Therapeutic Cloning: It's About Much More Than Embryonic Stem Cell Research

Wesley J. Smith Esq.

Follow this and additional works at: https://scholarship.law.stjohns.edu/jcred

Recommended Citation

Available at: https://scholarship.law.stjohns.edu/jcred/vol20/iss1/3
THERAPEUTIC CLONING: IT'S ABOUT MUCH MORE THAN EMBRYONIC STEM CELL RESEARCH

WESLEY J. SMITH, ESQ.*

Thank you very much. Hello everybody. Coming from California and seeing my governor [Arnold Schwarzenegger] on the television screen made me think: My governor can beat up your governor. [Laughter] I love it when I am introduced as a “distinguished” speaker because that’s just a way of saying that I’m getting old and I have gray hair. I am a lawyer. I have been asked to speak for twenty-five minutes. Being a lawyer, speaking for only twenty-five minutes is very hard for me, but I will do my best.

I want all of you to understand something very clearly, that when Dr. Roberge was contemplating potential future moral and ethical dilemmas with regard to using cloned fetuses for experiments, he was not engaging in alarmism. As I will describe, it is already becoming clear that this research is not going to be restricted to the use of early embryos in Petri dishes. From my perspective as I observe today’s experiments and advocacy, it is becoming increasingly clear that many of the advocates pursuing these technologies have no intention of engaging in any kind of reasonable or meaningful self-restraint. A few minutes ago, we talked about how states are going forward promoting research without any real public debate. Well, one of the reasons is that the scientists will not slow down long enough to allow us to have a reasonable a public conversation about the science and ethics involved with these technologies.

In fact, many in the science establishment now say hubristically that the opinion of the lay public is irrelevant.

* These remarks are an actual transcript of the author’s comments at the St. John’s Journal of Legal Commentary Symposium on Feb. 25, 2005.
because these are science issues and only scientists should be able to determine what is moral or immoral in science. But the controversies over biotechnology are not really a science debate; rather, they involve crucial arguments over ethics and morality. Since we are all going to enjoy the benefits or suffer the consequences of this research, we all have a right to participate in the debate. That is why forums like this are so important: we do have to get into these issues, and having such a wide, distinguished group of people to discuss these issues is so important. These are dual use technologies: they can be used for both good and bad. One of the speakers earlier said they could be used for great good and that is true - great human good. However, they can also, I am afraid, be used for great human harm.

I was struck as I was listening to these presentations, that much of biotechnology is not controversial. Adult stem cell research, for example, is not meaningfully opposed by anyone. Creating cancer drugs that were individualized to the patient’s genome is not controversial.

However, human cloning and embryonic stem cell research are controversial. And that is because these two issues uniquely involve something a matter that is quite crucial: what does it mean to be human? Does human life have intrinsic value simply and merely because it is human? Or, are there other ways, other than mere humanity, that we should use to measure the moral worth of a given human life?

I do not have time to get too deeply into this today, but there is one element of this debate that you need to know about: the definition of “person.” There is a real drive within bioethics, as well as in biosciences and philosophy, to say that being human is not what confers moral value. Indeed, in this view, being human, in and of itself, is irrelevant to moral value. Instead, what counts is whether one is a person, which is earned by possessing certain subjective criteria, such as level of cognition or level of awareness. Peter Singer of Princeton University defines a person as a being who is “self aware over time;” and only such a being is entitled to what the average American might call full
human rights. However, if a being does not possess the requisite cognitive capacities, then that moral value does not apply – even if that being is a human being. Thus, there are many thinkers who are actually very clearly and very specifically asserting that there are many humans who are not persons.

Now, many would say that unborn fetuses are not persons, and that has played out in other public controversies as well as in biotechnological controversies. We all know that. But many bioethicists also assert that newborn infants are not persons because they are not “self aware over time.” Peter Singer has questioned, for example, whether there is any intrinsic difference between a late term fetus and a newborn infant. He asserts that when it comes to cognitive capacities, there is not much of a difference. And, as a result, Singer has posited two theories: that there should be an absolute right to abortion for nine months, and that infanticide should be permitted. Thus, parents should be able to kill their children if those children do not meet the parents’ needs or if those children will cause more unhappiness than happiness.

Some might shrug this off is being merely theoretical. But in the Netherlands today, eugenic infanticide is being carried out routinely. About ninety cases of infanticide a year occur in the Netherlands because of their euthanasia program. This topic of infanticide could be the subject of a separate speech that could take another hour to discuss.

1 See Adam Kolber, Note, Standing Upright: The Moral and Legal Standing of Humans and Other Apes, 54 STAN. L. REV. 163, 182 (2001) (noting that “[f]or Singer, human and nonhuman animals have interests if they have the ability to experience pains or pleasures”).
2 See PETER SINGER, PRACTICAL ETHICS 131 (Cambridge Univ. Press 1979) (positing that “the potential of a fetus to become a rational, self-conscious being cannot count against killing it at a stage when it lacks these characteristics”).
3 See id. (noting that defective children do not possess “rationality, autonomy and self-consciousness”).
4 See id. at 132 (stating that, customarily, parents are happy at the births of their children, but some “[p]arents may, with good reason, regret that a defective child was ever born”).
6 See id. (stating that one hospital euthanized twenty-four of five hundred disabled infants).
So, who are other supposed human "non persons?" Well, some argue that people like Terri Schiavo are supposedly "non persons" because Terri had been diagnosed as being in a persistent vegetative state.\(^7\) Personally, I do not believe that she is a "non-person," but let us just assume she is one for the moment. Due to that situation, some bioethicists, for example, James Hughes of Trinity University in Hartford, argue that people like Terri, diagnosed to be in persistent vegetative states, should be considered property.\(^8\) Some bioethicists even argue that people like President Ronald Reagan in the late stages of Alzheimer's disease might be considered human "non persons." Other bioethicists go so far as to declare that psychotics who are enough out of touch with reality should be considered human "non persons."

This denial of universal human personhood leads us to some very worrisome issues: If we believe that human life has no intrinsic value simply and merely because it is human, then that permits us to do just about anything we want to human non persons. For example, we can create human life for the purpose of researching upon and destroying it—as occurs with human therapeutic cloning. Furthermore, if we can exploit unborn human lives because they are not 'persons;' can we also do that to already-born human "non persons?"\(^9\) Some very notable commentators believe so. Here is just one example, from CRITICAL CARE MEDICINE; where two Harvard doctors suggest that, "individuals who desire to donate their organs and who are either neurologically devastated or imminently dying should be allowed to donate their organs, without first being declared dead."\(^10\) America, and indeed the world, does have an organ

\(^7\) See Bob Jones, Two Steps Back – Abortion: As Pro-lifers March, the Supreme Court Deals Their Cause a Rebuke, WORLD MAG., Feb. 5, 2005 (noting opinion of Ken Connor, Florida attorney, who stated "[e]ffectively, Terri Schiavo is being treated as a non-person who does not receive the benefit of the protections provided by the Constitution").


\(^9\) See SINGER, supra note 2, at 131 (positing that “[k]illing [defective infants] . . . cannot be equated with killing normal human beings”).

shortage. But what these Harvard doctors suggest in this article, which is establishment medicine with a capital E, is that some of these humans are less morally valuable and thus can be killed for their organs. So now this shows us the trend of looking at some human lives as commodities, as products. This increasing advocacy for the commoditization of human non persons raises terrifically important and crucial moral issues, the decisions about which, I believe, will determine the morality of the twenty-first century.

Now, back to the point at hand: The controversies over human cloning and biotechnology are about much more than embryonic stem cell research. To introduce that point, I would like to briefly recount an exchange I had when I did a panel talk show in Canada. I was talking about the morality and ethics of embryonic stem cell research and therapeutic cloning. I was suggesting, as I do everywhere I speak on this topic, that the only way to prevent, for example, reproductive cloning, is to not permit human somatic cell nuclear transfer cloning at all. A fellow called, with a story about which we can all have great sympathy. He said: “I have a profoundly disabled daughter who I love very much. I do not care about the status of embryos – I do not care if we make human life for the purpose of destroying it, if that is going to help my daughter.” And we can all absolutely understand that. We all have loved ones who are going through terrible disease processes. For example, my uncle has Alzheimer’s disease, my best friend, Mark Pickup in Canada, has progressive Multiple Sclerosis, and a good friend of mine, who is only fifty years old with three young children, is dying of breast cancer. My father died of colon cancer. So we all have been through this. We all know the pain and anguish that our loved ones’ suffering causes us.

But there are issues beyond whether an individual is ill or whether an individual family is suffering, that go to some overarching issues of ethics and morality for society. And so I asked this father, “If you found that rather than an embryo in a

00019.htm (affirming that removal of organs from organ donors before biological death prevents organ damage).

11 See David W. Evans, Brain Death is Not Death, available at http://www.geocities.com/organ donate/BrainDeathIsNotDeath.html (last visited Sept. 21, 2005) (commenting on Truog and Robinson’s article, while suggesting that retention of specific brain functions, like knowledge, is “significant” in those people dubbed “brain-dead”).
Petri dish, you had to implant the embryo, gestate it for say three months, and then abort it to get the tissues to help your daughter, would that be acceptable to you.” He said, and I quote, “Yes, anything.” I said, “Well, what if we took it a little further. What if we took it say, to the eighth or ninth month of gestation to abort a fetus to help your daughter? Would that be acceptable?” He said, “Yes, anything.” I said, “Well, what if we had a disabled baby born whose quality of life would be determined to be much less than the normal quality of life - because that disabled child would have such a poor quality of life, would you be willing that that the disabled child be killed to help your daughter?” Please realize that I was now talking about this man’s own disabled daughter. Yet, in his pain, he couldn’t see it. He said, “Yes, anything.” I asked him, “Would you kill somebody in a coma to help your daughter?” He said again, “Yes, anything.” Now, I am not putting down this distraught father. It is easy to see what can happen if we are driven solely and exclusively by such deep devotion and anguish – justifiable anguish and love for a child. But the laws and ethics of our culture cannot be driven by anguish or strong emotion. Cooler heads must prevail or we can find ourselves in places that I think everyone would agree are completely unethical and immoral. We should not kill some people to help other people. At least that has always been the belief in western civilization.

Now the question then becomes: what is the moral status of nascent human life? That is a question with which our society is going to have to grapple. One problem is that the politics of abortion get in the way. So when we try to have this discussion, suddenly the big “A word” comes up and then we can never talk about it rationally. But I submit that abortion is factually irrelevant to these issues. Why? Abortion is not about the moral status, or lack thereof, of unborn life. Abortion is legal, whether one agrees or disagrees that it should be, because the courts and the law have said that society will not force women to do something with their bodies that they do not wish to do, that is, gestate and give birth.12 But when we discuss cloning and

12 See Roe v. Wade, 410 U.S. 113, 154 (1973) (holding that said “right of personal privacy includes the abortion decision, but that this right is not unqualified and must be considered against important state interests in regulation”).
embryonic stem cell research, no woman is being forced to do anything with her body. Hence, abortion is factually irrelevant.

This is not to say that the politics of abortion are irrelevant. But, I submit that we cannot decide what we should do about cloning and embryonic stem cell research based one way or the other on whether it would have a political impact on abortion. Otherwise, that whole issue of abortion just drives everything in society and we end up like America was in the 1850's, when every single issue ended up being about slavery: economics was about slavery, politics was about slavery, the admission of states into the Union was about slavery. And we are in danger today, I submit, of tying almost all moral issues to abortion. Indeed, I think a good case can be made that the impeachment and exoneration of President Bill Clinton in the end, was about abortion. But that is another speech for another day.

Our next step in looking at these issues is to determine what human cloning actually accomplishes. What does cloning do, in a nutshell? Cloning is a popular term for asexual reproduction, which is also called somatic cell nuclear transfer. Let's say I was going to be cloned. Under this procedure, a woman's mature egg would be taken, and then the nucleus removed from that egg. Next, one of my somatic cell, meaning body cell, would be taken and the nucleus removed. Last, that nucleus from my somatic cell would then be placed where the nucleus used to be in the mature egg. The result would be a genetically modified egg that now has forty-six chromosomes - the full human complement. The biotechnologist would then zap it with electricity and if the cloning works, a new embryo would be created. From then on, there is no more cloning. That is the basic science of it.

At that point, if the embryo has been created, it begins to develop similarly to a natural embryo. At about one week it becomes what is known as a blastocyst. At that point, the blastocyst could either be implanted or used in medical experiments. If it were to be implanted with the intent of bringing a cloned baby to birth, it is often called reproductive cloning. If it is to be used in experiments or medical treatments, it is often called therapeutic cloning. But these are not different kinds of cloning. These terms actually refer to different uses of the new human life that was created in the cloning process.
Cloning creates a new embryo. That is the basic science of it, although fewer and fewer scientists admit it. They used to. Now, however, many cloning advocates have changed their tune: They now argue that cloning does not create an embryo, because if they admit it creates an embryo, then it creates moral and ethical dilemmas that they would prefer not to have to deal with.

Here’s a recent example: I was in Missouri testifying in favor of a bill that would outlaw all human cloning in that state. Also attending was a fellow from the Stowers Institute\textsuperscript{13} that wanted to do embryonic cloning – the cloning of human embryos - starting in 2006. This Stowers fellow stated that these human embryos were not, in fact, embryos because there was no sperm or egg. But, in the United Kingdom, the cloning scientists admit they are creating embryos because they do not have the same political problems there as cloning advocates have here in the United States.\textsuperscript{14} These are embryos. And statements to the contrary are political spin.

This man from Stowers stated that these are not embryos; rather, they are just cells. I said “Well, if that is the case, then why are you worried about implanting them because you can implant ‘just cells’ from here until the cows come home and you will never have a human baby.” His answer was, “Well, after forty days it starts to get sentient, and then it is an embryo.” What nonsense. What junk biology.

And so we see that post modernism has come to biology: It isn’t the facts that count but the desired narrative. So, cloning advocates change scientific definitions and crucial distinctions to win political arguments. Such tactics are a corruption of science, in my view. The scientists’ job is to tell us what these things are from an objective, biological perspective. And then we can collectively grapple with the morality and ethics of these matters and come to informed opinions.

There is tremendous potential for human healing through therapeutic cloning. There is no question about that - if they can

\textsuperscript{13} See Stowers Institute for Medical Research, Welcome, http://www.stowers-institute.org/ (last visited Sept. 21, 2005) (affirming that said institute was founded to conduct innovative biomedical research to potentially solve gene-based diseases).

\textsuperscript{14} Brenda Almond, Future Stock, COURIER MAIL (Austl.), Oct. 2, 2002, at 19 (suggesting that said question of human embryos is considered a retrospective issue in the United Kingdom, where focus has shifted to what limits should be imposed on stem cell research).
get the embryonic stem cells to work right, which is a big if. There is also potential for great human harm. We have to grapple with these issues. But if we cannot get a common, agreed definition and lexicon, how can we have this discussion? And frankly, I have come to the conclusion that there are many in our society, particularly in the elite universities, who do not want us to have this discussion. They do not want the people to be participating fully in these debates.

Getting back to my theme that this research will not remain long in the Petri dish: Promotion of embryonic stem cell research has already entered the proverbial slippery slope before the technology is perfected. Recall that this controversy started with the argument that, “All we want to use are leftover embryos that are going to be tossed out anyway.” Remember that? That was in 2001 – a mere four years ago. It was President Bush’s first big public policy dilemma, which also had nothing to do with cloning. The controversy was limited to whether the federal government would fund embryonic stem cell research, which, actually, the government probably could not do legally because of the Dickey Amendment15 (which predates embryonic stem cell research) that prevents the federal government from funding destructive embryo research.16 That is why Bill Clinton did not fund embryonic stem cell research when the embryonic stem cells were first derived in 1998.17 Clinton tried to find a way around that law for two years and finally thought had found it near the end of his term, and then Bush overturned his proposal. You have already heard about the Bush policy.

Very quickly thereafter, the argument about stem cell research changed: suddenly we were told, “Well, we do not just need in vitro fertilization embryos that are going to be tossed out anyway. We also need to engage in therapeutic cloning, because if the stem cells from an in vitro fertilized embryo are derived

---


16 Id. (showing that 1996 amendment predated other legislation preventing federally funded embryonic stem cell research).

and then implanted into patients, the patients' bodies might reject the IVF embryos' tissues." This rejection of tissue would occur because the immune system would see those implanted cells and say, "That is not me, so, I am going to try to destroy those tissues." That is what immune systems do. This rejection could be akin to when organs are transplanted, requiring recipients to take strong anti-rejection drugs. Thus, therapeutic cloning began to be sold to the public via the argument that, "One potential answer is to just make clones of every patient; then, the genetics will be almost identical except for the mitochondrial DNA, and the body might not reject those tissues."

When Ron Reagan made his remarks at the Democratic Convention, the media reported about it as if he were challenging President Bush's IVF embryo funding policy. But Reagan never once challenged President Bush's policy. He never once mentioned in vitro fertilized embryos. Here is what he said: "Now, imagine going to a doctor who, instead of prescribing drugs, takes a few skin cells from your arm. The nucleus of one of your cells is placed into a donor egg whose own nucleus has been removed." Sound familiar? In fact, Reagan described somatic cell nuclear transfer cloning, but instead of using the commonly understood terms for that process, he instead called it embryonic stem cell research because he (or the biotechnologist who wrote his speech) knew that many people associate that term with leftover embryos that are going to be thrown out anyway, research which people tend to support.

But if you tell them that you are creating human cloned embryos for use in medical research, the general public tends to oppose it. So, a pro-cloning political strategy was developed to change the terms of the debate. Now, therapeutic cloning isn't used any more because the "C word" gets people upset. So Reagan and other cloning boosters began calling therapeutic cloning, embryonic stem cell research. Sometimes, it is just called "stem cell research," which nobody opposes since adult stem cells and with umbilical cord blood stem cells are utterly uncontroversial and are covered by that general term.

This strategy was intended, in my view, to cause people to become confused about the terms and definitions toward the end that we are unable to have a reasonable discussion because everybody is all mixed up about what is being discussed. I submit that this inability to have a reasonable public discussion due to terminology obfuscation is an intentional political tactic. When the first and only set of human embryos created through somatic cell nuclear transfer was created, the creator said this could be used for both reproductive and for therapeutic cloning of stem cells. Now, a year later, he calls them "clonal constructs." I assume he received talking points from biotechnology boosters who are bound and determined to control the terms and definitions used in the debate, whether or not they are accurate.

We see this obfuscation repeatedly around the country in attempts to legalize human cloning for biomedical research. Take, for example, California's Proposition 71, which was sold to voters as permitting embryonic stem cell research from leftover embryos. However, California's Proposition 71 did much more: It also created a state constitutional right to engage in human somatic cell nuclear transfer. Thus, human cloning is constitutionally protected by the state constitution of California. Yet the only time the word "cloning" was used in the measure, it referred to "reproductive cloning," even though the somatic cell nuclear transfer technique is the same, whether the resulting cloned embryo is used in research or implanted to be brought to birth.

That aspect of the law was never brought out in the campaign. What you saw in the campaign was a kid in a wheelchair and his mother saying, "Please pass this law so that my boy can be cured." What you saw was the late Christopher Reeve supporting this work so he could walk again. Little of what was actually in the measure was discussed at length. Proponents mounted a

---


20 CAL. HEALTH & SAF. CODE § 125290.10 (2005) (discussing somatic cell nuclear transfer law).

21 Eduardo R. Macagno, Unlocking the Mysteries of the Brain, SAN DIEGO UNION-TRIB., Oct. 21, 2004, at B11 (acknowledging constitutional right created by Proposition 71 to research using embryonic stem cells from humans).
twenty-five million dollar campaign on television.22 The media did not look deeply into the measure until after it passed, when it was too late. In addition, Governor Schwarzenegger came out and said, “Ah, why not?” And then it was over. So now, California will be borrowing billions of dollars to fund morally problematic and highly speculative research, at a time when the state is so broke that it is closing emergency rooms and trauma centers.

Another piece of noteworthy legislation that obfuscates what it would actually permit is currently pending in the State of Washington - Senate Bill 5594.23 This Senate Bill 5594 holds that, while stem cell research holds enormous potential for treating or even curing some diseases, “[t]he cloning of human beings is morally and ethically unacceptable.”24 Furthermore, the cloning of human beings poses grave health risks to any child who may be produced in this manner. The statute affirms that, “[a]ny attempt to clone a human being is thus in direct conflict with the policies of this state.”25

This language is misleading, as often the case with such bills. If the term “human being” means a human organism, somatic cell nuclear transfer would be outlawed in Washington by this legislation. However, it is clear that the term human being is intended to have a different meaning than human organism, since the legislation states that “[i]t is the policy . . . that research involving the derivation and use of human embryonic stem cells, human embryonic germ cells, and adult stem cells from any source, any source, including somatic cell nuclear transplantation, is permitted upon full consideration of the ethical and medical implications of this research.”26 (Emphasis added.) Clearly, then, where the legislation states that a human being cannot be cloned, it actually means that cloned babies cannot be born. Thus, this legislation would not outlaw creating

24 Id. at § 1(5) (making cloning of humans illegal in Washington State).
25 Id. at § 1(5).
26 Id. at § 2.
cloned human embryos—if passed, the legislation would explicitly license human somatic cell nuclear transfer cloning.

This is typical of such “bait and switch” legislation. Rather than employing a biologically accurate scientific definition for cloning, the drafters employed a political definition, to wit: “‘Cloning of a human being’ means asexual reproduction by implanting or attempting to implant the product of nuclear transplantation into a uterus or substitute for a uterus for the purpose of producing a human being.” Thus, implantation becomes cloning rather than somatic cell nuclear transfer. Moreover, the bill would authorize fetal farming since the clear reading of this definition means that if the “product of nuclear transfer”—a cloned embryo—is implanted into a uterus for a purpose other than bringing it to birth—say for use in fetal experimentation—the law (were the legislation to pass), would not be broken.

Repeatedly, we see bills that purportedly outlaw human cloning, but which actually authorize it. For another example of this approach, we need only look at a law enacted in New Jersey in 2004 that authorizes human cloning, implantation, and gestation through the ninth month.27 The wording of the law is sneaky. First, it authorizes human somatic cell nuclear transfer. Then, it doesn’t outlaw implantation of cloned embryos into a uterus. That which is not illegal, is by definition, legal. Finally, the statute makes it a felony to “clone a human being” and establishes punishments for violations, including “a civil penalty of not more than $50,000, or imprisonment for a term of not more than five years, or both, for each such incident.”28

This sounds tough – until we look at how the law defines “cloning of a human being.” As used in this section of the New Jersey law, “cloning of a human being” means the replication of a human individual by cultivating a cell with genetic material [that is the somatic cell nuclear transfer] through the egg, embryo, fetal, and newborn stages into a new human individual. (Emphasis added.)

28 Id. at § 2(c)(2) (announcing penalties for violating said legislation).
In other words, in New Jersey, if a biotechnologist creates a human embryo through somatic cell nuclear transfer and cultivates it through the cell, egg, embryo, and fetal stages, but destroys it just prior to birth, no law will have been broken. Through such smoke and mirrors, New Jersey legalized cloning and gestation through the ninth month.  

Now, biotechnologists say they have no interest in fetal farming. But the proposals to permit it are being proposed, and in New Jersey, enacted into law.

Where could this aggressive research lead? Why would scientists and researchers want to have access to this technology? Some have worried that cloned fetal farming could be used to obtain organs for transplantation. Such experiments have been done already with animals. For example, the cloning company, Advanced Cell Technology, created a cow embryo through somatic cell nuclear transfer. This cow embryo was then implanted into another cow’s uterus, and it was gestated to the early fetal stage. The cloned fetus was then aborted; its primordial kidneys were procured. Those kidneys were grafted onto cow donor DNA, which was given to see whether the kidneys would reject and to see whether they would produce urine. They did not reject the DNA, and they did produce urine. The media touted it as therapeutic cloning. It was not, however, therapeutic cloning because it did not use stem cells. It was actually an experiment in fetal farming.

Cloned fetuses created to have specific diseases could also be used in drug testing. They could be used in experiments intended to make reproductive cloning safe. Right now, the only reason why most in the science and bioethics establishments are opposing reproductive cloning is because it is not safe. And many state that, if it becomes safe, we will have to rethink these issues.

So, how would we learn how to perform reproductive cloning safely? Make clone after clone after clone, and find out what causes the problems of genetic imprinting and genetic expression in these cloned embryos. Eventually the cloning would move from the Petri dish into the early womb or, more likely, an artificial or animal womb, to see if cloned embryos could be

29 Id. at § 2(a) (allowing research on cells produced by somatic cell nuclear transplantation).
created that did not have all of the defects and disabilities that currently happen in mammalian cloning.

Should that time ever come, I promise you there will be a huge drive to get rid of the bans on reproductive cloning. And there will be lawsuits because there is a strong strain in bioethics and reproductive law that says people have an absolute right to procreate by any means necessary so long as it is safe. The fellow who helped create in vitro fertilization has said that he supports reproductive cloning if it is safe. Ian Wilmut helped create Dolly the sheep\(^\text{30}\) has supported reproductive cloning for a long time, for people who need to, for example, not have a genetic problem with their offspring.\(^\text{31}\) And he and bioethicist Glen McGee have suggested that such reproductive cloning could be like an adoption where you apply to be able to do it.\(^\text{32}\) Law professor and bioethicist John Robertson from Texas, is an absolute believer in procreation as an absolute right, which could include cloning once it were safe.\(^\text{33}\)

So, this is our dilemma as we enter a century of increasing biological control: We see great scientific potential with the new biotechnology, and great potential moral peril. Our task as a society is to try to obtain the benefits of biotech, and most of it is tremendously beneficial and not morally problematic, while avoiding some of the harrowing pitfalls. It won't be easy. But, if we deliberate carefully and move forward with an understanding that human life matters simply and merely because it is human, we can achieve the goal established in these matters by Leon Kass, the head of the President's Council on Bioethics,\(^\text{34}\) in the New Republic on May 21, 2001, in an article called Preventing a Brave New World: "[i]t is our difficult task to find ways to preserve society from the soft dehumanization of well-meaning

---

\(^\text{30}\) See Next, Really Prolific Cows: Scientists Clone a Sheep, But We Needn't Fret the Doomsday Scenarios, L.A. TIMES, Feb. 25, 1997, at B6 (announcing scientist's success in cloning sheep).


\(^\text{33}\) See Fertility Clinics Have Differing Policies, N.Y. TIMES, Jan. 19, 2005 (discussing how majority of people agree that everyone has right to have children).

\(^\text{34}\) The President's Council on Bioethics, www.bioethics.gov (last visited November 11, 2005) (describing group that advises President "on ethical issues related to advances in biomedical science and technology").
but hubristic biotechnological recreationism, and to do it without undermining biomedical science or rejecting its genuine contributions to human welfare."\textsuperscript{35}