



Stem Cell Research? No—For Protection of the Innocent

ROBERT SONG

There is no doubt that the most compelling arguments against embryonic stem cell research relate to questions about the status of the embryo, since obtaining stem cells from an embryo at the blastocyst stage inevitably involves the destruction of that embryo.

In a nutshell, my view is that embryos from the time of fertilization should always be treated as if they are persons and therefore should be given the same protection afforded to those unambiguously regarded as persons, such as children or grown adults. Note the “as if”: this position does not hold that embryos *are* persons, but rather that embryos should be given the benefit of any doubt that may linger over their status. If there is some doubt over the status of the embryo, it should be resolved in the embryo’s favor, as to be willing to kill what *for all one knows* is a person is tantamount to being willing to kill a person.

Of course, adopting the principle that embryos be given the benefit of the doubt implies that there *is* doubt about their status as persons. For this reason it is necessary to address briefly several arguments favoring a later start for personhood than fertilization.

One prominent line of reasoning turns on the embryological observation that up until about fourteen days, the human zygote has the capacity to divide spontaneously into genetically identical twins, each of which can grow to full maturity. This raises the philosophical question of how an individual could become two separate individuals and yet maintain its identity. Any such individual, it might seem, could only be a potential person, not a distinct actual person.

A second argument appeals to developmental notions of personhood and the belief (a) that personhood is not an all-or-nothing affair but is something that grows and perhaps declines or (b) that embryos are not persons, but potential persons, which over time may develop into full or actual persons.

A third line of argument is impressed by the high rates of natural pregnancy loss, such that many (perhaps even a majority) of embryos are spontaneously aborted before implantation.

In my opinion, however, none of these arguments (nor the various others put

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TO FACE

Stem Cell Research? Yes—Out of Love for the Neighbor

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The ethical debate surrounding the use of stem cells in genetic research is one of the fascinating issues coming out of modern biology. The government of the United States, for example, has refused to fund any scientific research that would involve creating new “lines” of human stem cells. At the same time, other organizations continue to press for greater funding and freedom to do research using human stem cells. Is there a moral stance that thoughtful Christians should take on these matters as part of our faithful witness to the gospel in our culture? Any attempt to address this question must first answer another: What is the moral status of the embryo?

As with many issues in ethics, clarity on this topic demands both clear thinking and clear language. Some understanding of the terms of the debate is therefore necessary.* Stem cells are part of every living thing. They can develop into any type of cell, and they make up the earliest form of a living thing. Scientists want to use human stem cells to do research in human genetic therapy—to repair damaged organs, and so forth. While there may be some hope that human stem cells can be developed from mature adults, the most useful and versatile stem cells come from embryos. At least for now, we need embryonic stem cells in order to pursue this research.

We also need a little more clarity about just what an “embryo” is. Zygote is the name for the earliest fertilized cell—until it is planted in the womb when it becomes an embryo. After about a month, when the basic organs begin to develop, we use the word “fetus.” While “person” is notoriously difficult to define, we also need some sense of what a human person is. At the end of life, there is general agreement that a human person needs, among many other things, some brain activity. When brain activity ends, the human person’s life is over (at least in this life).

*Those interested in further reading on the topic of genetics and Christian ethics will find two books from the ELCA Division for Church in Society very helpful: Roger A. Willer, ed., *Genetic Testing and Screening* (Chicago: ELCA, 1998), and Willer, *Genetics! Where do We Stand as Christians?* (Chicago: ELCA, 2001). See further the Alliance for Faith, Science and Technology Web page at www.elca.org/faithandscience/library.html. I also recommend James C. Peterson, *Genetic Turning Points: The Ethics of Human Genetic Intervention* (Grand Rapids: Eerdmans, 2001).

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forward) are convincing. In the case of twinning, why should this not be regarded as asexual human reproduction? Alternatively, even if some persons only came into being after twinning, why is that a reason for thinking that others did not come into being at fertilization? Either way, why is our lack of clarity about whether there are one or two persons present in the early embryo a reason for thinking that there is none present?

Further, while developmental arguments rightly point to the facts of biological growth, these facts are equally compatible with the idea that the early embryo is not a potential person, but is already a person with potential yet to be fulfilled.

Finally, in relation to the spontaneous wastage of unimplanted embryos, it is important to note that during many periods of history (and perhaps in some parts of the world today) the mortality rates of children in their first year of life have been of similar general proportions—and that has never been a reason for putting *their* personhood in question.

But behind the desire to give embryos the benefit of the doubt there stands not only the negative prohibition against killing, but also the Christian virtue of hospitality. The practice of hospitality informed early Christian objections to abortion and infanticide, and it indicates the importance of giving our time and love to the stranger. This is especially important in the case of embryos, since they typically do not arouse our instinctive feelings of compassion, as do fetuses at later stages of pregnancy.

So does this mean that all stem cell research should be regarded as unacceptable to Christians? It certainly suggests that any research or treatment that requires the destruction of embryos should be rejected. But of course not all stem cell research requires this. There is plenty of research into the possibilities of reprogramming adult stem cells or stem cells from umbilical cord blood, which has already resulted in clinical treatments for damaged heart tissue, leukemia, sickle-cell anemia, and severe combined immune deficiency (SCID). Many other avenues are being explored, and it may turn out that adult stem cells are much more flexible than was initially thought.

Of course, it may finally be that there are some diseases for which embryonic stem cell research still holds the most promise. Nobody who has any sense of the suffering such diseases may cause can be opposed to it lightly. Nevertheless, the issues involved are of the utmost seriousness, and it is essential that we have the moral courage to do what we must. The protection of the innocent, especially the vulnerable innocent, is one of the first marks of a civilized society. Christian witness must stand for nothing less. ⊕

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Applying this to the start of life, at least some brain or neural activity would seem to be necessary for an embryo to be a person.

Since we don't really know exactly when the embryo becomes a human person, the argument from ignorance—essentially, “since we don't know, better to err on the side of caution”—may be compelling with respect to the fetus, but not to earlier forms of human life. Note that the moral question is not, “When does life begin?” but rather, “When does an embryo become a human person?” While life should always be treated with respect, there are powerful reasons to insist that genetic research on human cells has such long-term benefits for us, our children, and our grandchildren, that such research is morally justified. However, if such research involved killing a human person, then it would be immoral; hence, and once again, the importance of stressing the onset of *personhood* rather than simply *life* as the pressing matter.

In this regard, while the status of the fetus may be in doubt, not so the zygote and what I call the “proto-embryo” of the first two weeks after conception. I can find absolutely no reason to believe that this small collection of identical cells (stem cells) is a person or has any neural activity. It does not even have a brain cell yet. The notion that a zygote should be regarded as a “potential person” turns on the assumption that a zygote could, in fact, be a person. But since in this life a human person needs some neural activity to stay alive, there is simply no reason to believe that a zygote or proto-embryo is a living human being. I prefer to think of the zygote and proto-embryo as *the seed of a human body*.

Notice that this debate turns on factual matters: by any reasonable definition, a zygote is not a person. Personhood, therefore, does not begin at conception. The zygote deserves our respect, as the seed of a human body, but this does not mean that research on zygotes is automatically immoral. Such research may be justified if done for the right reasons and in the right way. My conclusion is therefore a simple one: the church and individual believers should do all they can to promote genetic research that uses stem cells derived from zygotes and proto-embryos. These are readily available from fertility clinics; most of these frozen cells will eventually be destroyed in any case. In the very near future, and in some cases right now, the results of this research are improving the health of real, suffering human beings. Out of love for our neighbors and families we should support genetic research using human stem cells. ⊕

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