stem-cell debate heats up in Congress, even outspoken opponents of embryo research have not mounted a national campaign to ban in vitro fertilization or to prohibit fertility clinics from creating and discarding excess embryos. This does not mean that their positions are unprincipled—only that their positions cannot rest on the principle that embryos are inviolable.

Regulation Can Protect Stem Cell Research

What else could justify restricting federal funding for stem-cell research? It might be the worry, mentioned above, that embryo research will lead down a slippery slope of exploitation and abuse. This objection raises legitimate concerns, but curtailing stem-cell research is the wrong way to address them. Congress can stave off the slippery slope by enacting sensible regulations, beginning with a simple ban on human reproductive cloning. Following the approach adopted by the United Kingdom, Congress might also require that research embryos not be allowed to develop beyond 14 days, restrict the commodification of embryos and gametes [sperm and egg], and establish a stem-cell bank to prevent proprietary interests from monopolizing access to stem-cell lines. Regulations such as these could save us from slouching toward a brave new world as we seek to redeem the great biomedical promise of our time.

EVALUATING THE AUTHORS' ARGUMENTS:

The author of the previous viewpoint argued that human embryos are persons that deserve the same respect as that of an infant, adolescent, or adult human being. After reading this viewpoint, how do you think Michael J. Sandel and Paul McHugh might respond to that claim? Support your answer with evidence from both texts.



Stem Cell Research Is Murder

Judie Brown

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In the following viewpoint Judie Brown argues that using human embryos in stem cell research is murder. Brown claims that destroying an embryo for stem cell research is the equivalent to harvesting organs from a one-year-old child. The only difference between an embryonic child and an infant, she says, is size and age. The argument that embryos are merely a clump of cells that do not have spinal nerves or the ability to be self-aware holds no merit, she argues, and questions whether any living person would have chosen to give up their life at the embryonic stage for the sake of science. For these reasons, she argues that destroying embryos that do not have a choice in the matter is murder. As such, Brown concludes that embryos should not be used for stem cell research.

Judie Brown is president and cofounder of American Life League, the nation's largest grassroots pro-life educational organization. She is also currently serving her second five-year term as a member of the Pontifical Academy for Life in Rome.

AS YOU READ, CONSIDER THE FOLLOWING QUESTIONS:

- 1. How does the author interpret the comments of Congressman Michael Castle?
- 2. What three methods does Brown say offer more promise for curing disease than stem cells?
- 3. What breakthroughs in Toronto, Illinois, and Great Britain does the author discuss, and how do they factor into her argument?

Tery early in my life I learned a valuable lesson: when you manipulate the truth, you not only distort the subject you are discussing but you bring shame upon yourself as well.

As I have read the various news reports dealing with the [Democratic majority leader Nancy] Pelosi push for limitless funding of human embryonic stem cell research, I have been reminded of that lesson more times than I care to tabulate. And it consistently amazes me that those who lead the cheer for human embryonic stem cell research appear oblivious to the source of real progress and downright comatose about the abysmal results of the very research they favor.

A Human Embryo Is the Same as a Human Being

But perhaps the fundamental problem is far more serious. You see not once in all the discussion over the congressional bill, H.R. 3, "Stem Cell Research Enhancement Act of 2007," have we experienced an actual biology lesson on the identity of the human embryo. We have been told that these embryos are "leftovers" and that they are going to be "discarded anyway."

For example, we have heard Congressman Michael Castle (R-DE) say that the race to cure "tens of millions of patients suffering world-wide from diseases such as Juvenile Diabetes, Parkinson's, Alzheimer's, cancer and AIDS" makes increased funding for human embryonic stem cell research a must! His January 9 [2007] statement went on to justify the killing of human embryos by telling the public that "the

decision to discard the embryo which will be used for the research will already have been made and only then can the couple donate an embryo for research."

Let's state that in a different way so that we get the full meaning of this deceptively phrased statement. What if Castle had said "The decision to throw away the one-year-old baby which will be used for the research will already have been made and only then can the parents donate their child's body for research?"

Think about it. Would the public sit still for that kind of research? Of course not. But what is the actual difference between a one-year-old child and an embryonic child? Size and age. That is the only difference. The human being who is described as an embryo is no different than the human being who is described as a one year old child.

As MIT [Massachusetts Institute of Technology] stem cell scientist Dr. James Sherley said, "Whether or not the embryo has yet developed spinal nerves or self-awareness is an irrelevant point made to distract and confuse. I challenge the promoters of human embryonic stem cell research to justify why another human embryonic life is less worthy than their own was."

Supporters of Embryonic Stem Cell Research Are Misinformed

The language of the human embryonic stem cell research crowd has been specifically designed to deny the truth, to dismiss the human embryo as nothing more than a clump of cells and to make those of us who favor protecting such individuals from death and destruction appear to be unfeeling, heartless simpletons who do not care about curing diseases or relieving suffering people of their pain and agony.

But these same individuals will not take a moment out to study the facts about stem cell research, the advances that have been made using adult stem cells, cord blood stem cells or, most recently, stem cells taken from amniotic fluid. In fact, the rush to deny such successes is so transparent; even the lead scientist for the amniotic fluid stem cell breakthrough took time out of his busy schedule to let the world know that he wants Congress to fund embryonic stem cell research and that the legislation in question needs to pass! Why? Because, in my humble view, he has joined the ranks of those who believe that

Significant Events in Stem Cell Research

1978	The United States establishes an Ethics Advisory Board (EAB) whose review is required for federal funding of in vitro fertilization research.
1981	First American in vitro fertilization (IVF) baby, Elizabeth Carr, is born in Norfolk, VA.
1994	The National Institutes of Health (NIH) establishes the Human Embryo Research Panel, which recommends federal funding for embryo research using either "spare" embryos from IVF with parental consent, or embryos created solely for research purposes.
1994	President Bill Clinton says he does "not believe that federal funds should be used to support the creation of human embryos for research purposes" and directs the National Institutes of Health (NIH) not to support such research.
1995	Researchers at the University of Wisconsin isolate the first embryonic stem cells in rhesus macaque monkeys. The research shows it is possible to derive embryonic stem cells from primates, including humans.
996	Congress passes the Dickey-Wicker Amendment banning NIH funding of human embryo research.
997	The first successful cloning of a mammal, Dolly the sheep, is achieved by scientists in Edinburgh, Scotland.
998	Researchers at the University of Wisconsin–Madison are the first to report the isolation of human embryonic stem cells.
999	The Department of Health and Human Services concludes that public funds can be used for research on human embryonic stem cells derived using only private funds.
000	The NIH releases guidelines allowing federally funded research on human embryonic stem cells derived in the private sector.
001	President Bush allows federal funding of human embryonic stem cell research to proceed but only on cell lines already in existence worldwide, which were derived from leftover embryos from fertility clinics.
001	President Bush also establishes the President's Council on Bioethics to study ethical issues in biomedical sciences and to oversee all federally funded human embryonic stem cell research.
2004	Korean scientists clone thirty human embryos and harvest stem cells from them. One new stem cell line is created.

over ten years to fund human embryonic stem cell research. Researchers at Seoul National University in South Korea create eleven human embryonic stem cell lines from cloned human embryos. The lines are used to study human disease and therapies but are offlimits to federally funded American scientists as per U.S. policy restricting stem cell research to lines that were created prior to 2001. Researchers at Kingston University in England discover a new 2005 category of stem cell derived from umbilical cord blood. The state of New Jersey announces it will fund a \$150 million stem 2005 cell research center. The President's Council on Bioethics publishes "Alternative Sources 2005 of Pluripotent Stem Cells" describing theoretical methods for obtaining embryonic stem cells without destroying embryos. Connecticut lawmakers earmark \$100 million for stem cell research 2005 over ten years to compete with biotech industries in California and New Jersey. Illinois governor Rod Blagojevich uses an executive order to circumvent the state legislature to dedicate \$10 million for stem cell research. Senate majority leader Bill Frist (R-TN) breaks with President Bush and announces his support to loosen federal restrictions on human embryonic stem cell research. Scientists in England create the first ever artificial liver cells using umbilical cord blood stem cells. Scientists at Wake Forest University report discovery of a new type of 2007 stem cell in amniotic fluid. This may potentially provide an alternative to embryonic stem cells for use in research and therapy. Research reported by three different groups shows that adult skin cells

Californians pass Proposition 71, allowing the state to spend \$3 billion

Taken from: Compiled by the editor from a variety of sources.

can be reprogrammed to an embryonic state in mice.

it is all about the money . . . the more dollars the better, regardless of whether the particular research being funded is actually producing promised results.

One commentator even correctly suggested that scientific claims are inflated specifically to garner more and more money.

Non-Embryonic Stem Cells Are Effective in Treating Disease

Yet anyone who would take the time to review the record would immediately notice that the best and most promising research being done today uses either the patient's own stem cells, cord blood stem cells or no stem cells of any kind. There is nothing to indicate that human embryonic stem cell research is effectively producing any promising results.

State after state is authorizing huge expenditures of taxpayer dollars so that they can remain in the race. Huge biotech companies are investing millions in the research, and now Congress wants to

A technician removes cells from a human embryo to generate stem cells. Critics contend that this is a form of murder.



expand that funding base to include millions of federal tax dollars as well. For what? I ask you.

In Toronto Canada researchers have discovered a cure for diabetes in mice. Not a single stem cell of any kind was used in the initial research, yet few have heard about the work of Fr. Hans Michael Dosch and Dr. Michael Dalter whose injection of the active ingredient in hot chili peppers into the pancreatic sensory nerves of mice produced the amazing discovery. Yet not a single human embryo was killed.

FAST FACT In 2001 President George W. Bush banned federal funding of stem cell research that involved the destruction of fertilized embryos because he felt it was "unethical to destroy human life in

the hopes of saving

human life."

In Illinois a three-year-old child suffering from leukemia was given a lifesaving infusion of her own cord blood which saved her life and now at age six she is thriving. Not a single human embryo was killed.

In Great Britain researchers have discovered that mesenchymal stem cells from adult bone marrow can effectively regenerate spinal discs. Not a single human embryo was killed.

Embryonic Children Should Not Be Sacrificed in the Name of False Science

Human embryonic stem cell research is all hype and little hope. But you know, even if it were successful and even if killing human embryonic children produced miraculous cures, it is always immoral to pursue the research.

And one final note for those who get their news from the major media. The [George W.] Bush Administration has never banned human embryonic stem cell research; it has permitted federal funding for such research as long as the stem cell lines were in existence prior to the pronouncement President Bush made in August of 2001. The Bush Administration has never opposed private sector funding of such research and has never condemned it in any way.

The bottom line in all this is that hype has far exceeded facts. The bogey man created by human embryonic stem cell fanatics is the individual

lawmaker or activist who chooses to rely on truth and not to sacrifice one single embryonic child in the process of fulfilling false dreams or advancing fabricated claims of hope for the ill and the dying.

The agenda of the proponents of such research may never be fully understood. But there is one thing that has become crystal clear in all the mainstream media coverage: Not a single shred of factual evidence is being sought or reported.

If killing millions of innocent human persons isn't scandal enough, then American taxpayers should be outraged by human embryonic stem [cell] research because it is science fiction. We deserve better.

EVALUATING THE AUTHOR'S ARGUMENTS:

Judie Brown argues in this viewpoint that research scientists commit murder when they use embryonic stem cells. To make her argument, the author quotes from several sources. Who has the author quoted, and how has she used these quotations to build her argument?

Viewpoint

6

Stem Cell Research Is Not Murder

David Holcberg and Alex Epstein

In the following viewpoint David Holcberg and Alex Epstein argue that stem cell research is not murder. Opponents of stem cell research claim that embryos are human beings with a right to life. However, Holcberg and Epstein explain that rights are given to humans so they can think, act, work, feel, love, and live in freedom. Since embryos are merely clusters of a few hundred undifferentiated cells that do not see, hear, feel, or think, the authors claim the concept of rights does not apply to them. As such, the authors argue that embryos do not have rights that can be infringed upon. In this way, using embryonic cells for research cannot equal murder. In fact, the authors conclude that the real violation of rights comes from denying scientists the opportunity to pursue lifesaving cures for humans suffering from illness and disease.

David Holcberg is a media research and op-ed specialist, and Alex Epstein is a junior fellow at the Ayn Rand Institute in

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Irvine, California. The institute promotes objectivism, the philosophy of Ayn Rand, who is the author of *Atlas Shrugged* and *The Fountainhead*.

AS YOU READ, CONSIDER THE FOLLOWING QUESTIONS:

- 1. What is the difference, in the authors' opinion, between a *potential* and an *actual* human being?
- 2. What is the purpose of rights, according to Holcberg and Epstein?
- 3. Why do the authors think "pro-lifers" is an ironic term to apply to those who oppose stem cell research?

t is widely known that embryonic stem cell research has the potential to revolutionize medicine and save millions of lives. Yet many Congressmen are frantically working to defeat a measure that would expand federal financing of this research. Why are they (and so many others) opposing embryonic stem cell research—and doing so under the banner of being "pro-life"?

Embryos Are Not Human Beings

The opponents of embryonic stem cell research claim that their position is rooted in "respect for human life." They say that the embryos destroyed in the process of extracting stem cells are human beings with a right to life.

But embryos used in embryonic stem cell research are manifestly not human beings—not in any rational sense of the term. These embryos are smaller than a grain of sand, and consist of at most a few hundred undifferentiated cells. They have no body or body parts. They do not see, hear, feel, or think. While they have the *potential* to become human beings—if implanted in a woman's uterus and brought to term—they are nowhere near *actual* human beings.

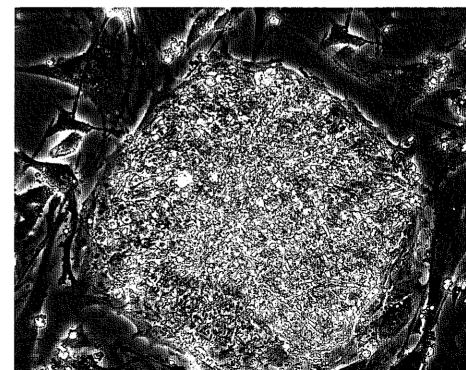
It Is Not Rational to Attribute Rights to Embryos

What, then, is the "pro-lifers'" reason for regarding these collections of cells as sacred and attributing rights to them? Religious dogma.

The "pro-lifers" accept on faith the belief that rights are a divine creation: a gift from an unknowable supernatural being bestowed on embryos at conception (which many extend to embryos "conceived" in a beaker). The most prominent example of this view is the official doctrine of the Catholic Church, which declares to its followers that an embryo "is to be respected and treated as a person from the moment of conception; and therefore from that same moment his rights as a person must be recognized."

But rights are not some supernatural construct, mystically granted by the will of "God." They are this-worldly principles of proper political interaction rooted in man's rational nature. Rights recognize the fact that men can only live successfully and happily among one another if they are free from the initiation of force against them. Rights exist to protect and further human life. Rights enable individual men to think, act, produce and trade, live and love in freedom. The principle of rights is utterly inapplicable to tiny, pre-human clusters of cells that are incapable of such actions.

The authors of this viewpoint contend that stem cells (shown) that are extracted from embryos are not yet human beings.





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Restricting Stem Cell Research Violates Scientists' Rights

In fact, to attribute rights to embryos is to call for the violation of actual rights. Since the purpose of rights is to enable individuals to secure their well-being, a crucial right, inherent in the right to liberty and property, is the right to do scientific research in pursuit of new medical treatments. To deprive scientists of the freedom to use clusters of cells to do such research is to violate their rights—as well as the rights of all who would contribute to, invest in, or benefit from this research.

And to the extent that rights are violated in this way, we can expect deadly results. The political pressure against embryonic stem cell research is already discouraging many scientists and businessmen from investing their time and resources in its pursuit. If this research can lead, as scientists believe, to the ability to create new tissues and organs to replace damaged ones, any obstacles placed in its path will unnecessarily delay the discovery of new cures and treatments for diseases such as Parkinson's, Alzheimer's, osteoporosis, and diabetes. Every day that this potentially life-saving research is delayed is another day that will go by before new treatments become available to ease the suffering and save the lives of countless individuals. And if the

"pro-lifers" ever achieve the ban they seek on embryonic stem cell research, millions upon millions of human beings, living or yet to be born, might be deprived of healthier, happier, and longer lives.

The enemies of embryonic stem cell research know this, but are unmoved. They are brazenly willing to force countless human beings to suffer and die for lack of treatments, so that clusters of cells remain untouched.

FAST FACT

An embryo does not have a body or any body parts, and it does not have the ability to see, hear, feel, or think.

Embryonic Stem Cell Research Is Necessary to Save Lives

To call such a stance "pro-life" is beyond absurd. Their allegiance is not to human life or to human rights, but to their anti-life dogma. If these enemies of human life wish to deprive themselves of the benefits of stem cell research, they should be free to do so and die faithful to the last. But any attempt to impose their religious dogma on the rest of the population is both evil and unconstitutional. In the name of the actual sanctity of human life and the inviolability of rights, embryonic stem cell research must be allowed to proceed unimpeded. Our lives may depend on it.

EVALUATING THE AUTHORS' ARGUMENTS:

David Holcberg and Alex Epstein argue that depriving humans the opportunity to benefit from stem cell research is more deadly than using nonhuman embryos for research. Clarify what they mean by this. Do you think they are right? Explain your answer thoroughly. Then, list how you think each of the other authors in this chapter would respond to this suggestion.