



United States
of America

Congressional Record

PROCEEDINGS AND DEBATES OF THE 105th CONGRESS, SECOND SESSION

Vol. 144

WASHINGTON, WEDNESDAY, FEBRUARY 11, 1998

No. 10

Senate

The Senate met at 9:30 a.m. and was called to order by the President pro tempore (Mr. THURMOND).

PRAYER

The Chaplain, Dr. Lloyd John Ogilvie, offered the following prayer:

Gracious Father, our loving, forgiving Lord of new beginnings, we listen intently to Your assurance spoken through Jeremiah, "I have loved you with an everlasting love; therefore with loving kindness I have drawn you."—Jeremiah 31:3.

We begin this day with these amazing words sounding in our souls. Can they be true? You judge our sins and forgive us. Your grace is indefatigable. It is magnetic; it draws us out of remorse or recrimination into reconciliation. You draw us to Yourself and we receive healing and hope.

Now we are ready to live life to the fullest. We are secure in You and therefore can work with freedom and joy. We know Your commandments are as irrevocable as Your love is irresistible. We have the strength to live Your absolutes for abundant life. We accept Elijah's challenge, "Choose this day whom You will serve," and Jesus' mandate, "Set your mind on God's kingdom before everything else!"—Matt 6:33; NEV. In His powerful name. Amen.

RECOGNITION OF THE MAJORITY LEADER

The PRESIDENT pro tempore. The able majority leader, Senator LOTT of Mississippi is recognized.

SCHEDULE

Mr. LOTT. Mr. President, this morning as previously ordered the Senate will resume debate on the cloture motion on the motion to proceed to S. 1601, the cloning bill, with the time until 10 a.m. equally divided between the two leaders or their designees.

Also, as previously ordered, at 10 a.m. a rollcall vote will occur on the

cloture motion on the motion to proceed to S. 1601. If cloture is invoked, the Senate will debate the motion to proceed to the cloning bill. If cloture is not invoked, the Senate can be expected to resume debate on the Massiah-Jackson nomination and then, at approximately 4 p.m. today, the Senate can be expected to begin debate on the nomination of Margaret Morrow, of California, to be U.S. district judge.

I want to emphasize that even though we are going back to debate on Massiah-Jackson, that does not mean we will stay on that nomination all the way until 4 o'clock. We will probably have some announcement later on this morning about that matter, and how we would expect to handle it. Additional votes can be expected to occur during today's session of the Senate.

As a reminder to all Senators, at 10 a.m. this morning a vote will occur on the cloture motion and we probably will have a vote late this afternoon on the Morrow nomination. It appears at this time that would occur probably around 6 o'clock, even though we have not advised everybody that that is our intent, or gotten an absolute commitment, but I believe there will probably be a vote about 6 o'clock on the Morrow nomination.

I yield the floor.

Mr. CRAIG addressed the Chair.

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

Mr. CRAIG. Mr. President, I ask unanimous consent to proceed for a very brief time.

The PRESIDING OFFICER. Without objection, is so ordered.

PICABO STREET

Mr. CRAIG. Mr. President, I thank my colleagues for yielding but a brief moment for the Senate to recognize something that went on last night nearly halfway around the world while all of us slept. A marvelous young lady

from Idaho, and a superb athlete, won the gold medal, one of our first gold medals in this Olympics in Nagano, Japan. Picabo Street, from the Sun Valley area of Idaho, who was a silver medalist in the 1994 Olympics, brought home the gold.

I think all of us are extremely proud this morning of our country and our athletes, and this fine woman athlete, Picabo Street, who some months ago had major knee surgery, while she was at the World Cup had a major accident, but with tremendous guts and tenacity and ability she is now one of our gold medalists and we are all proud.

I yield the floor.

HUMAN CLONING PROHIBITION ACT—MOTION TO PROCEED

The PRESIDING OFFICER. Who seeks the floor? Who yields time? The Senator from California.

Mrs. FEINSTEIN. Mr. President, it is my understanding that I have 15 minutes.

The PRESIDING OFFICER. The time between now and 10 o'clock is evenly divided.

Mrs. FEINSTEIN. I thank the Chair.

Mr. President, it is my intention to open the debate, then yield to Senator MACK, then Senator THURMOND, and then Senator KENNEDY for the remainder of my time.

Mr. President, I urge the Members of this distinguished body to vote no on cloture. I do so because I believe that by voting for cloture today we could do enormous harm.

The technique involved here, somatic cell nuclear transfer, creates what are called stem cells, which can be used for creation of tissue which has the same DNA as the person whose tissue it is. Therefore they are used as important adjuncts in cancer research; they offer

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



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important opportunities to overcome rejection of tissue in third-degree burns; to solve major problems inherent in juvenile diabetes; for osteoporosis; for Alzheimers; for Parkinsons disease; and for a host of other diseases.

Mr. President, there is no need to rush to judgment. No one, I believe, in this body, supports human cloning. There is a scientific moratorium on human cloning. The FDA has exercised jurisdiction to prevent it.

There is no need to rush to judgment. This bill is less than a week old. There has been no hearing on it. There are no definitions of critical terms in this bill.

Let me quote what the American Cancer Society has said in a letter dated February 9:

The American Cancer Society urges you to oppose S. 1601, legislation that would prohibit the use of somatic cell nuclear transfer. The American Cancer Society agrees with the public that human cloning should not proceed at this time. However, the legislation as drafted would have the perhaps unintended effect of restricting critical scientific research. The language could hamper or punish scientists who contribute to our growing knowledge about cancer.

Last evening I had printed in the RECORD a huge volume of letters from virtually every single patient group, 27 Nobel prize winners, and industry groups—all saying go slow, use caution.

I urge this body to vote no on cloture.

If I may, now, I yield 3 minutes of my time to the distinguished Senator from Florida.

The PRESIDING OFFICER. The Senator from Florida is recognized.

Mr. MACK. I thank the distinguished Senator from California for yielding this time. I have prepared remarks that I have gone over with my staff that cover things like it is obvious that there is no medical or ethical justification for human cloning. We all understand that. We also know there have been no hearings. We know as well that we have information from 27 Nobel laureates who say we should not pass this legislation. We have letters from 71 patient groups and scientific organizations that say we should not do this.

But let me say to my colleagues that I stand here this morning to make a special appeal. My father died of cancer. My mother died of cancer. My brother died of cancer. I was diagnosed with cancer. My wife was diagnosed with cancer. Our daughter was diagnosed with cancer.

I say to my colleagues, I appeal to you, don't get drawn into this debate that we should pass this legislation because we want to stand up and make a statement that we are against cloning. We are all against human cloning. We are all against human cloning. What I am asking you to do is to vote no on cloture so we will have an opportunity to hear from those patient groups that want to represent people like myself, represent families that have been affected like my family has been af-

ected. Let us hear from the scientific community that tells us whether this is the right thing to do or the wrong thing to do. I don't make a suggestion here that this is an easy decision to be made. It is a very difficult one. But that's all the more reason that you should vote against cloture and allow the process to take place—to have input, to have discussion, to have understanding. Then we then will be in a position to try to make a decision about what is the right thing to do. We just say let the process work. Let there be input.

So I urge my colleagues to vote no on cloture and to support moving the process forward.

I thank the distinguished Senator from California for yielding.

Mrs. FEINSTEIN. I thank the distinguished Senator for his comments. Indeed, they were very, very moving. I can share my family story, although it is not as dramatic, Senator, as yours—I lost my husband to cancer, I lost my mother, my father, my in-law's. So I, in a sense, share this with the Senator. I know in their last days how important research is to patients and how willing they are to try new things. Life is critically important.

I thank the Senator for his comments.

If I may, I allot 3 minutes of my time to the distinguished Senator from South Carolina.

The PRESIDING OFFICER. The Senator from South Carolina.

Mr. THURMOND. Mr. President, I rise today to address an issue of great international concern. Since February 1997, when Scottish scientists succeeded in cloning an adult sheep, the world has been consumed with the issue of cloning. There are great social and ethical implications of the potential application of this procedure to totally reproduce human beings. Obviously, there is no acceptable justification for replicating another human being, and the bill before the Senate, S. 1601, the Human Cloning Prohibition Act, would ensure that such a procedure would never take place in this country. However, I am concerned that this bill may be written so broadly that it will restrict future promising research which could lead to improved treatment or even a cure for many serious illnesses. The Juvenile Diabetes Foundation informs me that this bill would prohibit promising stem cell research that could make it possible to produce pancreatic beta cells that could then be transplanted into a person with diabetes. As a consequence, many of the horrible complications of this disease, including kidney failure, blindness, amputation, increased risk of heart disease and stroke, and premature death, could be eliminated. Likewise, I am informed by other representatives of the medical community that this bill could prohibit research into treatment of the following diseases and ailments: leukemia; sickle cell anemia; Alzheimers disease; Par-

kinson's disease; multiple sclerosis; spinal cord injuries; liver disease; severe burns; muscular dystrophy; arthritis; and heart disease.

Mr. President, there have been no committee hearings on S. 1601 and, therefore, no opportunity for the medical community to fully explain the implications of this legislation. My daughter, Julie, suffers from diabetes, and I do not want her, or others like her, to be denied the potential life saving benefits of research that this bill could restrict. But without the appropriate committee hearings, we do not fully understand what these benefits may be. This is far too important an issue for us to rush this bill to the floor without committee hearings. While we can all agree that to replicate a human being is immoral, we need to investigate this issue more thoroughly so that we do not deny our citizens and our loved ones of any possible life saving research. For this reason, I will not support cloture on the motion to proceed to S. 1601, and I strongly recommend that this bill be sent to committee so that the appropriate hearings can be held.

I yield the floor.

Mrs. FEINSTEIN. Mr. President, I reserve the remainder of my time.

The PRESIDING OFFICER. The Senator from Missouri.

Mr. BOND. Mr. President, how much time is left on both sides?

The PRESIDING OFFICER. The Senator from Missouri has 12 minutes and 30 seconds and the Senator from California has 3 minutes and 45 seconds.

Mr. BOND. Mr. President, I yield myself such time as I may need.

I urge my colleagues to vote yes on cloture so that we may proceed to debate an issue which generates many profound ethical and moral questions, ones which demand our immediate attention.

Let me be quite clear. This bill does not stop existing scientific research. I am as concerned as anyone here about the need for research on a whole range of diseases, things that can be perhaps cured or at least dealt with by stem cell research, by many other techniques that are now in progress today. Our bill does not stop any of that research.

Let's be quite clear, our bill does not stop any of that promising research now underway. The measure places a very narrow ban on the use of somatic cell nuclear transfer to create a human embryo. That is what we are talking about. Everybody said, "We agree we shouldn't be creating a human embryo by cloning," and that is what this bill does.

Over the past week, we have had a lot of distortion and, unfortunately, inflamed rhetoric by some of the big special interests, the likes of which I have not seen in my many years of public service. We have asked our opponents on numerous occasions, we have sat down with them, Senator FRIST, Senator GREGG, our staffs and I sat down

and said, "OK, if we all agree we shouldn't be creating a human embryo by cloning, how do you want to tighten it up?"

They are not willing to come forward because there are some rogue scientists, maybe some big drug companies, big biotech companies, who want to create human embryos by cloning. They think that would be a great way to be more profitable, to do some research on cloned human embryos. I think that is where we need to draw the line.

People say we want to have hearings. We have had hearings on the whole issue last year. We have debated it, and it comes down to the simple point: Do you want to say no to creating human embryos by cloning, by somatic cell nuclear transfer, or do you want to say, as my colleague from California would in her bill, "Oh, it's fine to create those human embryos by somatic cell nuclear transfer, so long as you destroy them, so long as you kill those test tube babies before they are implanted?"

There are a couple problems, very practical problems. Once you start creating those cloned human embryos, it is a very simple procedure to implant them. Implantation of embryos is going along in fertility research now, and it would be impossible to police, to make sure they didn't start implanting them.

But even if the objectives of the bill of my California colleague were carried out, it would mean that you would be creating human embryos by cloning, researching with them, working with them and destroying them. Do we want to step over that ethical line? I say no.

It is not going to be any clearer 3 months from now, 6 months from now than it is now. What is going to be different is that in 3 or 6 months, the rogue scientist in Chicago or others may well start the process of cloning human embryos by somatic cell nuclear transfer. That is why we say it is important to move forward on this bill.

If we bring this bill to the floor, we are happy to listen to and ask for specific suggestions from those who are concerned about legitimate research, but we have been advised time and time again that there is no legitimate research being done now in the biotech industry that uses somatic cell nuclear transfer to clone and create a human embryo as part of the research on any of these diseases.

We have heard from patient groups, people who are very much concerned, as we all are, about cancer, about juvenile diabetes, cystic fibrosis, Alzheimer's—the whole range of diseases. We can deal with those diseases. We can deal with the research without cloning a human embryo.

The approach of my colleagues from California and Massachusetts would lead us down the slippery slope that would allow the creation of masses of human embryos as if they were assembly line products, not human life. How

would the Federal Government police the implantation of these human embryos?

By allowing the creation of cloned test tube babies so long as they are not implanted, our opponents' bill calls for the creation, manipulation and destruction of human embryos for research purposes.

I have a letter that I will enter into the RECORD from Professor Joel Brind, Professor of Human Biology and Endocrinology at Baruch College, The City University of New York. He addresses the question of stem cell research. I quote from a portion of it:

Industry opponents also correctly point out that S. 1601 would ban the production of human embryos for research or other purposes entirely unrelated to the aim of cloning a human being. And well it should . . . In fact, it is in this area of research and treatment, to wit, the generation of stem cells, from which replacement tissues or organs could be produced for transplantation into the patient from whom the somatic cell originally came, which is most important to the biotech industry, for obvious reasons. For reasons just as obvious to anyone with any moral sense, such practices must be outlawed, for otherwise, our society would permit the generation of human beings purely for the purpose of producing spare parts for others, and thence to be destroyed. Some may call this a "slippery slope"—I believe "sheer cliff" would be more accurate.

Mr. President, I will add one other thing. He said:

. . . S. 1601 would, in fact, place real restrictions on stem cell research. Stem cell researchers would have to continue to work with somatic cell nuclear transfer technology in animal systems, in order to learn how to transcend the need for producing zygotes first. However, this is no different from restricting cancer research by prohibiting the injection of cancer cells into human beings (instead of rats) and then testing potential anticancer drugs on them. As a civilized society, we do have to live with meaningful ethical constraints or we end up with the likes of the Tuskegee experiment.

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

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

BARUCH COLLEGE,
DEPARTMENT OF NATURAL SCIENCES,
New York, NY, February 10, 1998.
Hon. CHRISTOPHER BOND,
U.S. Senate,
Washington, DC.

DEAR SIR: This letter is written in support of S. 1601, which is designed to ban the "cloning" of human beings. I have placed the word "cloning" in quotes, because, as claimed by opponents in the biotech industry, the bill would technically ban more than cloning, which, precisely defined, would be limited to use of somatic cells genetically identical to an existing human being (including an embryo or fetus). In other words, the bill closes a gaping loophole—to wit, the use of cells whose DNA has been modified artificially, or use of a fertilized nucleus—that would exist in the legislation, were it to be limited to cloning in its precise, technical sense. That is precisely why S. 1601 is a good bill, because it adequately defines a 'bright line' in the establishment of appropriate standards for stem cell research.

This 'bright line' drawn by S. 1601 is the line between the generation of a human zygote—i.e., a totipotent one-celled embryo; the equivalent of a complete human body at the time of conception—by the in vivo or in vitro union of haploid sperm and haploid egg, and the generation of a human zygote by the artificial means known as somatic cell transfer ('haploid' means half the normal human complement of 46 nuclear chromosomes [DNA], or 23. Only sperm and egg are haploid, while all other body cells—a.k.a. somatic cells—have 46 nuclear chromosomes. 'Totipotent' means that the one-celled embryo [zygote] is capable of giving rise to a completely differentiated human body, i.e., fully formed human being). In somatic cell transfer, a zygote is artificially produced by the introduction of a diploid (i.e., containing a full set of 46 chromosomes) nucleus from a body cell or a zygote, into an egg from which the nucleus has been removed. Thus, the bill clearly prohibits the generation of a human embryo by the artificial means of somatic cell transfer, whether the procedure may be strictly defined as cloning or not. (Note: It may be argued that in vitro fertilization is also artificial, however it is the artificial assistance of a natural process. A good analogy would be the difference between growing ordinary tomatoes in a greenhouse—artificial assistance—and growing genetically engineered tomatoes—artificially produced individuals.)

Industry opponents also correctly point out that S. 1601 would ban the production of human embryos for research or other purposes entirely unrelated to the aim of cloning a human being. And well it should, for the production of a zygote is the production of a human being, which would then be destroyed after use in research, or to generate spare parts for the treatment of patients suffering from a variety of ills. In fact, it is this area of research and treatment, to wit, the generation of stem cells, from which replacement tissues or organs could be produced for transplantation into the patient from whom the somatic cell originally came, which is most important to the biotech industry, for obvious reasons. For reasons just as obvious to anyone with any moral sense, such practices must be outlawed, for otherwise, our society would permit the generation of human beings purely for the purpose of producing spare parts for others, and thence to be destroyed. Some may call this a 'slippery slope'—I believe 'sheer cliff' would be more accurate.

What then? Does S. 1601 stop the field of stem cell research, with all its potential for life-saving and life-extending treatment, in its tracks? In a word, no. In fact one form of stem cell transplantation—bone marrow transplantation—has already been in wide use for years. Stem cells are body cells which are primitive and undifferentiated, and capable of giving rise to a variety of differentiated cell types and/or tissues and/or organs. For example, in a bone marrow transplant, the transplanted cells give rise, in the recipient's body, to the whole host of different types of white blood cells, red blood cells and platelets. Stem cells are thus 'pluripotent'—capable of forming many different types of cells, but not an entire human being, as would a totipotent cell or zygote. Of course the most precise way to obtain stem cells, especially if they are to be modified in order to correct a genetic defect, is to first generate a whole embryo—such as by somatic cell transfer—and then let it develop into a multicellular embryo, and finally harvest the desired stem cells and throw the rest away. Therefore S. 1601 would in fact place real restrictions on stem cell research. Stem cell researchers would have to continue to work with somatic cell nuclear transfer

technology in animal systems, in order to learn how to transcend the need for producing zygotes first. However this is no different from restricting cancer research by prohibiting the injection of cancer cells into human beings (instead of rats) and then testing potential anti-cancer drugs on them. As a civilized society, we do have to live with meaningful ethical constraints, or we end up with the likes of the Tuskegee experiment.

Biotech industry opponents also point out that one form of somatic cell nuclear transfer has already been used successfully in the treatment of infertility. In particular, a zygote produced the natural way—from the union of sperm and egg—is used to supply a diploid nucleus for transfer into a normal egg from which the nucleus has been removed. Who would need such a treatment?—a woman who has a genetic defect in her mitochondrial, rather than in her nuclear DNA. The mitochondria are the energy-producing parts of a cell, and we all inherit them from our mothers (from the non-nuclear part of the egg). If the mitochondrial DNA is defective the zygote will not be viable, even if the nuclear DNA is fine. Hence, transfer of the viable nucleus into a denucleated egg from a normal donor will result in a viable zygote. Fine, except that the offspring thus produced now has two biological mothers, both having provided genetic material essential for the offspring's survival. The legal nightmares following the use of this technology are easily envisioned, and the fact that it has already been done underscores the need for enacting the present legislation without delay.

I also wish to comment on alternative legislation which proposes to allow cloning or artificial production of human embryos, provided they are destroyed and not permitted to be born or even implanted into a woman's uterus. Such legislation is worse than no legislation at all. Permitting the destruction of innocent human life is abhorrent enough—but to mandate it?

Finally I report the essence of a conversation I had earlier today with some colleagues, concerning the matter at hand. They said that the banning of this technology would only result in its pursuit beyond the borders of the United States. I replied by asking them to name any foundation document or scripture for any civilization ever in history, in which was inscribed as a principle any version of "If you can't beat 'em, join 'em"? I implore you in the strongest possible terms to resist at every turn this product of corrupt mentality.

Please feel free to contact me at any time if I may be of any further assistance.

Sincerely,

JOEL BRIND, Ph.D.,
Professor, Human Biology and Endocrinology.

Mr. BOND. I reserve the remainder of my time.

Mrs. FEINSTEIN addressed the Chair.

The PRESIDING OFFICER. The Senator from California.

Mrs. FEINSTEIN. Thank you. Mr. President, I very much regret the fact that the Senator from Missouri has chosen to mischaracterize both my position and my bill. I hope we will have a chance in committee to iron that out. But at this time, I yield the remainder of my time to the distinguished Senator from Massachusetts.

The PRESIDING OFFICER. The Senator from Massachusetts.

Mr. KENNEDY. Mr. President, how much time do I have on this?

The PRESIDING OFFICER. The Senator from Massachusetts has 3 minutes and 13 seconds.

Mr. KENNEDY. I yield myself 2½ minutes.

Mr. President, as the Senator from California has pointed out, we have someone who doesn't describe our position accurately and then differs with the position. And that is just what has happened here on the floor of the U.S. Senate.

First of all, the committee which deals with these issues on public health has not had 1 day, 1 hour, 1 minute of hearings on this legislation. The distinguished Senator, Senator BOND, has said, "Couldn't we sit down and discuss these measures?" All we are saying is that a no vote gives us an opportunity to sit down in the committee and hear from the research organizations and the ethicists to try and draft legislation that is in the interest of the patients of this country.

We have challenged those who support this legislation to mention one major research or patient group that supports their position. All we hear is about special interest groups that are going to benefit from this program.

Do we consider the cancer society a special interest group? Do we consider the American Heart Association, the Parkinsons Action Network and the Alzheimers Aid Society special interest groups? If they are special interest groups, we are proud to stand with them. They know what is at risk. And those who support this legislation have not been able to bring to the floor of the U.S. Senate reputable researchers who believe that research towards alleviating human suffering will not be curtailed by this legislation.

This has been pointed out effectively by the Senator from Florida and the Senator from South Carolina. This is not a partisan issue. We all want to have the best in terms of research for our families, for the American people and for the world.

We are effectively cutting off opportunities to advance biomedical research if we impose cloture today. Let's give the committees the opportunity for full, open, informed, balanced judgment and then come back to the floor of the U.S. Senate and have a debate on this issue. Don't cut off one of the great opportunities for research in this country by voting for cloture today. I reserve the remainder of our time.

Mr. BOND. Mr. President, I yield 4 minutes to the Senator from Tennessee.

The PRESIDING OFFICER. The Senator from Tennessee.

Mr. FRIST. Mr. President, I rise to support the underlying bill and hope that we will be able to proceed with a discussion of the bill today. No longer can we divorce science from ethical consideration. Science moves too fast today. We see it, with what has resulted from Dolly with this cloning procedure. Science and ethics must march hand in hand.

What does this bill do? No. 1: It prevents cloning of a human being. It

stops people, like Dr. Seed, who have proposed cloning human individuals dead in their tracks.

No. 2: It creates a commission, 25 people, bipartisan, broadly representative of the American people, ethicists on board, the very best scientists on board, social scientists on board and lay people on board. That commission will consider new technology, will consider cloning, will consider the next potential great advance that is out there with that ethical, theological and scientific environment.

What does this bill do? This bill does not stop any current research being done in in vitro fertilization, in stem cells, in transplantation. And I challenge any scientist, because the scientific community and the private industry and all say, "No, we can't stop science," we need to involve that ethical decisionmaking today—I do challenge any scientist who reads the wording in the bill to send me a peer-reviewed study that is banned by the wording of this bill. Read the bill.

Do we eliminate all embryo research? No, only a single technique, that balance we have achieved between hope and the potential opportunities for a technique versus the ethical consideration and the science we have achieved by looking at a single technique.

We don't eliminate all embryo research, just a single technique when applied to the procedure when it clones a human embryo. That is the only area.

Do we eliminate all of this technique? Do we eliminate all of this somatic cell nuclear transfer? Absolutely not. The Dolly experiments continue. The animal research continues in somatic cell nuclear transfer.

The only thing we eliminate is the future application when this technique is used only in the circumstance to create a live cloned human embryo. All animal research continues today. This is an untested procedure. It may be harmful. It has not been proven to be safe today. Shouldn't we be looking at it in animal models instead of taking it to the human population? That is what this bill does. Slow down. Let's do that animal research before creating live cloned human embryos.

It is a tough issue. I don't want to slow down science and the progress of science, but I do think that we, as a society, absolutely must recognize that not all science can proceed ahead without consideration by the American people, without consideration of the ethical implications. All of the hopes that have been mentioned in terms of curing disease projected into the future, I have those same hopes, but I also recognize that we can't go totally on uncharted courses. Science has been abused in the past. We can look back at Hitler and what Hitler did in the name of science. We have to take these ethical considerations and put them hand in hand in the progress of science.

Let me close and simply say, the commission is vital to this legislation.

We have to have a forum that is not on the Senate floor, that is not just in the scientific communities, to address these issues. That is what this commission achieves.

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

Mr. FRIST. I yield back my time.

The PRESIDING OFFICER. Who yields time?

Mr. ROTH. Mr. President, today, I rise to state my unequivocal support for a federal ban on human cloning. However, I am uncomfortable with the hurried pace with which this issue is being considered in the Senate.

The issue before us is both extremely complex and consequential. Regulating the very cutting edge of medical science will impact our fights against nearly every category of disease, including cancer, heart disease, blindness, Parkinsons and Alzheimers diseases to name but a few.

The United States must maintain its preeminent position as the international leader in biotechnological research, but do so while adhering to the highest moral and ethical standards. Any prohibition of cloning needs to be very carefully constructed and tested by public hearing to assure that both of these goals might be fulfilled.

The Food and Drug Administration has claimed authority to regulate this technology now, eliminating the need for immediate legislative action. Knowing this, and with lives at stake, I believe all Senators should have the opportunity to benefit from a thorough public examination of this proposal.

For these reasons, I will not support cloture on the motion to consider S. 1601 in hopes that this matter will be further evaluated at the committee level.

Mr. BROWNBACK. Mr. President, I rise to make a few remarks on the matter of human cloning.

I believe that as the Senate debates this issue that is so fundamental to the meaning and the essence of what it means to be a person we must consider very carefully the moral implications associated with the issue of human cloning.

Certainly there is no moral prohibition, nor could one effectively be argued, against the cloning of plants or even animals—there is something fundamentally different. Also, no one is arguing against tissue research or other important research. The issue today is strictly limited to the use of technologically feasible methods to create and manipulate new life through a process of human cloning. And beyond that, the issue is whether or not it is morally permissible to clone human beings.

This issue demands the public attention because it implicitly revolves around the meaning of human dignity and the inalienable rights that belong to every person.

But before discussing this in particular I think it is necessary to engage in a discussion on an even more fundamental level.

What is even more fundamental in this discussion is the question of the place occupied by the birth of a new child in our society.

First it is worth noting that there is a symmetrical quality to the current debate in our culture. And although the underlying philosophical premise is the same, the outcomes are radically different. I believe it is one of the tragedies of our times that in the midst of a culture which has allowed over 35 million abortions to be performed over the last twenty-five years, we now desire to create human life by our own hands. On the one hand, we deny God's creation, on the other, we seek to create life in our own image and deny God yet again. This is tragic on both counts.

I personally believe, and 2,000 years of Western tradition support this belief, that the birth of any child is an unmerited gift from God to a man and woman. Some in recent years, have given us a notion of a child as an object merely for the fulfillment of a man and woman's personal desire. It should be reasserted though that a child is not and can never be an object merely for the fulfillment of a man and woman's personal desire. A child is a precious and unmerited gift from God. God alone gives human life—but human cloning usurps that role. And I do not believe that we can ever do that.

The creation of new life outside of man and woman is a gross distortion of the moral natural law.

Human cloning distorts the relationship between man and woman by negating the necessity of either one in the creation of new life and consequently also usurps the role of God in the creation of new life. Fundamentally, it alters the view of the child to the world in such a way that the child is seen as something which can fulfill the needs of an individual physically, emotionally or spiritually. This is an incorrect view and is a gross violation of our duty to protect the human dignity of each and every person. It reduces a child to a means to an end and denies them the dignity they deserve to be treated not as a means but as an end in and of themselves.

And this notion is precisely where the disagreement on this issue exists between the Administration and the cloning bill before us today.

Some will argue that the issue simply needs to be studied before any research begins—a notion which does not rest on the supposition of a child as a gift. This is wrong. There is no research that can ever justify the willful technological manipulation and creation of human life through the process of human cloning for the furtherance of science—or even for the preservation of humanity.

The White House doesn't want a permanent ban—they want a limited moratorium. This indicates that they believe there may be a use for this technology as it relates to the issue of human cloning. But no such use exists.

The act of cloning a human being for the purposes of study, or for the purpose of bringing new life into the world is intrinsically evil and should be absolutely prohibited.

Also, there is another dimension to this debate which is fraught with problems and that is the rationale that will develop should cloning be allowed.

But what few have mentioned in this discourse is that implicit in the rush to begin cloning human beings is the eugenic rationale that will ultimately develop in support of it. Already, there are stories—what I would call horror stories—of people asking for specific genetic attributes when deciding to participate in *in vitro* fertilization. And when we are able to shop for a baby in the same way that we shop for a car; by whimsically creating new life based solely on our own personal convenience and satisfying our own personal desire, we effectively say: "God we do not need You anymore, we can do this ourselves."

And that is just wrong.

Mr. President, it would be a serious mistake and an abdication of our duty as responsible legislators to allow the devaluation of human life that would take place if we allowed for human cloning. There should be no human cloning. Period.

Mr. President, as we continue to debate this issue I would urge my colleagues to examine the role of our government in this debate and to then reach the only conclusion possible: that human cloning seriously threatens the dignity of human beings and it is our responsibility to absolutely prohibit human cloning and in so doing decisively end debate on this issue once and for all.

Mr. HATCH. Mr. President, I rise to offer some comments on the cloning legislation that we are now debating.

I think that this has been an important debate, one which should continue. It is a debate that involves many difficult, troublesome issues. I come to this debate as a concerned pro-life Senator, who also has profound questions about the scientific implications of this bill.

I can tell you that scientists from my home state of Utah are following these discussions very closely.

I am proud that researchers at the University of Utah and the Huntsman Cancer Center are at the cutting edge of science. It was scientists at Myriad Genetics of Salt Lake City who were co-discoverers of a gene—the BRCA 1 gene—that causes some types of breast cancer.

Let me share with you a letter that I received from Dr. Ray White, the Director of the Huntsman Center. I ask for unanimous consent that the text of this letter be printed in the RECORD.

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

HUNTSMAN CANCER INSTITUTE,
Salt Lake City, UT, February 5, 1998.

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

DEAR SENATOR HATCH: It has been brought to my attention that there is now pending legislation from the Senate leadership that would make it a criminal offense to utilize somatic cell nuclear transfer technology. The intent of the legislation is to prevent the cloning of humans. I agree completely and wholeheartedly with this intention. It would be a travesty and tragic ethical transgression to create cloned human individuals. However, this technology is the basis for a broad range of studies in biomedical research and a ban would halt research in many areas that promise major benefits for mankind.

For example, injection of fetal brain cells is thought to possibly provide benefits to individuals suffering from Parkinson's disease. Obtaining such cells from fetal materials can create its own ethical dilemmas. It would be far better to be able to reprogram the patient's own cells for this purpose. Nuclear transfer technology might well provide ways to accomplish this desired goal without raising such ethical issues.

It is important and possible to create legislation that will achieve the desired goal of preventing human cloning. I urge you to please consider carefully the downstream negative consequences of an overly broad legislative stroke. By all means, let us outlaw human cloning. But let us not eliminate promising pathways of research that could relieve human suffering.

Thank you very much for your attention.

Sincerely,

RAYMOND L. WHITE,
Executive Director.

Mr. HATCH. I agree with Dr. White that we should try to find a way to ban cloning of human beings but do so in a way that allows, to the extent ethically proper, valuable research to continue.

In these type of debates many of us value the opinion of my good friend and colleague from Tennessee, Senator FRIST. As a physician he brings a unique perspective to issues of science and medicine. He is also a co-sponsor of S. 1601, the bill pending before this body.

Let me also share with you a letter I sent to Senator FRIST on this bill. It is a short letter which I ask unanimous consent to insert in the RECORD at this point:

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

U.S. SENATE,
COMMITTEE ON THE JUDICIARY,
Washington, DC, February 6, 1998.

Hon. BILL FRIST,
U.S. Senate,
Washington, DC.

DEAR BILL: I am following the debate on the human cloning bill very closely. My interest is twofold: As Chairman of the Judiciary Committee, I have a special responsibility for considering any legislation such as S. 1601 that creates new criminal penalties. In addition, my long-standing interest in biomedical research and ethics compels me to understand a bill which has such far ranging public health consequences.

As you know, throughout my career, I have always taken a strong pro-family and pro-life stance, especially those relating to abortion and human reproduction. I have also spent considerable efforts to see that the

United States remains the world's leader in biomedical research so that our citizens may continue to benefit from revolutionary breakthroughs in science. I know that you share my belief that we have a responsibility to facilitate the advance of medical science in a manner that to the greatest extent possible respects the religious and ethical concerns of a diverse population.

I believe that there is widespread agreement that the cloning of human beings is undesirable and should be stopped. However, in achieving this end we must take care not to cut off—unwisely and unnecessarily—vital important avenues of research. Dr. Raymond L. White, Director of the Huntsman Cancer Institute at the University of Utah, has voiced his concern about this matter: "It is important and possible to create legislation that will achieve the desired goal of preventing human cloning. I urge you to please consider carefully the downstream negative consequences of an overly broad legislative stroke. By all means, let us outlaw human cloning. But let us not eliminate promising pathways of research that could relieve human suffering."

I am committed to legislation that prevents human cloning but allows vital research to continue into areas such as Parkinson's Disease, Alzheimer's Disease, diabetes, and many cancers. You raised a number of cogent points during our debate on Thursday. To better understand the operation of S. 1601, I would appreciate it if you can provide your thoughts on the following:

1. S. 1601 does not define the term "embryo". Do you believe that the initially created single cell product of somatic cell nuclear transfer is an "embryo"? Is there consensus among scientists on this?

2. What is the intent of S. 1601 with respect to allowing, or disallowing, the creation of a one cell entity through somatic cell nuclear transfer to be cultured in vitro to produce tissue intended to treat, cure, diagnose, or mitigate diseases or other conditions? Specifically, what types of research and development activities would be permitted or precluded?

3. S. 1601 does not define the term "somatic cell." Do you consider fertilized eggs of the type used in mitochondrial or cytoplasmic therapy "somatic cells"? How are such therapies treated under your interpretation of S. 1601?

4. What research and development activities does S. 1601 preclude or regulate that are currently beyond the jurisdiction of the Food and Drug Administration under current law, including its 1993 and 1997 jurisdictional statements (58 Fed. Reg. 53248; 62 Fed. Reg. 9721)?

These questions involve novel and difficult issues. I am certain that other tough questions will surface during the course of this debate. It is because of your expertise in these areas that I seek your guidance. Accordingly, I would greatly appreciate it if you could detail your reasoning in responding to these inquiries. It would be most helpful if I could learn your views prior to the cloture vote on Tuesday.

Warmest personal regards,

ORRIN G. HATCH,
Chairman.

Mr. HATCH. I think that these are some of the important questions and the type of questions on which we need to have consensus before we enact legislation:

— What are the current capabilities of cloning, in animals and humans? Should we be focusing on banning a technology, or technologies, or the results of a technology.

— What should be the status of the asexually-produced totipotent cells? What is the correct definition of an embryo? For example, is it the definition used in the Report of the National Bioethics Advisory Commission—that it is "the developing organism from the time of fertilization until significant differentiation has occurred, when the organism becomes known as a fetus"? Would that definition preclude human somatic cell transfer technology?

— What current authority does the government have with respect to techniques which might lead to cloning human beings and human tissue?

— Although there is virtual unanimity that cloning of human beings should be banned at this time, what is the appropriate type of penalty for any attempt at such an act? Should it be a criminal penalty? If so, what type? Are the criminal penalties instituted in S. 1601 the appropriate means of preventing cloned humans?

— How does the language of this bill affect the ability to do further research on whether banning somatic cell nuclear transfer technology would affect the ability of a woman with unviable eggs to conceive children?

— Precisely what types of research could—and could not—be conducted under this bill?

These are important issues that deserve our full attention.

All of us have family, friends and loved ones afflicted by some terrible disease.

When we think about this bill we need to think about people like Nancy and Ronald Reagan as they battle against Alzheimers.

We need to think about Mohammed Ali's battle against Parkinsons.

We need to be sure that in locking off human cloning that we don't do so in a way that throws away the key to many other diseases.

Over the past few days, we have heard very compelling, heartfelt debate about this issue.

Some have expressed the belief that asexually-produced totipotent cells are, in fact, an embryo, fully deserving of the protections we accord to a human life.

Others have averred that these cells are not yet a human embryo, but rather should be viewed as a very promising tool which science should be allowed to explore as we continue our quest to cure such devastating diseases as diabetes, cancer and AIDS.

Both sides hold very strong moral convictions. There are extremely important implications for both.

This body must explore these fundamental questions. We must consider the views of our scientific experts, ethicists, religious leaders, ethicists, and men and women of medicine.

Let me also add I am very troubled that this bill should have been considered in Committee where many of the fundamental issues we have been debating can be explored in more depth, especially since S. 1601 amends Title 18 of the U.S. Code.

This is obviously an important debate, one which must be continued, and therefore I will vote "yes" on the motion to invoke cloture.

As we attempt to advance the public health, we must do so in a way that protects human life. I think we must work to craft legislation that achieves both of these goals.

Mr. GORTON. Mr. President, I intend to vote for cloture on the motion to proceed to Senator FRIST's bill this morning because I believe it is imperative that we move the debate on human cloning forward. The lightning pace of scientific and medical advances, while holding immeasurable promise, often leaves society unprepared to answer the moral and ethical questions that follow. The technology used to clone "Dolly" the now famous Scottish sheep, somatic cell nuclear transfer, clearly should not be used to clone a human child; this is neither a moral nor medically ethical procedure. Yet it is clear that the scope of possibility for this new technology has not been fully explored. It may hold the potential to develop new lifesaving therapies for diseases that have historically plagued mankind. Can we close the door on new opportunities to heal cancer patients, those afflicted with Alzheimers, or burn victims?

Few of us in this body have background in science, medicine, or medical ethics. Yet we are being asked to make decisions that have tremendous consequences for the lives of every American. We are being asked to examine some of our fundamental beliefs about life and the ethical use of science. We must be exceedingly cautious before legislating in an area we admittedly know little about.

I commend Senator FRIST for his leadership in bringing this issue before the Senate. I hope that we can reach consensus; that prohibiting the use of somatic cell nuclear technology to produce a human child and promoting responsible biomedical research are not mutually exclusive goals. But we cannot do so unless we thoughtfully debate the issue; we cannot ignore it.

Mr. BYRD. Mr. President, in February 1997, scientists in Scotland were successful in producing a cloned sheep, named "Dolly." This incredible event shocked the world and led to the realization that, at some point, cloning human beings might also be on the horizon. Shortly after the announcement about Dolly, my concern about the ethical and moral implications of cloning human beings led me to cosponsor Senator BOND's bill, S. 368, that would prohibit the use of Federal funds for research on human cloning. I believe that, with the notable exception of Dr. Richard Seed, who has announced to the world his intention of cloning a human being, there is broad agreement that cloning humans is unacceptable on many grounds.

But, the successful cloning of "Dolly" has prompted scientists to ponder other potential uses of somatic

cell nuclear technology, the technique used to create Dolly. Scientists believe that research using this technique might hold promise for a whole host of devastating human diseases. For this reason many in the scientific community are urging Congress to move cautiously in this area, lest overly broad legislation have unintended consequences. Care in its crafting is, therefore, imperative.

Given the concerns raised by the scientific community and patient groups, it is therefore prudent that we proceed with caution and only after thorough consideration of the ramifications that may follow if we were to enact S. 1601, the bill before us today. This bill has received not one hour of hearing before the appropriate committee. Who can say with any comfort what the impact may be on important research aimed at dread diseases? Doesn't important and potentially far reaching legislation such as this at least warrant hearings before we proceed? This legislation could have unintended and detrimental consequences.

Let us now get down to hard work and take the time necessary to determine how to go about banning the cloning of human beings in a clear and precise way that will avoid the unwanted consequence of also banning important research intended to alleviate the pain and suffering of victims of Alzheimers disease, Parkinsons disease, and many types of dreadful cancers.

I will vote against invoking cloture on the motion to proceed to S. 1601, the Human Cloning Prohibition Act. While I wish to register strong opposition to cloning a human being, I also believe that bringing this recently-introduced legislation to the Senate floor for consideration without hearings by the appropriate Senate committee, including testimony from expert witnesses is a mistake.

Mr. HELMS. Mr. President, the distinguished Senators BOND and FRIST are to be commended in introducing the underlying legislation to ban human cloning and the creation of human embryos. Congress must make unmistakably clear that human life is too precious and valuable to be cheapened by a medical procedure which replicates human beings.

Millions of Americans believe that human cloning is inconsistent with the moral responsibility that is incumbent upon modern medical technology. Put simply, so-called medical "advances" are not advances at all unless the dignity and sanctity of all human life are preserved. It is meaningful, I think, that the Senate's only physician has sponsored this bill. I appreciate Senator FRIST's willingness to offer his medical expertise to the American people by setting the record straight about the travesty of human cloning.

Mr. President, the overwhelming consensus among professionals in the medical industry confirms that human cloning is unethical and immoral. NIH

Director Harold Vamur stated that he personally agrees with numerous polls evidencing the public's opinion that cloning human beings is "repugnant."

Indeed, Mr. President, the American people are outraged by the hubris of a fringe element of the medical community wishing to pursue human cloning—and they are demanding action. In fact, some states have already introduced similar legislation to the one before us that would ban human cloning.

Perhaps this debate over human cloning was inevitable because, for too long, our society has failed to stand on the principle that all life has value. Nowhere has the lack of respect for human life been more evident than in the Supreme Court's tragic *Roe v. Wade* decision in 1973—the infamous case; which established that unborn children are expendable for reasons of convenience and social policy. *Roe v. Wade* presaged an era where science, technology and medicine are no longer confined to work within the moral boundaries erased by that ill-fated decision made twenty-five years ago.

I'm sure most Americans were alarmed, as I was, when the Chicago physicist, Richard Seed, expressed his reasoning for wanting to clone a human being. Mr. Seed, states that he believes mankind should reach the level of supremacy as our Creator. Mark my words, a society that permits modern medicine to sacrifice human dignity for the sole purpose of such self-glorification will not survive its own arrogance.

Those having doubts need only to consult their history books. Evidence of this can be seen throughout the course of history. It is instructive to read the book of Genesis and the account about a group from Babylon who became so enamored by technology that they believed they could build a structure, the infamous Tower of Babel, that would reach into heaven. The Lord punished the arrogance of this civilization and disrupted their foolish work.

Some may say this is a story of irrelevance, but I believe it serves as a reminder of the ramifications to come if modern medicine is allowed to exceed beyond the moral boundaries and human limitations set by God. We should not be in the business of taking away life or creating life unnaturally.

So, Mr. President, it is extremely important that the Senate pass this legislation to outlaw human cloning. In doing so, the Senate will heed the American people's belief that this objectionable procedure is a dangerous precedent and a morally abhorrent use of medical technology.

Mr. COATS. Mr. President, I rise in support of S. 1601, a bill that would end the cloning of human beings. I urge my colleagues to support and cosponsor this legislation.

Many opponents of the bill will label its supporters as anti-technology, anti-science—seeking to return to the dark

days of ages past. Such opponents have conveniently seized on a notion that to ban this emerging technological procedure is to despise all science and progress.

Nothing could be further from the truth. Just 80 days ago, two of the primary sponsors of this bill—Senators FRIST and GREGG—and I completed three years of intense work on the FDA Modernization Act, whose sole purpose was to advance the health of patients by supporting and promoting the extraordinary, life-saving work of high-technology biotech companies and drug firms. It is too convenient—indeed, it is dishonest—for opponents to charge supporters of this cloning bill with being anti-science, anti-patient.

Indeed, we who believe human life to be one of the greatest gifts from our Creator, do not fear the development of science and technology that protects and improves that life. We know only too well of the advances in medicine and vaccines that have dramatically reduced infant deaths. We have held hearings in which extraordinary PET technology can reveal the workings of the prenatal and postnatal brain. We have constituent companies whose fetal bladder stents now save the lives of women and their children, when death used to be a certainty.

But to admire, promote, and legislate on behalf of patient-friendly technology, and scientific achievement does not require that we sacrifice all principle or that we abandon caution in the face of serious questions about a particular technology.

Few will disagree that cloning presents this country with one of the most disturbing and tantalizing scientific developments in recent time.

At once, it presents us with the opportunity to duplicate, triplicate, infinitely replicate the best that the world has to offer; and it presents the threat of too much of a good thing—the loss of individuality and the end of the security and utility inherent in diversity. Indeed, the child is now created in our own image and not God's. It becomes a product of the will and not the receipt of gift. Who can predict the emotional, the psychological, or the spiritual consequences of such a technology?

Cloning technology, so new to the human experience, indeed considered just ten or fifteen years ago to be practically and scientifically unachievable, has received only scant attention from the most distinguished, thoughtful, and expert-laden institutions in our society. Even today, cloning of humans is still considered only a remote possibility by means as yet untested and only barely imaginable.

Because it differs so dramatically from in vitro fertilization and other methods of reproduction, we can scarcely begin to set forth some of the practical consequences: a reduction in genetic diversity, long considered essential to the species; an increase in deformities in the child. The possibilities are numerous and unexplored.

Proponents of cloning argue that in the face of these possibilities, caution is required. But while cloning proponents call for caution that protects experimentation, the better course is caution that protects the developing human embryos that are inevitably created by such technology.

How in good conscience can we wait for the practical and ethical complications of cloning to develop—to wait for Dr. Richard Seed to use methods that unavoidably involve the destruction of living human embryos?

Perhaps in the meantime research on animal cloning will result in the cloning technology that can be used to develop human cell lines or tissue that is not derived from a developing human embryo or does not result first in the creation of such an embryo. Again, until that day, caution is required—caution in defense of life.

S. 1601 ensures that the least among us receive our full recognition and protection as members of human society. I urge passage of S. 1601.

Mr. BIDEN. Mr. President, I want to make it absolutely clear: I oppose the cloning of human beings. But, I am voting against cloture on the motion to proceed to the cloning bill because the bill and the issues the bill raises are not that simple.

I am voting against cloture because there has not been sufficient discussion; there have not been sufficient hearings; there has not been sufficient consideration of what is a very complicated scientific issue. Legislation is supposed to be the end result of a process; not the beginning of it. This bill, Mr. President, is far too premature.

Yes, hearings were held last year after it was announced that Dolly the sheep was a clone. But, those were generic hearings on the issue of cloning. And, the bill before us is not—I repeat, not—a result of those hearings. This was a bill that was introduced a week ago, has never been the subject of a hearing, and has never been considered by a committee.

Are the definitions adequate? Or, are they over broad? In the name of preventing the cloning of a human being, are we hindering medical research that might help in the battle against cancer and other diseases? Or, in the name of allowing scientific research, are we opening the door to rogue scientists who will then find it easier to clone a human?

These are all very legitimate questions that need answers. In the end, there may be significant differences over what the answers should be. But, the problem here today, Mr. President, is that we are not ready to be debating answers to these policy questions because we have not had a thorough discussion of the questions and the implications.

With the pace of scientific advancement—scientific knowledge is now doubling about every five years—more and more of these extremely complicated bioethical issues are likely to come be-

fore the Congress in years to come. Let's not set a precedent here today that we will deal with them willy-nilly—by simply taking a position and voting without having given thoughtful consideration to the issues involved.

We need to act to ban the cloning of humans. But, before we act, we need more hearings and more discussion on how best to accomplish that. Therefore, I am voting against cloture on the motion to proceed.

Mr. DURBIN. Mr. President, I rise today to suggest that we should not be rushing to consider a bill that may do far more than ban human cloning permanently. The Lott-Bond cloning bill was only introduced last Tuesday and has been available for review for a very short period of time. The identical bill that was introduced by Senator BOND was referred to the Judiciary Committee and yet we have had no Judiciary committee hearings on this topic to examine exactly what this bill does. Is the bill really written to accomplish its goal of banning the duplication of humans via this new technology? Or does it go much further than its stated goal? I don't think that many of us here on the floor of the Senate (myself included) are well equipped to make that determination without hearing from experts in the field including scientists, bioethicists, theologians and others qualified to give us advice on this very important matter.

It is also not clear as to why we are rushing to consider this bill given that the FDA has already announced that it has authority over this area. In fact I have a letter here in my hand from the FDA that explains that before any human cloning would be allowed to proceed, FDA would need proof that the technology was safe. FDA will prohibit any sponsor of a clinical study from developing this technology if "it is likely to expose human subjects to unreasonable and significant risk of illness or injury" or "the clinical investigator was not qualified by reason of their scientific training and experience to conduct the investigation." The letter goes on to say that "In the case of attempts to create a human being using cloning technology, there are major unresolved safety questions. Until those questions are appropriately addressed, the Agency would not permit any such investigation to proceed."

The National Bioethics Advisory Committee recommended a five year moratorium on the use of this technology to create a human being. Due to the time limit that they were under, the committee was unable to focus on the issues beyond safety. They concluded that, at this time, the technology was unsafe for use for the purpose of cloning a human being. They did not address the many ethical issues involved with the use of this technology. The committee believed that these issues were too complex to be dealt with in such a short period of

time. Therefore, it is still necessary to allow time for discussion about the ethical use or need for a specific ban on the use of this technology.

To date, we have excluded Patient groups, physicians, scientists and other interested parties from the discussion of how this particular bill should be drafted. Yet it is these very patients whose future hope for cures may be cut off by a bill if it is improperly drafted.

I find it extremely troubling that we are rushing to consider a bill that every patient advocacy group, doctor, or scientist that has contacted my office has either urged us not to pass or has asked us to consider in a more deliberative manner. Organizations such as: The American Heart Association, the Juvenile Diabetes Foundation International, the American Association for Cancer Research, the American Society for Human Genetics, the American Academy of Allergy, Asthma and Immunology, the Association of American Medical Colleges, the American Pediatric Society, the Cystic Fibrosis Foundation, the National Osteoporosis Foundation, the Parkinson's Action Network, the AIDS Action Council, the American Academy of Pediatrics and 27 Science Nobel Laureates. These organizations and individuals are dedicated to finding cures for diseases. They are not advocates for unethical research. They are mainstream organizations committed to finding cures for such diseases as heart disease, strokes, spinal cord injuries, birth defects, asthma, diabetes, cancer, osteoporosis. These are diseases that afflict millions of Americans. Biomedical research may be some patients with these illnesses only hope.

For some, new technologies as yet undeveloped may be their only hope. For instance, some of my colleagues may have heard the story of Travis Roy. Travis is now a 21 yr old college student at Boston University. Travis grew up in Maine and was an avid ice hockey player. Unfortunately for Travis during his first collegiate hockey game 3 years ago, 11 seconds in to the game, he collided with the wall and suffered a spinal chord injury that has left him paralyzed with only a small amount of movement in his right hand. Travis has written a book about his experiences and his fight for recovery. For people like Travis that have had their spinal chords severely injured they look to new research that might help them regenerate their damaged tissue. As Travis so agonizingly stated recently: "All I want to be able to do is to hug my mother."

Researchers hope that they may be able to generate what are known as "stem cells," that is cells that can give rise to lots of other cells, using the technology that the Lott-Bond cloning bill seeks to ban. With continuing research, those cells might be used to repair injured spinal cords or damaged livers or kidneys or hearts.

Stem cell research could provide: cardiac muscle cells to treat heart at-

tack victims and degenerative heart disease; skin cells to treat burn victims; neural cells for treating those suffering from neurodegenerative diseases; blood cells to treat cancer anemia and immunodeficiencies; neural cells to treat Parkinson's Huntington's and ALS. The generation of stem cell lines using an unfertilized egg as a host is far removed from the act of creating embryos for research or creating a fetus for organ parts. In fact, it is the exact opposite giving an avenue for therapies that involve the culturing of single cells from adult cells. Some of these therapies would actually result in fetal tissue no longer being necessary for the treatment of many neurodegenerative diseases. Others might give hope to parents that conceive children that have genetic diseases, so that they are not faced with the agonizing choice between terminating a pregnancy or giving birth to a severely disabled child.

I think that many of us do not really know what the full scope for this technology really is. It is possible that this technology may be used in a life enhancing, life promoting manner.

We should have a full hearings process with opportunities to hear from specialists in medical genetics, researchers at NIH and other institutions. We should listen to what the medical community has to say on treatment options. We should also hear from patient advocacy groups and all others that may have expertise in this area or be affected by the legislation at hand. Likewise, the area of assistive reproductive technology has become incredibly complex and we should listen to bioethicists and religious leaders and their opinions which we surely value. Again, I wonder why we are rushing here. What about the committee hearing process is the Republican leadership afraid of that?

Some may argue that the announcement by the Chicago Physicist, Richard Seed of his intention to start cloning necessitates a rapid response. However, Dr. Seed has no training in medical procedures nor in biology. He does not have a lab for this purpose. He does not have the venture capital and in fact his home was recently foreclosed by the Bank. Thus to suggest that he will be cloning anything soon, seems outlandish at best. By the FDA's stated criteria of an investigator needing to demonstrate expertise, Dr. Seed would clearly fail and thus would be prohibited by FDA from proceeding.

One person's far-fetched claims should not propel us into passing legislation that has not been adequately reviewed. As J. Benjamin Younger, Executive Director of the American Society for Reproductive Medicine has said: "We must work together to ensure that in our effort to make human cloning illegal, we do not sentence millions of people to needless suffering because research and progress into their illness cannot proceed."

The PRESIDING OFFICER. Who yields time?

Mr. KENNEDY. How much time remains?

The PRESIDING OFFICER. Thirty seconds.

Mr. KENNEDY. Mr. President, I yield myself 30 seconds. I have too much respect for my friend and colleague from Tennessee to let the comparison with Hitler and science be used on the floor of the U.S. Senate in reference to our position on this particular issue without comment.

Our position has been embraced by virtually every major research group in this country. This vote isn't about a ban on the cloning of human beings. We have agreed on that principle. This vote is about preserving opportunities for major advances in biomedical research in this country. I hope the Senate will vote "no" on cloture.

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

Mr. BOND addressed the Chair.

The PRESIDING OFFICER. The Senator from Missouri controls 20 seconds.

Mr. BOND. I yield that time to myself.

Mr. President, unfortunately, the misinformation about this bill has our opponents saying that human cloning bans will hurt research. Show me one mainstream scientist who is currently creating cloned human embryos to fight these ailments. It is not happening. It should never happen.

Science has given us partial-birth abortions and Dr. Kevorkian's assisted suicide. We should say no to these scientific advances and no to the cloning of human embryos. If you vote against cloture, you are saying yes to human cloning.

CLOTURE MOTION

The PRESIDING OFFICER. Under the previous order, pursuant to rule XXII, the Chair lays before the Senate the pending cloture motion, which the clerk will state.

The assistant legislative clerk read as follows:

CLOTURE MOTION

We, the undersigned Senators, in accordance with the provisions of rule XXII of the Standing Rules of the Senate, do hereby move to bring to a close debate on the motion to proceed to S. 1601, regarding human cloning.

Trent Lott, Christopher S. Bond, Bill Frist, Spencer Abraham, Michael B. Enzi, James Inhofe, Slade Gorton, Sam Brownback, Don Nickles, Chuck Hagel, Rick Santorum, Judd Gregg, Rod Grams, Larry E. Craig, Jesse Helms, and Jon Kyl.

CALL OF THE ROLL

The PRESIDING OFFICER. By unanimous consent, the quorum call has been waived.

VOTE

The PRESIDING OFFICER. The question is, Is it the sense of the Senate that debate on the motion to proceed to consideration of S. 1601, the Human Cloning Prohibition Act, shall be brought to a close?

The yeas and nays are required under the rule. The clerk will call the roll.

The assistant legislative clerk called the roll.

Mr. NICKLES: I announce that the Senator from Virginia (Mr. WARNER) is necessarily absent.

Mr. FORD: I announce that the Senator from Michigan (Mr. LEVIN) is necessarily absent.

I further announce that the Senator from Nevada (Mr. BRYAN), is absent due to illness.

I also announce that the Senator from Nevada (Mr. REID), is absent attending a funeral.

I further announce that if present and voting, the Senator from Nevada (Mr. BRYAN), would vote "no."

The PRESIDING OFFICER (Mr. INHOFE). Are there any other Senators in the Chamber desiring to vote?

The yeas and nays resulted—yeas 42, nays 54, as follows:

(Rollcall Vote No. 10 Leg.)

YEAS—42

Abraham	Faircloth	Kyl
Allard	Frist	Lott
Ashcroft	Gorton	McCain
Bond	Gramm	McConnell
Brownback	Grams	Murkowski
Burns	Grassley	Nickles
Coats	Gregg	Roberts
Cochran	Hagel	Santorum
Coverdell	Hatch	Sessions
Craig	Helms	Shelby
D'Amato	Hutchinson	Smith (NH)
DeWine	Hutchison	Stevens
Domenici	Inhofe	Thomas
Enzi	Kempthorne	Thompson

NAYS—54

Akaka	Feingold	Lugar
Baucus	Feinstein	Mack
Bennett	Ford	Mikulski
Biden	Glenn	Moseley-Braun
Bingaman	Graham	Moynihan
Boxer	Harkin	Murray
Breaux	Hollings	Reed
Bumpers	Inouye	Robb
Byrd	Jeffords	Rockefeller
Campbell	Johnson	Roth
Chafee	Kennedy	Sarbanes
Cleland	Kerrey	Smith (OR)
Collins	Kerry	Snowe
Conrad	Kohl	Specter
Daschle	Landrieu	Thurmond
Dodd	Lautenberg	Torricelli
Dorgan	Leahy	Wellstone
Durbin	Lieberman	Wyden

NOT VOTING—4

Bryan	Reid
Levin	Warner

The PRESIDING OFFICER. On this vote, the yeas are 42, the nays are 54. Three-fifths of the Senators not having voted in the affirmative, the motion is rejected.

EXECUTIVE SESSION

Mr. LOTT. Mr. President, I ask unanimous consent the Senate resume consideration in executive session to debate the nomination of Frederica Massiah-Jackson.

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

NOMINATION OF FREDERICA A. MASSIAH-JACKSON, OF PENNSYLVANIA, TO BE U.S. DISTRICT JUDGE FOR THE EASTERN DISTRICT OF PENNSYLVANIA

Mr. LOTT. Now, Mr. President, we are working on an agreement with re-

gard to this nomination—we still have to clear it with Senators on both sides of the aisle—that would allow us to announce some action in regard to this nomination within the next couple of hours, we hope certainly in the early afternoon, and then it would be our intent to go to the Morrow nomination. We have been working on a time agreement, and we will enter a request as to exactly when that would be debated and for how long. It is our intent to have a vote on that nomination at a reasonable hour this afternoon—not tonight.

Mrs. BOXER. Will the Senator yield?

Mr. LOTT. Yes, I yield.

Mrs. BOXER. Several Senators on both sides of the aisle have been trying to get a time certain for the Morrow nomination. I wonder if the distinguished majority leader would consider offering a unanimous consent request so we can at least know how to plan our day? We have already thought it was happening this morning.

Mr. LOTT. We would like to be able to do that. I think the best way to get a unanimous consent agreement is to continue to work with Senators on all sides. My intent would be that we enter into an agreement to begin as early as possible and to get a vote not later than 6 o'clock. If for some reason we could not get that agreement, then we would have to have that vote tomorrow morning, but I believe we can work with the interested Senators on both sides and get this agreement worked out. As soon as we do, hopefully even by noon, we will enter the request. I think it would be something everybody will be comfortable with.

Mr. SPECTER. If the distinguished majority leader would yield to me, there have been discussions about a time. There are 4 hours. I was just discussing with our distinguished colleague from Missouri—I see he has left the floor so I will say nothing further. I hoped we might set that vote for 2:30, but I will let it ride.

Mr. LOTT. I don't think we can do it that early, but we will work with everybody here in the next few minutes. If we could get it done right away, we will do it, but certainly we want to do it this morning if at all possible.

I will continue to consult with the Democratic leader, and we will make that request soon.

I yield the floor.

The PRESIDING OFFICER. The clerk will report the nomination.

The legislative clerk read the nomination of Frederica A. Massiah-Jackson, of Pennsylvania, to be United States District Judge for the Eastern District of Pennsylvania.

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

Mr. FEINGOLD. Mr. President, I ask unanimous consent to speak as in morning business for 10 minutes.

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

THE PRESIDENT'S PROPOSED BUDGET

Mr. FEINGOLD. Mr. President, I rise today to offer some initial comments on the President's proposed budget for fiscal year 1999. As with any budget, there will be occasion to discuss and debate the many individual provisions it contains. I have already heard some legitimate concerns voiced about some of the provisions from both sides of the aisle, and I very much look forward to working with my colleagues on the Budget Committee to fashion what I hope will be the second consecutive bipartisan budget agreement.

Despite the many issues surrounding individual provisions, though, we have to acknowledge what a historic moment this is. The President's budget is historic. For the first time in 30 years, a President has submitted a unified budget that actually balances. That is an achievement worth noting and noting again. While many of us believe we have a way to go before we can talk about having a genuine balance, it is fitting to pause for a moment to acknowledge the tremendous progress that has been made.

The President's proposal also marks the end of one budget era and, I think, really the beginning of a transition period that may require changing some of our budget rules, and I will have more to say on that subject in the coming weeks. It is also worth remembering how far we have come and how we reached this important benchmark. First and foremost was the 1993 deficit reduction package. That was one of the toughest votes I think many of us have ever taken in this legislative body. It wasn't pleasant and it wasn't supposed to be pleasant. As we have found, there just is no painless solution to the deficit, and we had to take a different kind of step. In fact, Mr. President, it was the very toughness of that 1993 package that told me it was worth supporting. Let me also say that last year's bipartisan budget agreement also contributed to the effort. I repeat my admiration for the work done by the chairman of the Budget Committee, the Senator from New Mexico, Mr. DOMENICI, and also the ranking member, the Senator from New Jersey, Mr. LAUTENBERG, who worked so hard to make that agreement possible.

Mr. President, I wish that agreement had gone further. As I have noted on other occasions, I really wish we had refrained from enacting that fiscally irresponsible tax package last year. If we had, the unified budget would have actually reach balance earlier. Nevertheless, both of those efforts helped bring us to where we are today and all concerned deserve praise.