



## The Facts about ESCR Myths

**It is true that many myths surround the Embryonic Stem Cell Research (ESCR) debate.**

**Here are a few *straight facts* to replace some of the misleading statements you might encounter.**

1. Advances in Adult Stem Cell Research DO render *human* Embryonic Stem Cell Research obsolete – if it was ever useful in the first place. <http://www.usnews.com/health/blogs/heart-to-heart/2009/03/04/why-embryonic-stem-cells-are-obsolete.html> ).
  - a. Professor Shinya Yamanaka of Kyoto University, who isolated iPS cells, a type of Adult Stem Cells discovered in 2007, did not use *human* Embryonic Stem Cells to discover iPS cells.  
Link to the article published in *Cell* which detailed the process that was followed.  
<http://download.cell.com/pdf/PIIS0092867407014717.pdf>
  - b. Besides ethical considerations, there are also tumor and rejection problems with ESCR, also referred to in the *Cell* article.
  - c. Adult Stem Cell Research has yielded positive treatment results and Embryonic Stem Cell Research has not.
  - d. Is something “useful” when it has never yielded positive results and when it is unethical?
2. The scholarly journal, *Science* published a list, on Jan. 19, 2007, showing applications of Adult Stem Cells that produce therapeutic benefit for human patients. <http://www.sciencemag.org/cgi/data/315/5810/328b/DC1/1>
3. Though human bone marrow has been used in treatments for over 40 years, it wasn't until the early 1990's that stem cells from bone marrow were isolated and used by B. A. Reynolds and S. Weiss. That discovery, like embryonic stem cells, is relatively recent in terms of medical research.
  - a. Adult stem cells have had positive results in treating people. See these links for testimonies: <http://www.xcell-center.com/patient-stories/overview.aspx> and [www.stemcellresearchfacts.org](http://www.stemcellresearchfacts.org)
  - b. ESCR (Embryonic Stem Cell Research) has yet to make it out of the lab. There have been no actual human treatments on humans, though studies have been given the green light by the Obama administration.  
Note: There has never been a national ban on human embryonic stem cell research – only the national funding of it. States and countries have used private and public funds, all to no avail.
4. Human Embryonic Stem Cell Research ALWAYS DESTROYS HUMAN LIFE.
  - a. Researchers do not “create” embryonic stem cells – they “harvest” them from an embryo when it is about five days old in a process that destroys that embryo. In human research, this embryo is not just a “clump of cells,” but rather a self-developing organism with a complete “human” genome. Noted doctors from the Mayo Clinic, including C. Everett Koop and Edmund Pellegrino (*Stem Cell Research: Why Medicine Should Reject Human Cloning* <http://www.mayoclinicproceedings.com/content/78/8/1010.full.pdf+html>), observe that the, “. . . human embryo is a living human organism. Structurally, the embryo is genetically complete. . . .” (*Mayo Clinic Proceedings* August 2003; 78:1010-1018).
  - b. Using the rationale that the embryos will be destroyed anyway does not make it ethical.
5. Eggs are not created in a laboratory. The egg might be fertilized in a lab, but it is not created there.
6. Embryonic Stem Cell Research is not “religious” or “partisan.” Rather, it is pure SCIENCE and ETHICS.
7. Most Christian faiths DO support stem cell research – Adult Stem Cell Research – the ethical kind.
8. Cloning, no matter the purpose, is still cloning. Due to the small number of embryos that are given to research, embryonic stem cell research does lead to Somatic Cell Nuclear Transfer, or cloning. Changing the legal definition does not change the outcome. A clone is still a clone.