

## "Human Personhood" and Embryonic Stem Cells

Recent excellent contributions by Boomsma<sup>1</sup> and Mannoia<sup>2</sup> discuss multiple positions related to human embryonic stem cell (hES) research. Both mention briefly the basic question about such work; namely, when does the fertilized egg (blastocyst) become human. Many Christians agree that "Humanness" is not a biological trait but spiritual or supernatural (i.e., the presence of an eternal soul). At what point is the embryo endowed with a soul? There are no definitive Scriptures answering this question but there are both scriptural inferences and scientifically acquired information pertaining to it.

Studies of reproductive biology demonstrate that more than 50% of blastocysts are lost through failure to implant in the uterus or due to death or miscarriage after implantation.<sup>3</sup> Since the population of the United States exceeds 250 million and the birth rate approximates 14 births/1000,<sup>4</sup> the number of births per year in the United States approximates 3,500,000. A conservative estimation is that an equal number of blastocysts are lost each year. Are each of these lost blastocysts fully human and will their "souls" be in heaven? If so, then a high proportion of the population of heaven will be embryos (perhaps the highest proportion, particularly when one expands these figures worldwide!). Therefore, from the perspective of God's economy and redemption, it seems highly unlikely that each fertilized egg is endowed with an eternal soul at fertilization.

The question of when the soul is imparted to the human embryo cannot be clarified scientifically. However, there are Scriptures that shed light on this issue. Exodus 21:22, 23 describe a situation in which two men are fighting and injure a pregnant woman so that she has a miscarriage or a premature birth. There are two main positions on the meaning of these verses. In both, the death of the pregnant woman requires the application of the laws of retribution, i.e., giving "life for life, eye for eye, tooth for tooth, etc." The person causing the death of the pregnant woman must pay with his life. The disagreement about these verses relates to the punishment of the person causing the death of the baby. Clearly, at the time of the writing of Exodus, with the lack of medical expertise, almost 100% of miscarriages and premature births would result in death of the fetus or baby. According to many commentaries, the Scriptures direct that the offender for such occurrences must be fined as the judges determine and the laws of retribution would *not* be in effect. Others interpret these verses to say that the laws of retribution apply just as much for the death of the baby as for the death of the mother. A "middle of the road" position might be that the fetus is not considered human from the perspective of the laws of retribution until it at least is able to survive outside the uterus.

Other guidance comes from passages dealing with the punishment for adultery (Gen. 38:24; Lev. 20:10, 11, 12; 21:9; Deut. 22:21, 22, 24). Here the punishment is always death for the woman. Considering the high frequency of such behavior, it is likely that some of these adulterous women were pregnant or that fertilization had occurred prior to their deaths. Thus, the death of the blastocyst appears to have been of no consequence to the law, suggesting that it was not truly human or endowed with an immortal soul.

Of what relevance does the above information have to stem cell research? Clearly, adult stem cell work is very important, is producing amazing medical discoveries, and should be continued since it does not raise the kind of moral questions associated with embryonic stem cell research. Further, it seems appropriate to question whether the use of pre-implantation or *in vitro* fertilized blastocysts violates moral or scriptural guidelines since 50% or more of blastocysts die from natural causes. A further consideration is that in the medical freezers of our country there are thousands of frozen embryos left over from *in vitro* fertilization procedures and this number is increasing every day.

Research utilizing both types of stem cells appears to have tremendous positive health care potential and the above information should be considered in making decisions about such work.

## Notes

<sup>1</sup>R. A. Boomsma, "Embryonic Stem Cells and a Reformed Christian World View," *Perspectives on Science and Christian Faith* 56, no. 1 (2004): 38-48.

<sup>2</sup>K. A. Mannoia, "An Evaluation of Three Religious Perspectives on Stem Cell Research," *Perspectives on Science and Christian Faith* 56, no. 3 (2004): 216-25.

<sup>3</sup>Edmonds, D. Keith, K. S. Lindsay, J. F. Miller, E. Williamson, P. J. Wood, "Early Embryonic Mortality in Women," *Fertility and Sterility* 38, no. 4 (1982): 255-458; and R. G. Edwards, "Recent Scientific and Medical Advances in Assisted Human Conception," *International Journal of Developmental Biology* 41 (1997): 255-62.

<sup>4</sup>*The World Factbook* (Washington, DC: Central Intelligence Agency, 2003).

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## Concordism Lacks Concord with Both Scripture and Jesus

Peter Rüst's letter (*PSCF* 56, no. 3 [2004]: 235-6) contains a few statements which I think need correction. For one, the consensus interpretations of Old Testament scholars across the theological spectrum should not lightly be set aside as a mere appeal to authority. As in any field of knowledge, the opinions of those with the greatest background knowledge, training, and experience ought to be given precedence over the opinions of the less well informed. The private interpretations of concordism are not well informed and have no more right to set aside the consensus interpretations of Old Testament scholars than the private interpretations of creation science have to set aside the consensus interpretations of geologists and other scientists.<sup>1</sup>

Secondly, Rüst says I made a personal communication to him wherein I recommended the commentary by Alexander Rofé, *Introduction to the Composition of the Pentateuch*. This is a misleading statement since Rofé's book is not a commentary, and I recommended it only as a relatively easy-to-read introduction to higher criticism. I do not agree with everything in the book and very rarely