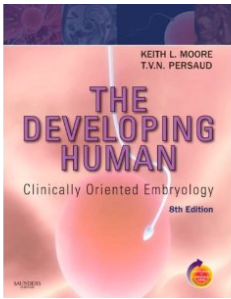


Medical Testimony

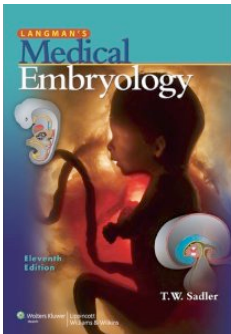
A new human being comes into existence during the process of fertilization.

MODERN TEACHING TEXTS ON EMBRYOLOGY / PRENATAL DEVELOPMENT



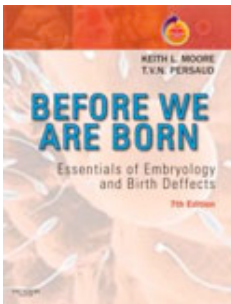
"Human development begins at fertilization, when a male gamete or sperm unites with a female gamete or oocyte to form a single cell, a zygote. This highly specialized, totipotent cell marks the beginning of each of us as a unique individual."

–Keith L. Moore, *The Developing Human: Clinically Oriented Embryology, 8th edition*. Philadelphia, PA: Saunders, 2008. pp. 15.



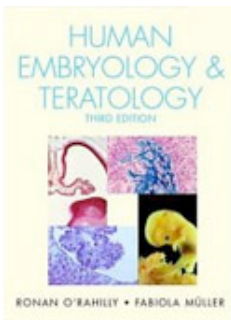
"Development begins with fertilization, the process by which the male gamete, the sperm, and the female gamete, the oocyte, unite to give rise to a zygote."

–T.W. Sadler, *Langman's Medical Embryology, 11th edition*. Philadelphia, PA: Lippincott Williams & Wilkins, 2010. p. 13.



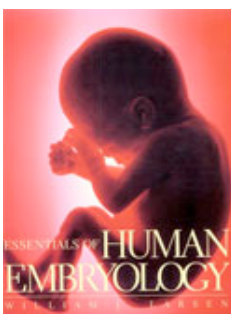
"[The zygote], formed by the union of an oocyte and a sperm, is the beginning of a new human being."

–Keith L. Moore, *Before We Are Born: Essentials of Embryology, 7th edition*. Philadelphia, PA: Saunders, 2008. p. 2.



"Although life is a continuous process, fertilization (which, incidentally, is not a 'moment') is a critical landmark because, under ordinary circumstances, a new genetically distinct human organism is formed when the chromosomes of the male and female pronuclei blend in the oocyte."

–Ronan O'Rahilly and Fabiola Müller, *Human Embryology and Teratology, 3rd edition*. New York: Wiley-Liss, 2001. p. 8.



"Human embryos begin development following the fusion of definitive male and female gametes during fertilization... This moment of zygote formation may be taken as the beginning or zero time point of embryonic development."

–William J. Larsen, *Essentials of Human Embryology*. New York: Churchill Livingstone, 1998. pp. 1, 14.

EXPERT TESTIMONY RELATING TO LIFE'S BEGINNING

"When fertilization is complete, a unique genetic human entity exists."

-C. Christopher Hook, M.D., Oncologist, Mayo Clinic, Director of Ethics Education, Mayo Graduate School of Medicine

"Science has a very simple conception of man; as soon as he has been conceived, a man is a man."

-Jerome Lejeune, M.D., Ph.D.

In 1981, a United States Senate judiciary subcommittee received the following testimony from a collection of medical experts (Subcommittee on Separation of Powers to Senate Judiciary Committee S-158, Report, 97th Congress, 1st Session, 1981):

"It is incorrect to say that biological data cannot be decisive...It is scientifically correct to say that an individual human life begins at conception."

-Professor Micheline Matthews-Roth, Harvard University Medical School

"I have learned from my earliest medical education that human life begins at the time of conception."

-Dr. Alfred M. Bongioanni, Professor of Pediatrics and Obstetrics, University of Pennsylvania

"After fertilization has taken place a new human being has come into being. [It] is no longer a matter of taste or opinion...it is plain experimental evidence. Each individual has a very neat beginning, at conception."

-Dr. Jerome LeJeune, Professor of Genetics, University of Descartes

"By all the criteria of modern molecular biology, life is present from the moment of conception."

-Professor Hymie Gordon, Mayo Clinic

"The beginning of a single human life is from a biological point of view a simple and straightforward matter – the beginning is conception."

-Dr. Watson A. Bowes, University of Colorado Medical School

A 1981 U.S. Senate report states, "Physicians, biologists, and other scientists agree that conception marks the beginning of the life of a human being - a being that is alive and is a member of the human species. There is overwhelming agreement on this point in countless medical, biological, and scientific writings." (Subcommittee on Separation of Powers, *Ibid.*)

The American Medical Association (AMA) declared as far back as 1857 (referenced in the *Roe. vs. Wade* opinion) that "the independent and actual existence of the child before birth, as a living being" is a matter of objective science. They deplored the "popular ignorance...that the foetus is not alive till after the period of quickening."