

## CLONING AND STEM CELL RESEARCH: WRONG MOVES ON BOTH SIDES OF THE ATLANTIC

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Human cloning may soon become an accepted means of producing human embryonic stem cells for use in medical therapies. The Donaldson Report, released in August by a government advisory commission headed by Britain's Chief Medical Officer Liam Donaldson, sanctions the use of just such a practice. If passed by Parliament, Britain would likely become the first country in the world to explicitly permit the cloning of human embryos. The Report endorses the process of transferring someone's DNA (the chemical basis of our genes) into a human egg stripped of its own DNA, resulting in a cloned human embryo. The commission approves only of what is being called "therapeutic cloning"—cloning in which the therapeutic benefits are bestowed upon patients in need of treatments developed from the cloned embryo's stem cells. Although this may bring therapeutic benefits to the patient, it is critical to recognize that no therapy whatsoever is bestowed upon the cloned embryo as—much to the contrary—obtaining the stem cells necessarily results in his or her death. In fact, the Donaldson Report ensures that no cloned embryo survives by requiring the destruction of all such embryos after 14 days as a means of preventing the development of cloned fetuses and babies—a process which has been termed "reproductive cloning." To prohibit human cloning is a good thing—but not if such prohibition demands the mandatory destruction of a human being *who has already been cloned* for the express benefit of someone else. Those who support the Donaldson Report, as well as many who favor human embryonic stem cell research in the U.S., have succumbed to the utilitarian drive to maximize the ends without considering the means.

Named the Breakthrough of the Year for 1999 by the prestigious journal *Science*, human embryonic stem cell research may indeed have the potential to benefit many people who suffer from serious debilitating conditions. Because embryonic stem cells can develop into many different types of tissues, researchers hope these cells can be coaxed into replacing tissues whose function has been lost or compromised as a result of injury or disease. For example, someone with diabetes might be given replacement pancreatic cells that produce normal amounts of insulin. Similar treatments might be developed for Parkinson's and Alzheimer's diseases.

The British interest in cloning arises largely in response to a chief obstacle encountered by scientists doing research on embryonic stem cells—namely, how to transplant cells or tissue derived from an embryo into a patient without that patient rejecting the implanted material. Obtaining cells from an embryo which has been cloned by inserting a patient's own DNA into an egg cell devoid of genetic material circumvents the risk of tissue rejection which would likely be posed if stem cells were derived from non-cloned embryos who do not share the patient's genetic material. For example, a patient suffering from severe burns could have embryos cloned using genetic material derived from his or her own cells. If the stem cells obtained from these cloned embryos could be coaxed into becoming skin cells, they would be genetically identical to the patient and would pose no risk of rejection.

The Donaldson Report, as well as human embryonic stem cell research which does not involve cloning, displays a particularly problematic approach to human life that has broad implications. By definition, research on embryonic stem cells involves the destruction of some human beings for the so-called benefit of others. Therapeutic cloning goes one step further and entails the deliberate creation—as well as the sacrifice—of human embryos for the alleged good of others. It treats human life as a commodity to be manufactured when needed and destroyed when desired to achieve some "greater" purpose. The utilitarian ethic, which justifies treating some humans as means to the end of benefitting others, is employed by those who promote both of these intrinsically objectionable practices. At their core, these acts are violations of human dignity.

The Council of Europe affirmed as much when the preamble to its 1998 Convention on Human Rights and Biomedicine: Additional Protocol on the Prohibition of Cloning Human Beings declared "that the instrumentalisation of human beings through the deliberate creation of genetically identical human beings is contrary to human dignity and thus constitutes a misuse of biology and medicine." Article 1.1 of this protocol states that "Any intervention seeking to create a human being genetically identical to another human being, whether living or dead, is prohibited." This serves to reinforce Article 18.2 of the original 1997 Convention, which stated: "The creation of human embryos for research purposes is prohibited." Little wonder an ethics spokesman for the political right in Germany declared that "the UK has now left the European community in terms of moral values."

While the recently released NIH guidelines for federally funding destructive human embryonic stem cell research stop short of sanctioning human cloning as a means of producing embryonic stem cells, government sanctioning of embryo destruction is itself not commendable—regardless of whether cloning is employed. Currently, a congressional ban prohibits federal funding for "research in which a human embryo or embryos are destroyed, discarded, or knowingly subjected to risk of injury or death." The only way to obtain human embryonic stem cells is to destroy human embryos. The NIH guidelines make the astonishing claim that so long as private funds are used to kill the embryos, public funds can be used to support research on the cells derived from such embryos. They allege that such research is itself untainted by the fact that it necessitates the destruction of innocent human beings. However, federal funding of embryonic stem cell research provides the very motivation for obtaining these stem cells and thereby destroying human embryos. Funding this research knowingly subjects human embryos to certain death. The fact that the NIH does not fund the destructive aspects of the research in no way absolves them of grave wrongdoing. To suggest otherwise is to disingenuously circumvent the existing law.

The area of stem cell research has been marked by many unprecedented advances. Ironically, the day before the Donaldson Report was released, the *Journal of Neuroscience*

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ests of individual patients and the interests of the entire patient population being served by the physician/hospital. Whenever there is a fixed amount of resources available to treat a patient population, conflict between the interests of the patient population and the interests of individual patients is likely.

Third, people need to be able to recognize the point at which medical treatment is futile. Virtually every day in hospitals and medical centers around the country, families make inappropriate requests for aggressive treatment at the end of life. More often than not, physicians accommodate these requests out of a fear of being sued or to avoid tension in dealing with the family. The result is that resources are unnecessarily spent at the end of life on futile or burdensome treatments which are very expensive but offer, at best, only minimal benefit. In the vast majority of these cases, there is clear consensus that the best course of action for the patient is to stop aggressive treatment and initiate a regimen of palliative or hospice care instead.

4 Fourth, people should develop a knowledge of and expertise in business ethics. In the last 2-3 years, ethics committees increasingly have been asked to shift their focus from strictly clinical ethics issues to those that deal with the business side of health care, or organizational ethics. Those who are involved in ethical reflection in hospitals and medical centers will be asked to blend business ethics and medical ethics to formulate an ethic that will benefit both patients and the orga-

nization that serves them. It would be in the interests of those in the bioethics community to become more educated about the sister field of business ethics so that they may better serve their institutions.

Fifth, people must express their concern for those who are poor and who lack sufficient health insurance. Often the most difficult issues in medical ethics have to do with access to care for the uninsured and under-insured. Though it is true that some people lack adequate health care coverage as a matter of choice or just temporarily while in between jobs, the majority of such persons feel vulnerable and would be very vulnerable indeed if faced with a serious illness.

Regardless of the way in which the macro issues are resolved, an integral part of the health care system—particularly if the trend toward the market continues—will be the provision of care for the poor by charitable and religious groups. Christ's admonition to care for the vulnerable surely applies to the poor, especially when they are experiencing serious illness and decline in health. Market forces should not be allowed to force physicians and hospitals away from providing charitable care. In the age of managed care, Christian health care providers—who follow in the tradition of the healing ministry of Christ—must take seriously the biblical mandate to care for the poor and ensure that such a commitment is evidenced in their practices. ■

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*Research* published a study demonstrating that stem cells taken from adult bone marrow had been transformed into nerve cells. This was previously believed to be impossible. Other long-held beliefs, such as the idea that the brain was incapable of regeneration, are being overturned because of research on stem cells derived from non-embryonic sources. With each passing month, research with these stem cells is revealing the huge potential of this area. The hopes of alleviating many devastating illnesses may be achieved via methods which are not dependent upon embryonic stem cells and which therefore do not require the destruction of embryos. As Christians, we should wholly affirm the desire to develop new treatments for diseases and should vigorously support research into adult stem cells and other non-embryonic sources.

The stem cell/cloning controversy raises, once again, the fundamental issue of personhood and the ensuing considerations of how human persons should be treated. Unfortunately, Christians cannot turn to the Bible for a specific verse to tell us if the embryo has the same rights as other humans. However, when Scripture mentions the unborn, the context is almost always one of God's protection for them and His vision for their lives (Psalm 139:13-17; Isaiah 44:1-2; Jeremiah 1:3). Human dignity arises from our being created in the image of God. If we ask "Who is an image of God?," we may receive no easy answer. But Jesus was asked, "Who is my neighbor?"

His reply with the parable of the Good Samaritan redirects the question (Luke 10:29-37) and emphasizes our responsibility to care for all human beings in whatever ways we can. Are we acting as good neighbors to these embryos? Do we reflect the image of God when we endorse the destruction of other human beings? Hardly.

It is indeed difficult to accept the disability or premature death of any human being because such tragedy marks the loss of potential. Who might this person have become? What might he or she have accomplished? Yet precisely the same potential is lost when a human embryo, cloned or not, is torn apart to supply stem cells for the benefit of another. Who would these embryonic beings have become, if only they had been protected and nurtured? Instead of sanctioning their sacrifice, those who brought these embryos into being should act as caretakers, nurturing and protecting these tiny human lives. In that way, they act as faithful images of God, reflecting His character to the world. Endorsing the destruction of human embryos fails miserably to reach this end, as it makes it ever easier for society to abdicate its responsibilities to the weak and vulnerable at all stages of development. Policies which promote human cloning and research on stem cells derived from human embryos reflect ominously on the state of a society and the values which characterize it. ■