MEMORANDUM

TO: Honorable Members of the Missouri House of Representatives

FROM: Gerard Nieters, Legislative Director
Pam Fichter, President

DATE: February 16, 2010

RE: Opposition to HCS HB 1675 - Legislation Including Life Sciences Tax Credits with no Pro-Life Protective Language

NOTE: This memo is applicable to any economic development legislation that comes before the Missouri House of Representatives.

Missouri Right to Life (MRL) opposes HCS HB 1675 that reinstates certain tax credits for certain research and development expenses, including tax credits for work in the fields of life sciences, biology and pharmaceuticals because, without restrictions, that work could include embryonic stem cell research or even fetal research. Because pharmaceutical research and development is a primary subject of cloning research, Missouri Right to Life opposes HCS HB 1675 and any other legislation that includes tax credits for pharmaceutical research without pro-life protective language.

The section in question is 620.1039 as printed in HCS HB 1675. The issue that opens up the concern is the NAICS definitions and industries allowed to receive state monies or tax credits.

Attached you will find a copy of the 1997 NAICS Definitions. You will find the pro-life concerns on pgs 19 & 20. The NAICS codes are under the numerical category of 5417, 54171 and 541710.

You will also find attached an article written by Dr. David Prentice, Senior Fellow for Life Sciences at the Family Research Council, that explains the necessity for clear definitions when delving into benefits for life sciences research.

One of the principal ways that cloning firms and institutions will make money consists of using cloning to establish lines of human embryonic stem cells on which various drug formulas may be tested. In fact, the Wisconsin scientist who invented the process that keeps human stem cells alive in cultures, James Thomson, has formed at least one company to do exactly that. As was reported in *The Capital Times* of Madison Wisconsin in 2007, "The [company] is growing stem cells into adult heart cells that could

make the testing of experimental drugs safer and more efficient." (The Madison Times, Feb. 7, 2007.) The news article went on to report, "[T]he research faces intense opposition from some social conservatives because days-old human embryos are destroyed as scientists extract the cells. Critics argue it is unethical to destroy human life in the name of science."

James Thomson may be an eminent scientist, but no one, whether a scientist, businessman, or abortionist, should have a license to kill innocent human beings. Nor should the State of Missouri give tax credits to research institutions who sponsor the killing of human beings in order to obtain stem cells for pharmaceutical research.

The U. S. Food and Drug Administration (FDA) says that the development of any new drug now requires at least $500 million and 8½ years of testing. See its summary, "FDA and the Drug Development Process: How the Agency Ensures That Drugs are Safe and Effective," February, 2002, p. 1 (http://www.fda.gov/opacom/factsheets/justthefacts/17drgdev.html). A large part of the cost arises from the requirement to test potential drugs on at least two different species of animals. FDA, "The New Drug Development Process: Pre-Clinical Research," on-line at http://www.fda.gov/cder/handbook/. Animal tests require acquiring and caring for live animals during the testing. Moreover, animal tests are not very satisfactory for some drugs. Testing potential pharmaceuticals on batches of human tissue cells, such as heart cells, would give more accurate and quicker results than animal studies. And because the FDA has moved on this by recently approving the first human trials of human embryonic stem cell research by the Geron Corporation; the destruction of innocent human life in the creation of pharmaceuticals is no longer a hypothetical but is a reality.

The National Institutes of Health has described how embryonic stem cells can be used in the testing of drugs. It says that human embryonic stem cells can "provide material for testing that may improve the safety and efficacy of human drugs. For example, new drugs are not generally tested on human heart cells because no human heart cell lines exist. Instead, researchers rely on animal models. Because of important . . . differences between animal and human hearts, however, drugs that are toxic to the human heart have occasionally entered clinical trials [tests on humans], sometimes resulting in death. Human ES cell-derived heart cells may be extremely valuable in identifying such drugs before they are used in clinical trials, ..." NIH, Regenerative Medicine 2006, Chap. 1, "Embryonic Stem Cells," page 4 (citations and table omitted) (http://stemcells.nih.gov/info/scireport/2006report.htm). It is not just human heart cells, but many types of human cells, that are expected to be produced by taking stem cells from human embryos. Id. Harvesting the stem cells, of course, kills the embryos.

The NIH does not explain why adult stem cells cannot be used for the purposes described, in light of the many ways that researchers have already proven they may be changed into other types of tissue cells. That possibility does not appear to be important to those who want to use embryonic stem cells.

Missouri Right to Life has suggested numerous versions of pro-life protective language that would assure that innocent human lives are not sacrificed in life sciences research. The latest version of protective language is as follows:
"It is not the intent of this section to include research as defined by Article III, section 38 (d) of the Missouri Constitution and this section shall be subject to the provisions of section 196.1127."

Without this language, Missouri Right to Life is opposed to HCS HB 1675 and any other Economic Development legislation that does not have clear pro-life protective language.

Another Economic Development bill is due to come up on the House floor, HB 1684 and we sincerely hope that this language will go on this legislation.