

I will begin with the facts. Your mother's egg cell was fertilized by your father's sperm cell, the 23 chromosomes and approximately 50,000 genes from *each* parent determining your physical characteristics and even intelligence and personality are already in place within your genetic code (Human Development Resource Council, Inc. www.hdrc.org). At conception, you were already "you." Now, you just need to grow.

Human embryonic stem cells (hES cells) are derived from frozen embryos remaining from *in vitro* fertilization (IVF) procedures. The argument is these human cells have the potential of treating a variety of illnesses. Because hES cells can act as "starter" cells to grow new nerve tissue, heart muscle tissue, or glandular tissue, many scientists are interested in potential treatments or even cures for heart disease, strokes, Parkinson's disease, diabetes, and many other disabling conditions. However, producing hES cells requires the destruction of human embryos.

During President Bush's administration, he permitted private companies to engage in hES cell research, but prohibited federal funding (our tax dollars) except for a limited number of stem cell lines from embryos that had already been destroyed. President Obama overturned this. Under the President's directive, the National Institutes of Health (NIH), unless Congress intervenes, will determine what, if any, boundaries there might be on how we obtain these embryos. With no clear policy from the White House, you and I could be footing the bill for research that clones embryos just to scavenge their parts.

The wrong assumption made by many is that these hES will be "thrown away anyway." This is incorrect. According to Dr. Sullivan, Director of Bioethics at Cedarville University, there are five possibilities of the estimated 600,000 frozen hES. "First of all, embryos may simply be implanted in the wombs of those who provided gametes for their creation. Another alternative is to release frozen embryos for implantation into another womb. Such "embryo adoption" can provide childless couples the joy of having a baby, while at the same time acting on behalf of another. The Snowflakes Embryo Adoption Program is the best-known non-profit organization, but some commercial centers offer this service as well. The third option would be to leave frozen embryos in their current state of physical, moral, and legal limbo, with the parents/owners unwilling or unable to decide their fate. Of course, this sort of non-decision may lead eventually to the destruction of the embryos, but the limit of long-term storage of frozen embryos is not yet known. The fourth choice, then, is to request that frozen embryos be destroyed (not through experimentation). By far, this is the most common outcome for unused frozen embryos, *by explicit decision of the parent /owners*. The fifth option, donating embryos for stem cell research, is *not* the most common choice, and almost as many couples are willing to give them for adoption. All five of these options are available for the couples who have legal control over them." In other words, there are other options.

According to the statistics, this leaves only 10% of the estimated 600,000 hES for experimentation. This is not enough. With a great deal of money now made available

by our tax dollars, scientists will need “more.” Where will they get more? With President Obama’s lax restrictions, they will be made—harvested. We will now be creating human embryos for the sake of experimentation...“cloning” is a real possibility.

There have been zero successes with hES. However, through adult and cord blood stem cell research, that does not require human destruction; there are startling advances in reprogramming adult cells into embryonic-like stem cells - hailed by the journal *Science* as the scientific breakthrough of the year - are said by many scientists to be making embryonic stem cells irrelevant to medical progress. We have seen repairs of spinal and brain injuries, healing breast and prostate cancer, curing leukemia, strokes, autoimmune diseases, cerebral palsy, even reversing serious illnesses and helping to rebuild damaged organs and more.

In addition, unknown to many, President Obama also revoked Bush’s 2007 order that directed funding be made available for 'Research on Alternative Sources of Pluripotent Stem Cells'. Dr. William Stalter, former Chief of Staff of Miami Valley Hospital and Medical Director of Miami Valley Women’s Center states “this is another alternative source that resembles human embryos but does not require the destruction of a human embryo or the use of women's eggs.” To divert scarce funds away from these promising avenues for research and treatment toward the avenue that is most morally controversial as well as most medically speculative would be a sad victory of politics over science.

Are we entering the “Black Hole” of science? The point of no return? Where money and politics are a driving factor in harvesting and disposing of human life? As Dr. Sullivan states, “At what point do we *not* have ethical values guide science?”

If the government wants to invest in hope for cures and promote ethically sound science, the balance is to use our tax monies for research that everyone, at every stage of human development, can live with.

-Christi Dodson, Executive Director, Dayton Right to Life