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A human embryo by any other name is still an embryo

By Jaydee Hanson

Out of the ground the Lord God formed every beast of the field and every bird of the sky, and brought [them] to the man to see what he would call them; and whatever the man called a living creature, that was its name ... The man said, "This is now bone of my bones, and flesh of my flesh; she shall be called woman, for she was taken out of man."

(Genesis 2:19, 23)

The process of naming creatures is one of the most basic human activities and a foundation of science. Indeed, it was an honor of the highest degree bestowed exclusively upon Adam and his descendants as the caretakers of God's creation. But in these times, amid the designs of humankind, are we living up to our vocation and duty? After all, what we name creatures has become a matter of life and death.

Metaphysical questions

What is an embryo? This is a basic biological question, but it involves more than mere biology. In fact, the definition appears to be getting fuzzier in the current bioethics debate that is raging from the halls of Congress to the state houses around the country.

Defining the word "embryo" should not be confined to the biological sciences alone. Rather,

the ontological premises held by scientists — meaning their conception about the nature of humankind—come into play. Some scientists sidestep the human implications of the term "embryo" by substituting technical terms such as "zygote" or "blastocyst" in its place. Such Orwellian distortions by utilitarian scientists are no surprise; but it is surprising that some right-to-life advocates have adopted a similar strategy.

Some right-to-life proponents of a technique called "altered nuclear transfer," or its variant "oocyte [egg] assisted reprogramming," claim that this technique does not really create an embryo but instead it produces an "embryo-like" mass that directly creates embryonic stem cells. However, these techniques use cloning, otherwise known as somatic cell nuclear transfer. In SCNT, the nucleus of a body cell is placed into an egg that has had its nucleus removed.

The current ANT-OAR process, however, first genetically engineers a body cell nucleus and then places the altered nucleus into the egg. What is in contention is whether this creates a cloned, albeit, “defective,” “deficient” or “disabled” embryo because the genetic engineering makes the embryo incapable of developing the tissues that form the placenta, which is necessary for the embryo’s survival in the womb. Proponents of this ANT-OAR protocol argue that because the defective embryo cannot ever develop into a child, then it isn’t an embryo. Nevertheless, while it may never become a born child, that doesn’t make it a non-embryo. Providing federal funding would make ANT-OAR the first U.S. government sanctioned embryo-cloning experiment.

William Hurlbut, M.D., the Stanford University professor and member of the President’s Council on Bioethics who conceived of this technique, told EWTN news director Raymond Arroyo that ANT-OAR brings about an “insufficiency” rather than a “deficiency,” and he claims that the biological entities are not embryos. Again, one should ask, “Is this semantics?” After all, many people with genetic deficiencies—or insufficiencies—are born, grow into adults and live long lives.

Animal trial results

Thus far, only Dr. Rudolph Jaenisch and his team at the Massachusetts Institute of Technology have conducted ANT-OAR animal research on mice. Jaenisch favors embryonic stem cell research and initially he declared in his scholarly *Nature* article on the mice experiment that the ANT-OAR technique had pro-

duced embryos. But after Senator Rick Santorum (R-Pa.) proposed the Alternative Pluripotent Stem Cell Therapies Enhancement Act (S. 2754) which would have provided government funding for further ANT-OAR research, Jaenisch changed his phrasing and now carefully claims on his web site that ANT-OAR does not produce “viable” embryos. Since the President’s Council on Bioethics endorsed the ANT-OAR process, along with many influential pro-life ethicists and policy-makers, Sen. Santorum presented the bill believing that it would protect embryonic persons.

Ironically, however, some of the nation’s most ardent proponents of embryonic stem cell research, including Dr. Irving Weissmann at Stanford University and Dr. Alta Charo, an outspoken defender of abortion at the University of Wisconsin, have declared these ANT-OAR altered “biological artifacts” to be embryos.

Furthermore, proponents for the ANT-OAR process have a test to see if the creature is an embryo. They say that if it is an embryo, it will survive in the womb. If the creature cannot survive in the womb, it isn’t an embryo. Such a test is really a slippery slope. What about fetuses who do not develop brains and die before birth or shortly thereafter? Are they not fetuses or human beings because they cannot survive? If it were ethical to genetically engineer an embryo to be defective, would it also be ethical to engineer the embryo so it could not develop a brain, but it could develop good fetal organs? Would it then be ethical to harvest organs from that defective fetus? A clear line should be drawn. No human embryo should be genetically engineered or cloned for any purpose, but if someone does make cloned and genetically-engineered

embryos, they should be given the respect and sanctity due to all human embryos.

A dangerous game

Defining a cloned ANT-OAR defective embryo as a “non-embryo” encourages the creation of other embryos as so-called non-embryos. Sadly, this is already happening. One pro-life senator believes that no cloned embryos are truly human because they were created without the use of male gametes.

This fall, Missourians will vote on a ballot initiative that purports to ban human cloning, but the initiative redefines cloning as the process of implanting “anything other than the product of fertilization of an egg of a human female by a sperm of a human male for the purpose of initiating a pregnancy that could result in the creation of a human fetus, or the birth of a human being.” Under this definition of “cloning,” cloning embryos is actually permitted, if they are to be killed and used for stem cell lines. Under the Missouri initiative, the crime is implanting that embryo in a woman’s womb, but it would allow for any other kind of experiment.

New Jersey already has a law that is even worse, because it allows a cloned embryo to be implanted into a woman’s womb to obtain fetal tissues and it makes a crime of allowing the cloned fetus to be born. Thus New Jersey lawmakers wouldn’t mind the creation of cloned human beings; they just don’t want them to live.

Several other states have bills similar to the New Jersey law before their legislatures. Fortunately, in July President Bush signed Sen. Santorum’s Fetus Farming Prohibition Act (S.

3504), which “prohibits the solicitation or acceptance of tissue from fetuses for research or other purposes.”

We need to slow down and clarify the definition of an embryo in both law and science. People of strong moral convictions should help in this public policy process, not complicate it.

The Alternative Pluripotent Stem Cell Therapies Enhancement Act that would have allowed for the ANT-OAR technique was passed by unanimous consent in the Senate, but it then failed in the House. If it had passed, President Bush would have signed it in good faith because his bioethics council had recommended ANT-OAR. In other words, we can expect that another bill permitting ANT-OAR will be introduced in Congress.

While some lawmakers’ intent is to find an ethical means of producing human embryonic stem cells, these measures fail the ethical test of many groups—including political conservatives and progressives as well as pro-lifers and Christians—because these measures fail the test of clear reasoning and clear language. Therefore, the pro-life community should not allow proponents of this kind of cloned embryo to sidestep federal prohibitions against funding for destructive research by calling these ANT embryos non-embryos or non-organisms.

The egg harvesting problem

If Congress passes a bill to permit ANT-OAR sometime in the future, another ethical iceberg still looms. ANT-OAR, like all cloning, requires women’s eggs. The bioethicists promoting ANT-OAR say they are seeking ethical means to acquire women’s eggs, such as obtaining eggs from cadavers and

hysterectomy donors. ANT-OAR would require large numbers of eggs to be extracted from women, at a significant risk to their health and lives. Moreover, if this experiment were performed with human eggs and human cells, it would be the first sanctioned use of cloning and genetic engineering to redesign a human embryo.

At this time, there is little research on the long-term effects of this genetic engineering and the

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functioning of the resultant embryonic stem cells. Dr. Jaenisch’s team found that the gene deleted to make the defective embryos also stopped intestinal stem cells from developing. And we do not know whether the deleted gene has other necessary functions in the stem cells that did appear to develop normally.

It is a short step from working on “altered,” cloned embryos to working on other cloned embryos.

Intentions are not enough

While the stated goal of ANT-OAR proponents is to generate embryonic stem cells without killing embryos, so far the process appears to compromise bioethics because their solution—genetically engineering and cloning defective embryos—does not pass the test required for ethical production of embryonic stem cells.

What we call things matters. When even the scientists who want to clone these ANT-OAR embryos call them embryos—although Dr. Jaenisch now calls them “non-viable”—then apparently the definition is clear to

all but a small part of the pro-life community that desperately wants to make cloned embryonic stem cells, but whose moral convictions would not allow it if such creatures were called “embryos.” Unfortunately, their confusion is confusing the public and lawmakers.

In our zeal to cure people of various afflictions, I would think that a pro-life scientist would especially want to accurately

define the creatures used in research so that no one is harmed. The right-to-life community, along with some liberal/progressive groups, has long opposed human cloning and human genetic engineering. If the U.S. Congress ever passes ANT-OAR legislation, I hope American Life League and its supporters will join with the International Center for Technology Assessment to stop federal funding for this research. It would be terrible if ANT-OAR proponents ended up redefining the human embryo, accepting human cloning and redesigning the human species by altering the human genome. The danger is real and we must work together to stop it.

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ICTA is a secular organization opposed to ANT-OAR. The theological premises herein are Mr. Hanson’s beliefs.

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