# Apologetics — Abortion Facts

“Pronuclei merge, within 12 hours. After fertilization, the packets of DNA from male and female — the pronuclei — approach, merge, and the intermingling chromosomes pair and part, as the first mitotic division looms. A new human genome forms. Following that first division, some genes from the new genome are accessed to make proteins, but maternal transcripts still dominate development.”
—— Ricky Lewis, PhD in Genetics.

“The zygote is composed of human DNA and other human molecules, so its nature is undeniably human and not some other species. The new human zygote has a genetic composition that is absolutely unique from itself, different from any other human that has ever existed, including that of its mother (thus disproving the claim that what is involved in abortion is merely "a woman and her body").”
—— Keith L. Moore and T.V.N. Persaud, The Developing Human: Clinically Oriented Embryology (Philadelphia: W.B. Saunders Co., 1998): 77, 350.

“Human development begins at fertilisation when a sperm unites with an oocyte [ovum] to form a single cell zygote. This highly specialised, totipotent cell marks the beginning of each of us as a unique individual.”
—— Keith L. Moore, Persaud, T.V.N. & Torchia, M.G. (2015). The developing human: clinically oriented embryology (10th ed.).

“Human development begins after the union of male and female gametes or germ cells during a process known as fertilization (conception).”
—— Keith L. Moore, Essentials of Human Embryology. (Toronto: B.C. Decker Inc, 1988), 2.

“Zygote. This cell, formed by the union of an ovum and a sperm (Gr. zyg tos, yoked together), represents the beginning of a human being. The common expression 'fertilized ovum' refers to the zygote.”
—— Keith L. Moore, Persaud, T.V.N. Before We Are Born: Essentials of Embryology and Birth Defects. 4th edition. (Philadelphia: W.B. Saunders Company, 1993), 1.

“At the moment of fusion of human sperm and egg, a new entity comes into existence which is distinctly human, alive, and an individual organism - a living, and fully human, being.”
——Judith G. Hall, Twinning, The Lancet, 362 (August 20, 2003): 735-43. See also, National Institutes of Health, Stem Cell Information Glossary, s.v. "Somatic cell nuclear transfer (SCNT)," accessed March 15, 2011.

“To accept the fact that after fertilization has taken place a new human has come into being is no longer a matter of taste or opinion... The human nature of the human being from conception to old age is not a metaphysical contention, it is plain experimental evidence.”
—— Mark Mittelberg, The Questions Christians Hope No One Will Ask (with Answers), 2010.

“Development of the embryo begins at Stage 1 when a sperm fertilizes an oocyte and together they form a zygote.”
—— Marjorie A. England, Life Before Birth. 2nd ed. England: Mosby-Wolfe, 1996, 31.

“The development of a human being begins with fertilization, a process by which two highly specialized cells, the spermatozoon from the male and the oocyte from the female, unite to give rise to a new organism, the zygote.”
—— Jan, Langman, Medical Embryology. 3rd edition. (Baltimore: Williams and Wilkins, 1975), 3.

“Embryo: The developing individual between the union of the germ cells and the completion of the organs which characterize its body when it becomes a separate organism.... At the moment the sperm cell of the human male meets the ovum of the female and the union results in a fertilized ovum (zygote), a new life has begun.... The term embryo covers the several stages of early development from conception to the ninth or tenth week of life.”
—— Douglas Considine, (ed.). Van Nostrand's Scientific Encyclopedia. 5th edition. (New York: Van Nostrand Reinhold Company, 1976), 943.

“The development of a human begins with fertilization, a process by which the spermatozoon from the male and the oocyte from the female unite to give rise to a new organism, the zygote.”
—— Sadler, T.W. Langman's Medical Embryology. 7th edition. (Baltimore: Williams & Wilkins 1995), 3.

“Although life is a continuous process, fertilization is a critical landmark because, under ordinary circumstances, a new,

genetically distinct human organism is thereby formed.... The combination of 23 chromosomes present in each pronucleus results in 46 chromosomes in the zygote. Thus the diploid number is restored and the embryonic genome is formed. The embryo now exists as a genetic unity."
—— O'Rahilly, Ronan and Miller, Fabiola. Human Embryology & Teratology. 2nd edition. (New York: Wiley-Liss, 1996), 8, 29. This textbook lists "pre-embryo" among "discarded and replaced terms" in modern embryology, describing it as "ill-defined and inaccurate" 12.

"Almost all higher animals start their lives from a single cell, the fertilized ovum (zygote)... The time of fertilization represents the starting point in the life history, or ontogeny, of the individual."
—— Bruce M. Carlson, Patten's Foundations of Embryology. 6th edition. (New York: McGraw-Hill, 1996), 3.