

Is Embryonic Stem Cell Research Morally Complex?

Case closed: Research that destroys one human being so that another may benefit is immoral. We should pursue the cure of disease in morally acceptable ways.

By Scott Klusendorf

When Advocates of embryonic stem cell research say that we have a moral obligation to save lives and promote cures, what they really mean is that human embryos should be cloned and killed for medical research. But you would never know it listening to their rhetoric.

Now I'm all for saving lives. I'm also for stem cell research. But I'm opposed to one kind of stem cell research that requires killing defenseless human beings so that others may (allegedly) benefit. That's immoral.

Embryos are not stem cells

Stem cells are fast growing, unspecialized cells that can reproduce themselves and grow new organs for the body. All 210 different types of human tissue originate from these primitive cells. Because they have the potential to grow into almost any kind of tissue including nerves, bones, and muscle, scientists believe that the introduction of healthy stem cells into a patient may restore lost function to damaged organs, especially the brain. Human embryos have an abundant supply of stem cells which scientists are eager to harvest in hopes of treating Parkinson's disease, Alzheimer's disease, and other illnesses. There's only one problem: You must kill the embryo to get its stem cells.

Advocates of embryonic stem cell research often reply that the embryos in question are not human organisms, but stem cells with the potential to become human beings. This is an unabashed lie. Embryos don't come from stem cells; they are living human beings that *have* stem cells. And extracting these cells is lethal for the tiny human subject.

Embryo stem cell research and cloning

Closely related to embryonic stem cell research is the cloning technique known as Somatic Cell Nuclear Transfer, which involves creating a human embryo that is a genetic clone of the patient and then killing that embryo so we can harvest its stem cells. This virtually guarantees that the patient's body will not reject the transplanted cells. It also reduces human life to a commodity: Embryos are created for the express purpose of destroying them for medical research.

Somatic Cell Nuclear Transfer is a three-step process. First, an unfertilized egg is taken from a woman and its nucleus is removed. Next, genetic material (DNA) from the

patient is placed inside the vacated egg. Chemicals are then added and a spark of electricity jolts the cell into dividing and growing into a cloned human embryo, which is later destroyed for its stem cells. A decade ago, this same technique gave us “Dolly,” the first cloned sheep.

When asked if human embryos should be cloned expressly for destructive research, a majority of Americans say yuck! Conversely, when asked if the state should fund stem cell research to cure disease, the majority says yes! Advocates of embryonic stem cell research and cloning know this, which explains why the C-word is seldom explained in their literature. All we hear about are the promised cures.¹

Phony cloning bans

Fearing public backlash, advocates of embryo stem cell research are trying to legalize cloning on the sly. First, they told us to distinguish “reproductive cloning,” which everyone allegedly condemned, from “therapeutic cloning,” which everyone knew could save lives.² But the distinction is totally misleading because all cloning is reproductive. So-called “reproductive” cloning means allowing the cloned human to be born alive. “Therapeutic” cloning means creating him for research, but killing him before birth. In either case, the act of cloning is exactly the same and results in a living human embryo. Remember: A cloned human being is created when the nucleus is removed from a human egg and replaced with genetic material from a donor. Once this occurs, the act of cloning is complete. After that, the only question is how we will *treat* the cloned human being—kill him for research or allow him to grow and develop.

Next came a series of phony cloning bans. Known more accurately as “clone and kill legislation,” the alleged “bans” allow human embryos to be cloned provided they are destroyed for medical research. In each case, what’s banned is the *birth* of cloned human beings, not their creation for destructive research. For example, New Jersey’s 2004 clone bill (S-1909) was sold to the public as a strict prohibition on human cloning, but there’s a hidden lethal twist: That so-called strict prohibition is simply that all cloned embryos *must* be killed before they have a chance to develop into more mature human beings. In other words, human lives may be created with cloning technology if and only if technicians agree—under threat of law—to destroy any clones *prior to birth*. That’s the proposed ethical safeguard that allegedly bans cloning. It’s a sham.³

But is it wrong?

Despite claims to the contrary, embryonic stem cell research is not morally complex. It comes down to just one question: Are the embryos in question members of the human family? If so, killing them to benefit others is a serious moral wrong. It treats the distinct

¹ Indeed, the majority of polls showing support for embryonic stem cell research never mention that you must kill the embryo to harvest the cells. For a polling data survey, see <http://www.pollingreport.com/science.htm>

² See, for example, statements from the Coalition for the Advancement of Medical Research <http://www.stemcellfunding.org/fastaction/news.asp?id=544>

³ For an excellent analysis of these phony bans, see Wesley J. Smith, “Stealth Cloning,” *National Review On-Line*, February 15, 2005.

human being, with his or her own inherent moral worth, as nothing more than a disposable instrument. Conversely, if embryos are not human, killing them to extract stem cells requires no more justification than pulling a tooth. My friend Frank Beckwith sums up the crux of the debate this way: “If I have a bad eye and you have a good one, can I forcibly take your good eye to make my bad one better?” Reply: Not if the donor is human. Hence, the ethical debate comes down to, What is the embryo—a human being or something else?

The facts of science make clear that from the earliest stages of development, embryos (whether produced through normal reproduction or cloning) are distinct, living, and whole human beings. True, they have yet to grow and mature, but they are whole human beings nonetheless. Leading embryology textbooks affirm this.⁴

Pro-cloning advocates like Ronald Bailey insist that we gain no real knowledge from these scientific facts. Bailey argues that embryonic human beings are biologically human only in the sense that every cell in the body carries the full genetic code, meaning that each of our somatic (bodily) cells has as much potential for development as any human embryo. Put simply, Bailey would have us believe that there is no difference in kind between a human embryo and each of our cells.⁵

This is bad biology. Bailey is making the rather elementary mistake of confusing parts with wholes. The difference in kind between each of our cells and a human embryo is clear: An individual cell’s functions are subordinated to the survival of the larger organism of which it is merely a part. The human embryo, however, is already a whole human entity. Robert George and Patrick Lee say it well. It makes no sense to say that you were once a sperm or somatic cell. However, the facts of science make clear that you were once a human embryo. “Somatic cells are not, and embryonic human beings are, distinct, self-integrating organisms capable of directing their own maturation as members of the human species.”⁶

Two common objections

1) *Twining*. Coning advocates sometimes claim that because an early embryo may split into twins (up until 14 days after conception), there is no reason to suppose that it’s an individual human being prior to that time. Hence, early embryo research (prior to day 14) is morally permissible. The flaw in this argument is easy to spot. How does it follow that because an entity may split (or even recombine) that it was not a whole living organism prior to the split? We can take a Flatworm, cut it in half, and get two flatworms.⁷ Would pro-cloning advocates argue that prior to the split, there was no distinct flatworm? I agree that twining is a mystery. We don’t know if the original entity

⁴ See T.W. Sadler, *Langman’s Embryology*, 5th ed. (Philadelphia: W.B. Saunders, 1993) p. 3; Keith L. Moore, *The Developing Human: Clinically Oriented Embryology* (Toronto: B.C. Decker, 1988) p. 2; O’Rahilly, Ronand and Muller, Pabiola, *Human Embryology and Teratology*, 2nd ed. (New York: Wiley-Liss, 1996) pp. 8, 29.

⁵ Ronald Bailey, “Are Stem Cells Babies? *Reason*, July 11, 2001.

⁶ Robert George and Patrick Lee, “Reason, Science, and Stem Cells,” *National Review On-Line*, 7-20-01.

⁷ Illustration taken from Patrick Lee, *Abortion and Unborn Human Life* (Washington, D.C. Catholic University Press in America, 1996) p. 93

dies and gives rise to two new organisms or if the original survives and simply engages in some kind of asexual reproduction. Either way, this does nothing to call into question the existence of a distinct human organism prior to splitting.

Ramesh Ponnuru raises one other problem with the twinning argument: It undermines our own right not to be killed:

Reproductive cloning is said to be nothing to frighten us because a clone just makes a twin of whoever is being cloned. Libertarians appear to think this is a knock-down argument: "To my knowledge no one has argued that twins are immoral," Bailey writes. The destruction of embryos in therapeutic cloning, meanwhile, is said to be okay because the embryos are at such an early stage of development that twinning is still possible. Since the embryo could become two embryos, it's not an individual. Both arguments from twinning are vulnerable to serious objection. But what's more important—although the libertarians are wholly oblivious to it—is that the arguments collide head-on. We're not supposed to worry about reproductive cloning because it just makes twins. But at the same time, it's okay to kill a human entity so long as it's possible for a twin to be derived from it. Since all of us can in theory be cloned at any age, and a clone is just like a twin, that seems to leave all of us without any ground to protest being killed. Which I, for one, resent.⁸

2) *Miscarriage*. Cloning advocates cite the high number of miscarriages as proof that a) embryos are not individual human organisms, and b) destructive research is morally permissible. Suppose miscarriages are common: How does this fact refute the claim that embryos are human beings? Many Third-World countries have high infant mortality rates. Are we to conclude that those infants who die early were never whole human beings? Moreover, how does it follow that because nature may *spontaneously* abort an embryo that I may *deliberately* kill one? Admittedly, these miscarriages are tragic events. But as journalist Andrew Sullivan points out, just because earthquakes happen doesn't mean massacres are justified.⁹

What makes humans valuable?

Some advocates of embryo stem cell research concede that zygotes (early embryos) are biologically human but deny that they are complex or developed enough to qualify as valuable human beings with a right to life. The argument goes that humans have value not in virtue of the kind of thing they are (members of a natural kind or species), but only because of an acquired property, usually, the immediate capacity for self-awareness. Zygotes and embryos do not have this immediate capacity and therefore fail to qualify as subjects of rights. "A goldfish resembles a human being more than an embryo does," writes journalist Michael Kinsley. "An embryo feels nothing, thinks nothing, cannot suffer, is not aware of its own existence." Go ahead and use it for research. Only blind faith can say that you shouldn't.¹⁰

⁸ Ramesh Ponnuru, "Lapse of Reason: The Libertarians and Cloning," *National Review*, February 11, 2002.

⁹ Andrew Sullivan, "Only Human," *The New Republic*, July 19, 2001.

¹⁰ Michael Kinsley, "Reason, Faith, and Stem Cells," *Slate*, August 29, 2000.

There are at least two problems that underscore the arbitrary and counterintuitive nature of Kinsley's claim. First, the self-awareness argument proves too much. Newborns are not aware of their own existence until several months after birth, so what's wrong with infanticide? As Peter Singer points out in *Practical Ethics*, if self-awareness makes one valuable, and newborns like fetuses lack that property, it follows that fetus and newborn are both disqualified. You can't draw an arbitrary line at birth and spare the newborn.¹¹ Second, if humans have value only because of some acquired property like self-awareness or sentience and not in virtue of the kind of thing they are, then it follows that since these acquired properties come in varying degrees, basic human rights come in varying degrees. Does Kinsley really want to say that those with more self-awareness are more human (and more valuable) than those with less? This relegates the proposition that all men are created equal to the ash heap of history.¹² Philosophically, it's far more reasonable to argue that although humans differ immensely with respect to talents, accomplishments, and degrees of development, they are nonetheless equal because they share a common human nature that comes to be when they come to be—either at conception or the completion of a cloning process.

In reply, some argue that destructive embryo research is justified because at least one source for human embryos, fertility clinics, have large numbers of “spare” embryos that are going to die anyway. Rather than discarding them, the argument goes, we should harvest their stem cells to treat disease in others. This is specious reasoning. One could, with equal validity, suggest that we allow research on six-month fetuses scheduled for partial-birth abortions. The fact is that we all die sometime. Do those of us who are going to die later have the right to kill (and exploit) those who will die sooner? Even if an individual's death is imminent, we still do not have a license to use him for lethal experiments. We cannot, for example, conduct experiments upon death-row prisoners or harvest their organs without their consent. Nor can we extract body parts from mortally wounded soldiers while they are dying on the battlefield.

Science versus morality

Regrettably, moral concerns with embryo stem cell research are often dismissed (rather than refuted) as anti-science and anti-progress, much like the persecution of Galileo. “Our conviction about what is natural or right should not inhibit the role of science in discovering the truth,” Tony Blair told critics of Britain's plan to clone human embryos for research. “[We will] not stand by as successful British science once more ends up being manufactured abroad.”¹³ Echoing these same sentiments, U.S. Senator Orin Hatch remarked, “It would be terrible to say because of an ethical concept, we can't do anything for patients.”¹⁴ Ron Reagan, son of the late pro-life President, told the Democratic National Convention that, “Many opponents to the research are well-meaning and

¹¹ Peter Singer, *Practical Ethics* (Cambridge, UK: Cambridge University Press, 1997) pp. 169-171.

¹² Robert P. George, “Cloning Addendum,” *National Review on-Line*, July 15, 2002; Patrick Lee, “The Pro-Life Argument from Substantial Identity,” Tollefsen Lecture, St. Anselm's College, November 14, 2002.

¹³ “Don't turn Against Science, Blair Warns Protesters,” *London Daily Telegraph*, November 18, 2000

¹⁴ Cited in “Clone Wars,” *National Review on-line*, July 1, 2002
<http://www.nationalreview.com/01july02/ponnuru070102.asp>

sincere, but their beliefs are just that—an article of faith...The theology of a few should not be allowed to forestall the health and well-being of many.”

However, if Blair, Hatch, and Reagan are correct that scientific progress trumps morality, one can hardly condemn Hitler for grisly medical experiments on Jews. Nor can one criticize the Tuskegee experiments of the 1920s in which black men suffering from syphilis were promised treatment, only to have it denied so scientists could study the disease.

Ramesh Ponnuru writes that pro-cloning polemics frequently frame the debate in terms that obscure the point at issue. “A cloning ban is said to be an attempt to ban research, its supporters are said to fear knowledge, and it is opposed on that basis. It is, of course, true that a ban would bar certain types of research and could prevent certain knowledge from being discovered—but because the research to get the knowledge involves homicide, not because it is research.”¹⁵

Can advocates of embryonic stem cell research deliver on their promises?

Finally, not only is embryonic stem cell research immoral, it may be unnecessary. Numerous peer-reviewed studies indicate that adult stem cells are more effective at treating disease than previously thought. Unlike embryo stem cell research, we can extract these adult cells without harming the donor. Critics of the pro-life view, like the late actor Christopher Reeve, insist that these adult cells won’t work. However, the evidence suggests just the opposite.¹⁶ So far, adult stem cells are outperforming their embryonic counterparts:

- Adult stem cells found in the bone marrow can be coaxed to provide “an abundant and accessible” supply of nerve cells for the brain. This confirms earlier studies suggesting that adult stem cells are not restricted, but more flexible than previously thought (i.e., able to develop into other types of tissue). Because these stem cells come from the patient’s own bone marrow, there is no risk of rejection.
- Cadavers can supply versatile brain stem cells that can turn into different kinds of nerve cells. Skin, bones, and just about every other tissue can be coaxed into producing brain cells.
- Body fat contains a virtually limitless source of adult stem cells needed for people with damaged joints and organs.
- Stem cells taken from cord blood treat Leukemia, repair damage from strokes, and may reverse damage from certain neurological disorders.
- Adult stem cells can also treat degenerative diseases of the eye. Evidence suggests that adult corneal stem cells restore useful vision to patients who are legally blind.
- Adult stem cells repair liver damage and may reverse diabetes. Meanwhile, cells from the patient’s own transplanted bone marrow can turn into liver tissue.

¹⁵ Ponnuru, *Ibid.*

¹⁶ For a complete summary of adult treatments, go to www.stemcellresearch.org.

Conclusion: memorize this

Here's the question to ask your critics at work, school, or church: *Given a choice between a therapy that happens to be lethal for human subjects and one that is not, wouldn't we be inclined to favor the therapy that is not lethal? Wouldn't that be even more the case if that non-lethal therapy turns out to be vastly more promising, and far less speculative, than the lethal therapy?*¹⁷ Stem cells drawn from adults have already yielded some striking achievements, and they do not require the killing of the human being from whom they are drawn.¹⁸ The extraction of stem cells from human embryos does, however, result in the destruction of defenseless human beings. Therefore, it is morally wrong. There's nothing complex about it.

Review:

- The morality of embryonic stem cell research is not complex. It comes down to just one question: Are the embryos in question members of the human family? If so, research that destroys them to benefit others is wrong.
- The facts of science make clear that from the earliest stages of development, the embryos in question are distinct, living, and whole human beings.
- The case for embryo research considers human value an acquired property. Hence, it cannot account for human dignity and equality.
- Human embryos are not the only source for stem cells. Ethical alternatives exist.
- Key question: Given a choice between a therapy that is lethal for human subjects and one that is not, shouldn't we favor the non-lethal therapy?

Review questions:

- What are stem cells and how do they differ from embryos?
- What is Somatic Cell Nuclear Transfer and how does the process work? In what way does it relate to embryonic stem cell research?
- Why is the debate over embryonic stem cell research not morally complex? What is the crux of the debate?
- How does Frank Beckwith's good eye/bad eye example help clear up the debate?
- Describe in a sentence the scientific facts about the embryo.
- Ronald Bailey confuses "parts" with "wholes." What do we mean by that?
- Advocates of embryonic stem cell research say that because a human embryo is not self-aware, we can use it for research. Why is it problematic to define human value this way? And what does it do to the concept of human equality?
- Why are Tony Blair's comments about the relationship between science and morality so disturbing? What historical examples point out this danger?
- Why is adult stem cell research morally permissible? How is it used to treat disease?

¹⁷ I owe this question to Hadley Arkes, "Senseless on Stem Cells," *National Review On-Line*, 8-23-04.

¹⁸ For a complete summary of these adult stem cell treatments, go to www.stemcellresearch.org

Projects for Enhanced Learning:

- Imagine that you are the President of the United States and have received the following letter from a citizen:

Dear Mr. President, Your policy of forbidding federal funding of embryo stem cell research is costing people their lives. Imagine that your own five-year-old son is ill and will soon die unless he gets stem cells from an embryo. Are you telling me that you would let your son die for the sake of an embryo that is not yet self-aware and is only the size of a dot at the end of a sentence? Besides, these embryos are not human beings, but stem cells that one day will become human babies. We shouldn't let silly debates over abstract moral questions get in the way of scientific progress that can save lives. While you are entitled to your own personal and religious views about the status of embryos, those views should not interfere with people who are sick and need cures right now! Please fund this important research. Sincerely, Mrs. Brown

Your job: Write a two-page reply to Mrs. Brown graciously explaining your views on embryo stem cell research. Your tone should be polite: Sympathize with her concerns while gently pointing out any flaws in her moral reasoning.

- Read and analyze the debate between Robert Bailey and Robert George/Patrick Lee at the links below. (Read them in order.) Which side makes the stronger case and why? Write a two-page summary of your thoughts on the exchange.
 1. Are Stem Cells Babies? (Ronald Bailey opens the exchange)
<http://www.reason.com/rb/rb071101.html>
 2. Reason, Science, and Stem Cells (Lee and George reply to Bailey)
<http://www.nationalreview.com/comment/comment-george072001.shtml>
 3. My Critics are Wrong (Bailey replies to Lee and George)
<http://www.nationalreview.com/comment/comment-bailey072501.shtml>
 4. The Stubborn Facts of Science (Lee and George reply to Bailey)
<http://www.nationalreview.com/comment/comment-george073001.shtml>
 5. More Stubborn Facts of Science (Bailey responds to Lee and George)
<http://www.nationalreview.com/comment/comment-bailey080601.shtml>
 6. Embryology, Philosophy, and Human Dignity: Ronald Bailey is still Wrong (Lee and George reply to Bailey)
<http://www.nationalreview.com/comment/comment-lee080901.shtml>
 7. Cellular Truths (Lee and George, continued)
<http://www.nationalreview.com/comment/comment-leeprint091001.html>

Web Resources for Further Study:

- Greg Koukl, “The Confusing Moral Logic of ESCR”
http://www.str.org/free/solid_ground/SG0109.htm
- Robert P. George, “Cloning Addendum”
<http://www.nationalreview.com/document/document071602.asp>
- Hadley Arkes, “Senseless on Stem Cells”
<http://www.nationalreview.com/arkes/arkes.asp>
- Andrew Sullivan, “Only Human,”
<http://www.tnr.com/073001/trb073001.html>
- Maureen L. Condic, “The Basics About Stem Cells”
<http://www.firstthings.com/ftissues/ft0201/articles/condic.html>
- Maureen L. Condic, “Stem Cells and False Hopes”
<http://www.firstthings.com/ftissues/ft0208/opinion/condic.html>
- Paul Cella, “Philosophy and Stem Cells”
<http://www.techcentralstation.com/120304D.html>
- Fact Sheet: Adult versus Embryonic stem cell treatments:
<http://stemcellresearch.org/facts/treatments.htm>
- Ramesh Ponnuru, “Lapse of Reason: The Libertarians and Cloning”
<http://www.nationalreview.com/11feb02/ponnuru021102.shtml>

Book Resources:

- Wesley J. Smith, *Consumer’s Guide to a Brave New World* (San Francisco: Encounter Books, 2004)
- Nigel Cameron and Charles Colson, *Human Dignity in the Biotech Century* (Downers Grove: InterVarsity Press, 2004)
- Leon R. Kass, *Life, Liberty, and the Defense of Dignity* (San Francisco: Encounter Books, 2002)
- Robert P. George, *The Clash of Orthodoxies: Law, Religion, and Morality in Crisis* (Wilmington: ISI Books, 2001)

Speaking: Get Scott Klusendorf for your banquet or school at prolifetraining.com