

said, Senator, please allow this research to go forward because I am worried my daughter will be blind at the age of 20 without it.

I have met families whose patriarch is suffering from ALS, Lou Gehrig's disease. Again, they have pleaded with us, allow the research to go forward so maybe that person or his children, who might get the disease, will be able to be cured.

I have met with so many people my age whose parents are suffering from Alzheimer's or Parkinson's. Again, they plead with us, allow stem cell research to move forward so that maybe my parent or other parents such as mine could be cured.

Americans struggle with diseases every day. The confounding and amazing thing is, when scientists are on the edge of a breakthrough, the President stops them. Scientists are on the cusp of making incredible progress through stem cell research, a process that has the potential to cure diseases as widespread as diabetes and heart disease, but progress came to a grinding halt in 2001 when President Bush limited federally funded stem cell research to only 19 sources. With that Executive Order, President Bush shut the door on hope for millions of American 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 kind of work. We need the best minds there.

Substantively, there is no doubt this is the right thing to do. But I put it in a broader context. There is a group of people in America of deep faith. I respect that faith. I have been in enough inner-city Black churches, working-class Catholic parishes, rural Methodist houses of worship, and small Jewish synagogues, to understand that faith is a gift. The trouble with this group, which I call the theocrats, is they want that faith to dictate what our Government does. That, in a word, is un-American. It is exactly the reason the Founding Fathers put down their plows and took up muskets to fight.

If you do not like stem cell research, don't use it for yourself or your family, but don't tell millions of Americans who may not share your faith that they cannot use it, as well.

We have seen this repeatedly with Schiavo, or the required teaching of creationism in the schools, and now with stem cell research. Unfortunately, the President and too many in this Chamber and too many in the other Chamber have gone along and said that faith, wonderful and noble as it is, should determine what our Government does.

This administration is not pursuing what most Americans want, but fol-

lowing the dictates of the narrow few. Fortunately, we live in a democracy. In a democracy these issues are debated.

I assure everyone in this Chamber, this issue will be debated and debated strongly in November. Those who have stood in the way of scientific progress and research, those who have told that wonderful mother that her child cannot get the research she needs so she might not be blind, will be held accountable. This will be one of the largest issues that will face us in November, and it should. That is what democracy is all about. All of those, including the President, who have tried to hide their actions with false promises or bills that accomplish nothing, will be held accountable.

Thank God we have a democracy. Thank God that a narrow band of people, few in number, deep in conviction, cannot dictate what our Government does. The fact that H.R. 810 has come to the Senate, the fact that it will get a large majority of votes here as it did in the House, and the fact that the President and some of his allies in this Chamber and others have stood in the way of saving lives and of scientific progress because they believe their faith should dictate what the rest of us do—again, they will be held accountable for that.

I hope this measure passes. It would be a miracle, a miracle that could save lives if it got a veto-proof majority in this Senate. I doubt that will happen. But one can always hope, because the hopes, the futures, of millions of Americans, born and unborn, rest on us pursuing this research, doing what science tells us it needs to do to enhance and preserve life, and not be blocked by a small group that wishes to impose its views on everyone else.

I yield the floor.

RECESS

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

Thereupon, the Senate, at 12:30 p.m., recessed until 2:15 p.m.; and reassembled when called to order by the Presiding Officer (Mr. VOINOVICH).

FETUS FARMING PROHIBITION ACT OF 2006

ALTERNATIVE PLURIPOTENT STEM CELL THERAPIES EN- HANCEMENT ACT

STEM CELL RESEARCH ENHANCE- MENT ACT OF 2005—Continued

The PRESIDING OFFICER. The majority controls the next 30 minutes.

The Senator from Pennsylvania.

Mr. SANTORUM. Thank you, Mr. President.

Mr. President, I would like to begin this discussion, talking about the three pieces of legislation that are before us, to talk about the one I believe is the least controversial of all; and that is the issue of fetus farming. It is a piece of legislation that I introduced, thanks to the great help of my staff, Heather MacLean, who has worked diligently on both pieces of legislation that are on the floor today that I happen to be the sponsor of, the alternatives bill as well as the fetus farming bill.

This legislation comes as a result of a recommendation from the President's Council on Bioethics. That council, as you know, is not made up of people who share the President's viewpoint on the issue of stem cell research. In fact, it is a rather diverse group. But they unanimously agreed with what they see out in the scientific world with respect to research being done—where animals are being implanted with embryos grown to a certain gestational age and then aborted for purposes of research—that this should not be allowed in humans; that we should not be developing embryos, implanting them in women, and then having those women abort the fetus for the purposes of doing research.

So the bill I have introduced follows on with the unanimous recommendation of the President's Council on Bioethics. Again, it is a diverse group. And they said: We should prohibit the transfer of a human embryo produced ex vivo—that is, outside of the mother's womb—to a woman's uterus for any purpose other than to attempt to produce a live-born child.

That is what the first piece of legislation does, what is referred to as the fetus farming bill. I am hopeful we can have a broad consensus, hopefully a unanimous vote, on the floor of the Senate in favor of this legislation. The House will hopefully pass that later today and the President will move forward and sign it.

The other issues I want to talk about get into a lot more detail with respect to how we deal with these very difficult moral questions. I have heard some say on the floor of the Senate there is no moral question here. In fact, I heard the senior Senator from New York calling those who oppose this H.R. 810—which calls for the destruction of human embryos for purposes of deriving embryonic stem cells—he called people who oppose H.R. 810 theocrats.

I do not agree with the Senator from New York on a lot of things. I am sure the Senator from New York is motivated by his faith to do a lot of things in his life. I am sure there are things on the floor of the Senate for which the Senator from New York is motivated by his faith tradition and uses it as a tool which has provided him a moral framework for this world. But I would never call him a theocrat for taking

that element of his faith, which he happens to believe is valuable, and applying it to a fact of circumstances before him in the Senate. So I would hope we would tone down that type of rhetoric. No one is advocating theocracy here.

But to suggest there are not moral questions at stake, I think is blatantly dishonest. There was a doctor that was on a C-SPAN program this morning, a doctor from Johns Hopkins, who was in favor of H.R. 810, who got up and said it very clearly, if you believe that killing a 5-day-old embryo is the taking of a human life, then I can understand, she said, you having problems with H.R. 810. If you do not, then I can understand why you do not have a problem with H.R. 810.

Now, to suggest that someone who happens to believe that a 5-day-old embryo, that is genetically human, that if implanted in a woman would have as good a chance as any other embryo in a woman to develop into any one of us—that we believe that killing that embryo is the taking of a human life—I am not too sure that goes into the bounds of imposing a theocracy on America.

I think that is, yes, to some degree, a moral question but I would argue, to some degree, very much a scientific question as to whether that is actually human and is it alive. And the answer is, yes, it is genetically human. It is like every one of us. And it is alive. If it were dead, no one would be implanting it, no one would be killing it. So it is human and it is alive.

You can say it is not human life. I can say this piece of paper is not a piece of paper, but that does not make it what it is not. It is human, and it is alive. Under H.R. 810, we say that the Federal Government is going to fund research dependent on the destruction, the killing of that embryo. I think it needs to be made clear there is nothing in the legislation—in fact, there is no bill I am aware of that has been introduced—that says any individual without Government dollars cannot take, cannot buy or get donated a fertilized embryo, an embryo, a 5-day-old embryo from an in vitro fertilization clinic and do research on it. There is no law prohibiting it. There is no law prohibiting the killing of those embryos.

All of us who have concerns about H.R. 810 have concerns because this is Federal funding for research dependent on the destruction of human life. I happen to believe that is morally objectionable. I also think it is scientifically objectionable too.

Having said that, I have one final point I would make. I do not think this position is necessarily well out of the mainstream. There was a poll taken recently. In the poll, this question was asked: Stem cells are the basic cells from which all person's tissues and organs develop. Congress is considering the question of Federal funding for ex-

periments using stem cells from human embryos. The live embryos would be destroyed in their first week of development to obtain these cells. Do you support or oppose using Federal tax dollars for such experiments? Thirty-eight percent support; almost 48 percent oppose.

I do not think those people would be called theocrats. They are not theocrats. These are honest, hard-working Americans who see human life and say: We should treat it with dignity and not do research.

Now, there are obviously a sizeable number on the other side. And, obviously, the majority of the Senate is going to support H.R. 810. I respect people who differ with me. I am not going to call them names. I am not going to label them something that sounds un-American. What I will say is I disagree with them and will try to do so respectfully. I will try to do so from the basis of someone who is a very strong supporter of stem cell research. In fact, I would put my record up against just about anybody in the Senate with respect to appropriating, asking for, and getting appropriated dollars designated to do stem cell research.

I have been working for 6 years, particularly with the Pittsburgh Tissue Engineering Institute and a whole host of companies that have developed in and around the biotech quarter in Pittsburgh that have shown great promise. Some of the research you have heard about with respect to alternatives to embryonic stem cell research with these pluripotent cells—many of these companies, many of these alternatives have come out of Pittsburgh, come out of the work that has advanced as a result of some of the Federal help that we have given to the McGowan Institute and to the Pittsburgh Tissue Engineering Institute.

In fact, we have put together such a robust program with respect to tissue engineering and regenerative medicine using stem cells that we have partnered with the Army. President Bush, earlier this year, went down to Fort Sam Houston, TX, to look at some of the work that is being done with our soldiers who have been wounded and being able to regenerate skin or parts of bodies. In fact, there is one study underway right now to regenerate an ear, actually grow back an ear of someone who lost their ear in the Iraq war.

All of that came from the support the Congress has shown, thanks to the leadership of Senator SPECTER and myself in this collaboration—the Pittsburgh Tissue Engineering Institute, the McGowan Institute for Regenerative Medicine, the U.S. Army Institute of Surgical Research, and on and on. This collaboration is based on the promise of stem cell research, to help our wounded soldiers. They are making dramatic and wonderful progress. So

there is, as many have said, a tremendous opportunity for a lot of powerful things to help cure people with respect to stem cells—these adult stem cells.

But I have not foreclosed, in any respect, the possibility of other types of stem cells being used, if they can be derived in an ethical fashion; “ethical,” meaning we do not sacrifice life in order to do research to find out more.

So what I have pursued—and what I think this alternative bill I have introduced, working with Senator SPECTER on it—is an attempt to find this middle ground. Some have suggested—I know Senator HARKIN has repeatedly suggested—this bill does not accomplish anything, the alternatives bill I have introduced does not do anything. I would strongly disagree with that.

The alternative bill—let me give you an example. I have been working with Senator DODD over the past several months—actually, over a year now—in developing a bill to provide direction to the National Institutes of Health with respect to autism research. It is a vitally important bill for the autism community. It is one that the entire community across the Nation has mobilized around, called the Combat Autism bill. We have worked meticulously on the language to make sure Congress provides direction to the NIH to ensure proper research is being done in accordance with the sensitivities of the community.

This bill, in many respects, is no different. What we are doing—as we are doing in the Combat Autism bill, as we did by setting up centers of excellence within the NIH, congressional-sponsored coordinators such as diabetes coordinators—all of these things NIH could have done. Could NIH have put up, structured a diabetes coordinator? Sure. Could they have set up a cancer institute? Sure. Could they have done all these things that have been congressionally mandated to do? Yes, they could have. But Congress thought it was important enough that we put it in statute. And we direct the funding so we can get a focus on what we believe as Congress—and representing the people's belief—is important for the future of medicine.

So in this case, yes, we are directing the National Institutes of Health shall invest money—not they “may;” but they “shall” invest money—in developing alternatives to the destruction of the human embryo for the creation of pluripotent cells. In fact, there are 16 different ideas, peer-reviewed studies showing alternative sources of pluripotent stem cells that have been published already.

What we are saying to the National Institutes of Health is: Look at these particular areas and others. You shall do research in this area. You shall look for alternatives for the development of these pluripotent cells. It is a directive. That is different. That is meaningful. It is important. It is not: Oh,

they can do it already, so this is no big deal. This is a big deal. This is an important step forward in getting the NIH focused on an area of research which is ethical, moral, and potentially curative for an unknown number of diseases.

There is work being done, I can tell you, because of the work we have done, and Senator SPECTER and I have done, in Pittsburgh with a company called Stemnion which I am very proud of. They are taking cells from the lining of the placenta—I was at their lab not too long ago. They had a placenta there, and they had a technician peeling off this sheathe from the lining of the inside of the placenta.

It is a three-cell layer sheet that is opaque; you can see through it almost. But it is a three-cell layer which is put into a solution. They retrieve the middle layer of the cell. They have found that this middle layer of cell can, in fact, differentiate into various types of body tissue, which is what we are looking for with respect to embryonic stem cells. They have also found that it doesn't cause tumors, which is one of the problems with embryonic stem cells. They are not just looking at that, they are also looking at—many of these researchers who are doing research on adult stem cells, cord blood, or placenta cells, or whatever—whether they can use these cells not just for direct treatment but to create a broader based treatment—something that is not just a treatment for the particular baby who came with that placenta but whether there is a broader application with these cells.

Can they do things that many believe embryonic stem cells can do—provide some sort of cellular solution that can be replicated in large doses, instead of just individual treatments, which can be expensive and not necessarily as useful or helpful? So there is the potential for broad-based solutions out of these pluripotent cells, something which those who argue for H.R. 810 say really isn't available.

The fact is, that it is an objective. We don't know if it is available, but, again, we don't know if embryonic stem cells will result in cures because they have not to date. Senators BROWNBACK, COBURN, FRIST, and many others have talked about all of the different therapies being used today to treat people through adult stem cell research. In fact, I mentioned one, which is the soldiers, in treating wound care. There are so many others. I was at another institution in Pittsburgh where they were showing how they were treating—I know this was talked about on the floor—congestive heart failure with adult stem cells and injecting them into the heart to try to regenerate the heart. So there are all sorts of opportunities with these cells. We should pursue that.

Actually, what my bill does is focus on creating embryonic-like cells. What

my bill does is provide an alternative path to get to where those who want to see embryonic stem cell research move forward want to go. We try to get them there with an ethical way of doing it.

I am hopeful—and I have not heard anybody get up and say they would oppose this legislation—that this legislation will pass with a very large number because I think it deserves passage. It does more than nothing. It does something, and it does something very important.

Also, I believe it is important that we stand firm and say that those who may be against H.R. 810 have the opportunity to stand firm and say that we are pro research, pro science, pro improving the quality of health care in this country, but we need, as public officials, to be the governor for science.

I know there have been attempts in the past—I don't think H.R. 810 does it because it is a limited use of human embryos, but there have been attempts in the past to sort of throw the gates open and allow Federal funding for any type of research in this area. I think we have an obligation, as the voice of the people, to limit, at least with Federal dollars, where science goes with taxpayer dollars. This is a scientific society that, if you can do it, they want to do it. In my mind, far too many scientists don't feel any check by the moral implications of creating a cloned individual, which we have seen in some places around the world. There have been attempts in private labs in this country and around the world, and there still are attempts to clone individuals. We need to speak clearly into this moment. I think the passage of this alternative bill does that. It says we can be pro science and do so in an ethical fashion.

I guess I will conclude my remarks by saying that this is an important moment for us in this country. This is about the value of human life. I know people will dismiss that, saying they would be discarded anyway. All I can suggest is that every life, whether it is in a suspended state in an IVF clinic or standing on the floor of the Senate attempting to defend and protect those suspended lives, has meaning. Every life deserves protection under our Constitution. Our Constitution protects persons. It is a very interesting word. They use the term "persons." So we have had a debate in this country for half a century or more—actually since its founding—as to what a person is under the Constitution. We are going to say, with respect to embryos at IVF clinics, that they are not people. We are going to say that this 5-day-old embryo created by a couple who wanted life—think about that. Every one of these embryos was created because a couple wanted desperately to create human life, and what we are going to say is that life that was created is not a person, doesn't really exist from the

standpoint of the Constitution. I think that is sort of hard for my mind to square—that we create human life and then later we say it is not human life, it is not a person, it is not entitled to any constitutional protections.

Some people have drawn lines and said it is not implanted and therefore it is not human life. When the egg is fertilized, it takes a while for that embryo to implant in any normal pregnancy. In the interim, is it not human life? What is it? These are questions that I know are very difficult to grapple with. It is very easy—and this is the caution—it is very easy, because that little embryo doesn't have a pair of eyes, a color of hair, or a name, to dismiss this entity as insignificant, particularly when we see some utilization, some usefulness to us in its existence. This utilitarian view that, well, we don't really know what these are—at least we make the claim that we don't really know what they are, so we sort of claim that there is a cloudiness to what this is, and it then allows us to destroy that life and use it for our purposes.

Let's be very clear about that. That is what we are doing. We are using it for our purposes, to benefit us. We are using a human life to help those of us who are alive, without the permission of that silent embryo. You can say, well, H.R. 810 is sort of a rare circumstance. It is just these small groups of embryos that are unwanted. I have been on the floor of the Senate debating issues of life for 12 years now. It seems to me that every year I come up here we tend to debate a different issue, and if we had been debating it 10 years prior, we never would have taken that position; we would have found it morally offensive to have argued what we argued—in this case 10 years ago. But 10 years from now, if we allow this to happen, what will be the next argument of what we must do because of the potential benefit for us? What must we do next?

One of the principal reasons I am an avid supporter of the fetal farming bill is a great fear that 10 years from now, we will be back here arguing the bill again. We may find that the embryonic stem cell research that is done in the public sector—and it is being done now in the private sector, and certainly there is international support for it in the public sector—just isn't the right thing, that they don't work quite as well as expected. But if you grow that embryo to a little later stage and these cells settle down and are not as hyperactive as these embryonic stem cells are, which have the potential of creating tumors, if you wait until they are a month or 2 months old, now you have the right time to be able to harvest these tissues for—you name it. I will not say that is highly likely—I don't know, I am not a scientist—but I don't think that is without question.

Then what would we say? If we can maybe just put the embryos in artificial wombs for a while and let them develop for a little bit or maybe implant them into a woman who volunteers, with no moral objection, to do so. You can say, that is repugnant. It is today.

I remember when I stood on the floor and debated the partial-birth abortion bill—how many repugnant things I had to explain regarding the killing of a child. We debated that, and it failed many times on the floor of the Senate, the banning of that procedure. No, these things do not happen in one great leap; they happen with just little steps, little defensible steps, little utilitarian steps, until the next time and the next time.

This is an important moment when we will say no to that and we will do what I believe is important to stand up for that value. At the same time, we can support a measure that is pro science. At the same time, we can support a measure that says we need to move forward, we need cures, we need scientific experimentation, we need to develop this incredibly rich field of regenerative medicine and stem cell research. It is an incredibly rich field, a promising field. We need to do it at a pace and in a way that we can be proud of over time and in a way that respects the dignity of the human person. But this is an incredibly promising field. No one on either side of this issue will deny that. It is an incredibly promising field, one we must pursue.

So that is why I introduced the alternative bill. That is why I strongly support it, and I would encourage all of my colleagues to support it. I would encourage the House to pass it, and then we will be enthusiastic supporters of Senator SPECTER's and Senator HARKIN's appropriations bill, to get as much money as the NIH can responsibly use to develop this field fully. It is an incredibly promising field that we must pursue, and we can do it. We can do it, America, ethically and morally, in a way that is consistent with the proud traditions of America. Science in an ethical and moral fashion: What a nice blend. We accomplished that with the alternative stem cell bill, and I urge the Senate's adoption.

Mr. President, I ask unanimous consent that letters I have received regarding this legislation be printed in the RECORD.

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

OREGON HEALTH & SCIENCE UNIVERSITY, OREGON STEM CELL CENTER,

Portland, OR, July 17, 2006.

DEAR SENATOR: I am a Professor in the Departments of Molecular and Medical Genetics and of Pediatrics and the current Director of the Oregon Stem Cell Center at Oregon Health & Science University in Portland Oregon. I am also on the Board of Directors of the International Society for Stem Cell Research. Last month I participated in a press

conference at the Capital in support of the Alternative Pluripotent Stem Cell Therapies Enhancement Act, S. 2754, sponsored by Senators Santorum and Specter. I am writing to affirm the solid scientific foundations for this approach and to urge you to vote in favor of this very important legislation.

Let me begin by stating clearly that I do not think that adult stem cells have all the properties of pluripotent embryonic stem cells (ESC) and could be used to replace or substitute for them in therapeutic or scientific investigations. ESC indeed hold tremendous—albeit at this point mostly unrealized—potential for significant improvements of human health. My objection to using human embryonic stem cells is the fact that their procurement involves the destruction of early human life, generated either by in vitro fertilization or by cloning. Exploitation and destruction of human embryos is morally unacceptable to me and to millions of others in the United States and around the world.

Fortunately, science strongly suggests that there is a solution to this particular moral quandary. All cells of the human body share the exact same DNA sequence, regardless of whether they are adult skin cells or embryos. The fate and nature of a cell (embryo vs. other cell type) is not determined by its DNA sequence but by which genes are active or silenced. Silent genes can be activated and active genes can be silenced through skilled laboratory manipulation. This is why it is possible to use the nucleus of an adult cell to make an embryo, as was done with Dolly the sheep. The contents of the egg are able to “flip genetic switches”. 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 have included altered nuclear transfer (ANT), cell fusion and chemical reprogramming. The results were obtained by top scientists in the field and published in the best journals.

To date the direct conversion of adult cells to pluripotent stem cells without any embryo destruction has only been achieved in animals, but it is highly likely that this can be done with human cells as well. In addition to being ethically and morally unimpeachable the alternative methods also promise a major clinical/medical advantage: pluripotent cells generated by these techniques will be tissue-matched to the patient. In contrast to embryonic stem cells derived from “discarded” embryos, immune suppression would not be needed to use these cells in transplantation.

Thus, compelling scientific and ethical arguments exist for non-embryo destructive alternative methods. S. 2754, the Alternative Pluripotent Stem Cell Therapies Enhancement Act, represents an important tool to advance the development of these techniques to the benefit of all.

Sincerely,

MARKUS GROMPE, M.D.,

Professor.

JULY 17, 2006.

DEAR SENATOR: I am a physician and a Consulting Professor in the Neuroscience Institute at Stanford where for many years I have taught courses in biomedical ethics. I have also served on the President's Council on Bioethics since its inception in January 2002.

In May 2005, the Council issued a White Paper entitled “Alternative Sources of Human Pluripotent Stem Cells.” This report outlined four proposals for obtaining pluripotent stem cells (cells with the same properties and potentials as embryonic stem cells) using techniques that do not involve the destruction of human embryos. As the author of one of these proposals, Altered Nuclear Transfer, I am writing to inform you of encouraging progress in establishing both the scientific feasibility and the moral acceptability of this proposal. In what follows, I am of course speaking for myself, not for the Council as a whole or for any other institution.

Altered Nuclear Transfer (ANT) is a broad concept with a range of possible approaches. ANT draws on the basic technique of nuclear transfer (popularly known as “therapeutic cloning”) but with a pre-emptive alteration such that pluripotent stem cells are produced without the creation and destruction of human embryos. Unlike the use of embryos produced by in vitro fertilization, ANT would allow the production of pluripotent stem cell lines of specific genetic types. This would enable standardized scientific studies of genetic diseases controlled testing for drug development, and possibly patient-specific immune-compatible cell therapies.

In the year since the publication of the Council report, major advances in this project have been documented in peer-reviewed research articles published in leading scientific journals.

In January 2006, the journal *Nature* reported research by MIT stem cell biologists Rudolf Jaenisch and Alexander Meissner demonstrating, in mouse studies, scientific proof-of-principle for Altered Nuclear Transfer. The authors described this technique as “simple and straightforward,” and, in testimony to a U.S. Senate subcommittee on stem cell research, Dr. Jaenisch stated: “Because the ANT product lacks essential properties of the fertilized embryo, it is not justified to call it an ‘embryo.’”

One month later, research by developmental biologist Michael Roberts of the University of Missouri published in the journal *Science*, suggested that the same ANT approach might be accomplished more directly and by an even simpler technique.

In March 2006, at a conference of scientists, moral philosophers and religious leaders organized by The Westchester Institute for Ethics and the Human Person, there was unanimous agreement that if further refinement of these techniques is successful with non-human primates, cautious extension of these approaches to studies with human cells would be morally acceptable.

This conclusion has received further support from research reported by Hans Schoeler, Chair of the Department of Cell and Developmental Biology at the Max Planck Institute in Germany. Using the same basic alterations, he was able to establish pluripotent stem cells from these non-embryonic laboratory constructs at a rate of efficiency 50% higher than current embryo-destructive techniques (that use IVF embryos). This suggests that ANT may have both scientific and moral advantages.

In the attached letter, Dr. Schoeler explains: “Biologically (and morally), I would not consider such a . . . laboratory product to be a living being, but more rightly would consider it a single-lineage tissue culture. “He continues, “Although these studies have been conducted using mice, it is reasonable to expect that the mammalian pattern of embryogenesis is conserved to the degree

that a similar result would be obtained with human cells. These research results suggest that Altered Nuclear Transfer may be able to produce human pluripotent stem cells (the functional equivalent of embryonic stem cells) in a manner that is simpler and more efficient than current methods. Moreover, by doing so without creating a human embryo, such a project may resolve our current impasse over embryonic stem cell research and allow social consensus in support of this important new field of biomedical science."

Altered Nuclear Transfer is just one of several promising approaches that may allow a resolution of our current conflict over federal funding of stem cell research. There is also encouraging progress in 'direct reprogramming', another proposal discussed in the Council report. If we can learn the specific chemical factors in an egg that are necessary for reprogramming, we may be able to combine these factors with the nucleus of any adult body cell and produce a patient-specific, genetically matched pluripotent stem cell line. Furthermore, over a dozen types of cells from tissues as diverse as bone marrow, brain, fat, testis, and even placenta appear to share some of the properties of pluripotent cells. It is too early to claim these cells are the functional equivalent of embryonic stem cells, but thorough exploration of their potentials is obviously worthy of directed federal support.

Our current conflict over the moral status of the human embryo reflects deep differences in our basic convictions and is unlikely to be resolved through deliberation or debate. Likewise, a purely political solution will leave our country bitterly divided, eroding the social support and sense of noble purpose that is essential for the public funding of biomedical science. The President's Council on Bioethics Alternative Sources report challenges our nation to seek a solution that sustains the important human values being promoted by both sides of this difficult debate. These projects are feasible using current technologies, and the scientific information gained in their investigation would have broad value even beyond the immediate goals of stem cell research.

Senate bill 2754, The Alternative Pluripotent Stem Cell Therapies Enhancement Act of 2006, would provide crucial support for these projects. In reaching beyond the moral controversies that divide our nation, Senators Santorum and Specter have offered us a way forward with stem cell research, "one small island of unity within a sea of controversy."

Sincerely,

WILLIAM B. HURLBUT, M.D.

NATIONAL RIGHT TO LIFE
COMMITTEE, INC.,

Washington, DC, July 13, 2006.

DEAR SENATOR: With the Senate scheduled to vote on H.R. 810 on July 18, we write to express the strong opposition of the National Right to Life Committee (NRLC) to this legislation, which would mandate federal funding of research that requires the killing of human embryos. NRLC will include the roll call on passage of H.R. 810 in its scorecard of key pro-life votes for the 109th Congress.

Each human being begins as a human embryo, male or female. The government should not fund research that requires the killing of living members of the species *Homo sapiens*. H.R. 810 would require federal funding of research projects on stem cells taken from human embryos who are alive today, and who would be killed by the very act of removing their stem cells for the re-

search—a practice very different from that of the human being who dies by accident and whose organs are then donated to others.

Stem cells can be obtained without killing human embryos, from umbilical cord blood and from many types of "adult" (non-embryonic) tissue. Already, humans with at least 72 different diseases and conditions have received therapeutic benefit from treatment with such "adult" stem cells. In contrast, embryonic stem cells have not been tested in humans for any purpose because of the dangers demonstrated in animal studies, including frequent formation of tumors.

Those who favor federal funding of research that kills human embryos sometimes claim that these embryos "will be discarded anyway," but this need not be so. Many human embryos have been adopted while they were still embryos, or simply donated by their biological parents to other infertile couples. Today they are children indistinguishable from any others.

Prior to the vote on H.R. 810, the Senate will vote on S. 3504, the Fetus Farming Prohibition Act, and S. 2754, the Alternative Pluripotent Stem Cell Therapies Enhancement Act. We encourage you to support both S. 3504 and S. 2754.

S. 3504 would make it a federal offense for a researcher to use tissue from a human baby who has been gestated in a woman's womb, or an animal womb, for the purpose of providing such tissue. Some researchers have already conducted such "fetus farming" experiments with animals—for example, by gestating cloned calves to four months and then aborting them to obtain certain tissues for transplantation. This research is obviously being pursued because of its potential application in humans.

S. 2754, the Alternative Pluripotent Stem Cell Therapies Enhancement Act, would require the National Institutes of Health to support research to try to find methods of creating pluripotent stem cells (which are cells that can be turned into many sorts of body tissue) without creating or harming human embryos. The bill does not endorse any particular method, and does not allow funding of any research that would create or harm human embryos.

For additional information, please contact the NRLC Federal Legislation Department at 202-626-8820 or Legfederal@aol.com. Additional resources are available at the NRLC Human Embryos webpage at www.nrlc.org/killing_embryos/index.html and at <http://www.stemcellresearch.org/>

Sincerely,

DAVID N. O'STEEN, Ph.D.,
NRLC Executive Director;

DOUGLAS JOHNSON,
Legislative Director.

SECRETARIAT FOR
PRO-LIFE ACTIVITIES,
Washington, DC, July 12, 2006.

DEAR SENATOR: In accordance with a unanimous consent agreement approved on June 29, the Senate may soon vote on three bills relating to bioethics and stem cell research: H.R. 810, S. 2754 and S. 3504. On behalf of the U.S. Conference of Catholic Bishops I am writing to comment on each proposal.

H.R. 810, "STEM CELL RESEARCH ENHANCEMENT ACT"

This bill violates a decades-long policy against forcing taxpayers to support the destruction of early human life. Federal funds would promote research using "new" embryonic stem cell lines, encouraging researchers to destroy countless human embryos to pro-

vide more cell lines and qualify for federal grants. However, no alleged future "promise" can justify promoting the destruction of innocent human life here and now, whatever its age or condition.

The argument that "excess" embryos may be discarded by clients anyway is morally deficient. Such arguments have been rejected by our government in all other contexts, as when harmful experiments have been proposed on death-row prisoners or on unborn children intended for abortion. The fact that others may do harm to these nascent lives gives Congress no right to join in the killing, much less to make everyone else complicit in it through their tax dollars.

While these moral considerations are paramount, it is also worth noting that the factual assumptions behind the embryonic stem cell campaign are questionable. Embryonic stem cell research is not showing the remarkable "promise" claimed by supporters, but lags far behind adult stem cells and other approaches that are providing real treatments for dozens of conditions. Experts now predict that treatments may emerge in "decades" or not at all. Other experts admit that use of so-called "spare" embryos is only a transitional step in any case, that creating human embryos (by cloning or by in vitro fertilization) solely for destructive research will be the next essential step. We also know that only 3% of frozen embryos in fertility clinics are designated by their parents for use in research—ensuring that attempts to move toward large-scale research or treatments will require creating and destroying new human lives on a massive scale.

In the name of sound ethics and responsible science, Congress should reject H.R. 810, S. 2754, "ALTERNATIVE PLURIPOTENT STEM CELL THERAPIES ENHANCEMENT ACT"

Even supporters of destructive embryo research have said that "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" (National Bioethics Advisory Commission, Ethical Issues in Human Stem Cell Research, Sept. 1999, Vol. I, p. 53). Congress has a responsibility to explore how such research may be advanced without creating moral problems.

S. 2754 serves this important goal, by funding efforts to derive and study cells which have the capabilities of embryonic stem cells but are not obtained from a human embryo. For example, many studies suggest that stem cells from adult tissues and umbilical cord blood already have the versatility once thought to exist only in embryonic cells, or may acquire this versatility by various forms of "reprogramming." Pluripotent stem cells may or may not have advantages over other stem cells for some forms of research—and such advantages, if any, are most likely not in the area of providing direct treatments for patients. But the effort to explore all feasible avenues of research that do not attack human life is worth pursuing.

This bill does not fund research using human embryos, and references a careful definition of "human embryo" in the Labor/HHS appropriations bill that has served the cause of ethical research very well since 1996. In the case of any technique whose nature is uncertain, the bill provides for additional basic and animal research, to make certain that the technique does not create or harm embryos before it can be applied to humans. In short, it defines a clear and responsible policy that should be supported by defenders of the sanctity of human life, as well as by

those tempted to support stem cell research that destroys life.

S. 3504, "FETUS FARMING PROHIBITION ACT"

This bill amends current federal law against abuses in the area of fetal tissue research, to prevent the most egregious abuse of all: the use of human fetal tissue (such as fetal stem cells) obtained by growing human embryos in a human or animal uterus in order to provide such tissue.

Because no member of Congress has voiced support for such atrocities, the only argument against this bill may be that it is not needed because no one wants to do such a thing. I wish this were true. But in fact, most animal studies cited as "proof of principle" for so-called therapeutic cloning have required exactly this—placing cloned animal embryos in a womb and growing them to the fetal stage to obtain usable stem cells. Some researchers call this the new "paradigm" for human treatments from cloning. And while the biotechnology industry insists it has no interest in maintaining cloned human embryos past 14 days, it has supported state laws such as one enacted in New Jersey which allow such "fetus farming" into the ninth month of pregnancy to harvest body parts. (See "Research Cloning and 'Fetus Farming'" at www.usccb.org/prolife/issues/bioethic/cloning/farmfact31805.htm.) Now is the time to enact a national policy against such grotesque abuse of women and children, by approving S. 3504.

In short, the Senate has an opportunity to approve two bills that respect both science and ethics—and to reject misguided legislation that ignores ethical demands in its pursuit or an ever more speculative and elusive "progress." Technical progress that makes humans themselves into mere raw material for research is in fact a regress in our humanity. Therefore, I strongly urge you to oppose H.R. 810, and to approve the other two bills proposed as part of this agreement.

Sincerely,

Cardinal WILLIAM H.
KEELER,
*Archbishop of Baltimore,
Chairman,
Committee for Pro-Life
Activities, U.S.
Conference of
Catholic Bishops.*

THE ETHICS & RELIGIOUS LIBERTY
COMMISSION OF THE SOUTHERN
BAPTIST CONVENTION,
Nashville, TN, July 17, 2006.

Hon. RICK SANTORUM,
*U.S. Senate,
Washington, DC.*

DEAR SENATOR SANTORUM: The U.S. Senate will vote this week on three crucial bills dealing with the sanctity of human life. Two bills promote ethical means of research, while the third promotes the unethical destruction of human embryos. We support passage of S. 3504, The Fetus Farming Prohibition Act of 2006, and S. 2754, The Alternative Pluripotent Stem Cell Therapies Enhancement Act. We oppose in strongest possible terms passage of H.R. 810, The Stem Cell Research Enhancement Act of 2005.

The Fetus Farming Prohibition Act of 2006 (S. 3504) would make it a federal offense for a researcher to use tissue from a human baby who has been gestated in a woman's or an animal's womb for the purpose of providing such tissue. This respectable bill would prevent the manufacture and ultimate abortion of human fetuses for research, a practice that would create life for the sole purpose of destroying it.

The Alternative Pluripotent Stem Cell Therapies Enhancement Act (S. 2754) would provide new federal funding for research on alternative means for producing pluripotent stem cells without creating or harming human embryos. This is an ethical alternative to the third bill, H.R. 810, which would instead provide federal tax dollars for stem cell research on embryos created at in vitro fertilization (IVF) clinics.

The Stem Cell Research Enhancement Act of 2005 (H.R. 810) would overturn President Bush's longstanding policy that bars federal funding of research that involves killing additional human embryos to obtain stem cells. Researchers who take stem cells from embryos created by IVF destroy humans who might otherwise be given the opportunity of birth, like the 100 "snowflake" babies who have been adopted as embryos from IVF clinics in the United States. Frozen embryos are clearly not "unwanted" as many of the bill's supporters claim, and must not be seen as expendable resources for the sake of so-called "more valuable lives." Proponents of H.R. 810 claim that embryonic stem cell research could lead to the discovery of cures for diseases. However, to date it has been a fruitless pursuit yielding not even a single treatment for a disease. Research on non-embryonic stem cells, on the other hand, has produced treatments for 70 ailments, often with dramatic results.

We must seek to protect human life at all stages and promote only ethical stem cell research. The votes on these three bills directly affect whether or not human life will be protected from conception to birth in the United States. Your assistance in assuring passage of S. 3504 and S. 2754 and defeat of H.R. 810 will be greatly appreciated.

In His Service,

DR. RICHARD LAND.

THE PRESIDING OFFICER. The minority controls the next 30 minutes.

Mr. HARKIN. Mr. President, I yield 3½ minutes to the Senator from New Jersey, Mr. MENENDEZ.

Mr. MENENDEZ. Mr. President, I rise on behalf of millions of Americans and their families holding out hope that the Senate will do the right thing today, which is to support embryonic stem cell research so that scientists have the resources they need to potentially save millions of lives.

I voted for the Stem Cell Research Enhancement Act when I was in the House, and I strongly support it.

My support for this promising research is painfully personal. When I visit my mother, who suffers from Alzheimer's, and see her vacant stare, in which she doesn't even recognize her own family, I just cannot comprehend how anyone in this body can vote against this bill and deny families their last hope for a cure from the loneliness and confusion caused by this horrible disease.

Embryonic stem cells have the ability to grow into virtually any cell in the body and thus have the potential to cure people like my mother and many others. That is why this research is so vitally important.

Millions of Americans just like my family are waiting in hope that we will do the right thing. Those with loved ones suffering from Alzheimer's, Par-

kinson's, or juvenile diabetes wait in hope that their prayers will be answered and cures will be found in their lifetime. Across America, families in which a child or a parent is paralyzed from a traumatic accident hold out hope that we will do the right thing and give their loved ones back the life they knew before their injury.

President Bush and other opponents of this legislation know all too well the overwhelming public support for this promising research, but they still can't bring themselves to stand up for the people's interests over the special interests, stand up for sound science over ideology. Instead, they say one thing and do another.

You can't say you support cures, then turn around and oppose the most promising research. You can't say you support research and turn around and oppose the vital funding that will make breakthroughs possible.

For those who insist on playing politics with people's lives, make no mistake about it: The American people are watching, and they will not take kindly to seeing their last flicker of hope being extinguished.

The only thing more callous than no hope is false hope.

To those who say they are for research but vote against this legislation, they must answer to the mother who must care for her child who can't walk because of a spinal cord injury, to the wife who must help her ailing husband battling Parkinson's disease, to the father forced to watch his daughter inject herself with countless insulin needles for the rest of her life.

By saying one thing and doing another on this issue, you are creating false hope and putting these and millions of other families on yet another roller coaster of despair. I know this is true because my sister and I and our children deal with it when we look into the eyes of my mother who no longer recognizes our faces. My mother and her terrible suffering brought me to this fight, but my children and the hope for a cure for future generations inspires me to keep fighting.

We have an obligation to stand up and do what is right today in the Senate. American families and future generations simply cannot afford for us to fail them now.

Mr. HARKIN. Mr. President, I yield 8 minutes to the Senator from California, Mrs. FEINSTEIN.

Mrs. FEINSTEIN. Mr. President, I thank the manager of the bill. In just a short hour or so, the Senate will finally vote on passage of this important stem cell act. This is a long time coming.

I believe and hope that we are going to have a very strong vote in favor of this critical scientific research. I also hope that President Bush will reverse his earlier veto threat and sign this bill that holds such promise for so many

Americans suffering from catastrophic illness.

This issue, and this debate, is really about hope. It is about giving hope of a scientific breakthrough to millions of Americans suffering from chronic, debilitating, and devastating disease.

We can't stand here on the Senate floor and pretend that we know which scientific advances will cure diabetes, ALS, or cancer. Unfortunately, some of my colleagues have done just that. They have insisted that adult stem cells and cord blood cells are being successfully used to treat at least 65 illnesses. They argue that there is no reason to move forward with this bill, no reason to make new lines of stem cells available. However, adult stem cells present serious limitations and embryonic stem cell research offers unique promise.

Embryonic cells derived from embryos are pluripotent, meaning they can become any type of cell. Adult stem cells cannot, and, therefore, their application is limited. These embryonic cells are easy to grow, isolate, and study. Adult stem cells are harder to grow in a lab. These embryonic cells can divide. They can renew themselves for long periods. Adult stem cells, on the other hand, exist only in small amounts. All these properties make these stem cells an excellent target for scientific exploration.

Now, there have been heartrending stories of people suffering from diseases such as leukemia and other blood disorders who experience relief from adult stem cells or cord blood cells, and that is just great. This progress is encouraging and it should move forward. But these advances in treatments have not addressed the needs of patients suffering from other diseases.

In juvenile diabetes, for example, scientists have discovered that adult stem cells in the pancreas do not play an effective role in insulin production. To cure the disease, doctors will need insulin-producing cells to inject into their diabetic patients. This is done now on a limited basis, but there aren't enough donor cells available. Stem cells could change this. They could provide an unlimited amount of cells that are compatible with the patient, making anti-rejection drugs simply unnecessary. Of course, if we don't let our scientists try, we will never know.

Dr. Douglas Kerr of Johns Hopkins—and I used this yesterday on the floor—headed a team that used embryonic stem cells to treat 15 rats that had been paralyzed by an aggressive infection that had destroyed their cord nerve cells. Eleven of these rats experienced significant recovery. They regained enough strength to bear weight and take steps on their previously paralyzed hind quarters.

A few years ago, no one thought this could be done. Dr. Kerr explains that this is, in essence, a cookbook recipe to

restore lost nerve function, and that this procedure could some day be used to repair damage from ALS, multiple sclerosis, or spinal cord injuries.

He says:

With small adjustments keyed to differences in nervous system targets, the approach may also apply to patients with Parkinson's or Huntington's disease.

The NIH Director, Dr. Zerhouni, called this a remarkable advance that can help us understand how stem cells can begin to fulfill their great promise. What an advance this would be. Can you imagine if you could regenerate the spinal cord, once again, and if paraplegics and quadriplegics could again function? That is what this bright frontier is all about. That is what is so very important.

All of this takes time. Scientists first isolated human embryonic stem cells only 8 years ago, and in that time they have learned a substantial amount about how these cells work and how they could one day be used in treatment.

But there is also a lot we don't know. Some have suggested because there have been no miraculous cures in this 8-year period, there will never be useful treatments that come from this technology. But none of the great feats of scientific inquiry have been simple. That is for sure. Scientific progress takes time and investment. Our researchers today have made discoveries, many in mice, that could prove just as revolutionary as the introduction of penicillin in the 1940s. These preliminary discoveries will amount to nothing unless researchers have access to Federal funding and viable stem cell lines to move forward.

In the last 2 days we have heard a great deal about the hope that the passage of Castle-DeGette would bring to patients and their families.

I would like to say a final word about hope. I simply cannot believe that President Bush would select this legislation as his first veto as President of the United States. I know that he has issued a veto threat, but think about it. Think about the millions of people. Think about the fact that if you are really pro-life, these embryos—which will never become human life, which are discarded, which will not be used, which are the product of in vitro fertilization—these embryos are never going to be babies, as the opposition would have us believe. Think of the lives that these embryos might save some day. People paralyzed, people with juvenile diabetes, young people with Parkinson's disease who can't move and who have trouble speaking—think about what this can mean in terms of being for life.

That is why I think if the President thinks about this, we all have the hope on this side of the question that he will not veto this legislation.

The President himself recognized the promise of stem cell research back in

2001 when he attempted to find a middle ground. But 5 years later, it is apparent, there is no middle ground. We need embryonic stem cell research, and this is the way to do it. I am hopeful that this body will vote aye.

Mr. President, I yield the floor.

Mr. HARKIN. Mr. President, I thank the Senator from California and also the next speaker, Senator KENNEDY, for their great leadership over all of these years to give hope to so many Americans. I yield 10 minutes to the Senator from Massachusetts.

Mr. KENNEDY. Mr. President, I want to extend, as I think all of us in this body want to, appreciation to the Senator from Iowa, as well as the Senator from California and the Senator from Pennsylvania, for their long, continuing, and ongoing leadership in such an important area for families in this country.

This afternoon, the debate on stem cell research will draw to a close. For Senators, life will go on. Next week, the Senate will deal with other issues and other questions. But millions of Americans don't have that luxury. For them, the struggle against disease isn't something they think about for a few brief days. It is something they confront every day of their lives.

A child coping with endless injections of insulin and constant worries about blood sugar cannot simply turn away from this debate. Someone watching helplessly as a parent or a spouse succumbs to the tremors of Parkinson's disease cannot simply move on to other concerns.

For us, a vote on stem cell research may take only a few moments in a busy day. But for millions of Americans, the consequences of our vote may last a lifetime.

Should this lifesaving legislation pass through Congress, President Bush has said he will veto it. The President may believe that ends the debate, but it does not. This debate will continue as long as lives are diminished and cut short by diseases and injuries that stem cells might cure. This debate will go on as long as there are those of us who believe that rather than discard unwanted embryos, we should embrace them to bring fuller lives to millions of people.

For their sake our battle continues—tomorrow, next week, next month, and in the days ahead. To those who suffer and cling to hope, we promise that we will never give up. The promise of a better day that embryonic stem cell research brings cannot be denied forever.

I want to take a moment to address some of the arguments our opponents on this issue have made during this debate. Dr. Thomas Murray, one of the Nation's leading scholars in bioethics, has a simple saying: "Good ethics starts with good facts." It is like John Adams, who said, "Facts are stubborn things." Sadly, on this most important

ethical issue we have heard some very questionable allegations.

We have heard that adult stem cells have conquered disease after disease and therefore our legislation is not needed, but the facts tell a different story. The Nation's leading scientific society, the American Association for the Advancement of Science, recently published an extensive study that disputes these claims. Contrary to the allegation of opponents of our bill, adult stem cells have not treated Parkinson's disease, cancer, lymphoma, brain tumors, multiple sclerosis, arthritis, lupus, sickle cell anemia, heart damage, spinal cord injuries, and many other conditions.

The Cancer Research and Prevention Foundation was so concerned about the misleading claims that adult stem cells are curing cancer that they sent Congress a letter setting the record straight. Their letter states that the studies used to support these claims are "not extensive and by no means prove that adult stem cells are effective in treating these cancers."

In fact, out of the hundreds of diseases and injuries that our legislation might address, only nine have shown promise for treatment with adult stem cells. Let's hope that in time this situation changes. If adult stem cells can cure cancer or Parkinson's disease or spinal injury in the future, we will all—all rejoice.

But we must not foreclose the chance of progress with embryonic stem cells while this possibility is tested. No matter how deeply held the convictions are of those who oppose our legislation, they cannot erase the facts. The objective evidence has convinced the Nation's leading medical experts that embryonic stem cell research has unique potential and unparalleled promise.

Our opponents have also said that because there have as yet been no cures from embryonic stem cells, we should continue to restrict the research. Is it truly a surprise that a discovery made only a few years ago has yet to move to the clinic, especially when NIH has been prohibited from funding the most promising areas of research?

Knowledge about the function of DNA is the foundation of modern medical science. It underlies the development of every major new drug and medical treatment today. In 1973, scientists discovered how to splice pieces of DNA together, the fundamental breakthrough that led to the biotechnology wonders of today. But there were no clinical trials or new cures based on that historic discovery for years that followed.

Human embryonic stem cells were discovered in 1998. Of course, they have not led to a range of new cures in the brief time since then, just as discovering how to splice DNA did not lead to immediate clinical breakthroughs. But it would be just as foolish to keep re-

stricting stem cell research today as it would have been to stop basic DNA research in the 1970s because it did not produce instant cures.

The ethical debate surrounding stem cell research is not unique. Such debates have accompanied many breakthroughs and new therapies. It is essential for researchers to be bound by strict ethical guidelines, especially in the early days of a new science as we seek to understand its potential. Such controversy also accompanied other lifesaving and beneficial medical developments, such as DNA research and in vitro fertilization. But now, DNA research has saved lives and is alleviating suffering. And IVF has brought the joy of parenthood to couples across America. Would any of us turn back the clock and shun the new medicines that DNA research has brought? Would any of us deny the joy of children to those able to conceive only through IVF? Of course not.

In a few short minutes, the Senate will decide whether to open the extraordinary promise of stem cell research to millions of Americans who look to it with hope for new cures and a better day.

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

The PRESIDING OFFICER (Mr. COLEMAN). The Senator has 2 minutes 45 seconds.

Mr. KENNEDY. Two years ago I held a forum on stem cell research. One of the participants was Moira McCarthy Stanford from Plymouth, MA, whose 14-year-old daughter was suffering from juvenile diabetes. I received this letter from her:

For as long as I can remember, I've had to take a lot of leaps of faith. I've had to believe my parents when they told me taking four or five shots a day and pricking my finger eight or more times a day was just "a new kind of normal." I've had to just smile and say I'm fine when a high blood sugar or low blood sugar forced me to the sidelines in a big soccer game; or into the base lodge on a perfect ski day; or out of the pool during a swim meet.

But when I watched, with my parents, President Bush's decision on Stem Cell research in the summer of 2001, I just could not accept it. You see the one thing that has helped me accept all I've had to accept these years is the presence of hope. Hope keeps me going.

That night, President Bush talked about protecting the innocent. I wondered then: what about me? I am truly innocent in this situation. I did nothing to bring my diabetes on; there is nothing I can do to make it any better. All I can do is hope for a research breakthrough and keep living the difficult, demanding life of a child with diabetes until 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.

I am so happy to hear that the Senate is thinking of passing H.R. 810. I can dream again—dream of that great time when I write a thank you letter to the Senate, the House and everyone who helped me become just another girl; a girl who dreamed and

hoped and one day, got just what she wanted: her health and future. That's all I'm really asking for.

Mr. President, in a few moments we will have the opportunity to answer her. I hope the answer will be in the affirmative.

I yield whatever time remains.

Mr. LEAHY. Mr. President, I would like to take this opportunity to offer my perspectives on the issue currently being debated by the Senate, stem cell research. The debate over this issue in the Senate is long overdue. The promise this research holds for finding treatments or cures for diseases such as Alzheimer's, diabetes, Parkinson's, Lou Gehrig's disease and cancer is immeasurable.

It has been 5 years since the President announced his administration's restrictive policy on stem cell research, a policy that limited the number of stem cell lines available for use with Federal funding. All of these lines are contaminated by the use of mouse feeder cells and will likely never meet the standards required for human treatment. The United States leads the world in the medical expertise that can find cures and treatments for these scourges. But it has become abundantly clear that the President's restrictive policy is hindering scientific progress toward the discovery in the United States of possible cures and treatments for many fatal diseases that affect millions of Americans, and millions more around the world.

More than a year ago, our colleagues in the House passed legislation that would reverse the President's limiting policy. Since then, as we have all waited for the Senate to act, many more who suffer from catastrophic illness and could have been helped by research of this kind have passed away. Many of us are grieving the loss of Dana Reeve, a vocal advocate for stem cell research, who lost her battle with cancer last March. She and her husband, Christopher Reeve, had become two of the public faces in the struggle for advancement of stem cell research.

The Senate will vote on three stem cell bills today. However, H.R. 810 is the only bill that will give real reason for hope to millions of Americans and their families. Take the case of a woman from my State of Vermont who was diagnosed with multiple sclerosis in 1999. Forced to give up her career as a musician because she could no longer use her hands to play the piano, she began working as a clerk in a gift store, only to have to give up that job because she had trouble handling money and sometimes broke the items in the store. Her plea to me—and really to all of us—is deeply moving. Listen to her appeal: "If there is any chance stem cell research might help MS, it must be done. There is nothing else for MS patients to look forward to . . ."

I would like to address two of the arguments that opponents of this stem

cell research offer against the passage of H.R. 810. They contend that there is no need for public funding of this research because private funds are available in some situations. While there are private dollars being used for embryonic stem cell research, public funds are needed to spur on this research, to lead this research effort to the cutting edge of progress, and to harness the work of our National Institutes of Health. Public funding is also needed to keep the United States competitive with other countries in this arena.

At the University of Vermont, for example, researchers are using bone marrow stem cells to repair damaged tissues in various organs. This work could be expanded with the infusion of Federal research dollars.

A second misdirected argument is that this embryonic stem cell research is not needed because alternatives to embryonic research hold more promise than the current method. Some argue that embryonic stem cell research is not needed because it has not yielded any results. However, none of the proposed alternatives has proven successful for deriving human stem cells, and there is no guarantee that any of them ever will. While it is true that embryonic stem cell research has not yet led to human therapies, it is important to remember that this field is only in its infancy. This is because President Bush's restrictions have prevented federally funded investigators from fully exploring the potential of this research.

The President has indicated his intent to veto H.R. 810 should the Senate pass this bill. I join my colleagues in urging him not to use the first veto of his administration to block funding for this research. H.R. 810 is a bill that has garnered support across the faith community and across political lines. I respect those who raise concerns grounded in what they believe are moral and ethical issues surrounding this issue. I would assure them that this bill contains provisions that will ensure donor consent for the use of the embryos for medical research. The bill also maintains that research on these stem cells will be conducted in an ethical manner.

Those who oppose stem cell research seemingly ignore the fact that embryos used for this research will be otherwise discarded. Women at fertility clinics are given an option of what to do with unused fertilized embryos. At the discretion of the donor, embryos can be preserved, donated for medical research, or discarded. In the United States, there are more than 400,000 frozen embryos which are stored for infertile couples, and many ultimately will be thrown away. The options of discarding these embryos or allowing them to be used for lifesaving research would seem to offer a clear choice to those on both sides of this debate.

I am proud to be a cosponsor of S. 471 and I urge the Senate to pass the Stem Cell Research Enhancement Act so we can begin realizing the promise of this research.

Mr. AKAKA. Mr. President, of the three bills being discussed, only one, H.R. 810, the Stem Cell Research Act, contains language which would lead to substantive expansion of stem cell research. The legislation would authorize Federal funding for research on stem cells derived from donated embryos. These embryos will likely be destroyed if they are not donated for research. The bill also would institute strong ethical guidelines for this research.

We must pass 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 to develop 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, such as diabetes, cancer, Parkinson's disease, Alzheimer's, autism, heart disease, spinal cord injuries, and many other afflictions. We cannot afford to limit research that could help improve the lives of so many who currently suffer from diseases which we have limited ability to prevent, treat, or cure.

If we fail to enact H.R. 810, 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.

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 on an area of research that is very promising. We need to pass this legislation to help move research forward that could alleviate the pain and suffering of individuals.

The other two bills being debated do not provide much help. I agree with the American Diabetes Association that neither S. 2754 nor S. 3504 "would have any real impact on the search for a cure and better treatments with diabetes." These two bills are no substitute for H.R. 810. I am hopeful that we will be able to pass H.R. 810 and ensure that it is enacted. I am a proud cosponsor of S. 471, the Senate companion legislation to H.R. 810, which was introduced by my colleagues, Senator SPECTER and Senator HARKIN. We have a responsibility to do all that we can to support

this promising research that has the potential to improve the lives of individuals suffering from diseases.

On June 21, 2005, I met a young constituent, Dayna Akiu, at a hearing on juvenile diabetes in our Homeland Security and Governmental Affairs Committee. Dayna shared with me her success at overcoming the problems associated with diabetes, which meant a lot to her as an active soccer player. Dayna wanted me to also know that children have a very difficult time managing their diabetes. For example, checking blood sugar and taking insulin shots is hard to do for anyone suffering from diabetes, especially for children. Stem cell research has the potential to make life better for Dayna and countless others. Every time I meet with constituents advocating for increased stem cell research, I am reminded of the great possibility of improving their lives through this innovative medical research. We must allow this research to move ahead to improve the lives of Americans of every age across this country.

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.

It is clear from the last 2 days of debate in the Senate that people on both sides of this issue have very strong feelings about their positions, and rightly so. This is an extremely important issue that raises a whole host of questions to which there are no easy answers.

On one hand, we must consider the fundamental question of how to treat potential human life. On the other, we must consider the vast potential of a scientific field that could greatly improve millions of actual human lives and save millions more. When the stakes are this high, we are obligated to have an honest, open, and thorough debate.

In keeping with the gravity of these questions and the potential ramifications of how we answer them, I believe that both the Government and the scientific community should address them responsibly.

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 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 Government 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 the House 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, H.R. 810 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. 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 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 H.R. 810 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—on everything from cars to computers to medicine—that have made life easier and better for people in our country and all over the world. In a field with such great promise, I believe we owe it to our history and to our position in the world community to once again be the leader.

I want to be clear that I also believe we should promote research on adult umbilical cord stem cells, as well as alternative methods of creating embryonic stem cells. In addition, we should do everything in our power to prevent unethical and repulsive practices from pervading this kind of research. For that reason, I strongly support the other two proposals that are currently before the Senate, S. 2754 and S. 3504.

As I make these remarks today, I think once again of my father. I also think of other fathers, mothers, brothers, and sisters across this great Nation who live every day with debilitating conditions that stem cell research could help cure. Suffering that could be stopped. Lives that could be saved. Families that could stay together.

We have an opportunity to make great strides on these fronts today and to do so responsibly. I urge my colleagues to support H.R. 810.

Mr. WYDEN. Mr. President, today we must reach across the aisle and make a strong bipartisan statement supporting

embryonic stem cell research and challenge our scientists to use embryonic stem cells to see if the promise of treatments and cures can be made a reality for the many around our country and around the world who look to this research for hope.

The Web site of the National Institutes of Health says it most clearly. That Web site states embryonic "stem cells have potential in many different areas of health and medical research. To start with studying stem cells will help us to understand how they transform into the dazzling array of specialized cells that make us what we are. Some of the most serious medical conditions such as cancer and birth defects are due to problems that occur somewhere in this process. . . . Pluripotent stem cells offer the possibility of a renewable source of replacement cells and tissues to treat a myriad of diseases, conditions and disabilities including Parkinson's and Alzheimer's diseases, spinal cord injury, stroke, burns, heart disease, diabetes, osteoarthritis and rheumatoid arthritis."

Scientists believe that Parkinson's disease, Alzheimer's, and spinal cord injuries are some of the areas that could be helped through embryonic stem cell research. I see no reason embryonic stem cell research should be treated any differently than other research.

Some say embryonic stem cell research has not helped to date. Some point out that there has not been much success in stem cell research since it began in 1998. This kind of research has been only done for less than 10 years. That is a nanosecond when it comes to scientific research. In comparison, Congress passed the National Cancer Act in 1971. This was legislation to make "the conquest of cancer a national crusade." That legislation greatly accelerated the pace of cancer research and its translation into treatment. However it was not until 2005, when cancer deaths in the United States declined for the first time since 1930, when the United States started tracking cancer deaths. In the intervening years treatments evolved to help people fight cancer and live longer and better with the disease.

Those opposed to this research say that supporters of embryonic stem cell research have overpromised the benefits of the research. Without expanding the research beyond the bounds of current policy, people will never know what might have been.

California, New Jersey, Illinois, and a few other States have stepped up to help fund research, but they should not be expected to carry this burden alone. H.R. 810 will give clear the way for researchers to use Federal funding to access other cell lines than the 22 currently approved lines and provide access to other critical tools needed so research in this promising new area

can be accelerated to the benefit of all. I urge support for H.R. 810.

Mrs. BOXER. Mr. President, I rise in support of this long overdue legislation to expand stem cell research.

When this issue first came up with President Bush in 2001, he had a choice between helping scientists conduct life-saving research or putting politics before science. To the detriment of the millions of Americans suffering from diseases and conditions for which there is no cure, the President chose politics and decided that Federal funds could only be used for research on existing stem cell lines.

At the time, there were 78 existing stem cell lines—only 22 of which were usable. Scientists agreed that this was nowhere near enough to fulfill the promise that stem cell research provides. To make matters worse, scientists at the University of California San Diego and the Salk Institute for Biological Studies in La Jolla conducted an extensive study showing that even those lines are contaminated by mouse feeder cells—and unsuitable for human therapies. So the President's policy—painted as a compromise at the time—left scientists with little to no chance to advance their research.

At least 10 countries have made significant financial commitments to stem cell research. Our commitment is less than one quarter of Australia's. Our country's failure to lead on this is having significant consequences. Here is one example:

After the President's announcement in 2001, Roger Pedersen, one of the world's leading stem cell researchers, announced that he was leaving his faculty position at the University of California San Francisco for one at the University of Cambridge. He saw a promising future for stem cell research in the United Kingdom, yet saw none in the United States.

We need to change this.

I am proud to say that California recognized that our Federal policy was unacceptable. The State has enacted the Nation's first law to permit research involving human embryonic and adult stem cells while facilitating the voluntary donation of embryos for stem cell research. Now how did this happen in California? It started with one man and one family.

Roman Reed was 19 years old when he broke his neck in a college football game and became paralyzed. Roman's parents led a campaign in 2002 to pass legislation to invest in spinal cord injury research.

Then, in November 2004, Californians passed Proposition 71, which provides \$3 billion in State funding over 10 years for embryonic stem cell research. Unfortunately for Roman and his family, legal challenges have stalled these funds, and with them, stalled their hope for a brighter future.

More States are considering their own initiatives, but these State efforts

simply can't supplant the resources and expertise that would result from research supported by this administration and the National Institute of Health.

Today, after years of struggling to pass this legislation, we have an opportunity to offer hope to thousands of Americans and put America back on the cutting edge of science. We know we can make a difference when we give our scientists the tools and support to do their work.

Because of our national commitment to scientific achievement and through NIH-supported research, death rates for heart disease and sudden infant death syndrome have been nearly cut in half in the past several years. The number of AIDS-related deaths fell 70 percent between 1995 and 2001. HIV/AIDS has become a disease that more people live with and fewer die from. And as a result of critical research at the National Cancer Institute at NIH, the survival rate for children with cancer rose by 80 percent in the 1990s.

The current Federal policy has been a roadblock to progress. This bill will put us back on the right track. Some in this body have been telling the American public that stem cell research is morally wrong. But we have taken every step to address their concerns in this bill.

This legislation would only allow Federal funding of research on stem cell lines derived from excess fertilized embryos that were never actually used in couples' in vitro fertilization processes. Right now, these embryos are being discarded, and we are losing hundreds or even thousands of valuable new stem cell lines.

I believe it is wrong to have those embryonic stem cell lines go to waste when we could instead offer hope to Americans suffering from devastating medical conditions. We have a moral imperative to try to relieve their pain.

That is why we have seen a broad coalition of people across political lines that support this research. One example is former First Lady Nancy Reagan. She took a stand that was based on compassion and not politics. For many years, she cared for President Reagan. She inspired millions of Americans with her quiet courage and dignity. She knows that this research holds the best hope for the 4.5 million people who, like her late husband, suffer from Alzheimer's. She knows that supporting stem cell research would save many lives.

Our beloved Christopher Reeve—who we all know was paralyzed from a riding accident—supported and actively campaigned for this research because he knew that those 250,000 to 400,000 people with spinal cord injuries potentially could be treated.

How many of us have ever seen a colleague, friend, or family member suffering from a terrible disease like Par-

kinson's? Where the sufferers and their families struggle with debilitating physical deterioration, ever-changing medications with terrible side effects and the knowledge that the patient's condition will continue to decline—often fatally?

How many of us have met with constituents and patient advocate groups—like the ALS Association, the Juvenile Diabetes Research Foundation, the Leukemia and Lymphoma Society—that share their stories of courage and great hope for the passage of this legislation? Stem cell research has the potential for finding cures to diseases like Parkinson's, ALS, diabetes, and cancer, and has the great potential to reduce suffering. We should fulfill that potential and pass this important legislation now.

I hope that Senators support H.R. 810 because we can change the current policy and open the door to major advances in medical science through stem cell research.

President Bush has said that he will veto this legislation if it reaches his desk. I ask him to reconsider this unwise decision. The lives of millions of Americans are in his hands.

Mr. CONRAD. Mr. President, as the Senate debates stem cell research, I wanted to indicate that I will be supporting all three measures before the Senate. I will support these measures because I have great faith that some day this promising research will lead to cures for some of our most devastating diseases.

This is not a decision I came to hastily. I have thought long and hard about stem cell research. Hundreds of North Dakota families have told me this research is the key to helping their loved ones lead healthy lives. I have also heard from North Dakotans who have very strong religious objections to stem cell research. I respect their views. But, in the end, I believe we should put an appropriate ethical framework in place to give hope of a cure to those who suffer from disease. That is why I am supporting stem cell research.

In 2001, a group of U.S. Senators, including me, called on President Bush to allow Federal funding of stem cell research. The President agreed and created the current policy of allowing research but only on those lines developed by August 9, 2001. This arbitrary date has limited the ability of scientists to fully realize the potential of stem cell research. In fact, there are only 22 lines available today, and all are contaminated. I think it is right to expand the available lines. And it is imperative that we create a strong framework to ensure this research is done in the most ethical way.

It has been over a year since the House of Representatives took action on H.R. 810, the Stem Cell Research Enhancement Act, and passed it with

overwhelmingly bipartisan support. This bill expands Federal research while strengthening the ethical guidelines associated with it. To be clear, this bill would only allow research on stem cells taken from excess embryos used in fertility treatments. Fertility clinics help couples have a baby, but sometimes this therapy produces extra embryos, which can be disposed of, donated to other couples, or used for research. A 2003 study estimated that 400,000 excess embryos are currently stored in these clinics and more than 11,000 of those have been designated for research. This bill simply allows researchers access to those embryos.

H.R. 810 also requires that these embryos would never be implanted into a woman and that the individual has given written consent for the donation. Under the current policy, there are no such guidelines. I believe these requirements are essential to ensuring the strongest ethical behavior.

Before I close, I would like to share the stories of two young girls that I have had the pleasure of meeting. Their stories—as well as the thousands of others like them—have deeply impacted my decision to support H.R. 810. Ashley Dahlen and Camille Johnson are both teenagers suffering with juvenile diabetes. And I truly mean suffering. They each have scars on their fingertips from where they have to check their blood sugars constantly, even while they are sleeping. They have to stay home from school when their sugars are too high. Both have had extremely close calls and have been hospitalized. Without a cure, both will end up on dialysis and will suffer other complications, possibly even heart failure.

These young girls and their families support stem cell research. They want to grow up, get married, and have children of their own. They continue to hope that one day, stem cell research will provide them a cure to this most awful disease. I share their hope and faith in stem cell research. Today, I am voting to pass this hope along to the millions of children and families suffering from diseases that could be cured using stem cell research.

Mr. BYRD. Mr. President, today, the Senate is debating H.R. 810, the Stem Cell Research Enhancement Act, which would allow the Federal Government to provide additional funding for embryonic stem cell research. I have received numerous heartfelt letters from constituents outlining their concerns with embryonic stem cell research. These are concerns which I simply cannot overlook or dismiss.

I know the suffering and worry that families go through when a loved one desperately needs treatment for a serious progressive illness. Easing the pain and suffering of our loved ones, our daughters, sons, parents, and grandparents, should be at the hallmark of a

caring society. The potential of finding cures for Parkinson's disease, Alzheimer's, cancer, and diabetes must not be ignored.

I understand the promise for embryonic stem cell research to yield treatments and therapies for numerous diseases; however, we must not overlook the ethical concerns associated with such research. I am a great supporter and will continue to be a proponent of fully funding the Centers for Disease Control and the National Institutes of Health for research into cures for cancer, diabetes, and heart disease, to name a few, which is why I also support H.R. 810. However, the moral implications of embryonic stem cell research must not be discounted.

We are not just debating whether the scientific and medical communities should continue the exploration of embryonic stem cells their impact on medical conditions. If Federal funds begin to flow without also addressing moral issues such as human cloning, how long will it be before an ethical crisis of our own making erupts? This is why the Congress should also debate a framework to ensure that practices such as reproductive cloning do not take place. The Senate has taken up three bills, none of which provides guidance about stem cell research's future development. None of these bills addresses the need to examine the possibility that embryonic stem cell research might lead to potential immoral outcomes, such as the cloning of human beings for illegitimate purposes. We must not dismiss these ethical and moral undertones. A comprehensive approach must be devised to protect science and medicine against misuse and public backlash. While I will support H.R. 810 in order to help provide hope to those who suffer from diseases, the Congress must take a hard look into ensuring scientific integrity as this medical research proceeds.

Mr. LIEBERMAN. Mr. President, I rise in support of the stem cell bills currently being considered by the Senate. Frankly, this debate has been too long in coming and I commend my friends, Majority Leader FRIST and Minority Leader REID, on coming to an agreement and bringing this debate to the floor.

This is as real as it gets. This is about life over death and hope over despair. This is about encouraging astounding scientific advances that can relieve the suffering of millions of our fellow citizens, or accepting a shriveling stasis that, in fact, sounds a retreat as we watch the rest of the world march past us.

We have before us three stem cell bills, but only one, the Stem Cell Research Enhancement Act, H.R. 810, deals with embryonic stem cells.

Let me say that with a big "E." These embryonic stem cells actually

hold the greatest promise for those afflicted with currently incurable diseases such as Alzheimer's, heart failure, and spinal cord injury. These stem cells are pluripotent—that is they can differentiate into any and all tissues.

There is still much to know about what causes appropriate differentiation of embryonic stem cells, but if we conduct research to answer these questions, we will have the scientific power to replace dead neural tissue and muscle and cancerous white blood cells, with fresh new ones.

The potential is breathtaking. What this means is that an individual with quadriplegia could walk again. The elderly affected by Alzheimer's can be brought back from a hellish twilight and rejoin their families. Childhood leukemia could be banished to the realm of distant memory. And Americans everywhere will have a second chance at running with strong loud hearts.

The science on embryonic stem cells is new and complicated, which is why we need our Nation's brightest minds working on this. Yet in 2001, President Bush issued an executive order which effectively banned federally funded embryonic stem cell research. This has stifled our Nation's attempts to lead the world in harnessing the potential and miracles of embryonic stem cells. The President reasoned, like many who oppose this bill, that the process of embryonic stem cell extraction amounts to abortion because these cells have to be taken from microscopic embryos that do not survive the process.

What the President did not mention is that the embryos under discussion number in the tens of thousands. They are the unused embryos from in-vitro fertilization, are frozen in fertility clinics, are unique, and will be thrown away.

I repeat: Thrown away. The chance to offer new life to millions of Americans suffering from debilitating by disease or injury will be discarded as medical waste.

Given these facts, the choice seems clear. The Senate must choose to advance the scope of our scientific knowledge and expand the horizons of our medical technologies.

The House has already done this. Last year, by a vote of 238 to 194, the House passed H.R. 810, introduced by Representative MICHAEL CASTLE, which authorized federally funded research on embryonic stem cell lines derived from surplus embryos at in-vitro fertilization clinics, provided that donors give consent and that they are not paid for the embryos.

The Senate today has the opportunity to join the House and we must do so by a resounding majority to convince the President that a veto of the Stem Cell Research Enhancement Act is contrary to what Americans want.

More than 65% of Americans support federal funding of embryonic stem cell research across all party lines.

Finally, I do support the other two bills being considered alongside the Stem Cell Research Enhancement Act. But a vote for them without a vote for H.R. 810 is the height of cynicism.

Let us be clear, alternatives to embryonic stem cells, such as umbilical cord and adult bone marrow stem cells, are inferior alternatives. They do not have the same regenerative potential and Congress has already authorized money that is currently being used for research in this area.

Today we stand at destiny's doorstep with the chance to have it swing wide and open into a new age of scientific and medical understanding. We must not hesitate.

I urge my colleagues to join me in passage of H.R. 810 and I call on President Bush to sign it into law and not veto the hopes and dreams of millions of Americans for whom astounding new cures may lie just over the threshold of our present knowledge.

I yield the floor.

The PRESIDING OFFICER. The Senator from Iowa.

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

The PRESIDING OFFICER. The Senator from Iowa has until 3:15. I think it is about 8 minutes.

Mr. HARKIN. Eight minutes? Then I yield myself 8 minutes, I guess.

First of all, Mr. President, I thank all the Senators who came here to speak in support of H.R. 810, Republicans, Democrats, liberals, conservatives, moderates. I think it has been a very good debate.

When I started the debate, I talked about hope. Senator FEINSTEIN spoke about that. Senator KENNEDY just spoke eloquently about hope. I think that is where we should close the debate, on hope, because H.R. 810 offers real hope. It offers real hope to people who are suffering from Alzheimer's, from ALS, Lou Gehrig's disease, Parkinson's, spinal cord injuries, juvenile diabetes. It offers hope to their loved ones and their families.

Senator KENNEDY just read the statement by Lauren Stanford about her hope, her hope that she can one day be whole again. To repeat for emphasis sake what Senator KENNEDY just said, Lauren Stanford—she is innocent, as she said. She did nothing to bring on her diabetes. As she said, all I have is hope.

I am so happy to hear that the Senate is thinking of passing H.R. 810. I can dream again.

The one thing that has helped me accept what I have had to all these years is the presence of hope. Hope keeps me going.

That is Lauren Stanford. "Hope keeps me going."

H.R. 810 basically opens the door and lets in the sunshine. It opens the door

for more responsible research, research done with good peer review, research done with good oversight, and, I might add, research done with strong ethical guidelines that we have in H.R. 810.

I remind my colleagues and all who are watching, the ethical guidelines in H.R. 810 are stronger than what exists right now—stronger than what exists right now.

The American people get it. They understand this. We know in a recent poll that asked, "Do you support embryonic stem cell research?" that 72 percent said "Yes." That is almost three out of four. Most of these American people who support stem cell research don't have MDs. They don't have a Ph.D. But they know one thing: virtually every reputable biomedical scientist, almost all Nobel Prize winners, say that embryonic stem cell research holds enormous potential to cure diseases and injuries. They know that.

That is why 591 groups, disease advocacy groups, patient groups, scientific groups, research institutions, religious groups—591 American organizations support H.R. 810. That is why over 80 Nobel Prize winners have written to us asking us to pass H.R. 810. The American people get it. They know what is at stake.

As I said, it has been a good debate. I thank Senator FRIST, our majority leader, for engineering this debate and making it possible for us to have an up-or-down vote on H.R. 810. But I must say, in the last couple of days, what has saddened me is that so much time has been spent talking about whether adult stem cells or embryonic stem cell research is the way to go. Frankly, the vast majority of American people could care less. They could care less. They want cures. They want cures for Parkinson's and Alzheimer's and juvenile diabetes and spinal cord injuries. They want their loved ones to have a better life, a fuller life, a pain-free life—less suffering.

If adult stem cells get us there, fine. If embryonic stem cell research gets us there, fine. We should not shut the door; we want to open the doors. We have done 30 years of work on adult stem cell research and not one of these illnesses has yet been cured or even remotely cured by adult stem cells. We have only had embryonic stem cells for 8 years, but we ought to open the doors.

It is a false dichotomy to say that it is either adult stem cells or embryonic stem cells. As Senator SMITH of Oregon said today so eloquently, the people of America want these embryos that are left over from IVF clinics not to be discarded but to give the gift of life to those who suffer.

Last night when I left the floor of the Senate, I met a young man out here, the first time I ever met him. His name is Jeff McGaffrey. He is sitting here on the floor of the Senate today. I didn't

know this: he is an intern on the HELP Committee. He was appointed to the U.S. Air Force Academy in Missouri, and during his first year there he suffered an accident and now doesn't have the use of his legs. He is paralyzed from the waist down.

I want to read this. This is a letter from Jeff McGaffrey.

Honest to God, not a day goes by, not an hour goes by when I don't think about my days at the academy, about the life I led as an officer in the Armed Forces, leading soldiers in service to our nation. In spite of this chair that I am confined to, I still regard myself as an officer, a soldier on the frontlines of a different type of battlefield; a battle not against a country or an army, but against disease and injury.

I continue to cherish the hope for a cure, until the day comes, if God-willing, I can walk away from this chair and back into the camaraderie and respect of the men and women who proudly serve our country in the Armed Forces.

I ask that you please keep my hope alive, and not just my hope but the hopes of millions of people, including our soldiers and veterans who proudly served our country and who currently suffer from disease and injury.

Keeping this hope alive is made possible by moving forward with stem cell research, especially H.R. 810, the Stem Cell Research Enhancement Act. We know not where embryonic stem research might lead, but we know there is only one way to find out, by allowing NIH funding for our best and brightest scientists to explore the full therapeutic potential of embryonic stem cells.

I ask unanimous consent that Jeff McGaffrey's letter be printed in the RECORD.

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

DEAR SENATOR HARKIN: My name is Jeff McGaffrey, and I had the wonderful privilege of meeting you last night at the end of the stem cell debate. As you could tell, I was confined to a wheelchair. I currently suffer from paralysis due to a spinal cord injury. I am a resident of the great state of Missouri, currently interning for the Senate HELP Committee through Chairman Enzi working on the health policy team. I'm also a student at the University of Missouri-Kansas City.

I have not always been a student at the University of Missouri-Kansas City, nor have I always been confined to a wheelchair. I was appointed to the U.S. Air Force Academy following high school. It was an honor that I continue to be proud of. Unfortunately I suffered a spinal cord injury while I was there. I believe one of the greatest honors and responsibilities that an individual can have is being an officer in the armed forces, leading soldiers in service to our nation. This was, and still is, my goal, my ambition, one in which I would dedicate my life to.

Honest to God, not a day goes by, not an hour goes by when I don't think about my days at the academy, about the life I would have led as an officer in the armed forces, leading soldiers in service to our nation. In spite of this chair that I am confined to, I still regard myself as an officer, a soldier on the frontlines of a different type of battlefield; a battle not against a country or army, but against disease and injury.

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Whether cures are found, whether my dream becomes a reality or not, I hope my service, in whatever capacity it might be, can lay the foundation for a better world, which is exactly what the brave men and women who serve our country do every day.

Respectfully,

JEFF MCGAFFREY
Former U.S. Air Force Cadet.

Mr. HARKIN. Mr. President, I close with this thought. So many people are suffering in our country. They have hope.

My nephew Kelly was injured 27 years ago serving his country—just like Jeff McGaffrey—on an aircraft carrier in the Pacific. He was sucked down by a jet engine and broke his neck. He has been paralyzed for 27 years. He keeps his hope alive. He has followed this debate. He has followed years of research. Kelly McGuade is a smart young man. He has followed it, and he knows that the one thing which gives him the best hope is embryonic stem cell research.

Are we today going to dash their hopes? Are we going to shut the door, pull the curtain down, and say, I am sorry? What all the major scientists with the best minds say is the best potential—are we going to close the curtain and shut the door?

I say open the door. Bring in the sunshine. Let our scientists move ahead with the strong ethical guidelines, with good peer review and with good oversight to give hope to my nephew, to Jeff, and to millions of Americans.

I yield the floor.

Mr. ALEXANDER. Mr. President, embryonic stem cell research has enormous promise for lifesaving treatments that may help cure juvenile diabetes, Parkinson's, spinal injury, and other debilitating diseases. That is why I will vote today for the House-passed legislation that allows Federal funding of research on stem cells derived from excess embryos at fertility clinics that would otherwise be discarded.

President Bush has already said that Federal funds may be used in some cases for research on some stem cell lines derived from fertilized eggs. This bill will increase the number of stem cell lines available for research.

With the help of fertility clinics, some perspective parents use fertilized

eggs to help them have children. The excess eggs that these parents don't use often are thrown away. I support using some of these fertilized eggs under carefully controlled conditions with the consent of the donors for potentially lifesaving research.

I will also vote for two other bills this afternoon. The first bill encourages stem cell research that does not involve the destruction of embryos, and the second bill bans fetal farming—the practice of creating fetuses solely for research purposes.

Mr. MCCAIN. Mr. President, I will vote in support of all three bills under consideration today, which together provide a framework for addressing the issue of stem cell research. This research holds the potential to unlock cures that could defeat deadly diseases and relieve tremendous human suffering. At the same time, one type of stem cell research, involving embryonic stem cells, has also raised serious ethical and moral concerns, both inside and outside the medical community. I believe the framework provided by the three bills before us today offers a way forward.

S. 2754 offers increased Federal funding and support for adult stem cell research and other types of stem cell research that do not involve the use of human embryos. Scientists believe this research holds tremendous potential, and I share their hope. Countless numbers are affected by the many diseases that this type of research may offer future cures.

In promoting stem cell research, one of the lines that must not be crossed is the intentional creation of human embryos for purposes of research rather than reproduction. A second bill before us, S. 3504, draws a line that says we in the United States will not abandon our values in pursuit of scientific progress. This bill bans the practice of what has been referred to as “fetal farming.” It makes it a Federal crime for researchers to use cells or fetal tissue from an embryo that was created for research purposes. This bill also makes it a Federal crime to attempt to use or obtain cells from a human fetus that was gestated in the uterus of a nonhuman animal. These provisions close important gaps in our existing laws, and I urge my fellow Senators to join me in supporting this bill.

It is important that we act now to address these issues because research involving embryonic stem cells is also proceeding outside the United States. Unfortunately, the intense focus on ethical and moral concerns that has driven the debate in America, as reflected in the President's Commission on Bioethics, is not always present in private industry and the scientific community in other parts of the world. I am concerned about the path that some of this unregulated research leads us down. Of particular concern is the

potential for experimentation into human cloning. Our involvement through this legislation is another protection against sanctioning such practice within our own borders. I am concerned that ongoing research elsewhere may result in the routine acceptance of deeply troubling practices, in particular the intentional creation of human embryos for purposes of research rather than reproduction.

However, it doesn't have to be this way. The United States offers a 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 final bill before us, H.R. 810, will allow us to attract scientists to perform highly regulated embryonic stem cell research that will otherwise take place in an unregulated environment somewhere else. This bill authorizes Federal support for embryonic stem cell research but limits that support to scientists who use embryos originally created for reproductive purposes, and now frozen or slated for destruction by in vitro fertilization clinics. H.R. 810 requires that prior to even considering whether to donate unused embryos for research, the patient who is the source of the embryos must be consulted, and a determination must be made that these embryos would otherwise be discarded and would never be implanted in the patient or another woman. This provision ensures that patients with excess embryos will first consider the possibility of embryo adoption, and only if this option is rejected will the patient then be consulted concerning the possibility of embryo donation. A patient donating embryos that would otherwise remain frozen or be destroyed must give written informed consent, and H.R. 810 makes it illegal for anyone to offer any sort of financial or other inducement in exchange for this consent.

All of these carefully drawn rules contained in H.R. 810 do not exist in the status quo, and this sort of embryonic stem cell research remains largely unregulated in the private sector and in many parts of the scientific community overseas. Federal oversight that will come with approving this bill will allow us to ensure that this 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 noted that this type of research will proceed with or without Federal approval, so I believe that it is best carried out under strict Federal guidelines and oversight. It is my hope that by offering limited Federal support in the context of the framework provided by the three bills before us today, we can realize the benefits of stem cell research while also

drawing clear lines that reflect our refusal to sacrifice our ethical and moral values for the sake of scientific progress.

Mr. DOMENICI. Mr. President, stem cell research has brought to the forefront the longstanding debate between bioethics and advancements in medical science. Stem cell research evokes hope in scientific progress while at the same time reminding us of its ethical hazards. Unquestionably, this is one of the most difficult public policy issues the Senate has discussed in many years.

I wish to make it very clear that I do not oppose stem cell research. I support and encourage research that uses cells derived from adult tissues and umbilical-cord blood and hope that an alternative source of embryonic stem cells, one that does not destroy embryos, can be found. I believe that it is possible to advance scientific research without violating ethical principles. It is my intention to support the Alternative Pluripotent Stem Cell Therapies Enhancement Act, S. 2754, which will support the use and further development of techniques for producing pluripotent cells like those derived from embryos but without harming or destroying human life.

After much reflection on this issue, I have determined that I personally cannot support H.R. 810, the Stem Cell Research Enhancement Act. Taking stem cells from an embryo kills that embryo, and destroying human life is never justified even if it is done in order to benefit others. Obtaining good for oneself at the cost of another is contrary to my deepest held moral beliefs.

I do not believe the American public should have to fund research that many find morally objectionable. The future of this research does not require a policy of Federal funding. There is no ban on private funding of embryonic stem cell research, and there are other resources available to fund this type of research. The State of California has even chosen to use State taxpayer funds for embryonic stem cell research.

It is also my intent to support S. 3504, the Fetus Farming Prohibition bill. This bill would make it illegal to perform research on embryos from “fetal farms,” where human embryos could be gestated in a nonhuman uterus or from human pregnancies created specifically for the purpose of research.

Although it is often portrayed as such, the debate over embryonic stem cell research is not easily reduced to simple positions in support or opposition. Good people can and do disagree on this very complex issue. It is my belief that by pursuing the appropriate scientific techniques we can alleviate human suffering and also preserve the sanctity of human life, and it is for these reasons that I cast my vote today.

Mr. SPECTER. Mr. President, I wish to address some of the comments made by my colleagues, Senators BROWNBACK and COBURN, during the debate regarding H.R. 810.

Senator COBURN stated that "every disease Senator HARKIN listed—every disease save ALS—has an adult stem cell or cord blood stem cell cure that has already been proven in humans, without using embryonic stem cells." Senator HARKIN listed the following diseases and injuries: cardiovascular disease, autoimmune disease, Alzheimer's, Parkinson's, spinal cord injuries, birth defects, and severe burns. My response to Senator COBURN is where are these cures of which he speaks? Cardiovascular disease remains the No. 1 killer of Americans. Autoimmune diseases like multiple sclerosis and lupus confound family members of Senators in this Chamber. Nancy Reagan would likely have heard of a cure for Alzheimer's disease. Christopher Reeve recently passed away and his spinal cord injury was not healed by adult or cord blood stem cells. To say that "proven cures" exist is to defy the experience and insult the intelligence of millions of Americans.

Senator COBURN stated that we are telling the American people that there are "no cures other than fetal stem cell research . . . the fact is there is not one cure in this country today from embryonic stem cells." First, I have always supported all forms of medical research. My goal is to attain cures and treatments for diseases by whatever technology works. If there were restrictions on adult stem cells, I would be the first to introduce legislation to eliminate those restrictions. The fact is, there are no restrictions on Federal funding for adult stem cell research, and there are severe limitations on Federal funding for embryonic stem cells.

Now, to the point on there being no cures from embryonic stem cells: That is a self-fulfilling prophecy. Human embryonic stem cells were discovered in 1998. Since that time, there have been severe limitations on the funding for basic research into how to make proper use of these incredible cells. Perhaps, if we had not had any restrictions, there would now be cures available. When I say that "embryonic stem cells hold great promise for treating, curing and improving our understanding of diseases" like diabetes, Parkinson's disease, amyotrophic lateral sclerosis, and heart disease, I am quoting Dr. Elias Zerhouni, President Bush's appointee as head of the National Institutes of Health, NIH. When I say that "human stem cell research represents one of the most exciting opportunities in biomedical research," I am quoting Dr. David Schwartz, the Director of the National Institute on Environmental Health Sciences and 18 other Directors of the NIH. These are

the leaders of the biomedical research enterprise in the United States and the world.

Senator COBURN stated, that "as a matter of fact, [these stem cell lines] are not contaminated." I can only respond by telling you that Dr. James Battey, the Chairman of the NIH Stem Cell Task Force—and the man in charge of keeping track of the 21 approved lines—says "All of the 21 human embryonic stem cell lines eligible for Federal funding have been exposed to mouse cells." It is unlikely these cells will ever be useful for the clinical applications and cures that everyone wants.

Senator COBURN stated that "there is no limitation in this country at all on private research." I do not agree with that statement. Privately funded research in the United States counts on scientists and doctors trained by the NIH. The chokehold on Federal funding has kept young scientists from entering the field of stem cell research and limited the number and quality of scientists who can do the work that private investors would like to see done. In addition, when it comes to the basic research that is a necessary first step in curing diseases, private funds are no match for the almost \$30 billion investment we make at the NIH.

Senator BROWNBACK notes that this is a question of when life begins. I say this is a question of when life ends. These embryos are already slated to be thrown away. The decision the Senate faces is do we throw these cells away or do we use them to treat diseases that affect over 100 million Americans. This is most definitely a question of when life ends.

Senator BROWNBACK has introduced into the record a list of 72 Current Human Clinical Applications Using Adult Stem Cells. That list includes lupus, multiple sclerosis, testicular cancer, and Hodgkin's lymphoma. I was surprised to find Hodgkin's lymphoma on this list as I have some personal experience with that disease. My physician, Dr. John Glick, a recognized expert in the field of Hodgkin's lymphoma, stated that he had never heard of such a treatment or cure. I wish that I had known that a "cure" existed for this disease when I was undergoing chemotherapy, as I would have liked to have avoided some of the unpleasant side effects. I state this to illustrate the point that the diseases on that list are diseases for which adult stem cell therapies have been attempted. In most cases, it just means that doctors tried a bone marrow transplant. There is no doubt that bone marrow transplants are a miraculous treatment, however, they have only been proven to be helpful in blood diseases and enhancing immune systems. The great promise of embryonic stem cells is to expand the group of diseases that can be cured to include motor-

neuron, cancer, and cardiovascular diseases. This is the great potential that makes patients, like me so excited.

My goal is to enable our scientists and doctors to discover cures that will end the suffering of millions of Americans. Passing H.R. 810 will enable scientists to include stem cell research in their search for cures.

Mr. STEVENS. I support passage of H.R. 810, the Stem Cell Research Enhancement Act of 2005.

Research using embryonic stem cells will likely play an important role in developing treatments and cures for conditions such as diabetes, heart disease, Parkinson's, Alzheimer's, cancer, and other devastating diseases.

With the appropriate safeguards in place over the use of stem cell tissues, the potential improvements to our quality of life and our standards of care should be pursued.

It is clear from my conversations with scientists representing many disciplines that the stem cell lines permitted under the administration's policy allowing Federal funding from embryonic stem cell research on those cell lines in existence on August 9, 2001, are no longer adequate to allow them to pursue the breakthroughs in treatments and cures which stem cell research promises.

This bill does not allow embryos to be created for use in research; rather, it allows scientists to use embryos that already exist in storage at fertility clinics that would otherwise be destroyed.

It does not make sense to me to discard embryos that might otherwise be used to find a cure for cancer, diabetes, or Alzheimer's because it is "taking a life." These embryos are slated for destruction in any case. None of the bills before us today would prohibit the destruction of unwanted embryos created in fertility clinics but then unused.

I hope that my colleagues would prefer to have this research conducted in our country where appropriate safeguards to prevent cloning of human beings may be put into place. If Federal funds cannot be used for this research in our own country, scientists will find ways to conduct this research in other countries where such safeguards may not be in place, and where Americans might not reap the benefits of the research.

We must provide the means for science to move forward to cure and treat diseases that plague our people. I urge my colleagues to support H.R. 810.

Mr. TALENT. Mr. President, earlier this year I came to the Senate floor in opposition to human cloning and in support of new stem cell alternatives that could allow us to get exactly the stem cells we want to relieve human suffering without creating, destroying, or cloning a human embryo. I said during that speech that it appears that the very advances of science that have

caused the ethical dilemmas in this area of stem cell research may now be providing a solution.

The alternatives bill, S. 2754, seeks a genuine way forward that all Americans can wholeheartedly endorse.

One year ago, the President's Council on Bioethics issued a report entitled "Alternative Sources of Human Pluripotent Stem Cells." This report outlined four proposals for obtaining pluripotent stem cells—those with the same properties and potentials as embryonic stem cells—using techniques that do not involve the destruction of human embryos. In the year since that report, major advances in each of these approaches have been documented in peer-reviewed research articles published in leading scientific journals.

Two of these "alternative methods" offer the possibility of obtaining superior stem cells with potential scientific and medical advantages over those that could be obtained by destroying embryos.

Altered nuclear transfer and direct reprogramming would permit the production of pluripotent stem cell lines of specific genetic types. This would allow standardized scientific studies of genetic diseases and possibly patient-specific or immune-compatible cell therapies.

So it is important to recognize that this alternatives bill, S. 2754, could encourage advances in stem cell biology unlike any current law or pending legislative approach. And it could do so in a way that would sustain moral and social consensus for full Federal funding of this research. I note that the bill will pass with an overwhelming vote—exactly the kind of consensus which I hoped for.

For all of these reasons, I will vote enthusiastically for the alternatives bill. I will oppose H.R. 810, which uses tax dollars to fund research that requires the destruction of human life at its earliest stages. The Federal Government has never funded such research before, and that is not a line I wish to cross—especially since, as the alternatives bill shows, it is possible to fund every type of stem cell research without cloning or destroying human embryos. In fact, the stem cells which the alternatives can provide are superior—because they are "patient specific" genetically—to the stem cells which science can get from destroying embryos.

I should add that the promise of the alternatives is speculative, but so is the promise of the research which would destroy human life. All of this research has potential, it is all speculative, and it all involves essentially the same science. My sense is that either all of it or none of it will prove to be possible and that the right balance is therefore to seek the win-win solution that gives us the best chance to relieve human suffering while protecting human life.

We are entering a promising new era in biomedical technology, but as our power over human life increases, so does the seriousness of the moral issues. We should all want to advance biomedical science while sustaining fundamental principles for the protection of human life. This is why I am also voting in favor of the prohibition against fetus farms.

Biomedical science should be a matter of unity in our national identity: No one should enter the hospital with moral qualms about the research on which their therapies had been developed or resentful that positive possibilities for the best therapies were not explored.

The differences within our Nation can be a source of strength as we seek to open a way forward for biomedical science. The alternatives offer us just such a path to progress.

Mr. REID. Mr. President, it is my understanding that I have 15 minutes. Am I correct?

The PRESIDING OFFICER. The Democratic leader is correct.

Mr. REID. Mr. President, for those of us who are fortunate to represent our States in the Senate, it is a high honor and a privilege, but we tend to not understand sometimes the eyes that are watching what we do. Today, the eyes of millions of people are watching us to see what is going to happen in the Senate as it relates to H.R. 810. Many of these people, who are afflicted with dread diseases, having had perhaps serious accidents, are personally concerned about what we do here today. But in addition to those people who are personally concerned as a result of the maladies that afflict them, there are millions of us—fathers, mothers, sons, daughters, aunts, uncles, neighbors, friends, brothers, sisters—who are all also watching and hoping that their loved ones someday will be better.

What is hope? What do you say about hope? If you had to put the words in a dictionary for hope, what would you say? I looked in the dictionary under "hope." There is a very simple definition: to cherish the desire with anticipation. That is what this is all about: people who cherish, desire, and anticipate that we will do something to make their lives better.

Shortly here in the Senate we are going to vote on a measure that will allow those people to have hope. It is called the Stem Cell Research Enhancement Act, a piece of legislation that keeps hope alive for millions and millions of people in America—hope for a 17-year-old, almost 18-year-old, Molly Miller. I have followed her disease since she was a little girl. She is a twin. The sister Jacki and herself as twins tended to go every place together. One is sick, one isn't. One feels the pain personally, one feels the pain emotionally.

This legislation gives hope to Molly and Jacki Miller of Las Vegas, a pair,

a team, twins, who suffer from juvenile diabetes.

What is a twin? I guess the best way to describe a twin is when I was flying to Las Vegas on a very crowded airplane, I was in one seat and there were two little girls in the middle seat and the window seat. I began to sit down. I looked at the girls. They looked alike. I said, Are you sisters? One girl looked at me very directly and said to me, No, we are twins.

Jacki and Molly have suffered and suffered together because they are more than sisters, they are twins.

This legislation will give hope to a man by the name of Robert Alfertelle of Boulder City, NV. He is confined to a wheelchair because of Parkinson's disease.

We all know friends and neighbors who have diseases who have hope of being cured as a result of what we are doing here on the Senate floor today. These diseases can be cured. We are told they can be cured.

You have heard the recitation of these difficult diseases that people have with the hope that they can be cured if we do the right thing here today. For too long these good people have been denied hope because we in the Senate haven't acted. The House passed this bill 14 months ago. Unfortunately, until today it has been stalled here in the Senate.

The Americans who would benefit from cures offered by stem cell research have been forced to wait. They have waited through weeks dedicated to issues such as the definition of marriage. They waited through weeks of ideological debate dedicated to the well-off, connected few. In fact, we spent weeks here on issues that would affect less than .02 percent of Americans to repeal the estate tax. We spent time here on flag burning. We have waited through a health care week that had nothing to do with getting America help. We have all waited too long—so long in fact that on May 1 former First Lady Nancy Reagan was so baffled and disappointed by the continued delays in the Senate she wrote a letter, which I quote:

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 very hard to understand.

I too am disappointed that we have had to wait 14 months for this vote. I am grateful the wait is over. I believe that because of the persistence of Democrats in the Senate, we will thankfully finally vote on the Stem Cell Research Enhancement Act, H.R. 810. This legislation provides a rare opportunity for this Congress—some say this "do-nothing Congress"—to consider legislation about curing disease and saving lives, not partisan politics.

This body needs to pass this legislation because the President's current

stem cell policy is hindering promising medical research that could lead to treatment and cure for diseases and conditions. Under the President's stem cell policy, Federal research funds can be used on only a small number of chronic stem cell lines, most of which are contaminated, and that were created before August 9, 5 years ago.

Under this policy, only 21 stem cells qualify, many of which are contaminated and are certainly inferior to new and more promising stem cell lines. I have heard people come to this floor and say why should the Federal Government get involved? We are spending \$3 billion a week in Iraq. I think we can get involved. We have gotten involved in a lot of things dealing with medical research, as well we should.

We have worked for years spending Federal taxpayer dollars on doing something about AIDS research. Last week it was announced that instead of having to take as many as 36 pills a day, there is now one pill for people who are HIV infected—one pill that does the same as 36 pills did, and in fact probably better. People have had to get up in the middle of the night to take medications.

All of that research is funded by the Federal Government. New drugs for epilepsy were started by Tony Coelho who was a whip in the House, and who was an epileptic. He led the charge. We spent lots of Federal dollars on epilepsy, and we have made great progress.

Gene therapy involved the fragile X syndrome. We spent millions of Federal dollars on stroke prevention, screening for Downs syndrome. We have spent hundreds and hundreds of millions of dollars on cancer research, on digestive bowel disease, lupus, and diabetes.

These are dollars well spent. We have made progress. But the most eminent scientists in the world tell us that they need this legislation passed. Our Government is needlessly impeding the work of our Nation's top scientists who cannot use Federal funds on research, on new and more promising stem cell research that does not pose the risk of contamination that the eligible stem lines do.

This legislation would solve this problem by expanding the number of human embryonic stem cell lines eligible for federally funded research to include new stem cell lines that would be derived from any of the more than 400,000 surplus embryos from fertility clinics that will never be used to create a pregnancy and would otherwise be thrown in the trash.

Just as important, this legislation would ensure that stem cell research is conducted under ethical guidelines that are more strict than the President's current policy.

In short, this legislation would allow our Government to do everything it can under strict ethical guidelines and

oversight to develop treatments for a wide range of diseases and conditions.

That is why this legislation is supported by 41 Nobel laureates, virtually every major medical, scientific, and professional association, major research universities, and patient advocacy organizations.

Before we vote on the Stem Cell Research Enhancement Act, the Senate will first consider two other measures. Neither one of these measures is a substitute for H.R. 810. The only reason they are here is to provide political cover for the political opponents of this legislation. The opposition knows that their opposition to stem cell research is outside the American mainstream, so they want to give themselves political cover by voting for two meaningless bills. It is playbook straight from the Republican Orwellian world of politics. Neither one of these bills would do any harm but neither would have any impact at all. There is nothing included in S. 2754 which cannot already be accomplished without this legislation. The National Institutes of Health Director has told the Judiciary Committee this exact thing. It doesn't do anything that can't be done now.

The second bill, the Fetus Farming Prohibition Act, bans activity that no scientist is currently doing or wants to do. I will vote for both of them. They are meaningless.

While I support all three of these bills, there is only one that matters, H.R. 810, the Stem Cell Research Enhancement Act which will clear the way for research that can lead the way for treatments and cures for a wide range of diseases and conditions.

Don't take just my word for it. Hundreds of patient advocacy groups, health organizations, research universities, scientific societies, religious groups, and other interested organizations, representing millions and millions of patients, scientists, health care providers and advocates, wrote the following in a letter to the Senate:

Of the bills being considered simultaneously, only H.R. 810 will move stem cell research forward in our country . . . The other two bills . . . are not substitutes for a yes vote on H.R. 810.

I ask unanimous consent the full text of this letter, dated July 14, 2006, signed by almost 600 organizations, be printed in the RECORD.

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

U.S. SENATE,

Washington, DC, July 14, 2006.

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

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

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

Mr. REID. Mr. President, America needs a new direction not only in what is going on in Iraq but what is going on with medical research. We will take a step in that direction by passing H.R. 810.

A vote against H.R. 810, regardless of how Members vote on the other two measures, is a vote against research and cures. A vote for it is a vote for millions of Americans who are looking to us right now for help. A vote for H.R. 810 is a vote to keep hope alive. Let's keep hope alive.

The PRESIDING OFFICER. The majority leader.

Mr. FRIST. Mr. President, I understand I have 15 minutes under my control.

The PRESIDING OFFICER. The majority leader is correct.

Mr. FRIST. Mr. President, I yield 3 minutes on my time to Senator DODD, who has been unable to come to the floor.

The PRESIDING OFFICER. The Senator from Connecticut.

Mr. DODD. I thank the majority leader immensely for his generosity. I know we are about to close out this debate, and I am appreciative of him allowing me this time to express my strong support for this legislation. I commend the majority leader, along with my colleagues from Pennsylvania and Iowa, Senator SPECTER and Senator HARKIN, and others who have championed this issue. I commend the other body for passing this legislation, the Stem Cell Research Enhancement Act, over a year ago and by a fairly substantial majority vote.

My hope is that my colleagues, in a significant vote, will endorse and support what has already been done in the House. Then we can finally deliver on promising stem cell 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.

This is controversial, there is no question about it. But as the distinguished minority leader, the Democratic leader, pointed out, we are talking about embryos that would otherwise be discarded but can now be used to one day make a difference in the lives of literally millions and millions of Americans.

I am the godfather of a child with juvenile diabetes. I cannot begin to state how my friend's family in Connecticut feels about legislation. I don't know what their politics are on this. I know they are a family with deep values and a deep sense of support for their church. They are also a family whose child's life could be made profoundly different if it were possible to examine embryonic stem cells thoroughly so that one day we can find a cure for juvenile diabetes. But, obviously there are others diseases, including Parkinson's, ALS, cancer, and other devastating conditions we can make a difference on. With the passage of this bill, we can say to these children and these families we can make a difference.

I emphasize, again, these 400,000 embryos would otherwise be discarded. Strict ethical requirements apply to the use of these embryos. 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 on 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. Their 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's possible that some of the twenty-one stem cell lines currently approved for federally-funded research, the so-called "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. An amendment is attached to every annual Labor-HHS appropriations bill prohibiting any Federal funds from being used to destroy human embryos. This amendment, referred to as the "Dickey amendment," is not affected by this legislation. 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 funded using Federal dollars.

I have also heard some of my colleagues who oppose this legislation argue that embryonic stem cell research is unnecessary given the advances in adult stem cell research. Let me quickly say, with respect to adult stem cells, I am strongly supportive of moving aggressively in that area. I am a strong supporter. In fact, I authored the legislation which is now law advancing bone marrow and cord blood stem cell collection for use in adult stem cell transplantation. For both of my young daughters, we took the umbilical cord blood from the children at birth and it is being stored. My hope is that stem cells from cord blood will prove to be tremendously valuable to coming generations of Americans. 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 appropriations bill.

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 cells, among others, and that property—called pluripotency—is unique to their embryonic state.

Let us not lose this opportunity. I urge the President to reconsider, to listen to the majority leader, listen to Senator SPECTER, Senator HARKIN, and others who have spent countless hours examining this issue and see if he would not be willing to change his mind on this issue to avoid a Presidential veto. My hope is we will get strong bipartisan support on this bill.

I intend to support the Fetal Farming Prohibition Act and the other legislation being offered. I think those bills are unnecessary, but nonetheless I will be glad to support them. But let's also pass the Stem Cell Research Enhancement Act by a strong vote.

The PRESIDING OFFICER. The majority leader.

Mr. FRIST. Mr. President, last year I made a commitment to try to bring H.R. 810, the Stem Cell Research Enhancement Act, to the floor. This week, I followed through on that promise. Over the last 2 days, we have discussed science, we have discussed ethics and how those two issues, science and ethics, interplay.

That is important because stem cell research will be the first of many major moral and ethical challenges to biomedical research that this Senate has the responsibility to address in the 21st century. We will face similar discussions again and again as biomedical

science rapidly advances, especially as we learn more and more about molecular and cellular developmental biology. It is our responsibility as legislators, as representatives of the American people, to determine the proper role for our Federal Government, both in financial support, as well as in ethical oversight, in this evolving, new, exciting research and to build around it appropriate ethical safeguards and appropriate ethical framework.

As legislators, as representatives, we must participate in defining this research, surrounding the culture of life. If we don't do so, the research itself will begin to define us and who we are.

Biomedical research holds great promise, but it is a promise that must be harnessed within these moral and ethical safeguards. The secret, the heart of human dignity, is living within limits—ethical limits and moral limits—limits that do not hamper human scientific advances but, rather, allow us to preserve and promote them. That is why it is important and appropriate that we can consider all three of the bills that have been debated over the last 2 days. In the Fetus Farming Prohibition Act and the Stem Cell Therapies Enhancement Act, we realize the potential of research practices that may actually bridge moral and ethical differences, while the Stem Cell Research Enhancement Act seeks, by other means, to expand the number of embryonic stem cell lines available for federally funded research.

Over the last 2 days, we have engaged in a robust debate, a full debate, highlighting the ethical dilemmas presented by research about those very early beginnings of life, as well as the potential, the hope for this research.

I close by making a final comment on what I believe is this inherent need for policy surrounding science and add a cautionary note in this discussion. I am optimistic about the future. I am optimistic because of these remarkable, exciting, rapidly accelerating advances in developmental biology. New doors of exploration have been exploding and opened by things such as the Human Genome Project, by our new knowledge of molecular genetics, molecular sequencing, cellular mechanisms. Some have called the 21st century—we are in the early years of the 21st century—the century of the cells, a century that will explode with regenerative medicine, the ability to replace cells that had been damaged by disease or ill health.

As a heart surgeon, I can't help but to dream of no longer having to cut out a diseased heart, a heart that is failing, and replace it with a donated heart because advances in cell therapy, advances in regenerative medicine will allow us to repair tissues or regenerate that new cardiac tissue, healthy tissue, without any surgery at all.

Ten years from now, today's hope can be that reality. In 15 years, whole

organ-heart transplantation could—we do not want to overstate but could be relegated to the history books. That is why it is so important to bring this debate to this Senate, to allow science to advance, to promote science with strong ethical oversight.

In the last century, we faced a whole range of ethical considerations; in my own field of heart transplantation, decisions about how you define brain death. The discussion went on for years and years, actually two decades, into the late 1960s, ethical discussions about to whom you decide to give that healthy heart, when you have so many people who are dying—ethical decisions that have to be made every day.

We have had controversies over blood transfusions, genetic therapy, we even faced controversy over the treatment and diagnosis of HIV/AIDS. But as we have seen over the course of today's and yesterday's debate, the future will bring even more profound ethical questions. They will continue to come with increasing frequency as we continue to unlock those mysteries of health and disease.

How we in humanity handle this gathering, this increasing control over cellular and molecular science, as well as developmental biology, will reflect who we are as a people and where we are going. We can't hide from, as representatives of the American people, nor should we, the questions that this new knowledge presents. Our votes today are a mere step, a first step toward beginning to answer them.

Throughout today's debate, I have heard a number of my colleagues, myself included, talk about the potential for healing, that inherent hope offered by adult stem cells as well as embryonic stem cells, but it is important that advocates not oversell the potential for medical treatment. As a physician, I understand the importance of promoting hope and of giving hope, but it is irresponsible to give false hope. This evolving science is relatively new, and even our basic research has to be done before we can truly give that hope to become reality, and even then we may encounter failure.

All of these are difficult issues on which people of very good faith can reasonably disagree. However, I hope that all can agree this debate and the approach we took in this debate by considering three bills as a package, each bill to be voted upon separately, is a fair way, is a thoughtful way, to begin to address the future of stem cell research.

The bills are important steps in defining science policy and advancing the practice and science of medicine. To get this far, we had to set aside our differences. I am hopeful that at the end of the day we will have made important strides forward in promoting biomedical advancement in a responsible and in an ethical manner. I expect the

outcome of these votes will demonstrate there is some consensus among Members, even on this very divisive issue.

I yield 3 minutes to the Senator from Pennsylvania.

Mr. SPECTER. Mr. President, I thank the distinguished majority leader for yielding me the time.

As we prepare for the vote, it is my view that it is a clear-cut question to use embryos to save lives because otherwise they will be destroyed. There are some 400,000 frozen embryos, and the choice is discarding them or using them to save lives.

Embryonic stem cells have the flexibility for the potential to cure Parkinson's, Alzheimer's, heart disease and cancer.

I have a constituent, Jim Cordy, in Pittsburgh, PA, who suffers from Parkinson's. Every time I see Jim Cordy, he displays an hourglass. He inverts it, and as the sand passes from one part of the hourglass to the lower, Jim Cordy makes the dramatic point that is the way his life is slipping away in the absence of utilizing all means possible to cure Parkinson's. The number one possibility is embryonic stem cell research.

Senator BROWBACK and I had a debate where he challenged me on when life began, and I retorted—suffering from Hodgkin's cancer myself—the question on my mind was when life ended. Life will never begin for these embryos because there are 400,000 frozen embryos in the US. Notwithstanding millions of dollars appropriated to encourage adoption, only 128 have been adopted. So those lives will not begin, but many other lives will end if we do not use all the scientific resources available.

In bygone years, Galileo was prosecuted when he insisted the world was round. Columbus was discouraged from seeking America because the world was flat and it was impossible to find a new continent. Boniface VIII stopped the use of cadavers, indispensable for medical research. And the Scottish Church prohibited anesthesia for women in childbirth because it was God's will that women should suffer.

A century from now people will look back in amazement that we could even have this debate where the issues are so clear-cut. I urge my colleagues to support S. 2754, which I cosponsored with Senator SANTORUM, which is long run—

The PRESIDING OFFICER. The Senator's time has expired.

Mr. SPECTER. I ask unanimous consent for 30 seconds more.

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

Mr. SPECTER. Which promotes stem cell research without destroying the embryo. But the real core issue is the third vote on H.R. 810 which will allow Federal funding, which is now in the

range, at NIH, of \$30 billion a year, which can save so many lives.

I thank the majority leader and thank the Chair and yield the floor.

The PRESIDING OFFICER. The majority leader.

Mr. FRIST. Mr. President, in just a few moments we will be voting on three bills. The first bill we will be voting on is the Fetus Farming Prohibition Act. The second bill we will be voting on is the alternative means, the alternative ways of deriving stem cells. And the third is the House bill in support of research which is derived from blastocysts.

Mr. President, I ask unanimous consent it be in order to ask for the yeas and nays on all three bills en bloc.

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

Mr. FRIST. Mr. President, I now ask for the yeas and nays on the three bills.

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The yeas and nays were ordered.

Mr. FRIST. Mr. President, I ask unanimous consent that the second and third votes be limited to 10 minutes each.

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

Mr. FRIST. Mr. President, I yield back all time.

The PRESIDING OFFICER. Under the previous order, the hour of 3:45 having arrived, the Senate will proceed to three consecutive votes.

The question is on the engrossment and third reading of the bills.

The bills were ordered to be engrossed for a third reading and were read the third time.

The PRESIDING OFFICER. The bill, S. 3504, 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.

The result was announced—yeas 100, nays 0, as follows:

[Rollcall Vote No. 204 Leg.]

YEAS—100

Akaka	Cochran	Gregg
Alexander	Coleman	Hagel
Allard	Collins	Harkin
Allen	Conrad	Hatch
Baucus	Cornyn	Hutchinson
Bayh	Craig	Inhofe
Bennett	Crapo	Inouye
Biden	Dayton	Isakson
Bingaman	DeMint	Jeffords
Bond	DeWine	Johnson
Boxer	Dodd	Kennedy
Brownback	Dole	Kerry
Bunning	Domenici	Kohl
Burns	Dorgan	Kyl
Burr	Durbin	Landrieu
Byrd	Ensign	Lautenberg
Cantwell	Enzi	Leahy
Carper	Feingold	Levin
Chafee	Feinstein	Lieberman
Chambliss	Frist	Lincoln
Clinton	Graham	Lott
Coburn	Grassley	Lugar

Martinez	Reid	Stabenow
McCain	Roberts	Stevens
McConnell	Rockefeller	Sununu
Menendez	Salazar	Talent
Mikulski	Santorum	Thomas
Murkowski	Sarbanes	Thune
Murray	Schumer	Vitter
Nelson (FL)	Sessions	Voivovich
Nelson (NE)	Shelby	Warner
Obama	Smith	Wyden
Pryor	Snowe	
Reed	Specter	

The bill (S. 3504) was passed, as follows:

S. 3504

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 “Fetus Farming Prohibition Act of 2006”.

SEC. 2. PROHIBITION OF THE SOLICITATION OR ACCEPTANCE OF TISSUE FROM FETUSES GESTATED FOR RESEARCH PURPOSES.

Section 498B of the Public Health Service Act (42 U.S.C. 289g-2) is amended—

(1) by redesignating subsections (c) and (d) as subsections (d) and (e), respectively;

(2) by inserting after subsection (b) the following:

“(c) SOLICITATION OR ACCEPTANCE OF TISSUE FROM FETUSES GESTATED FOR RESEARCH PURPOSES.—It shall be unlawful for any person or entity involved or engaged in interstate commerce to—

“(1) solicit or knowingly acquire, receive, or accept a donation of human fetal tissue knowing that a human pregnancy was deliberately initiated to provide such tissue; or

“(2) knowingly acquire, receive, or accept tissue or cells obtained from a human embryo or fetus that was gestated in the uterus of a nonhuman animal.”;

(3) in paragraph (1) of subsection (d), as so redesignated, by striking “(a) or (b)” and inserting “(a), (b), or (c)”;

(4) in paragraph (1) of subsection (e), as so redesignated, by striking “section 498A(f)” and inserting “section 498A(g)”.

Mr. LEAHY. Mr. President, I move to reconsider the vote, and I move to lay that motion on the table.

The motion to lay on the table was agreed to.

The PRESIDING OFFICER. The bill, S. 2754, 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 result was announced—yeas 100, nays 0, as follows:

[Rollcall Vote No. 205 Leg.]

YEAS—100

Akaka	Chafee	Durbin
Alexander	Chambliss	Ensign
Allard	Clinton	Enzi
Allen	Coburn	Feingold
Baucus	Cochran	Feinstein
Bayh	Coleman	Frist
Bennett	Collins	Graham
Biden	Conrad	Grassley
Bingaman	Cornyn	Gregg
Bond	Craig	Hagel
Boxer	Crapo	Harkin
Brownback	Dayton	Hatch
Bunning	DeMint	Hutchison
Burns	DeWine	Inhofe
Burr	Dodd	Inouye
Byrd	Dole	Isakson
Cantwell	Domenici	Jeffords
Carper	Dorgan	Johnson

Kennedy	Mikulski	Shelby
Kerry	Murkowski	Smith
Kohl	Murray	Snowe
Kyl	Nelson (FL)	Specter
Landrieu	Nelson (NE)	Stabenow
Leahy	Obama	Stevens
Lautenberg	Pryor	Sununu
Levin	Reed	Talent
Lieberman	Reid	Thomas
Lincoln	Roberts	Thune
Lott	Rockefeller	Vitter
Lugar	Salazar	Voivovich
Martinez	Santorum	Warner
McCain	Sarbanes	Wyden
McConnell	Schumer	
Menendez	Sessions	

The bill (S. 2754) was passed, as follows:

S. 2754

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 “Alternative Pluripotent Stem Cell Therapies Enhancement 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, including from postnatal sources, without creating human embryos for research purposes or discarding, destroying, or knowingly harming a human embryo or fetus.

SEC. 3. ALTERNATIVE HUMAN PLURIPOTENT STEM CELL RESEARCH.

Part B of title IV of the Public Health Service Act (42 U.S.C. 284 et seq.) is amended by inserting after section 498C the following:

“SEC. 409J. 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 2007 through 2009, to carry out this section.”.

The PRESIDING OFFICER. The bill (H.R. 810) 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.

The result was announced—yeas 63, nays 37, as follows:

[Rollcall Vote No. 206 Leg.]

YEAS—63

Akaka	Feingold	McCain
Alexander	Feinstein	Menendez
Baucus	Frist	Mikulski
Bayh	Gregg	Murkowski
Bennett	Harkin	Murray
Biden	Hatch	Nelson (FL)
Bingaman	Hutchison	Obama
Boxer	Inouye	Pryor
Burr	Jeffords	Reed
Byrd	Johnson	Reid
Cantwell	Kennedy	Rockefeller
Carper	Kerry	Salazar
Chafee	Kohl	Sarbanes
Clinton	Landrieu	Schumer
Cochran	Lautenberg	Smith
Collins	Leahy	Snowe
Conrad	Levin	Specter
Dayton	Lieberman	Stabenow
Dodd	Lincoln	Stevens
Dorgan	Lott	Warner
Durbin	Lugar	Wyden

NAYS—37

Allard	DeWine	Nelson (NE)
Allen	Dole	Roberts
Bond	Domenici	Santorum
Brownback	Ensign	Sessions
Bunning	Enzi	Shelby
Burns	Graham	Sununu
Chambliss	Grassley	Talent
Coburn	Hagel	Thomas
Coleman	Inhofe	Thune
Cornyn	Isakson	Vitter
Craig	Kyl	Voivovich
Crapo	Martinez	
DeMint	McConnell	

The bill (H.R. 810) was passed.

Mr. ENSIGN. Mr. President, I move to reconsider the vote.

Mr. FRIST. I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Mr. FRIST. Mr. President, plans tonight are that we will get consent on moving to the Water Resources Development Act. Senator INHOFE is available to start that bill.

I congratulate and thank all of our colleagues for the very good debate that we have had over the last 2 days on a very tough issue, a difficult issue. Members have had the opportunity to express themselves with good debate on science and on the ethics. I thank them for that collegial approach.

CONDEMNING HEZBOLLAH AND ITS STATE SPONSORS

Mr. FRIST. Mr. President, I ask unanimous consent that the Senate now proceed to the consideration of S. Res. 534 which was submitted earlier today.

The PRESIDING OFFICER. The clerk will report the resolution by title.

The assistant legislative clerk read as follows:

A resolution (S. Res. 534) condemning Hezbollah and its state sponsors.

There being no objection, the Senate proceeded to consider the resolution.

Mr. BYRD. Mr. President, I have grave concerns about what the coming days hold for the situation in the Middle East. The spiral of violence, which began with the kidnaping of Israeli soldiers, is threatening to engulf the entire region. Unless something is done soon to stop the escalation, all out war—the likes of which has not been seen in the Arab-Israeli conflict for decades—could soon be upon us.

Innocent lives are at risk. The rocket attacks on Israel are indiscriminate tools of terror. We know that Israeli bombs have also taken innocent lives, including those of children. How does this fighting serve any greater purpose? Can there be no other way to solve the important problems facing the region without shedding innocent blood in the process?

Let us not forget that it is not only the lives of Israelis, Lebanese, and Palestinians that are threatened by the fighting. Press reports indicate that 25,000 Americans are in Lebanon, and some believe that number is far too low an estimate. I have learned that a number of West Virginians are in Lebanon now. Two of the families of West Virginians have children with them—children as young as 4 years old. One of these families has already fled Beirut into the countryside while they await word on when they can be transported to safety.

I am hopeful that there are yet moderate voices in the international community which seek solutions to this crisis. There are calls for an international peacekeeping force to stabilize the Israeli-Lebanese border. There are also indications of behind-the-scenes diplomacy to unite all countries of the region in favor of a reasonable solution.

The resolution before the Senate is not a voice of moderation. It is a resolution that proposes only to point fin-

gers at who is to blame for the current violence. This is the wrong response to an international crisis and a humanitarian tragedy.

Does this resolution help the Americans who are stranded in Lebanon amidst this fighting? It does not. I fear that this resolution might, in fact, unleash a violent anti-American backlash at a time when the State Department and our Armed Forces are struggling to find a way to rescue our citizens. The Senate should have more sense than to rush to pass such a provocative resolution at this time.

Mr. President, now is the time for moderation and wise counsel. We need solutions, not recriminations. Why should the Senate pass a resolution, the only possible effect of which is to further entrench both sides of the current conflict? I cannot support a resolution that does not I have the practical effect of advancing us toward an end to this tragic violence.

Mr. WARNER. Mr. President, yesterday the Senate was advised by hotline that this resolution would be voted on last night by voice vote. I indicated a desire to be allowed to speak for no more than 15 minutes before the vote, and that was agreed to. I said explicitly when further inquiry came to me that I would not in any way—in any way—object to the Senate, if the leadership so desired, to voting on that measure last night by voice vote. I went back, checked with the senior staff of our cloakroom, and they verified it. There are e-mails to the effect that I said that.

I did have an opportunity to speak last night at length—it is in yesterday's CONGRESSIONAL RECORD—regarding my concerns about that legislation, although I indicated in large measure I supported almost every provision, and we just participated in a voice vote where, in effect, my vote was counted in the "yea" column.

Mr. President, I call to the attention of my colleagues my statement of yesterday beginning at page S7624.

Mr. President, I awakened this morning to determine that the press is reporting the following:

The Senate had been expected to quickly pass a resolution Monday night, but Armed Services Committee Chairman John W. Warner of Virginia blocked the vote.

That message was skillfully distributed throughout the world—the worldwide press. It made CNN and other responsible news organizations. That was the deliberate attempt by some individual or individuals to distort the truth, to distort what is in the RECORD.

Mr. President, I am pleased to say that the remarks I made last night were, in part, taken into consideration, and the resolution which the Senate will soon vote on does reflect what my principal concern was with regard to the first draft; namely, that there was no reference to some—upwards of 25,000

Americans seeking to return or leave that war-torn area. Consequently, there is a provision, No. 11, placed in this resolution which says:

Recognizes that thousands of American nationals reside peacefully in Lebanon, and that those American nationals in Lebanon concerned for their safety should receive the full support and assistance of the United States Government.

I am glad I did what I did—made it clear that this has worked its way into the RECORD. There are other concerns that I have which are cited in the statement that I made yesterday and I am delighted to have the opportunity to correct what was a deliberate attempt to distort the record.

I thank my colleagues, and I yield the floor.

Mr. DURBIN. Mr. President, I rise in support of the resolution which I cosponsored and which the Senate passed today condemning the actions of Hezbollah and expressing our support for Israel.

On July 12, Hezbollah forces launched an attack through Syria, crossing into Israel, killing eight Israelis and seizing two Israeli soldiers as hostages. This assault followed months of rocket attacks by Hezbollah on northern Israel. Those acts of terrorism created the situation that the world confronts today. Israel could not tolerate such assaults on its own soil. No nation could.

Our country will stand with the Government and people of Israel as they defend themselves. The U.S.-Israel relationship is one of the most important and steadfast diplomatic bonds in the world. It is imperative that Congress express this support clearly and unequivocally. The resolution passed today makes this important statement, to our friends in Israel and to the world.

When Hezbollah escalated its attacks against Israel earlier this month, they dragged Lebanon into a conflict that neither the Lebanese Government nor most of the Lebanese people sought. Israel was compelled to respond to the violence on their soil. That was a situation that simply could not continue. Nor can Israel afford to return to the state of affairs before the war. There must be a real change in Lebanon: the days in which Hezbollah could simply lob rockets across the Israeli border with impunity must end.

I believe the United States must play a principal role in helping to forge a solution to this conflict and its underlying causes: the persistent attacks on Israel and the capture of Israeli soldiers.

The conflict in Lebanon has broader international origins and threatens the stability of the region as a whole. Iran and Syria are involved. They have long bankrolled Hezbollah and may have been involved in the plans to seize the Israeli soldiers. One of their goals may have been to distract the world from