago, April 9, Dr. Harold Varmus, former Director of the National Institutes of Health and now the President of Memorial Sloan-Kettering Cancer Center and also a Nobel laureate wrote:

S. 5 represents an important step forward for human embryonic stem cell research, a new field that offers great promise for the replacement of damaged cells, the understanding of the mechanics of disease, and the development of the testing of new drugs. Unfortunately, current Federal policy, in place since 2001, has not kept pace with the speed of scientific discovery and is today of limited value to the scientific community.

A man whom I have met, Dr. Jeffery Bluestone, a leading diabetes researcher and director of the Diabetes Center at the University of California, San Francisco, said:

We have made great strides in understanding the role of the immune system in diabetes, but fully pursuing both embryonic and adult stem cell research will build on our current successes and could be critical in the ultimate treatment and cure of patients who suffer from this disease.

I have spoken to him personally, and he has said we are going to cure, in the next few years, diabetes. They need this ability to go forward.

The other day I received a letter signed by more than 500 leading organizations from all around the country. It crossed the political spectrum. It includes the AARP, the American Medical Association, Novartis Pharmaceuticals, the Mayo Clinic, the Episcopal Church, Iraq Veterans for a Cure, the American Diabetes Association, Memorial Sloan-Kettering Cancer Center, Harvard University, and the Parkinson's Action Network—to name 11 of 500 organizations.

They spoke with one voice in support of S. 5. writing:

The Stem Cell Research Enhancement Act will move stem cell research forward in our country. The bill holds promise for expand-

ing medical breakthroughs and hope for millions of patients and their loved ones.

Even President Bush's own Director of the National Institutes of Health, Dr. Elias Zerhouni, endorsed the need to pursue embryonic stem cell research in addition to alternative forms of research. At a Senate hearing a few weeks ago he said:

It's not possible for me to see how we can continue the momentum of science and research with the stem cell lines we have at NIH. . . . [F]rom my standpoint as NIH director, it is in the best interests of our scientists, our science, and our country that we find ways and the nation finds a way to go full-speed across adult and embryonic stem cells equally.

Americans, by a huge majority, favor stem cell research because they see the suffering of their own friends and relatives and neighbors, similar to those described in my introduction today. They hear the opinions of experts similar to those I just mentioned and they put their faith in science.

Californians, by ballot, voted, they agreed to spend billions of their own State Treasury on stem cell research, thus challenging the obstinacy of President Bush.

Congress has supported this important cause already. Two years ago the House of Representatives passed something called H.R. 810, the Stem Cell Research Enhancement Act, with bipartisan support. Last year the Senate followed suit, as Republicans and Democrats united to pass a bill that will expand the number of stem cell lines available to federally funded researchers, while ensuring that strict ethical guidelines are followed.

Yet when we sent this bipartisan bill to President Bush's desk, he responded with a veto—his only veto in 6 years, taking away the hope for millions.

Today, as hundreds of millions of Americans wait for progress, our scientists, our innovators are marking time, waiting for President Bush to keep hope alive. The wishes of the American people and the overwhelming weight of evidence, scientific evidence, should trump the narrow ideology of President George Bush.

Yesterday and today we debated S. 5, the Stem Cell Research Enhancement Act, a bill that is similar to the one both the House and Senate passed last year with strong bipartisan support. The House passed it again this year. S. 5 authorizes federally funded research on stem cell lines derived from excess embryos from fertility clinics, embryos that would otherwise be discarded—discarded, thrown away, trashed. These potentially discarded embryos could and should be used to advance life-saving research.

At the same time, our bill acknowledges the important ethical issues at stake and enacts stronger research guidelines than exist in the President's current policy. Because we believe that all forms of promising research should move forward, S. 5 includes a provision that supports the advancement of alternative forms of stem cell research

based on the Santorum-Specter bill that passed the Senate unanimously

Tonight the Senate will also consider another measure sponsored by Senators Coleman and Isakson. Similar to our bill, theirs would promote research in alternative methods for deriving stem cells, some say. However, unlike our bill, this bill would retain the President's restrictions on stem cell research. The legislation is, in my opinion, more political than substantive, more political than scientific. The Coleman-Isakson bill is not a substitute for S. 5.

I know some of my colleagues will disagree. I am not going to vote for it. I think S. 30 is a cover vote, and I am not going to provide any cover. S. 5 is the only bill being discussed that will lift the restrictions that are impeding scientific research and can lead to new treatments and cures of many dread conditions and diseases. For the 100 million Americans who suffer from diseases that could be treated as a result of stem cell research, there is simply no alternative to S. 5.

By supporting the Stem Cell Research Enhancement Act, we are renewing our faith in society's steady march forward. Whether expanding our frontiers, putting a man on the Moon. or mapping the human genome, America has always embraced great scientific challenges that hold even greater promise. It is who we are and it is a commitment to the American people that we must honor.

Jonas Salk, a great American scientist who moved science forward regarding the dread polio or, as they called it, infantile paralysis, when he invented the vaccine, once said, "Our greatest responsibility is to be good ancestors.

If we give our scientists the tools to succeed and give hope to the millions who suffer, we will be doing just that, good ancestors.

I yield any time I have.

Have the yeas and nays been ordered? The PRESIDING OFFICER. They have not.

Mr. REID. I ask for the yeas and

The PRESIDING OFFICER, Is there a sufficient second? There is a sufficient second.

The yeas and nays were ordered.

Mr. REID. Also, before the Chair enters an order. I ask for the yeas and nays on the second vote that we have this evening.

The PRESIDING OFFICER. Is there a sufficient second? There is a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. Under the previous order, the two bills will be read for the third time, en bloc.

The bills (S. 5 and S. 30) were ordered to be engrossed for a third reading and were read the third time, en bloc.

The PRESIDING OFFICER. The bill (S. 5) having been read the third time, the question is, Shall the bill pass?

The yeas and nays have been ordered.

The clerk will call the roll. The legislative clerk called the roll.

Mr. DURBIN. I announce that the Senator from Connecticut (Mr. Dodd), the Senator from South Dakota (Mr. JOHNSON), and the Senator from Louisana (Ms. LANDRIEU) are necessarily absent.

I further announce that, if present and voting, the Senator from Louisana (Ms. Landrieu) would vote "vea."

The PRESIDING OFFICER CANTWELL). Are there any other Senators in the Chamber desiring to vote? The result was announced—yeas 63,

nays 34, as follows:

# [Rollcall Vote No. 127 Leg.]

#### YEAS-63

Akaka	Feinstein	Murkowski
Alexander	Gregg	Murray
Baucus	Harkin	Nelson (FL)
Bayh	Hatch	Obama
Bennett	Hutchison	Pryor
Biden	Inouye	Reed
Bingaman	Kennedy	Reid
Boxer	Kerry	Rockefeller
Brown	Klobuchar	Salazar
Burr	Kohl	Sanders
Byrd	Lautenberg	Schumer
Cantwell	Leahy	Smith
Cardin	Levin	Snowe
Carper	Lieberman	Specter
Clinton	Lincoln	Stabenow
Cochran	Lott	Stevens
Collins	Lugar	Tester
Conrad	McCain	Warner
Dorgan	McCaskill	Webb
Durbin	Menendez	Whitehouse
Feingold	Mikulski	Wyden

#### NAYS-34

#### NOT VOTING-3

Johnson Landrieu

The PRESIDING OFFICER. The year are 63; the nays are 34. Under the previous order of March 29, 2007, requiring 60 votes for passage of this bill, the bill is passed.

The bill (S. 5) was passed, as follows: S. 5

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

# SECTION 1. SHORT TITLE.

This Act may be cited as the "Stem Cell Research Enhancement Act of 2007".

# SEC. 2. HUMAN EMBRYONIC STEM CELL RE-SEARCH.

Part H of title IV of the Public Health Service Act (42 U.S.C. 289 et seq.) is amended by inserting after section 498C the following: "SEC. 498D. HUMAN EMBRYONIC STEM CELL RE-

# SEARCH.

"(a) IN GENERAL.—Notwithstanding any other provision of law (including any regulation or guidance), the Secretary shall conduct and support research that utilizes human embryonic stem cells in accordance with this section (regardless of the date on which the stem cells were derived from a human embryo).

"(b) ETHICAL REQUIREMENTS.—Human embryonic stem cells shall be eligible for use in

any research conducted or supported by the Secretary if the cells meet each of the following:

"(1) The stem cells were derived from human embryos that have been donated from in vitro fertilization clinics, were created for the purposes of fertility treatment, and were in excess of the clinical need of the individuals seeking such treatment.

"(2) 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.

"(3) The individuals seeking fertility treatment donated the embryos with written informed consent and without receiving any financial or other inducements to make the donation.

"(c) Guidelines.—Not later than 60 days after the date of the enactment of this section, the Secretary, in consultation with the Director of NIH, shall issue final guidelines to carry out this section.

"(d) REPORTING REQUIREMENTS.—The Secretary shall annually prepare and submit to the appropriate committees of the Congress a report describing the activities carried out under this section during the preceding fiscal year, and including a description of whether and to what extent research under subsection (a) has been conducted in accordance with this section.".

#### SEC. 3. ALTERNATIVE HUMAN PLURIPOTENT STEM CELL RESEARCH.

Part H of title IV of the Public Health Service Act (42 U.S.C. 284 et seq.), as amended by section 2, is further amended by inserting after section 498D the following:

#### "SEC. 498E. ALTERNATIVE HUMAN PLURIPOTENT STEM CELL RESEARCH.

"(a) IN GENERAL.—In accordance with section 492, the Secretary shall conduct and support basic and applied research to develop techniques for the isolation, derivation, production, or testing of stem cells that, like embryonic stem cells, are capable of producing all or almost all of the cell types of the developing body and may result in improved understanding of or treatments for diseases and other adverse health conditions, but are not derived from a human embryo.

"(b) Guidelines.—Not later than 90 days after the date of the enactment of this section, the Secretary, after consultation with the Director, shall issue final guidelines to implement subsection (a), that-

"(1) provide guidance concerning the next steps required for additional research, which shall include a determination of the extent to which specific techniques may require additional basic or animal research to ensure that any research involving human cells using these techniques would clearly be consistent with the standards established under this section:

"(2) prioritize research with the greatest potential for near-term clinical benefit; and

"(3) consistent with subsection (a), take into account techniques outlined by the President's Council on Bioethics and any other appropriate techniques and research.

"(c) Reporting Requirements.—Not later than January 1 of each year, the Secretary shall prepare and submit to the appropriate committees of the Congress a report describing the activities carried out under this section during the fiscal year, including a description of the research conducted under this section.

"(d) RULE OF CONSTRUCTION.-Nothing in this section shall be construed to affect any policy, guideline, or regulation regarding embryonic stem cell research, human cloning by somatic cell nuclear transfer, or any other research not specifically authorized by this section.

"(e) Definition .-

"(1) IN GENERAL.—In this section, the term 'human embryo' shall have the meaning given such term in the applicable appropriations Act.

"(2) APPLICABLE ACT.—For purposes of paragraph (1), the term 'applicable appropriations Act' means, with respect to the fiscal year in which research is to be conducted or supported under this section, the Act making appropriations for the Department of Health and Human Services for such fiscal year, except that if the Act for such fiscal year does not contain the term referred to in paragraph (1), the Act for the previous fiscal year shall be deemed to be the applicable appropriations Act.

"(f) AUTHORIZATION OF APPROPRIATIONS.— There is authorized to be appropriated such sums as may be necessary for each of fiscal years 2008 through 2010, to carry out this section."

Mr. McCONNELL. I move to reconsider the vote and to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The question is on the passage of S. 30. Under the previous order, there will be two minutes evenly divided before the vote. Who yields time?

The Senator from Minnesota is recognized.

Mr. COLEMAN. Madam President, I rise in favor of S. 30. Last year the Senate passed a similar measure, Specter-Santorum, 100 to nothing. The reality is that S. 30 goes beyond what Specter-Santorum did. When the dust settles and S. 5 is vetoed, the only real opportunity to expand pluripotent embryonic stem cell research is through S. 30. I ask my colleagues to please put politics aside and to do the right thing.

I plead with my colleagues, on behalf of all of those who have looked to us and asked for hope to move the science of stem cell research forward in a way that does not divide but unifies, do what we did last year, 100 to nothing, keep hope alive, vote in favor of S. 30.

The PRESIDING OFFICER. The Senator from Iowa.

Mr. HARKIN. Madam President, the bill we just passed, S. 5, does everything that S. 30 does. That was already said in the debate the other day. S. 5 has already passed by an overwhelming vote. Everything that S. 5 does is in S. 30. So the next vote really doesn't make any difference one way or the other, because by passing S. 5, we allow to be done what is done in S. 30.

Secondly, I have always taken the position that we should not tell scientists what to do and what not to do within the ethical guidelines we have established. What S. 30 says is: Go ahead and investigate. I don't know if using so-called dead embryos and extracting stem cells will work. I am not a scientist. But I don't want to handcuff the scientists and tell them they can't research it. As far as I am concerned, a vote for S. 30 is saying again what we committed to do in S. 5.

The PRESIDING OFFICER. All time has expired. The question is now on the passage of S. 30. The yeas and nays

have been ordered. The clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. DURBIN. I announce that the Senator from Connecticut (Mr. DODD) and the Senator from South Dakota (Mr. JOHNSON) are necessarily absent.

The PRESIDING OFFICER. Are there any other Senators in the Chamber desiring to vote?

The result was announced—yeas 70, nays 28, as follows:

#### [Rollcall Vote No. 128 Leg.]

#### YEAS-70

Akaka	Dole	McCaskill
Alexander	Domenici	McConnell
Allard	Dorgan	Murkowski
Bennett	Ensign	Nelson (NE)
Biden	Enzi	Pryor
Bond	Graham	Reed
Brown	Grassley	Roberts
Brownback	Gregg	Salazar
Bunning	Hagel	Sessions
Burr	Harkin	Shelby
Byrd	Hatch	Smith
Carper	Hutchison	
Casey	Inhofe	Snowe
Chambliss	Isakson	Specter
Coburn	Kennedy	Stevens
Cochran	Kerry	Sununu
Coleman	Klobuchar	Thomas
Collins	Kyl	Thune
Conrad	Landrieu	Vitter
Corker	Leahy	Voinovich
Cornyn	Lott	Warner
Craig	Lugar	Webb
Crapo	Martinez	Whitehouse
DeMint	McCain	

#### NAYS-28

#### NOT VOTING-2

Dodd Johnson

The PRESIDING OFFICER. On this vote, the yeas are 70; the nays are 28. Under the order of March 29, 2007, requiring 60 votes for the passage of this bill, the bill is passed.

The bill (S. 30) was passed, as follows: S. 30

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

#### SECTION 1. SHORT TITLE.

This Act may be cited as the "Hope Offered through Principled and Ethical Stem Cell Research Act" or the "HOPE Act".

#### SEC. 2. PURPOSES.

It is the purpose of this Act to-

(1) intensify research that may result in improved understanding of or treatments for diseases and other adverse health conditions; and

(2) promote the derivation of pluripotent stem cell lines without the creation of human embryos for research purposes and without the destruction or discarding of, or risk of injury to, a human embryo or embryos other than those that are naturally dead.

#### SEC. 3. HUMAN PLURIPOTENT STEM CELL RE-SEARCH.

Part H of title IV of the Public Health Service Act (42 U.S.C. 289 et seq.) is amended by inserting after section 498C the following:

#### "SEC. 498D. HUMAN PLURIPOTENT STEM CELL RESEARCH.

"(a) IN GENERAL.—The Secretary shall conduct and support basic and applied research to develop techniques for the isolation, derivation, production, or testing of stem cells, including pluripotent stem cells that have the flexibility of embryonic stem cells (whether or not they have an embryonic source), that may result in improved understanding of or treatments for diseases and other adverse health conditions, provided that the isolation, derivation, production, or testing of such cells will not involve—

"(1) the creation of a human embryo or embryos for research purposes; or

"(2) the destruction or discarding of, or risk of injury to, a human embryo or embryos other than those that are naturally dead.

"(b) GUIDELINES.—Not later than 90 days after the date of the enactment of this section, the Secretary, after consultation with the Director of NIH, shall issue final guidelines that.—

"(1) provide guidance concerning the next steps required for additional research, which shall include a determination of the extent to which specific techniques may require additional animal research to ensure that any research involving human cells using these techniques would clearly be consistent with the standards established under subsection (a):

(2) prioritize research with the greatest potential for near-term clinical benefit;

"(3) consistent with standards established under subsection (a), take into account techniques outlined by the President's Council on Bioethics and any other appropriate techniques and research; and

"(4) in the case of research involving stem cells from a naturally dead embryo, require assurances from grant applicants that no alteration of the timing, methods, or procedures used to create, maintain, or intervene in the development of a human embryo was made solely for the purpose of deriving the stem cells.

"(c) REPORTING REQUIREMENTS.—Not later than January 1 of each year, the Secretary shall prepare and submit to the appropriate committees of the Congress a report describing the activities carried out under this section during the fiscal year, including a description of the research conducted under this section.

"(d) RULE OF CONSTRUCTION.—Nothing in this section shall be construed as altering the policy in effect on the date of enactment of this section regarding the eligibility of stem cell lines for funding by the National Institutes of Health.

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

``(f) Definitions.—In this section:

"(1) NATURALLY DEAD.—The term 'naturally dead' means having naturally and irreversibly lost the capacity for integrated cellular division, growth, and differentiation that is characteristic of an organism, even if some cells of the former organism may be alive in a disorganized state.

"(2) HUMAN EMBRYO OR EMBRYOS.—The term 'human embryo or embryos' includes any organism, not protected as a human subject under part 46 of title 45, Code of Federal Regulations, as of the date of enactment of this section, that is derived by fertilization, parthenogenesis, cloning, or any other means from one or more human gametes or human diploid cells.

"(3) RISK OF INJURY.—The term 'risk of injury' means subjecting a human embryo or embryos to risk of injury or death greater than that allowed for research on fetuses in

utero under section 46.204(b) of title 45, Code of Federal Regulations, and section 498(b) of this Act.".

# SEC. 4. NATIONAL AMNIOTIC AND PLACENTAL STEM CELL BANK.

(a) IN GENERAL.—The Secretary of Health and Human Services shall enter into a contract with the Institute of Medicine for the conduct of a study to recommend an optimal structure for an amniotic and placental stem cell bank program and to address pertinent issues to maximize the potential of such technology, including collection, storage, standards setting, information sharing, distribution, reimbursement, research, and outcome measures. In conducting such study. the Institute should receive input from relevant experts including the existing operators of federal tissue bank programs and the biomedical research programs within the Department of Defense.

(b) REPORT.—Not later than 180 days after the date of enactment of this Act, the Institute of Medicine shall complete the study under subsection (a) and submit to the Secretary of Health and Human Services and the appropriate committees of Congress a report on the results of such study.

Mr. COLEMAN. I move to reconsider the vote.

Mr. BROWNBACK. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The Senator from Louisiana.

#### VOTE EXPLANATION

Ms. LANDRIEU. Madam President, I want the record to reflect that I would have voted "aye" on the previous vote on S. 5 had I been able to be here. I was traveling today for a funeral and was unable to get back. Subsequently, I voted "aye" on the bill that just passed. But I would like the record to reflect that had I been able to make the first vote, I would have voted "aye."

# OBSERVING YOM HASHOAH, HOLOCAUST MEMORIAL DAY

Ms. LANDRIEU. Madam President, I ask unanimous consent that the Foreign Relations Committee be discharged from further consideration of S. Res. 142, and that the Senate then proceed to its immediate consideration.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will report the resolution by title.

The legislative clerk read as follows:

A resolution (S. Res. 142) observing Yom Hashoah, Holocaust Memorial Day, and calling on the remaining member countries of the International Commission of the International Tracing Service to ratify the May 2006 amendments to the 1955 Bonn Accords immediately to allow open access to the Bad Arolsen archives.

There being no objection, the Senate proceeded to consider the resolution.

Ms. LANDRIEU. Madam President, I ask unanimous consent that the resolution be agreed to, the preamble be agreed to, the motions to reconsider be laid upon the table, and that any statements relating thereto be printed in the RECORD, without further intervening action or debate.

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

The resolution (S. Res. 142) was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

#### S. RES. 142

Whereas April 15, 2007, marks the international observance of Yom Hashoah, Holocaust Memorial Day, a day to remember and mourn the millions who died during the Holocaust of World War II;

Whereas thousands of Holocaust survivors, historians, and researchers are being denied access to files, located at Bad Arolsen, Germany, that tell the story of unspeakable crimes committed by the Nazis;

Whereas the Bad Arolsen archives contain 30,000,000 to 50,000,000 pages of documents that record the individual fates of over 17,000,000 victims of Nazi persecution;

Whereas the Bad Arolsen archives are administered by the International Tracing Service, which in turn is supervised by an international commission composed of 11 member countries established by the Agreement Constituting an International Commission for the International Tracing Service, signed at Bonn June 6, 1955 (6 UST 6186) (commonly known as the "Bonn Accords");

Whereas the member countries of the International Commission are the United States, Israel, Belgium, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Poland, and the United Kingdom:

Whereas, in May 2006, after years of delay, the member countries of the International Commission commendably agreed to amend the Bonn Accords to make the Bad Arolsen archives public for the first time and agreed to place digitized copies of the documents in the archives at Holocaust research centers in other countries, including the United States Holocaust Memorial Museum;

Whereas the May 2006 amendments will become effective only after each of the 11 member countries completes the ratification process;

Whereas the United States, the United Kingdom, Israel, Poland, and the Netherlands have completed the ratification process: and

Whereas opening the Bad Arolsen archives is an urgent matter: Now, therefore, be it

Resolved, That the Senate-

(1) joins people around the world in observing Yom Hashoah, Holocaust Memorial Day, and mourning the millions who were lost during the Holocaust;

(2) commends the United States, the United Kingdom, Israel, Poland, and the Netherlands, as the member countries of the International Commission of the International Tracing Service that have completed the ratification of the May 2006 amendments to the Agreement Constituting an International Commission for the International Tracing Service, signed at Bonn June 6, 1955 (6 UST 6186) (commonly known as the "Bonn Accords");

(3) calls on Belgium, France, Germany, Greece, Italy, and Luxembourg, the member countries of the International Commission that have not yet ratified the May 2006 amendments to the Bonn Accords, to do so immediately;

(4) calls on the International Commission to approve the immediate distribution of copies of the documents from the Bad Arolsen archives that have already been digitized when the International Commission meets in Amsterdam in May 2007; and

(5) respectfully requests the Secretary of the Senate to transmit copies of this resolution to the Secretary of State and to the ambassadors representing each of the member countries of the International Commission in the United States.

# ADJOURNMENT UNTIL 9:30 A.M. TOMORROW

The PRESIDING OFFICER. Under the previous order, the Senate stands adjourned until tomorrow at 9:30 a.m.

Thereupon, the Senate, at 6:42 p.m., adjourned until Thursday, April 12, 2007, at 9:30 a.m.

#### NOMINATIONS

Executive nominations received by the Senate April 11, 2007:

#### DEPARTMENT OF STATE

PETER MICHAEL MCKINLEY, OF VIRGINIA, A CAREER MEMBER OF THE SENIOR FOREIGN SERVICE, CLASS OF MINISTER-COUNSELOR, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO THE REPUBLIC OF PERU.

#### DEPARTMENT OF VETERANS AFFAIRS

CHARLES L. HOPKINS, OF MASSACHUSETTS, TO BE AN ASSISTANT SECRETARY OF VETERANS AFFAIRS (OPERATIONS, PREPAREDNESS, SECURITY AND LAW ENFORCEMENT). (NEW POSITION)

#### PUBLIC HEALTH SERVICE

THE FOLLOWING CANDIDATES FOR PERSONNEL ACTION IN THE REGULAR COMPONENT OF THE PUBLIC HEALTH SERVICE SUBJECT TO QUALIFICATIONS THEREFORE AS PROVIDED BY LAW AND REGULATIONS:

# To be medical director

ARTURO H. CASTRO
ROBERT F. CHESBRO, JR.
ISABELLA A. DANEL
AURELIO GALATI
EVE M. LACKRITZ
MARY L. LINDEGREN
BORIS D. LUSHNIAK
FRANK J. MAHONEY
BOYD W. MANGES
ELAINE MILLER
JOHN S. MORAN
MANETTE T. MALACANE NIU
STEPHEN J. RITH-NAJARIAN
LAURENCE M. SLUTSKER
DAVID L. SWERDLOW
ROBERT P. WISE

# To be surgeon

SCOTT F. DOWELL
KIMBERLEY K. FOX
BROCKTON J. HEFFLIN
HUMBERTO HERNANDEZ-APONTE
DANIEL B. JERNIGAN
RONALD W. JOHNSON
PETER H. KILMARX
SHARON L. LUDWIG
MARK A. MILLER
ABRAHAM G. MIRANDA
ABELARDO MONTALVO
CYNTHIA G. WHITNEY
STEVEN S. WOLF
STEPHANIE ZAZA

# To be senior assistant surgeon

JENNIFER L. BETTS
MATTHEW A. CLARK
FELICIA L. COLLINS
SRIPARNA D. DATTA
AL-KARIM A. DHANJI
PHILIP T. FARABAUGH
DANIEL R. FEIKIN
COY B. FULLEN
BRUCE W. FURNESS
MELISSA A. GREENWALD
SHANNON L. HADER
RICHARD S. HARRIS
NARAYAN NAIR
MICHALE D. RATZLAFF
REBECCA L. WERNER
MITCHELL I. WOLFE

To be assistant surgeon

ANTHONY M. DUNNIGAN TOBE M. PROPST

To be dental director

RONALD E. BAJUSCAK ROBERT A. CABANAS MICHAEL L. CAMPSMITH TIMOTHY L. LOZON NICHOLAS S. MAKRIDES DEAN A. MALLOY DAVID M. MCCOLLOUGH HIROFUMI NAKATSUCHI WILLIAM V. STENBERG

To be dental surgeon

THOMAS B. BREWER DAVID L. BRIZZEE LISA W. CAYOUS MARK S. ELLIOTT MARK R. FREESE PAUL H. JOHNSON MICHAEL J. MINDIOLA DEBORAH PHILO-COSTELLO MARION E. ROOTS DONALD L. ROSS JAMES M. SCHAEFFER WILNETTA A. SWEETING

To be senior assistant dental surgeon

KENNETH S. CHO
CIELO C. DOHERTY
ROBERT T. DVORAK
DAVID C. FEIST
RONALD L. FULLER
STEVEN K. RAYES
KRISTIN SHAHAN SAREAULT
ROBIN G. SCHEPER
JOHN R. SMITH
ANTHONY VITALI
VALARIE D. WILSON
BENJAMIN C. WOOTEN

To be nurse director

FAY E. BAIER
JANICE M. CARICO
CLARA HENDERSON COBB
KIRK L. HOPINKA
KITTY R. MACFARLANE
RUSS P. METLER
CATHY J. WASEM

To be nurse officer

To be not be not seen as a constant of the notation of the not

To be senior assistant nurse officer

To be senior assist

DIANE M. AKER
BONNE J. ALLARD
BELINDA E. BACON
KELLY L. BARRY
KIMBERLY M. DEFFINBAUGH
GUADALUPE R. DEMSKE
IRENE H. DUSTIN
JUDY L. GLENN
WILLIAM C. GUINN
DENNIS R. HAMMOND
JULIE D. KING
CHAD W. KORATICH
KAREN L. KOSAR
MOIRA G. MCGUIRE
CAROLYN J. MCKEOWN
ANTHONY E. MILLKAMP
MADELYN RENTERIA
CARMELITA SORRELMAN
AMY O. TAYLOR

To be assistant nurse officer

MICHELLE E. BROWN-STEPHENSON CHANNEL R. MANGUM HUNG P. PHAN

To be engineer director

To be engarther Mandal J. Hutson
Arthur M. Anderson
Mitchell W. Constant
Eric L. Crump
Danielle Devoney
Matthew N. Dixon
Robert J. Drummond
Thomas J. Heintzman
Michael S. Jensen
Louis A. Lightner, Jr.
Jimmy P. Magnuson
Kevin B. Milne
Mary C. Miner
Kathy M. Ponselett
Daniel D. Reitz
David P. Shoultz
Mark R. Thomas
Andrew J. Zajac
Anthony T. Zimmer

To be senior ass:

To be senior assistant engineer officer

MARK A. CALKINS
JAMIE D. NATOUR
DENMAN K. ONDELACY
JEFFREY S. REYNOLDS
HILDA F. SCHAREN-GUIVEL
ERIC Y. SHIH
NATHAN C. TATUM
CHARLES H. WEIR
DANIEL H. WILLIAMS

To be scientist director

MARY E. BIRCH

G. SHAY FOUT DAVID HUSSONG SHARON O. WILLIAMS-FLEETWOOD MILDRED M. WILLIAMS-JOHNSON

To be scientist

DRUE H. BARRETT RICKIE R. DAVIS ANN M. MALARCHER CLEMENT J. WELSH

To be senior assistant scientist

CARMA S. AYALA DAPHNE B. MOFFETT MEREDITH A. REYNOLDS ROBERT L. WILLIAMS

To be environmental health director

RICHARD W. DURRETT JAMES S. SPAHR

To be environmental health officer

DANIEL ALMAGUER
CLINT R. CHAMBERLIN
NANCY J. COLLINS
GARY J. GEFROH
GREGORY M. KINNES
JOHN P. LEFFEL
KEVIN D. MEEKS
MICHAEL A. NOSKA
DORIS RAVENELL-BROWN
SARATH B. SENEVIRATNE
L. J. DAVID WALLACE III
BERRY F. WILLIAMS
RONALD D. ZABROCKI

To be senior assistant environmental health officer

CALVIN K. COOK VIVIAN GARCIA BRIAN E. HROCH KATHY S. SLAWSON DONALD B. WILLIAMS, JR.

To be veterinary director

RONALD B. LANDY

To be senior assistant veterinary officer

JENNIFER H. MCQUISTON

To be pharmacist director

GARY W. BLAIR MICHAEL E. MARCARELLI JAMES P. STABLES

To be pharmacist

MICHAEL R. ALLEN
ROBERT A. ANDERSON
CHRISTINE E. CHAMBERLAIN
MICHAEL S. FORMAN
MICHAELS. FORMAN
MICHELE F. GEMELAS
JILL G. GEOGHEGAN
KAREN G. HIRSHFIELD
REBECCA J. LIDEL
JOSEPHINE A. LYGHT
WILLIAM B. MCLIVERTY
AMY L. MINNICK
SHELLEY F. PAULSON
ANNIE L. REINER
PATRICIA F. RODGERS
SHEILAE L. VEIKUNE
EARL D. WARD, JR.
KELVIN N. WHITEHEAD
DEBORAH F. YAPLEE

To be senior assistant pharmacist

JAMES L. BRESETTE
JAMES E. BRITTON, JR.
ROSALIND P. CHORAK
RICHARD O. DECEDERFELT
GARY L. ELAM
JENNIFBR E. FAN
WALTER L. FAVA
PAUL E. HUNTZINGER
EUN S. JEON
TENA L. JESSING
MARIANN KOCSIS
REY V. MARBELLO
ERIC M. MUELLER
LISA D. OLIVER
LISA D. OLIVER
LISA P. OLSON
ERIC J. POLCZYNSKI
LISA M. ROSE
KASSANDRA C. SHERROD
GREGORY W. SMITH
DERBE E. TESCHLER
STACEY A. THORNTON
JACQUELINE H. WARE
CASSONDRA M. WHITE

To be assistant pharmacist

KRISTEN L. MAVES

To be dietitian director

EDITH M. CLARK

To be dietitian

JO ANN A. HOLLAND DAVID M. NELSON CONNIE Y. TORRENCE-THOMAS

To be senior assistant dietitian

ALEXANDRA M. COSSI

JEAN M. KELAHAN KIRSTEN M. WARWAR GRAYDON T. YATABE

To be senior assistant therapist

MARY BETH DORGAN LAURA M. GROGAN RONALD R. WEST

To be health services director

EPIFANIO ELIZONDO JEREMIAH P. KING

To be health services officer

TONI A. BLEDSOE TRACI L. GALINSKY DARLENE A. HARRIS BRIAN T. HUDSON MALCOLM B. JOHNS GAY E. NORD CARMENCITA T. PALMA STEVEN A. SMITH DOROTHY E. STEPHENS

To be senior assistant health services officer

JULIE WOFFORD BLACK DEBORAH A. BOLING MICHAEL A. CANDREVA BRIAN K. CULLIGAN LA CRUZ DAVID S. DE JENNIFER S. GANNON BONNIE L. GRANT ARNOLD L. HOWARD SCOTT A. MIDDLEKAUFF GODWIN O. ODIA RENEE S. ROBERSON ELIZABETH A. SCOTT LISA D. STARNES

To be assistant health services officer

ALLYSON M. ALVARADO CHERYL L. FAJARDO BETH ANNE HENSON RYAN D. HILL DAVID J. LUSCHE

THE FOLLOWING CANDIDATES FOR PERSONNEL ACTION IN THE REGULAR COMPONENT OF THE PUBLIC HEALTH SERVICE SUBJECT TO QUALIFICATIONS THEREFORE AS PROVIDED BY LAW AND REGULATIONS:

To be medical director

DAVID G. ADDISS
DAVID R. ARDAY
WILLIAM B. BAINE
MARK D. BONNELL
LYNN A. BOSCO
ROBERT F. BREIMAN
RALPH T. BRYAN
GEOFFREY M. CALVERT
RICHARD J. CALVERT
DAVID B. CANTON
ROBERT L. DANNER, JR.
SCOTT D. DEITCHMAN
MARK E. DELOWERY
MAURA K. DOLLYMORE
LUIS G. ESCOBEDO
KAREN M. FARIZO
STEVEN K. GALSON
OLGA GRAJALES
DAVID M. HARLAN
GEORGE H. HAYS, JR.
AUGUSTA E. HAYS
CLARE HELMINIAK
PAUL J. HIGGINS
NOREEN A. HYNES
ROBERT H. JOHNSON
DEFFREY L. JONES
MARY L. KAMB
WILLIAM J. KASSLER
SANDRA L. KWEDER
WILLIAM C. LEVINE
JOSEPH MULINARE
PATRICK J. OCONNOR
BRADLEY A. PERKINS
ROSSANNE M. PHILEN
ROBERT E. QUICK III
GARY F. ROSENBERG
DAVID C. RUTSTEIN
MARCEL E. SALIVE
ANNEL M. SOSIN
JORDAN W. TAPPERO
JUDITH THIERRY
WALTER W. WILLIAMS
DAWN L. WYLLIE

To be senior surgeon

CHARLES H. BEYMER
SUSAN BLANK
MICHAEL J. BOQUARD
ALICE Y. BOUDREAU
J RUSSELL BOWMAN
JOANNA BUFFINGTON
WILLIE CACHO
JOSEPH M. CHEN
PHILIP E. COYNE, JR.
MARSHA G. DAVENPORT
HERMAN A. DOBBS III
MICHAEL M. ENGELGAU
THOMAS W. HENNESSY
MICHAEL F. IADEMARCO
NEWTON E. KENDIG

ALI S. KHAN ALI S. KHAN
DENISE T. KOO
MARK N. LOBATO
VERNON A. MAAS
ERIC A. MANN
AUBREY K. MILLER
JEFFREY B. NEMHAUSER JEFFREY B. NEMHAUS
LOIS R. NISKA
ELENA H. PAGE
MARK J. PAPANIA
MONICA E. PARISE
LYNN A. PAXTON
CARLOS M. RIVERA
DIANA M. RODRIGUEZ
MARC A. SAFRAN
ABIGALI M. SHEFER
ROBERT J. SIMONDS
DAVID H. SNIADACK
MARK J. TEDESCO MARK J. TEDESCO JONATHAN T. WEBER JANE R. ZUCKER

# To be surgeon

JOHN M. BALINTONA
ROXANNE Y. BARROW
DAHNA L. BATTS
MARK E. BEATTY
ELISE M. BELITRAMI
KENNETH L. BROOKS
MICHAEL G. BRUCE
ANTHONY B. CAMPBELL
CHRISTINE G. CASEY
JEFFREY M. CURTIS
PATRICK H. DAVID
HEIDI C. ERICKSON
JAMES D. HEFFELFINGER
DAVID C. HOUGHTON
TERRI B. HYDE
DENISE J. JAMIESON
DAVID E. JOHNSON
VENKATARAMA R. KOPPAKA
JAMES F. LANDO
SUSAN A. LIPPOLD
SHERYL B. LYSS
JULIE M. MAGRI
STEPPHANIE E. MARKMAN
LISA L. MATHIS
JOHN C. MOUS JOHN M. BALINTONA JULIE M. MAGRI
STEPHANIE E. MARKMAN
LISA L. MATHIS
JOHN C. MOHS
KIMBERLY S. MOHS
ROCHELLE M. NOLTE
WILLIAM H. ORMAN
KATHERINE C. PALATIANOS
BERNARD W. PARKER
FARAH M. PARVEZ
ALEXANDER K. ROWE
STEPHEN M. RUDD
MARC A. SAFRAN
SCOTT S. SANTIBANEZ
MONA SARAIYA
MICHAEL E. TOEDT
ALICIA GARCIA VANTRAN
SEYMOUR G. WILLIAMS
JASON J. WOO
CATHERINE L. WOODHOUSE

To be dent

# To be dental director

To be de JEROME B. ALFORD WILLIAM E. ATWOOD DONALD C. BELCHER THOMAS L. BERMEL ARTURO BRAVO JAMES L. CARPENTER A. ISABEL GARCIA MICHAEL F. GMUREK NORMAN W. JAMES THOMAS A. KORBITZ RAYMOND F. LALA MARGARET L. LAMY PATRICK D. MCDERMOTT STEVE J. MESCHER GARY L. PANNABECKER FORREST H. PEEBLES LYNN G. PRICE LEE S. SHACKELFORD DARLENE A. SORRELL WALTON L. VANHOOSE JOHN T. ZIMMER

# To be senior dental surgeon

To be senice

ARLAN K. ANDREWS
MICHAEL C. ARNOLD
TIMOTHY S. BISHOP
MARK R. BOGNAR
HERMAN J. CAMPBELL
JEFFREY M. CAROLLA
RANDOLPH A. COFFEY
JEFFERY R. COMBS
BRET A. DOWNING
MARKUS P. ELDRED
PAUL J. FARKAS
JANIE G. FULLER
CARL J. GUSTKE
GEORGE HADDY
JOSEPH G. HOSEK
RUTH M. KLEVENS
MICHAEL R. KWASINSKI
STEVEN J. LIEN
TANIA M. MACIAS
RANDALL B. MAYBERRY
ADELE M. MEGLI
MARY G. MURPHY
DEBORAH R. NOYES
SAMUEL J. PETRIE
PETER M. PRESTON
JOSE C. RODRIGUEZ
RICKEY S. THOMPSON

#### RICK D. VACCARELLO

#### To be dental surgeon

TIMOTHY L. AMBROSE RONALD C. COX BRYAN S. DAWSON ROBERT G. GOOD STANLEY K. GORDON CLAY D. HENNING LAURA J. LUND GELYNN L. MAJURE GLENN P. MARTIN GLENN P. MARTIN
KATHLEEN M. OCONNOR-MORAN
JAMES J. PALERINO
ALAN C. PETERSON
TIMOTHY L. RICKS
MARION E. ROOTS
ROBERT P. SEWELL
TODD M. TOVAREK
LYNN C. VAN PELT
CLAUDIA G. VONHENDRICKS
CHARLES M. WEBER

# To be nurse director

ELIZABETH A. AUSTIN BETTY L. CHERN-HUGHES LESLIE DENISE COOK COOPER LESLIE DENISE COOK C MARY P. COUIG ROBERT E. EATON RUSSELL L. GREEN KAREN D. HENCH MARY R. INGRAM ARMANDO S. LEDESMA CAROL L. LINDSEY JOHN S. MOTTER NANETTE H. PEPPER NANETTE H. PEPPER
JACQUELYN A. POLDER
BONTA S. PYLER
DEBORAH C. ROMERO
PAUL A. SATTLER
ANNETTE C. SIEMENS
NADINE M. SIMONS
PELAGIE C. SNESRUD
MARJORIE LYNN WITMAN

ANDREA P. ARGABRITE

#### To be senior nurse officer

TO be senior nw.
ANDREA P. ARGABRITE
JUDITH E. ARNDT
ANA MARIE L. BALINGIT-WINES
GARY W. BANGS
JANICE A. BENNETT
EILEEN D. BONNEAU
DONNA N. BROWN
ROBYN BROWN
MARY E. BRUK
DORIS L. CLARKE
AMY S. COLLINS
MARIA L. DINGER
SANDRA DODGE
LESLIE D. DYE
MARY E. FAIRBANKS
LESLIE D. DYE
MARY F. FARRBANKS
JEAN FROST
EDWIN M. GALAN
LOUIS J. GLASS
LONNA J. GUTTERREZ
CINDY E. HAMLIN
KIMBERLAE A. HOUK
LAURIE S. IRWIN-PINKLEY
PHILIP JARRES
VERLISS L. KELLER-MILLER
DAVID W. KELLY
DONNA M. KENISON
DEBORAH KLEINPELD
CAROL L. KONCHAN
MARK P. LECAPITAINE
MARY M. LEEMHUIS
SUSAN R. LUMSDEN
MICHAEL D. LYMAN
IRENE MARIETTA
KENNETH H. MARMON
ANGELA M. MARTINELLI IRENE MARIETTA
KENNETH H. MARMON
ANGELA M. MARTINELLI
TIMOTHY E. MATHEWS
ROBERT W. MAYES
JERILYN ANDERSON MCCLAIN
STEPHANIE V. MIDDLETON
BRENDA J. MURRAY
GENISE Y. NIXON
REBECCA K. OLIN
MARTHA T. OLONE
JOHN D. ORELLA
STEVEN E. OVERSBY
MICHAEL J. PAPANIA
CHRISTINE M. PARMENTIER
SANDRA D. PATTEA SANDRA D. PATTEA MONIQUE V. PETROFSKY CHERRYLL F. RANGER JAMES R. REID MARY J. RILEY GILBERT P. ROSE JOHN J. ROSENBERGER JOHN J. ROSENBERGER JAMES F. SABATINOS JULIANA M. SADOVICH BEVERLY J. SANDERS MAURICE M. SHEEHAN RUTH A. SHULTS ELLEN D. SIMMONS LYNN A. SLEPSKI EDNESTINE T. SMADTH ERNESTINE T. SMARTT YUKIKO TANI BERNADINE L. TOYA KENDA J. WALLACE JAMES S. WHITING CINDY L. WILSON

#### To be nurse officer

JANICE ADAMS

DARYL L. ALLIS
WENDY S. ANTONOWSKY
THOMAS C. ARMINIO
DANIEL J. ARONSON
KEVIN J. BARTLETT
TRACY A. BROWER
SALLY E. BROWN
AMY V. BUCKANAGA
MARTHA E. BURTON
DEBORAH M. CARTER
CHARLES W. CHAMBERS
KAREN M. COOK
TERENCE E. DEEDS
CATHERINE M. DENTINGER
LISA A. DENXER
THOMAS L. DOSS
SHERI L. DOWNING-FUTRELL
SHANNON C. DUNN SHERI L. DOWNING-FU SHANNON C. DUNN ROBERT T. EDWARDS JAMES L. GIBSON DAVID M. GOLDSTEIN BRENT T. HALL LORI B. HANTON JOHN S. HANTON
JOHN S. HARTFORD
JODI L. HENNESSY
DIANNE MISKINIS HILLIGOSS
JOHN M. HOLCOMB
DE ALVA HONAHNIE
ERIC M. HOWSER
WILLADINE M. HUGHES
ANITA L. JOHNSON ERIC M. HOWSER
WILLADINE M. HUGHES
ANITA L. JOHNSON
MARY C. KARLISON
RONALD D. KEATS
JANIE M. KIRVIN
ANITA C. KRUMM
DEBORAH L. LAKE
ROBERTA PROFFITT LAVIN
RICHARD N. LELAND
LESLIE R. LIGHTWINE
LORI M. LUU
STEPHANIE C. MANGIGIAN
MARK J. MARTINEAU
PETER J. MARTINEAU
PETER J. MARTINEAU
SUSAN Z. MATHEW
PEGGY J. MATHIS
STARDUST W. MAZZARIELLO
JACQUELINE P. MORGAN
CATHERINE B. MOSHER
MICHELE E. NEHREBECKY
SHELLY K. PAYNTER
RICKY D. PEARCE
THUYLE T. PHAM
LYNN M. POWER
LAVERNE PUCKETT
MICHAEL R. SANCHEZ
BARBARA L. SCHOEN
ROSEMARY J. SULLIVAN
JAMES L. VICKROY
RBYAN E. WEAVER ROSEMARY J. SULLIV.
JAMES L. VICKROY
BRYAN E. WEAVER
DOMINIC T. WESKAMP
SIONA W. WILLIE
TRACY L. WOLFE
SHERRI L. ZUDELL

DARYL L. ALLIS

#### To be senior assistant nurse officer

CINDY L. ADAMS
FELICIA A. ANDREWS
GLENN R. ARCHAMBAULT
GUADALUPE R. DEMSKE
MICHAEL W. FORBES
BARBARA A. FULLER
SHERRY L. MCREYNOLDS
ALEXIS MOSQUERA
DABYI. W PERBY DARYL W. PERRY MONICA D. RANKINS JANET E. SEEGERS SPENCER T. SMITH

# To be engineer director

RANDY J. CORRELL RANDY J. CORRELL
DANIEL L. HEINTZMAN
PAUL A. JENSEN
KENNETH F. MARTINEZ
DAVID I. MCDONNELL
RONALD L. MICKELSEN
JEFFREY J. NOLTE
RUSSEL D. PEDERSON
JOHN P. BIEGEL. JOHN P. RIEGEL JOHN P. RIEGEL RICHARD A. RUBENDALL ROGER G. SLAPE GREGORY A. STEVENS MICHAEL R. WEAVER

# To be senior engineer officer

DAVID M. APANIAN
SHIB S. BAJPAYEE
RAYMOND M. BEHEL II
JAMES W. COLLINS
BRYAN L. FISCHER
MICHAEL G. GRESSEL
ALLEN K. JARRELL
THOMAS M. PLUMMER
ROBERT J. REISS
STEPHEN P. RHODES
BOSS D. SCHROEDER STEPHEN P. RHODES ROSS D. SCHROEDER MUTAHAR S. SHAMSI KEITH P. SHORTALL MARK A. STAFFORD MAURICE C. WEST DOMINIC J. WOLF

#### To be engineer officer

STEVEN J. ANDERSON DONALD C. ANTROBUS STEPHEN R. BOLAN

STEVEN L. BOSILJEVAC
CHRISTOPHER A. BRADLEY
CHRISTOPHER P. BRADY
MICHAEL S. COENE
CHARLES M. COTE
GORDON R. DELCHAMPS
ROBERT J. DRUMMOND
RICHARD J. GELTING
KENNETH J. GRANT
CHARLES S. HAYDEN II
SCOTT M. HELGESON
LEE C. JACKSON
CHUCRI A. KARDOUS
ANTHONY G. KATHOL
DARRELL W. LAROCHE
JOHN W. LONGSTAFF
ROBERT J. LORENZ
ERIC L. MATSON
STEVEN M. MCGOVERN
ANDREW M. MELITZER
MARY C. MINER
NELSON N. MIX
PETER T. NACHOD
STEVEN R. RAYNOR
RICK A. RIVERS STEVEN L. BOSILJEVAC RICK A. RIVERS CAROL L. ROGERS JERRY A. SMITH JACK S. SORUM MICHAEL A. STOVER DARRALL F. TILLOCK DANIEL C. TOMPKINS HUNG TRINH MARJORIE E. WALLACE RICHARD S. WERMERS

#### To be senior assistant engineer officer

PATRICK W. CRANEY MATHEW J. MARTINSON BRENT D. ROHLFS

#### To be scientist director

PAMELA L. CHING
DEBRA G. DEBORD
LYNDA S. DOLL
MARK S. EBERHARDT
MICHELE R. EVANS
BARRY S. FIELDS
YOUNG H. LEE
ROBERT W. LINKINS
WILLIAM G. LOTZ
MARK L. PARIS
ROGER R. ROSA ROGER R. ROSA GLENN D. TODI

#### To be senior scientist officer

LAILA H. ALI LALIA H. ALI
ROY A. BLIAY
KATE M. BRETT
FRANK P. GONZALES
OMAR D. HOTTENSTEIN
LAUREN C. IACONO-CONNORS
ROSA J. KEY-SCHWARTZ
CHARLES D. KIMSEY, JR.
PATPLICK I MONPELL I. PATRICK J. MCNEILLY HELENA O. MISHOE PAUL D. SIEGEL JOYCE L. SMITH WILLIAM H. TAYLOR III

#### To be scientist officer

NELSON ADEKOYA
LISA J. COLPE
RICKIE R. DAVIS
MINNIS T. HENDRICKS, JR.
KAREN A. HENNESSEY
ROBIN L. LYERLA
KATHLEEN Y. MCDUFFIE
JOSHUA A. MOTT
STEPHANIE L. SANSOM
CYNTHIA A. STRILEY
DOUGLAS A. THOROUGHMAN

# To be senior assistant scientist officer

#### MEREDITH A. REYNOLDS

#### To be environmental health director

ROBERT H. BERGER DAVID A. BLEVINS WILLIAM J. DANIELS BRUCE M. ETCHISON DANIEL M. HARPER DANIEL M. HARPER CHARLES L. HIGGINS BRENDA J. HOLMAN ALAN D. KNAPP ALAN R. SCHROEDER CRAIG A. SHEPHERD

#### To be senior environmental health officer

To be senior enviro
JARET T. AMES
DAVID P. BLEICHER
BRIAN E. CAGLE
ALAN J. DELLAPENNA, JR.
ALAN S. ECHT
RUSSELL E. ENSCORE
DONNA LYNN EVANS
WENDY L. FANASELLE
RALPH F. FULGHAM
MICHAEL G. HALKO
MICHAEL E. HERRING
THOMAS A. HILL
JOSEPH L. HUGHART
STEVEN G. INSERRA
MARK A. KELTY
MARTHA D. KENT

JAN C. MANWARING JAN C. MANWARING
THERESA I. MCDARMONT
MARK D. MILLER
ROBERT S. NEWSAD
MATTHEW J. POWERS
JOSEPH L. SALYER
TERESA A. SEITZ
AUBREY C. SMELLEY, JR.
BICHADLE TILDRED RICHARD E. TURNER JOHN W. WALMSLEY MICHAEL D. WARREN MICHAEL M. WELCH REBECCA L. WEST PAUL T. YOUNG

#### To be environmental health officer

CHRISTOPHER W. ALLEN
JANICE ASHBY
STEPHEN P. BERARDINELLI, JR.
MARGARET L. BOLTE
MYRNA J. BUCKLES
JULIA E. CHERVONI
KEITH W. COOK
LARRY F. CSEH
WILLIAM T. GOING III
KIT C. GROSCH
ROBERT W. GRUHOT
WAYNE L. HALL
KENNY R. HICKS
JOHN D. HOLLAND
LISA J. IWASZKO
CHRISTOPHER T. KATES
DUANE M. KILGUS CHRISTOPHER W. ALLEN CHRISTOPHER T. KATES
DUANE M. KILGUS
ANN M. KRAKE
JENNIFER M. LINCOLN
JOSEPH D. LITTLE
JOSEPH W. MATTHEWS
A THOMAS MIGNONE, JR.
SUSAN L. MUZA
RICHARD A. ORLANDO
GINA L. PAHONA
ALAN G. PARHAM
EDWARD PEREZ, JR.
RHONDA S. SEARS
JOHN D. SMART
TIMOTHY WALKER
ELIZABETH B. WRIGHT

To be net

#### To be veterinary director

DOUGLAS A. POWELL CAROL S. RUBIN WILLIAM S. STOKES BARTON G. WEICK AXEL V. WOLFF

# To be senior veterinary officer

SEAN F. ALTEKRUSE STEPHANIE I. HARRIS ESTELLA Z. JONES-MILLER HUGH M. MAINZER SHANNA L. NESBY-ODELL META H. TIMMONS

#### To be veterinary officer

KAMELA D.E. DAVIS KATHERINE A. HOLLINGER

#### To be pharmacist director

DENNIS M ALDER DENNIS M. ALIDER
JENEVA S. ARNOLD
DARYL A. DEWOSKIN
JOHN A. ELTERMANN, JR.
JOAN C. GINETIS
JAMES R. HUNTER
ALVIN J. LEE
SHEILA M. OKEEFE DAVID W. RACINE JO ANN M. SPEARMON JAMES P. STUMPFF JOSLYN R. SWANN DAVID R. TAYLOR CHARLES C. WATSON JAMES S. WILLIAMS III

# To be senior pharmacist officer

MARK E. BURROUGHS
MARIA T. BURT
VICKY S. CHAVEZ
STEPHANIE DONAHOE
KATHLEEN E. DOWNS
L. JANE DUNCAN
MARY A. FONG
JEFFEBY R. FRITSCH
THOMAS P. GAMMARANO
SYRENA T. GATEWOOD
GARY M. GIVENS
BEN GLIDEWELL GARY M. GIVENS BEN GLIDEWELL RAYMOND GOLDSTINE LILLIE D. GOLSON LUISA V. GRAVLIN GEORGE J. HAVENS III RITA L. HERRING MARY ANN HOLOVAC WALTER L. HOLT, IR MARY ANN HOLOVAC
WALTER L. HOLT, JR.
CHARLES V. HOPPES
CARL W. HUNTLEY
MARTIN JAGERS
CAROLYN J. JOHNSON
JOSEPH L. JOHNSON
MICHAEL D. JONES
JAMES C. JORDAN JAMES C. JORDAN ANTHONY E. KELLER ALICE D. KNOBEN VERNON T. LEW

MICHAEL R. LILLA ROBERT H. MCCLELLAND JOSEPH F. MCGINNIS PHILIP J. MINNICK JAMES M. MOORE JAMES M. MOORE
M. PATRICIA MURPHY
ROBERT E. PITTMAN
NICHOLAS A. QUAGLIETTA
WILLIAM D. SAGE
PAMELA M. SCHWEITZER
MARGARET A. SIMONEAU
ROBERT M. TAYLOR
JAMES E. TEAGUE
SHARON K. THOMA
THOMAS J. TROSHYNSKI
ADOLPH E. VEZZA
PETER WEISS PETER WEISS

#### To be pharmacist officer

KARL D. AAGENES JAMES F. BARNETT, JR. CHRISTOPHER A. BINA LYNDALL S. BLACKMON DONALD L. BRANHAM SILVIA P. BREAKFIELD CAROLE C. BROADNAX CAROLE C. BROADNAX
CLINTON D. BULLOCK
KRISTI A. CABLER
ROBERT B. CARLILE IV
CYNTHIA C. CARTER
LANA Y. CHEN
CARMEN C. CLELLAND
SCOTT M. DALLAS
ALISON R. DION
STEVEN D. DITTERT
KATHLEEN M. DOTSON
THOMAS C. DURAN THOMAS C. DURAN CAROL A. FELDOTTO MARK A. FELTNER TRACI C. GALE TRACI C. GALE
PATRICIA N. GARVEY
SCOTT F. GIBERSON
MATTHEW P. GRAMMER
MELINA N. GRIFFIS
ROBERT W. GRIFFITH
RANDALL J. HAIGH
JANETTE L. HARRELL
DANIEL L. HASENFANG
TOMMY E. HOREIS
BECKY L. KAIME
KIMBERLY D. KNUTSON
DAVID A. KONIGSTEIN
JANE M. KREIS
KOUNG U. LEE
MICHAEL J. LONG
HOUDA MAHAYNI MICHAEL J. LONG
HOUDA MAHAYNI
PATRICK M. MARSHALL, JR.
JOHN R. MARTIN
TERRI J. MARTIN
MARK R. MCCLAIN
CONNIE J. MCGOWEN-COX
MAYRA I. MELENDEZ
ALICIA M. MOZZACHIO
CHERYL A. NAMTVEDT
MARY A. NIESEN
JENNIFER SRIVER POST
JULIE K. RHIE. JENNIFER SRIVER POST
JULIE K. RHIE
WILLIAM A. RUSSELL, JR.
BRIAN D. SCHILLING
KENNETH H. SCHMIDT
MELISSA R. SCHWEISS
SANDRA M. SHIPP
SCARLET D. SOUTHERN
THOMAS A. STICHT
VANESSA G. THOMAS-WILSON
DEBORAH J. THOMPSON
ROBERT J. TOSATTO
CATHERINE L. VIEWEG
PAMELA J. WEST
BEVERLY K. WILCOX
CATHERINE WITTE
EDWARD N. YALE EDWARD N. YALE ROCHELLE B. YOUNG

# To be senior assistant pharmacist officer

GREGORY S. DAVIS ROSS P. GREEN ELAINE J. HU NASSER MAHMUD VLADA MATUSOVSKY PARAS M. PATEL EMILY T. THAKUR ELIZABETH F. YUAN

#### To be dietitian director

KAREN M. BACHMAN-CARTER LAURA A. MCNALLY GLEN P. REVERE MIRANDA S. YANG-OSHIDA

To be senior dietitian officer

ELAINE J. AYRES SUSAN T. DETHMAN CELIA R. HAYES MARILYN A. WELSCHENBACH

To be dietitian officer

KARI R. BLASIUS MELISSA Z. SANDERS APRIL P. SHAW

To be therapist director

MARK W. DARDIS FRANCES M. OAKLEY IVANA R. WILLIAMS

#### To be senior therapist officer

DAVID J. BRUEGGEMANN MARTHA A. DUGANNE SUSANNE E. PICKERING BECKY L. SELLERS KAREN L. SIEGEL MICHAELE R. SMITH

#### To be therapist officer

JEAN E. BRADLEY
JOHN H. FIGAROLA
SCOTT P. GAUSTAD
MICHELLE Y. JORDAN
MICHAEL E Y. JORDAN
MICHAEL D. LAPLANTE
CINDY R. MELANSON
LOIS L. MICHAELIS-GOODE
RICHARD SHUMWAY
MATTHEW E. TAYLOR
DANIEL C. WEAVER

# To be senior assistant therapist

TESHARA G. BOUIE AYANNA Y. HILL JACKIE M. PETERMAN

#### To be health services director

REGINA A. BRONSON RUST D. COREY EUGENE G. DANNELS MICHELE M. DOODY MICHELLE M. DOODY CLIFFORD D. EVANS JOHN D. FUGATE, JR. ROBERT A. LATINA STEVEN A. LEE RICHARD A. LEVY PAUL W. LICHTENSTEIN LAWRENCE C. MCMURTRY JAMES C. DOPIT! LAWRENCE C. MCMURTRY JAMES C. PORTT LINDA M. POTTERN HEYWARD L. ROURK, JR. ILZE L. RUDITIS JAMES F. SAVIOLA RICHARD G. SCHULMAN MAX A. TAHSUDA ALBERT R. TALLANT FRANCIS P. WAGNER, JR. RICHARD C. WHITMIRE

#### To be senior health services officer

CORINNE J. AXELROD THEODORE P. CHIAPPELLI FRANK H. CROSS, JR. WILLIAM M. GOSMAN WILLIAM D. HENRIQUES TERESA C. HORAN PAUL A. JONES
GREG A. KETCHER
HENRY LOPEZ, JR.
W. HENRY MACPHERSON W. HENRY MACPHERSON MARGARET A. MCDOWELL EDWARD M. MCNERNEY MICHAEL R. MILNER DIANA L. RULE JANET REEN SAUL TERRY J. SCHLEISMAN RONALD E. SELLERS DANA R. TAYLOR
RAY J. WEEKLY
PEGGY J. WHITEPLUME
WILLIAM BOYD WYETH

# To be health services officer

KATHY L BALASKO
MARINNA BANKS-SHIELDS
JEFFREY T. BOSSHART
JOHN J. CARDARELLI II
ANA D. CINTRON
GARY M. COLE
THOMAS A. COSTELLO
WILLARD E. DAUSE
SANDRA L. FERGUSON
DENISE L. GOUDELOCK
JAMES A. GREGORY
DIANE C. HANNER
HOWARD J. HEISLER
REBECCA D. HICKS
STEVEN E. HOBBS
MARY C. HOLLISTER
THOMAS W. HURST
SHERLENE B. JACQUES
DAWN A. KELLY
MONICA R. KUENY
KIMBERLY LEWANDOWSKI-WALKER
JUDITH A. NELSON
ANNE M. PERRY
JEAN O. PLASCHKE
DANNEL H. DEED KATHY L. BALASKO JUDITH A. NELSON
ANNE M. PERRY
JEAN O. PLASCHKE
DANIEL H. REED
JAMES B. REED
BRIAN E. RICHMOND
MONICA PASQUALE RUEBEN
RUBEN T. SABATER
JAY A. SELIGMAN
JOHN H. STADICK
DELORES E. STARR
ASTRID L. SZETO
SYLVIA J. TETZLAFF
BRUCE W. TOPEY
GILBERT E. VARNEY, JR.
KIMBERLY A. WALKER
CHRISTOPHER R. WALSH
ROBBIN K. WILLIAMS ROBBIN K. WILLIAMS CHERYL A. WISEMAN ANTHONY M. ZECCOLA

# To be senior assistant health services officer

MARJORIE D. BALDO MICHELLE M. BLETH NADINE R. BROWN REBECCA A. BUNNELL ELIZABETH A. HASTINGS STANTON C. HAWKES AMY L. HOLDER JASON A. ORTIZ RONALD R. PINHEIRO KAREN J. SICARD

#### To be assistant health services officer

ALLYSON M. ALVARADO

THE FOLLOWING CANDIDATES FOR PERSONNEL ACTION IN THE REGULAR COMPONENT OF THE PUBLIC HEALTH SERVICE SUBJECT TO QUALIFICATIONS THEREFORE AS PROVIDED BY LAW AND REGULATIONS:

#### To be medical director

DANIEL S. MILLER

To be senior surgeon

PAUL J ANDREASON PAUL J. ANDREASON FRANCISCO M. AVERHOFF ROBERT BALL BRENTON T. BURKHOLDER SUSAN T. COOKSON RAFAEL HARPAZ DALE J. HU DALE J. HU
JEFFREY B. KOPP
SHIRLEY J. LEE
AUGUSTINE Q. PROVENCIO
CALMAN P. PRUSSIN SUSAN E. REEF RAFEL D. RIEVES ERIC M. WASSERMANN

#### To be surgeon

SARAH E. ATANASOFF
MARTIN G. BELSON
PAUL J. BRADY
KAREN R. BRODER
XIOMARA I. BROWN
DOUGLAS H. ESPOSITO
ALICIA M. FRY
CHANDAK GHOSH
KENNETH R. HARMAN, JR.
CHRISTOPHER W. KEANE
TEJASHRI S. PUROHIT-SHETH
JULIA A. SCHULINGER JULIA A. SCHILLINGER LISA M. SUMNER MELANIE M. TAYLOR

#### To be senior assistant surgeon

MARK R. DYBUL
DWIGHT R. HUMPHERYS
PAUL I. JUNG
KATRINA KRETSINGER
KAREN A. NEAR
SHERYL A. OSHEA
PRAGNA PATEL
PRITI R. PATEL
JEFFREY D. SCHULDEN
ANN T. SCHWARTZ
DANIEL A. SINGER
ALAN K. TUPPONCE
ALCIA A. WILLIAMS
DAVID WONG

#### To be senior dental surgeon

DANIEL J. HICKEY DAVID K. LUNDAHL JAMES T. OWEN

# To be dental surgeon

RICHARD L. FIRNHABER CHRISTINE K. HENG RICHARD N. HUDON SEAN R. KELLY

# To be senior assistant dental surgeon

RUBEN S. ACUNA REGINALD A. BALLARD JOYCE D. BIBERICA NATHAN L. BRENNER MICHAEL J. DONALESKI JENNIFER L. LOMBRANO LINDA B. MARKLE KIMBERLY WOODS MONTOYA CRISTIAN G. MORAZAN KHOI N. NGUYEN ADRIAN R. PALMER NANCY L. SANDMANN STEPHEN W. WIIST

# To be nurse officer

ROBIN A. BASSETT SUSAN M. BEARDSLEY TONJUS M. MASON TRACY L. MATTHEWS JAIME MUNIZ DEBORAH B. NIXON ANNE M. NORDQUIST CELISSA G. STEPHENS ANGELINE L. WASHINGTON

#### To be senior assistant nurse officer

THERESA M. ABEYTA TAMIKA E. ALLEN
PATRICIA A. BARRETT
ELIZABETH D. BATTLES

JASON M. BISCHOFF YOLANDA R. BURKE-DEE WILLIAM G. CASTLE MATTHEW A. CLEMONS BRENDA C. COOK BRENDA C. COOK
CAROL A. CORBIE
JOSEPH M. CREAGER
KIMBERLY R. CROCKER
VALESIA N. DANIELS
ANISSA A. DAVIS
JAMES L. DICKENS
KAREN E. DORSE
FELICIA J. DUFFY
KEVIN D. ELKER
KRISTEN A. EVERETT
WILLIAM J. FOUST
ANDREW S. GANZON
STEPHEN G. GONSALVES
BRIAN S. GRIFFIN
JOSEFINE R. HAYNES
DENISE M. HINTON DENISE M. HINTON
MICHAEL J. JENKINS
JOEL A. JOHNSON
ROSEMARY A. JOHNSON JACKIE KENNEDY-SULLIVAN SUE A. LARKIN ANGEL S. LASANTA ROBIN R. LEE ANGEL S. LASANTA
ROBIN R. LEE
CHARLETTA L. LEWIS
MEL-YING LI
JOHN T. MARCHAND, JR.
KIMBERLY Y. MARTIN
REBECCA A. MCCAIN-SINGLETON
SEAN M. MCMAHAN
JONEE J. MEARNS
MARIA A. MOREL
CYNTHIA J. NIELSEN-MCARDLE
LISA A. PALUCCI
ELIEZER R. PANGAN
ANASTASIA M. PILIAFAS-BROWN
THOMAS T. PRYOR
MICHAEL C. RAY
MELISSA A. ROBB
ELIZABETH G. SACHSE
JEFFERY R. SEMAK
DONNA M. SMITH
JONATHAN F. SMITH JONATHAN F. SMITH TARAH S. SOMERS SHONDA M. STACEY COLLEEN A. SWEENEY JAMES M. TINGEN RICARDO VARELA ELIZABETH ZAMORA

#### To be assistant nurse officer

HAROLD L. BOYLES JOSEPH BRADY MARK D. CRUZ MONIQUE A. DAVIS KAORI DONOHUE BRYAN H. EMERY COLEEN R. FETT KENNETH L. SIMMET, JR. JAMES E. THOMAS WILLIAM T. WILLIAMSON ANH P. WRIGHT

# To be junior assistant nurse officer

BENJAMIN O. LINTHICUM JAMES K. LYONS ADRIANA M. MEYER-ALONZO ANGELA F. WILLIAMS

To be senior engineer officer

# CAROLE L. BOERNER

To be engineer officer

JAMES A. BELLAH RICARDO MURGA GREGORY J. ROBINSON GEORGE F. STEVENS

#### To be senior assistant engineer officer

BRIAN J BREIJER BRIAN J. BREUER
MICHAEL R. CHARD
PIERRE M. COSTELLO
JAVIER B. FRANCO
KELLY E. MORTENSEN
JENNIFER A. PROCTOR
MATTHEW W. RASMUSSON CHAD A. SNELL EMIL P. WANG JAMES O. WHITE TAMMY K. WHITE MICHAEL R. YOUNG

# To be assistant engineer officer

ALLEN F. BOLLINGER SEAN T. BUSH JENNIFER LYNN CAPAROSO

To be scientist director

PALMER A. ORLANDI, JR.

To be senior scientist

KEVIN M. MCGUINNESS

# To be scientist

LAURA J. DRASKI JOHN M. GOLDEN LESLIE A. MACDONALD MARK M. METHNER DAVID J. SKANCHY JOSEPH J. TEMENAK

#### To be senior assistant scientist

LEIGH T. R. BUCHANAN DAN-MY T. CHU DANICE K. EATON AARON T. FLEISCHAUER DOMINIC R. FRASCA DARA S. FRIEDMAN ALTHEA M. GRANT DONA A. LEDI ANG RONA A. LEBLANC
TRACY C. MACGILL
JOEL M. MONTGOMERY
TIMOTHY D. NELLE JAMES L. OSTERHOUT MARTIN L. SANDERS STEVEN S. YOON

#### To be environmental health officer

ALAN L. BREND DEBORAH A. GRECO WILLIAM J. GREIM KEVIN P. SHEEHAN

#### To be senior assistant environmental health officer

RANDY J. BOYLSTEIN BRIAN L. COOK LISA J. DELANEY ALARIC C. DENTON ROGER A. GOODMAN TRAVIS R. HUNT DIANA L. KELSCH BRADLEY S. KING JOHN L. MCKERNAN LAURALYNN T. MCKERNAN MARY B. OCONNOR AIMEE T. TREFFILETTI SARAH E. UNTHANK DANIEL J. YEREB

#### To be assistant environmental health officer

ROBERT A. GIBBS CHRISTOPHER T. SMITH MATTHEW A. WALBURGER

To be veterinary director

WILLIAM R. ELKINS

To be veterinary officer

TERRI R. CLARK VICTORIA A. HAMPSHIRE DANIEL R. OLEARY

To be senior assistant veterinary officer

JENNIFER G. WRIGHT

To be pharmacist director

ORVILLE D. BROWN III

To be senior pharmacist

WILLIAM D. FIGG

#### To be pharmacist

THOMAS E. ADDISON KENNETH W. HILL LARRY P. LIM JOUHAYNA S. SALIBA JON R. SCHUCHARDT AARON W. SIGLER

# To be senior assistant pharmacist

CECIL M. AYCOCK
MATTHEW R. BAKER
SYE D. BENNEFIELD
POSTELLE D. BIRCH
GERALD R. BROWN, JR.
ARIANNE E. CAMPHIRE
JOHN T. CHAPMAN
IVANNE L. CHEATHAM
JAMES B. CLAY
TEDI A. CEPAGER TERI A. CREAGER KEVIN R. DENNY IDA-LINA DIAK PETER S. DIAK PETER S. DIAK
DANA R. EVANS
LORI M. EVANS
JOHN R. FULITON
JAMES C. GEMELAS
VIOLETTE J. GEZA
ELIZABETH A. D. GIRARD
HUIJEONG A. HAHM
ANN R. HILLER
THOMAS O. HINCHLIFFE
SARAH H. HO
SHERA M. HOGAN
JAEWON HONG SARAH H. HO
SARAH H. HO
JAEWON HONG
HAKSONG JIN
KRISTY M. KLINGER
PAULA M. LAPLANT
NICOLE LEE
KELLI D. LUCAS
KRISTEN E. MILLER
ANGELA L. NELSON
BINH T. NGUYEN
DANIEL K. NGUYEN
DANIEL K. NGUYEN
SOOJUNG S. PARK
DEVVRAT T. PATEL
JACQUIE K. ROTH
SUSAN A. RUSSELL
SANDEEP S. SAINI
MARK W. SELLLERS
ALISEA R. SERMON
STANLEY M. SHEPPERSON MELAINE M. SHIN
KELLEY M. SIMMS
JEANNE SKANCHY
DIANE C. SMITH
KELLY L. STANKIEWICZ
AYOUB S. SULIMAN
ALLISON L. UNDERWOOD
PETER G. VERMILYEA
BEVERLY WEITZMAN
STACEY W. WILLIAMS
YON C. YU MELAINE M. SHIN

#### To be dietitian

KRISTEN L. MOE LESLYE L. RAUTH

#### To be senior assistant dietitian

AMY M. BEUTLER SANDRA G. MAGERA GREGORY J. MAHRT

# To be senior assistant therapist

TERRY L. BOLES MATTHEW R. DAAB DARLENE M. HARMON ERNESTINE B. HIGDON BRIDGETTE A. SEAGO BARBARA A. WERITO

To be senior health services officer

ROBERT J. LYON

#### To be health services officer

CHARLES N. JAWORSKI SUNIL PATEL CYNTHIA A. SPELLS PHILLIP L. TOY DIAHANN L. WILLIAMS

#### To be senior assistant health services officer

To be senior assistant i Jason D. Abell Karl W. Bailey Jon T. Baughman Brian C. Bucca Rhondalyn R. Cox Andrew J. Demma Jodee M. Dennison Travis L. Fisher Gerard R. Forster Brenda L. Gearhart Camille P. Hawkins Nicholette Y. Hemingway Thomas S. Hochberg Hellen M. Hunter Latonya T. Jiggetts Sianat Q. Kamal Ibrahim Kamara Laurie ann Kelley IBRAHIM KAMARA
LAURIE ANN KELLEY
DAVID K. LAU
PETER R. LENAHAN
JENNIFER ANN MALIA
JOY ANN P. MATTHIAS
CHRISTOPHER L. MCGEE
CHRISTOPHER K. MILLER
THERESA A MINITER CHRISTOPHER K. MILLI
THERESA A. MINTER
DAISY D. MITCHELL
JAMES T. MORRIS
SUSAN R. PEACOCK
TODD B. PELTON
ROBERT S. PIE, JR.
SCOTT J. SALVATORE
ANGELA K. SHEN
CLARENCE SMILEY
ADAMU A. TAHRU
LINDA THAI
JON-MIKEL WOODY
KATHLEEN A. WOOTEN

#### To be assistant health services officer

GILIAN H. ENGELSON EDUARDO B. FAYTONG EDUARDO K. FAYTONC
JASON S. JURKOWSKI
LEAH A. LASCO
TODD M. RAZIANO
ANGEL E. SANCHEZ
STEPHEN C. SMITH
LAREE A. TRACY
DARIN S. WIEGERS

#### IN THE AIR FORCE

THE FOLLOWING NAMED OFFICERS FOR APPOINTMENT IN THE FOLLOWING NAMED OFFICERS FOR AFFORMMENT IN THE UNITED STATES AIR FORCE TO THE GRADE INDI-CATED UNDER TITLE 10, U.S.C., SECTION 624:

#### To be brigadier general

To be brigadier general

COLONEL MARK A. ATKINSON, 0000
COLONEL BRIAN T. BISHOP, 0000
COLONEL BRIAN T. BISHOP, 0000
COLONEL BRIAN T. BISHOP, 0000
COLONEL NORMAN J. BROZENICK, JR, 0000
COLONEL NORMAN J. BROZENICK, JR, 0000
COLONEL DAVID A. COTTON, 0000
COLONEL SHARON K. G. DUNBAR, 0000
COLONEL SHARON K. G. DUNBAR, 0000
COLONEL BARBARA J. FAULKENBERRY, 0000
COLONEL BARBARA J. FAULKENBERRY, 0000
COLONEL JAMES M. HOLMES, 0000
COLONEL JAMES M. HOLMES, 0000
COLONEL JAMES J. JONES, 0000
COLONEL JAMES J. JONES, 0000
COLONEL HICHAEL A. KELTZ, 0000
COLONEL FREDERICK H. MARTIN, 0000
COLONEL FREDERICK H. MARTIN, 0000
COLONEL WENDY M. MASIELLO, 0000
COLONEL ROBERT P. OTTO, 0000

COLONEL LEONARD A. PATRICK, 0000 COLONEL BRADLEY R. PRAY, 0000 COLONEL BRADLEY R. PRAY, 0000
COLONEL LORI J. ROBINSON, 0000
COLONEL ANTHONY J. ROCK, 0000
COLONEL ANTHONY J. ROCK, 0000
COLONEL ROWAYNE A. SCHATZ, JR, 0000
COLONEL THOMAS L. TINSLEY, 0000
COLONEL THOMAS L. TINSLEY, 0000
COLONEL JACK WEINSTEIN, 0000
COLONEL JACK WEINSTEIN, 0000
COLONEL JACK WEINSTEIN, 0000 COLONEL STEPHEN W. WILSON, 0000 COLONEL MARGARET H. WOODWARD, 0000

#### IN THE ARMY

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES ARMY TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTION 624:

#### To be major general

BRIG. GEN. CARROLL F. POLLETT, 0000

#### IN THE NAVY

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTION 624:

To be rear admiral (lower half)

CAPT. MICHAEL A. GIORGIONE, 0000

THE FOLLOWING NAMED OFFICER FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED UNDER TITLE 10, U.S.C., SECTION 624:

To be rear admiral (lower half)

THE FOLLOWING NAMED OFFICERS FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED UNDER TITLE  $10,\,\mathrm{U.s.C.}$ , SECTION 624:

To be rear admiral (lower half)

CAPT. WILLIAM M. ROBERTS, 0000 CAPT. ALTON L. STOCKS, 0000

THE FOLLOWING NAMED OFFICERS FOR APPOINTMENT IN THE UNITED STATES NAVY TO THE GRADE INDICATED UNDER TITLE  $10,\,\mathrm{U.S.C.},\,\mathrm{SECTION}\,624$ :

To be rear admiral (lower half)

CAPT. ROBERT J. BIANCHI, 0000 CAPT. THOMAS C. TRAAEN, 0000

IN THE AIR FORCE

THE FOLLOWING NAMED INDIVIDUAL FOR APPOINT-MENT IN THE GRADE INDICATED IN THE REGULAR AIR FORCE UNDER TITLE 10, U.S.C., SECTION 531(A):

To be major

NOANA ISSARGRILL, 0000

# IN THE ARMY

THE FOLLOWING NAMED INDIVIDUALS FOR REGULAR APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES ARMY MEDICAL CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

# To be lieutenant colonel

FRANKLIN M. CRANE, 0000 GARY T. KIRCHOFF, 0000

THE FOLLOWING NAMED OFFICERS FOR REGULAR APPOINTMENT IN THE GRADES INDICATED IN THE UNITED STATES ARMY UNDER TITLE 10. U.S.C., SECTION 531:

#### To be lieutenant colonel

MARK W. CRUMPTON, 0000 MATTHEW B. MEDNICK, 0000 WILL G. MERRILL, 0000 ANDREW E. PETRETTI, 0000 DAVID F. SMITH, 0000

To be major

CHRISTOPHER L. COLEMAN, 0000 CORY J. DELGER, 0000 LAWRENCE P. HOUSE, 0000 RHONDA L. KEISTER, 0000 D000097

THE FOLLOWING NAMED INDIVIDUAL FOR REGULAR APPOINTMENT TO THE GRADES INDICATED IN THE UNITED STATES ARMY NURSE CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

# To be lieutenant colonel

THOMAS BROOKS 0000 HELEN A. MORETTI, 0000

To be major

WESLEY J. ANDERSON, 0000 MICHELLE A. DUNKLEY, 0000 SANDRA J. HETZEL, 0000 LORIE J. MITCHELL, 0000 DEBORAH C. WARREN, 0000

THE FOLLOWING NAMED INDIVIDUALS FOR REGULAR APPOINTMENT TO THE GRADES INDICATED IN THE UNITED STATES ARMY MEDICAL CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

#### To be colonel

DAMON T. ARNOLD, 0000

To be lieutenant colonel

DAVID B. ANDERSON, 0000

WAYNE A. CAROLEO, 0000

To be major

DONOVAN D. DIXON, 0000 JEFFREY R. KEIM, 0000 GIJSBERTUS F. VANSTAVEREN, 0000

THE FOLLOWING NAMED OFFICER FOR REGULAR AP-POINTMENT IN THE GRADE INDICATED IN THE UNITED STATES ARMY MEDICAL CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

To be lieutenant colonel

THE FOLLOWING NAMED INDIVIDUAL FOR REGULAR APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES ARMY DENTAL CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

To be major

BERNADINE F. PELETZFOX, 0000

THE FOLLOWING NAMED OFFICER FOR REGULAR AP-POINTMENT IN THE GRADE INDICATED IN THE UNITED STATES ARMY VETERINARY CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

To be major

#### D0000

THE FOLLOWING NAMED INDIVIDUAL FOR REGULAR APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES ARMY MEDICAL SPECIALIST CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

To be major

JOSEF RIVERO, 0000

THE FOLLOWING NAMED INDIVIDUAL FOR REGULAR APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES ARMY DENTAL CORPS UNDER TITLE 10, U.S.C., SECTIONS 531 AND 3064:

To be major

STEPHEN J VELEZ 0000

#### IN THE MARINE CORPS

THE FOLLOWING NAMED OFFICER FOR TEMPORARY APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES MARINE CORPS UNDER TITLE 10, U.S.C., SECTION 6222

To be major

JASON K. FETTIG, 0000

THE FOLLOWING NAMED OFFICER FOR TEMPORARY APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES MARINE CORPS UNDER TITLE 10, U.S.C., SECTION 6222:

To be colonel

MICHAEL J. COLBURN, 0000

#### IN THE NAVY

THE FOLLOWING NAMED OFFICERS FOR TEMPORARY APPOINTMENT TO THE GRADE INDICATED IN THE UNITED STATES NAVY UNDER TITLE 10, U.S.C., SECTION

To be lieutenant commander

BENJAMIN AMDUR, 0000 MICHAEL L. ATWELL, 0000 GILBERT AYAN, 0000 WILLIAM E. BAIN, 0000 CASEY B. BAKER, 0000 EMILY L. BASSETT, 0000 DAVID P. BROOKS, 0000 NATHANIEL H. BROWN, 0000 SHAWN M. COWAN, 0000 SHAWN M. COWAN, 0000
MARC E. DAVIS, 0000
WILLIAM J. DAVIS, 0000
JASON M. DEICHLER, 0000
BRIAN C. EARP, 0000
MICHAEL D. FISHER, 0000
JOHN W. HALE, 0000
ANTHONY J. HARRELL, 0000 MARK R. HARRIS, 0000 MICHAEL W. HARTMANN, 0000 EDWARD A. HERTY IV, 0000 JUSTIN R. HODGES, 0000 THOMAS M. JONES, 0000 STEPHEN M. KOSLOSKI, JR., 0000 JUDD A. KRIER, 0000 NEIL A. KRUEGER, 0000 ERIC E. LANG, 0000 CHRISTOPHER LEDLOW, 0000 CHRISTOPHER LEDLOW, 0000
RANDALL G. LEE, 0000
PHUONG M. LUI, 0000
CHARLES E. LYNCH, 0000
GEORGE S. MAJOR, 0000
JAMES R. MALONE, 0000
GRADY S. MCDONALD, 0000
NATHAN M. MILLS, 0000
MICHAELS. MITCHELL, 0000
ALBERT L. MOORE, 0000
MICHELLE L. NAKAMURA, 0000
THOMAS J. NIEBEL, 0000
HADEN U. PATRICK, 0000
WILLARD L. PHILLIPS, 0000
WILLARD L. PHILLIPS, 0000 HADEN U. PATRICK, 0000
WILLARD L. PHILLIPS, 0000
STEPHAN H. POMEROY, 0000
JESSE C. PRUETT, 0000
KENNETH M. RAHN, 0000
ALFREDO R. RENDON, 0000
JAMES M. RICHARDS, 0000
MARSHALL G. RIGGALL, 0000
JOHN J. RIOS, 0000
MARK T. PODENISON, 0000 MARK T. ROBINSON, 0000 JOEL RODRIGUEZ, 0000 THOMAS A. SEIGENTHALER, 0000 JEFFREY R. SHIPMAN, 0000 WILLIAM M. SPENCE, 0000 SCOTT T. TASIN, 0000 STEVEN C. TERREAULT, 0000 LYNDEN R. TOLIVER, JR., 0000 DAN W. TURBEVILLE, 0000 BLANDINO A. VILLANUEVA, 0000 JOHN W. WATERSTON, 0000

KEITH C. WOODLEY, 0000 TODD C. ZENNER, 0000 DAVID M. ZIELINSKI, 0000

#### DISCHARGED NOMINATION

The Senate Committee on Homeland Security and Governmental Affairs was discharged from further consideration of the following nomination and the nomination was placed on the Executive Calendar:

\*CLAUDE M. KICKLIGHTER, OF GEORGIA, TO BE INSPEC-TOR GENERAL, DEPARTMENT OF DEFENSE.

\*Nominee has committed to respond to requests to appear and testify before any duly constituted committee of the Senate.

# CONFIRMATION

Executive nomination confirmed by the Senate Wednesday, April 11, 2007:

DEPARTMENT OF DEFENSE

JAMES R. CLAPPER, JR., OF VIRGINIA, TO BE UNDER SECRETARY OF DEFENSE FOR INTELLIGENCE

THE ABOVE NOMINATION WAS APPROVED SUBJECT TO THE NOMINEE'S COMMITMENT TO RESPOND TO REQUESTS TO APPEAR AND TESTIFY BEFORE ANY DULY CONSTITUTED COMMITTEE OF THE SENATE.

# WITHDRAWALS

Executive Message transmitted by the President to the Senate on April 11, 2007, withdrawing from further Senate consideration the following nomina-

WILLIAM LUDWIG WEHRUM, JR., OF TENNESSEE, TO BE AN ASSISTANT ADMINISTRATOR OF THE ENVIRON-MENTAL PROTECTION AGENCY, VICE JEFFREY R. HOLMSTEAD, RESIGNED, WHICH WAS SENT TO THE SENATE ON JANUARY 9, 2007.

ALEX A. BEEHLER, OF MARYLAND, TO BE INSPECTOR GENERAL, ENVIRONMENTAL PROTECTION AGENCY, VICE NIKKI RUSH TINSLEY, RESIGNED, WHICH WAS SENT TO THE SENATE ON JANUARY 9, 2007.