

CATHOLIC TEACHING ON STEM CELL RESEARCH

Part I: Introduction to the Ethics and Science

- This winter the General Assembly will consider legislation on stem cell research here in NC
- Many are pushing for the state to fund human *embryonic* stem cell research
- We as Catholics need to educate ourselves and respond to this serious issue

Catholic Teaching on Life

The starting point for evaluating stem cell science

Life is sacred

The central fact at the core of our Church's teaching on life is that *life is sacred*. God created us "in his image" and called His creation "very good" (Gn 1: 27, 31); from the beginning of each person's existence God has given that person the remarkable gift of life, which reflects His own life. Elaborating on this gift, the Catholic Church teaches that "human life is sacred because from its beginning it involves 'the creative action of God' and it remains forever in a special relationship with the Creator" (Donum Vitae, intro 5). This core value of human life cannot be removed by any circumstance; every patient dying of cancer, every prisoner on death row, every mentally handicapped person, every embryo frozen in a fertility clinic, every person in poverty is beloved by God and each of their lives is sacred.

God's love calls us to action

God loves us. Christ took on human nature out of love, in order to offer salvation to us. However, he calls us not only to receive His love, but to give love to each other; as he says to the apostles at the Last Supper "love one another as I love you" (Jn 15:12). This love takes many forms, and among them is love for the sacred life in each person. In this light, the commandment "you shall not kill" establishes the minimum requirement of what we must not do, but Christ's command to love as He loves pushes us to aim for the best we can accomplish rather than merely avoid the worst. John Paul II captured this when he wrote that the commandment not to kill "culminates in the positive commandment which obliges us to be responsible for our neighbors as for ourselves: 'you shall love your neighbor as yourself'" (Evangelium Vitae 40).

"Who is my neighbor?" (Lk 10:29)

With regard to the pending legislation in North Carolina, our neighbors are our embryonic brothers and sisters whom researchers propose to create through cloning or obtain from fertility clinics and to kill in the lab for embryonic stem cells. Despite the good the researchers hope to accomplish, *we can never use evil as a tool to accomplish good*.

Stem Cell Science

What is a stem cell?

A stem cell is a "precursor" cell, an undifferentiated cell, capable of producing more specialized types of cells; just as the stem of a plant grows and becomes leaves and berries, stem cells give rise to the developed cells that form the organs and tissues of the body, such as brain cells, heart cells, etc.

What are "embryonic stem cells" vs. "adult stem cells"?

Embryonic stem cells are named for where they come from: embryos. In the first days after conception the new person develops the embryonic stem cells that develop into all the organs and different types of tissue in

Look for more bulletin inserts on this topic for the next two weeks.

the growing body. Once these embryonic stem cells have made the first steps in developing into specific types of tissues, they are then called *adult stem cells*. In the analogy to a plant, an embryonic stem cell would be at the base of the stem while an adult stem cell would be higher up on the stem, where the stem forks into branches.

Why are researchers interested in stem cells?

The most prominent and most often mentioned reason is treatment of disease. Because stem cells can form into specialized cell types, the idea is that they could treat illnesses in which diseased cells and tissues do not work normally. Adult stem cells already are used to treat many diseases (i.e., bone marrow transplants are actually adult stem cell transplants!)

Where can you obtain stem cells?

- *Adult stems cells* are all over the body: in bone marrow, in blood from a baby’s umbilical cord, in the liver, in the skin, etc.
- *Embryonic stem cells* come only from embryos, and obtaining these cells involves destroying the embryo to remove the stem cells. Thus, adult stem cells can come from a tissue sample from a willing donor, but embryonic stem cells come from killing a human at the earliest stage of life.

Where would researchers obtain embryos?

1. From the many embryos “left over” after IVF (in vitro fertilization). Though frozen in suspended animation, these youngest of our brothers and sisters are fully human and their lives are sacred.
2. From a process called “somatic cell nuclear transfer”: a scientist removes the genetic material (the nucleus & DNA) from a woman’s egg and replaces it with the genetic material from a developed cell (a “somatic” cell) such as a skin cell. This mixed cell acts like a fertilized egg and grows into an embryo. This is how Dolly the sheep was made; i.e., *this is cloning*.
→Recognize this important point: somatic cell nuclear transfer (SCNT) equals cloning, and *human cloning would be one of the major sources of embryos for research*.

What are the moral issues with stem cell research?

- *Adult stem cells*: the Catholic Church fully supports research and treatment with adult stem cells. Using adult stem cells for treatment and research is the same as using donated blood or a donated kidney to study disease or treat a person with kidney failure.
- *Embryonic stem cells*: the Church firmly opposes human embryonic stem cell research because obtaining embryonic stem cells involves killing embryos and because creating embryos by somatic cell nuclear transfer means cloning humans. Both cloning and the killing of embryos violate the sacred life we are given by God and thus are evil.

What can you do about this issue?

- To contact your legislators by email or phone start here:
Website: www.ncga.state.nc.us/GIS/Representation
Phone for the State Board of Elections: (919) 733-7173 (they will connect you to your County Board of Elections who will tell you exactly who represents you and how to contact them.)

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