

CLONING AND STEM CELLS: DOES CLONING CREATE HUMAN LIFE?

As promised last week, I am taking the opportunity in my column to take a closer look at several of the main issues of contention involving human cloning and stem cell research. This is a very complex subject, but an incredibly important one. I was drawn into this debate when I filed a bill that would ban human cloning in Missouri several years ago. When I filed it, little did I know that scientists in Missouri were actually working toward cloning a human being. I have faced stiff opposition to my bill from those who hope to use cloning to develop medical therapies. In particular, scientists want to be able to clone people so they can harvest stem cells from the cloned embryo. That is why cloning and embryonic stem cell research often intersect.

Not all stem cell research involves cloning. Stem cell research actually holds great promise for cures for disease. Because many types of our cells cannot regenerate and repair themselves, we humans suffer from paralysis, diabetes and other debilitating conditions. Because stem cells can become virtually any cell in the body, someday it may be possible to replace the damaged cells with new, healthy cells. That is why I support stem cell research, but not all stem cell research.

There are two strains of stem cells at issue in this debate—adult stem cells and embryonic stem cells. Adult stem cells are found in a number of places in the body. They are even found in fat. Scientists can harvest these stem cells relatively easily and without killing the person from whom they are harvested. Embryonic stem cells are a very different matter. Embryonic stem cells are found in human embryos and in order to use those stem cells scientists have to kill the human embryo. We were all once an embryo. Human embryos are tiny human beings. I am strongly in favor of adult stem cell research which does not involve killing a human, but I am strongly opposed to embryonic stem cell research, which does require the termination of a human life.

I will soon be re-filing my bill to ban human cloning in Missouri. Five states (Arkansas, Iowa, North Dakota, South Dakota and Michigan) and many countries, Germany, Canada, France, Switzerland and Norway, to name only a few, have forbidden the practice of cloned embryonic stem cell research.

The issue at the heart of this debate boils down to one simple but fundamental question: "Does human cloning create a human life?" The opponents of my bill argue that the cloning process does not create a new human being but instead only "regenerates" a part of an already living person, a donor, using some of his or her own cells. This debate is at the heart of the whole controversy so at the risk of boring my readers with scientific jargon we must delve into what actually occurs during a cloning procedure compared to what happens with normal conception. In cloning, scientists take a human female egg and remove the nucleus and its 23 chromosomes, leaving it with little genetic material. In its place they insert the nucleus of a cell from a living human being, a skin cell for example, that contains the full complement of 46 chromosomes from the donor. (In conception a baby normally gets 23 chromosomes from its father and 23 from its mother). A small electrical current is then applied to the egg and it begins to divide just like an egg

fertilized by a male sperm. This new “entity” is allowed to live and grow for a few days. Then the valuable stem cells it has produced are extracted, destroying it in the process.

Some proponents of this research claim that this “entity” is not a human embryo since its 46 chromosomes came from one donor. I believe they are wrong (in fact, when scientists in South Korea recently announced they had cloned a human using this procedure they had no qualms about correctly identifying their creation as a human embryo). I rest my case on 3 points I find to be indisputable.

First, the embryo created through human cloning is biologically indistinguishable from one created by normal conception. In other words, if you looked at them both under a microscope you would not be able to tell the difference.

Secondly, if the embryo created by cloning were implanted in a uterus and allowed to develop, in nine months it could conceivably produce a real live human baby that cries, drinks milk and makes dirty diapers. How am I so sure of this? The same cloning procedure we’ve been discussing has already produced a rather famous mammal named Dolly the sheep. Would anyone like to make the argument that Dolly wasn’t really alive because she was an exact genetic copy of the donor sheep? Of course not – that would be absurd yet it is equally absurd to argue that cloning doesn’t produce a new human life.

Finally, if having the same genetic make-up of another human being means you are not a unique individual in the eyes of God and under the Constitution of the United States, I am sure this will come as shocking news to the hundreds of identical twins in this country. Because of the way their embryo developed there was a natural “cloning” that occurred in their mother’s womb and each twin shares an exact genetic make-up. So which twin shall society deem to be subhuman? The answer is obvious. They are both equally human and equally deserving of protection.

These are the reasons I am proposing a cloning ban. After reviewing the science, I see no other position that is intellectually honest or morally defensible.

If you have comments or questions about this week’s column or any other matter involving state government, please do not hesitate to contact me. You can reach my office by e-mail at matt_bartle@senate.state.mo.us or by phone at (888) 711-9278.