

Statement on the efforts to repeal State laws prohibiting embryonic stem cell research
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We have entered a new era in the treatment of neurological diseases, diabetes and other illnesses - an era that everyone, regardless of philosophy or faith commitment, can embrace. People of faith recognize that science has contributed mightily to our sense of wonder and human advancement. We also share society's concern for the many families, faced with serious illness, who are desperate for cures for their loved ones.

Tragically, however, these families and the public are often misled into thinking that research on human embryos provides the only hope for a cure. Researchers and for-profit biomedical companies overstate the benefits of embryonic stem cell research, and other proponents regularly disregard the moral implications involved in it.

This week Senate Bill 74, *An Act to repeal the prohibition against cell stem treatments and research and to establish ethical guidelines to regulate stem cell research*, was introduced in the South Dakota Senate. In view of this development and the other attempts to change State law in this regard, it is time once again to bring to light both the facts and the moral implications of this issue. Clarity of thought and candor are now needed, lest modern science be misused, just as it was last century by those experimenting on human beings.

To that end, four falsehoods need to be named and addressed:

- 1) "Embryos are no more than a microscopic clump of cells and surely not human life."
- 2) "Embryonic stem cells are of greater benefit to researchers than adult stem cells."
- 3) "As the human embryos to be used are surplus embryos developed for *in vitro* fertilization and since they would be destroyed anyway, their use for research is not morally objectionable."
- 4) "The majority of Americans and Catholics support research on embryos."

1. “Embryos are no more than a microscopic clump of cells and surely not human life.”

Minimizing the value of embryos by referring to their tiny microscopic size depends on the ridiculous fallacy of measuring value by size. The Earth is but a tiny speck of cosmic dust in comparison to the vast expanse of the universe. Yet, who could convincingly argue that that Earth’s value is diminished by its relative size in the cosmos?

The description of an embryo as nothing but a microscopic clump of cells is an obvious attempt to distract from one simple truth accepted by all scientists: human embryos are genetically complete, unique in their makeup and fully human. Each one of us was this tiny microscopic size once, just as each of us was a child in the womb, a newborn infant, a toddler, a teen. The argument that size equates with value fails on its own, but it is also a deliberate distraction from the fact that human embryos are human life. This is why the Church insists that “research” on human embryos involves “the killing of innocent human creatures,” and is without question “an absolutely unacceptable act” (cf., *The Gospel of Life*, 63). No reference to the size of embryos can cloud the fact that destroying them involves killing unique human life that is genetically complete.

2. “Embryonic stem cells are of greater benefit to researchers than adult stem cells.”

While this claim often goes unchallenged in the media, the truth is that embryonic stem cells have yet to provide a cure for anything. In fact, not only have embryonic stem cells *never* helped a human patient, but recent studies show they can put one at risk. The claim that someday they will provide cures has always been considered guess work, but now even that is called into question.

Scientists have known for some years that there are safety problems when embryonic stem cells are placed in animals, including a tendency to form tumors. But, as recently as March 2009, Dr. Bernadine Healy, former head of the National Institutes of Health, offers in her article, *Why Embryonic Stem Cells are Obsolete*, published by U.S. News and World Report, a disturbing account of how embryonic stem cell treatment put a young boy’s health in jeopardy:

...several events (have) reinforced the notion that embryonic stem cells, once thought to hold the cure for Alzheimer's, Parkinson's, and

diabetes, are obsolete. The most sobering: a report from Israel published in PLoS Medicine in late February that shows embryonic stem cells injected into patients can cause disabling if not deadly tumors. The report describes a young boy with a fatal neuromuscular disease called ataxia telangiectasia, who was treated with embryonic stem cells. Within four years, he developed headaches and was found to have multiple tumors in his brain and spinal cord that genetically matched the female embryos used in his therapy.

She continues:

His experience is neither an anomaly nor a surprise, but one feared by many scientists. These still-mysterious cell creations have been removed from the highly ordered environment of a fast-growing embryo, after all. Though they are tamed in a petri dish to be disciplined, mature cells, research in animals has shown repeatedly that sometimes the injected cells run wildly out of control—dashing hopes of tiny, human embryos benignly spinning off stem cells to save grown-ups, without risk or concern.

In contrast, as scientists continue to discover the proven benefits of adult stem cells, new uses for them are constantly being found. Harvard University researchers have found in mice that the body's own stem cells can revive and reverse diabetes on their own, once a new treatment is used to stop the body's immune system from attacking its own insulin-producing cells. A new protocol for islet cell transplants, developed in Canada, using pancreatic islet cells from adult cadavers, has already allowed human patients to reverse their diabetes and throw away their insulin needles; several U.S. centers are in the midst of very promising clinical trials with this approach.

And, in 2007, the respected journals, *Science* and *Cell*, independently reported breakthroughs that could benefit science and insure that stem cell research is morally acceptable. Independent teams of scientists in Wisconsin and Japan, headed by James Thomson and Shinya Yamanaka, respectively, succeeded in reprogramming human skin cells so that they behave like the embryonic stem cells. Both lead scientists spoke about the need to resolve the ethical concerns surrounding the use of embryonic stem cells as an important factor in motivating them to pursue the study of adult stem cells. Thomson remarked that "If human embryonic stem cell research does not make you at least a little bit uncomfortable, you have not thought about it enough." Yamanaka spoke in more personal terms: "When I saw the embryo, I suddenly realized there was such a small difference between it and my daughters. I thought, we can't keep destroying embryos for our research. There must be another way."

All of these developments show that there is no conflict between good science and good morality. The scientific and technological breakthroughs in stem cell research, through the use of adult stem cells, are exciting opportunities that will benefit millions of our citizens. Our elected representatives should usher in this new age of medical progress by supporting morally responsible research and by continuing the ban on embryonic stem cell research. We can be proud that present State law, prohibiting embryonic stem cell research, allows for ethical research on adult stem cells. It is one of the strongest in the country and it is based on good science and good morality.

3. “As the human embryos to be used are surplus embryos developed for *in vitro* fertilization, and since they would be destroyed anyway, their use for research is not morally objectionable.”

Without ignoring the moral objections to *in vitro* fertilization, this line of argument makes a claim that the human life of one can belong to someone else. It takes for granted that either the parents or scientists involved in research have a right to use this human life as “biological material” or as a provider of organs or tissue for transplants in the treatment of certain diseases. No one owns this life. No one has the right to destroy it.

From the day Cain killed Abel, man has been reminded in the depths of his conscience that human life does not belong to him, because it is the property and gift of God the Creator and Father.

When the State crosses this moral line and sanctions the utilitarian exploitation of human life, albeit the contention that these embryos are going to be destroyed anyway, this can only result in an increased indifference in society as a whole to the value of human life. A further erosion of our sense of right and wrong can only lead to even more experimentation on human life, such as cloning. Moreover, most *in vitro fertilization* embryos are kept for reproductive purposes, and not released for research. Removing the ban on embryonic stem cell research could unwittingly create a “demand” to produce more embryonic stem cells, once those made available from *in vitro* procedures are exhausted.

4. “The majority of Americans and Catholics support research on embryos.”

Proponents base this claim on the polls they themselves have sponsored. A careful study of these polls reveals that the groups promoting destructive embryo research are

creating an illusion of support for their agenda by using questionable tactics. One of the tactics is “push polls.” By presenting false and misleading claims as though they are fact, they push respondents to give a favorable response. To do this they avoid mentioning the destruction of human embryos, asking only if people support the use of stem cells “that come from excess fertilized eggs.” This euphemism demonstrates their fear that many Americans recognize a “human embryo” as a “human life.”

More dependable polls suggest that Americans oppose federal funding of stem cell research that requires destroying human embryos, by a factor of almost three to one. Asked to choose between funding all stem cell research (both adult and embryonic), and funding only adult stem cell research and similar alternatives to see if there is no need to destroy embryos for research, Americans prefer the latter approach by an even wider margin.

Regardless of the polls or even the “benefits” of research using embryonic stem cells, the question remains: Can we as a society permit and support medical research that requires the destruction of human life?

Concluding Remarks

The tendency to instrumentalize human life is not new. Totalitarian regimes over the ages subjugated individual rights to ideological purity. In our day, terrorists breathe the chilling assertion that it is legitimate to kill innocent men and women in furtherance of politics, power, religion and revenge. We see it again in this instance, when we are told that life in its earliest stages of human development is to be subordinated to the needs of scientific experimentation.

Much is at stake as our leaders exercise their responsibilities to create a just and humane society. The decisions facing our elected officials as they consider Senate Bill 74 call for clarity of thought, honesty in presenting the facts, and wisdom. Nearly 50 years ago, the Church addressed the modern world and its leaders in these words, which are as relevant and imperative today as they were then:

Our era needs...wisdom more than bygone ages if the discoveries made by man are to be further humanized. For the future of the world stands in peril unless wiser men are forthcoming.” *The Pastoral Constitution on the Church in the Modern World (Gaudium et Spes)*, 15.