

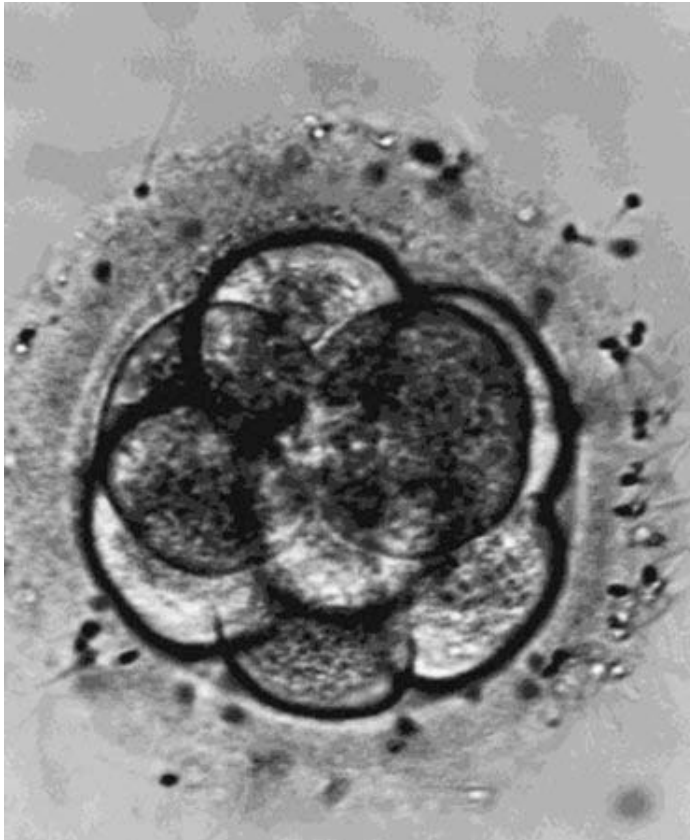
Gilbert, Scott. "Against Science and Scripture." Philadelphia Inquirer 11 November 2011. 14 November 2011 <http://articles.philly.com/2011-11-11/news/30387353_1_human-embryos-personhood-biologists>.

Against science and Scripture

November 11, 2011|By Scott Gilbert

In 2007, the Legionaries of Christ, one of the most conservative Catholic orders, asked me to speak about the question Mississippi voters confronted this week: When does personhood begin? I was surprised at the invitation because, as an embryologist and historian of biology, I had written that there was no scientific consensus on this issue.

The date of the talk, Nov. 15, also happened to be the feast day of Albertus Magnus, the only sainted embryologist and, indeed, one of only 34 people honored as a "Doctor of the Church." A 13th-century founder of the study of natural history and a teacher of St. Thomas Aquinas, Albert argued that ensoulment begins not at conception, but only after several weeks of gestation.



A human embryo with eight cells, three days after fertilization. (Inquirer archive)

So what does contemporary science say about when an embryo becomes a person? It depends on the biologist and the biology.

Some scientists take a genetic approach, saying life begins at fertilization, when one gets one's genome. This idea is also found among antiabortion activists who believe that at that point, as one website put it, "intelligence and personality - the way you look and feel - were already in place in your genetic code. At the moment of conception, you were essentially and uniquely you."

University of Pennsylvania historian Susan Lindee has shown that we are constantly being told that DNA is our soul or essence - for example, "The sauna is in the DNA of every Finn." My favorite DNA-as-soul claim is the tagline for the midsize Hummer: "Same DNA. Smaller chromosomes."

But biologists with embryological leanings take issue with this idea. Identical twins, for instance, have the same DNA, but they certainly have different personalities and, theologically speaking, distinct souls.

Twins can form up to the point of individuation, when animal embryos undergo a process called gastrulation, in which the cells are told what to become. In human embryos, this occurs around 14 days after fertilization. Thus, countries such as Britain and Canada allow research on embryonic stem cells, which predate individuation.

Another group of biologists argues that you're not a person until your brain activity can be recorded as an electroencephalogram, or EEG, around week 28. After all, the loss of that activity represents a loss of personhood to the extent that organs may be removed for transplant. This parallels the earlier Catholic view expressed by Aquinas, who said ensoulment occurs some time after conception, when one has developed the anatomy needed to house the human-specific, rational soul.

Still other biologists contend that only birth itself makes us physically distinct individuals, independent of maternal physiology. The anatomy of our heart, lungs, and blood vessels changes at our first breath.

This, interestingly, is where the Bible claims personhood originates. Genesis 9:6 says that one who murders a man must himself be destroyed. But Exodus 21:22 says a man who causes a woman to miscarry is not to be put to death, but rather should pay a fine. In the Bible, personhood is a birthright.

The advocates of "zygote rights" - who plan to pursue measures in several other states following their Mississippi defeat - are going against both science and Scripture. It is a dangerous thing to equate a fertilized egg with an adult human. It not only makes the zygote like the person; it makes the person like the zygote. As less than half of normal human conceptions make it to term, most zygotes don't become babies. Zygotes can be cheap, and human life never should be.