

## **Stem cell research**

The Catholic Church is concerned with the protection of all innocent human life. Scientific research is important, but it can never come at the expense of the weakest among us.

- Are there different types of stem-cell research?
- Is the Catholic Church opposed to all stem-cell research?
- What is the Church's teaching on the use of tissue from aborted children?
- Is there a conflict between the need for scientific research and the Church's teaching on the protection of innocent life?

### **What Are Stem Cells?:**

Stem cells are a special type of cell that can easily divide to create new cells;

pluripotent stem cells, which are the subject of most research, can create new cells of various types. Over the last several years, scientists have been optimistic about the possibility of using stem cells to treat a wide range of diseases and other health problems, because stem cells could potentially regenerate damaged tissues and organs.

### **Types of Stem-Cell Research:**

While news reports and political debates often use the term "stem-cell research" to discuss all scientific research involving stem cells, the truth is that there are a number of different types of stem cells that are being studied. For example, adult stem cells are often drawn from bone marrow, while umbilical-cord stem cells are taken from the blood that remains in the umbilical cord after birth. Most recently, stem

cells have been found in the [amniotic fluid](#) that surrounds a baby in the womb.

### **Support for Non-Embryonic Stem-Cell Research:**

There is no controversy about research involving all of these types of stem cells. In fact, the Catholic Church has publicly supported adult and umbilical-cord stem-cell research, and Church leaders were among the first to applaud the discovery of amniotic stem cells and to call for further research.

### **Opposition to Embryonic Stem-Cell Research:**

The Church has consistently opposed research on embryonic stem cells, however. For several years now, many scientists have called for greater research on embryonic stem cells,

because they believe that embryonic stem cells exhibit greater pluripotency (the ability to divide into different types of cells) than, say, adult stem cells.

The public debate around stem-cell research focused entirely on embryonic stem-cell research (ESCR). The failure to distinguish between ESCR and other forms of stem-cell research has muddied the debate.

### **Reconciling Science and Faith:**

Ironically, despite all of the media attention that has been devoted to ESCR, not a single therapeutic use has been developed with embryonic stem cells. In fact, every use of embryonic stem cells in other tissue has led to the creation of tumors.

The greatest advances in stem-cell research so far have come through adult stem-cell research: Dozens of therapeutic uses have been developed and are currently in use. And the recent discovery of amniotic stem cells may well provide scientists with all the advantages that they had hoped to derive from ESCR, but without any of the moral objections.

### **Basis of Opposition:**

On August 25, 2000, the Pontifical Academy for Life released a document entitled "[Declaration on the Production and the Scientific and Therapeutic Use of Human Embryonic Stem Cells](#)," which summarizes the reasons why the Catholic Church opposes ESCR.

- **First**, the preparation of embryonic stem cells from a living embryo

requires the destruction of the embryo, which the Church teaches is a gravely immoral act.

- **Second**, some scientists have used [cloning](#) to produce embryos in order to harvest stem cells. While these embryos are not created in the normal manner, the Church recognizes that they, too, are alive, and their destruction is gravely immoral.
- **Third**, the Church opposes the use of embryonic stem-cell lines that already exist for the same reason that She opposes the creation of new lines: Those lines began with the destruction of innocent human life.

It doesn't matter whether scientific advances may be made through ESCR; the Church teaches that we can never do evil, even if good may come of it, and there is no way to obtain embryonic

stem cells without destroying innocent human life.

### **Elsewhere on the Web**

- [Pontifical Academy for Life on the Use of Human Embryonic Stem](#)
- [Document of the Holy See on Human Cloning](#)