

The Moment When New Individual Human Life Begins

-- C. Ward Kischer, Ph.D. and Dianne N. Irving, Ph.D.

In 1973 Justice Harry Blackmun wrote the majority opinion in *Roe v. Wade*, and in that opinion, addressing human sexual reproduction, claimed that the beginning of human life could not be determined. He said: “we need not resolve the difficult question of when life begins.” He referred to the “disciplines of medicine, philosophy and theology” as being “unable to arrive at any consensus.” Since when do those academic disciplines determine the science of Human Embryology? This was deliberately deceptive, not to mention devious. One would ordinarily expect our Supreme Court Justices to be erudite, learned and judicious. However, Blackmun’s explanation was none of the above; but, in fact, was ignorant. He did not include the long established objective scientific facts from the world of Human Embryology. Sources going back a hundred years were certainly available to him and his clerks, at that time. In fact, Bradley Patten’s textbook entitled *Human Embryology*, copyrighted 1968, specifies that Obstetricians routinely calculate when the embryo, or fetus, was conceived. This is called: “Estimation of presumptive age” [of the embryo]. The time of conception and time of birth “can be predicted with exactness”.

Blackmun ignored this fact. He even invoked a worthless reference to the stoics of ancient Greece when he wrote: “There has always been strong support for the view that life does not begin until live birth. This was the belief of the Stoics”. The Stoics were a group of ancient Greek philosophers, existing around 300 b.c. Blackmun’s reference was as if to say science had not progressed for more than 2000 years.

Blackmun’s statements have given rise to some ridiculous notions. For example, Eleanor Smeal, President of NOW in 1977, claimed in a public address: “Everybody knows life does not begin until after birth.” Orin Hatch, U.S. Senator from Utah, claims life does not begin until implantation. Even though Hatch was answered with scientific facts in *Human Events*, a weekly publication which is sent to every Senator, he has never retracted his statements. Are Senators beyond learning anything about that of which they know very little or nothing? Some pundits exclude any reference to science at all. Larry King, some years ago, in answer from a caller who asked him when does life begin, said: “We have to have the Supreme Court tell us.”

Bill O’Reilly, host of Fox Cable News program, *The O’Reilly Factor*, constantly refers to the embryo, or fetus, as recently as June 17th, 2009, as “potential human life”. Despite multiple efforts to enlighten him with the facts, he has ignored them. At worst, this is ignorance. At best, this violates his “no spin” claim. Life is never “potential”. O’Reilly puts life on the same plane as a “potential” political preference, or an occupational preference.

Even some human embryologists have equivocated their identification as to when human life begins. Thomas Sadler, in his textbook *Medical Embryology*, says: “the development of a human being begins with fertilization.” Yet, he then states: “the new organism is the zygote”, which does not form until 24 hours after fertilization. Keith Moore and T.V.N. Persaud, in their textbook, *The Developing Human*, acknowledge the same point of beginning development, that

of fertilization; yet, then say: “the zygote **is** the beginning of a new human being”. Such inconsistencies have provided fertile grounds for pols, politicians and pundits.

We have often wondered why more human embryologists are reluctant to join in the polemics of this issue. We are convinced it is because most of them are textbook authors, and grant dependent, and they do not want to appear partisan fearing loss of their book sales or grant monies.

Let’s frame the issue: in human sexual reproduction, when conception [or fertilization] occurs the continuum of life is initiated. There must be a moment – of time – at which the time continuum of life begins. From that moment **all** of development until death, whenever that may occur, becomes a *fait accompli*, that is, under conditions which we understand and have come to embrace as “normal”.

Fertilization is a process, and the new single-cell human embryo begins at the beginning of that process – with **first contact** of the sperm with the oocyte. There are several known events which rapidly occur: calcium release, cortical and subcortical reactions, zonal reaction, cytoplasmic reactions, formation of the pronuclei, syngamy [the coming together of the chromosomes], other changes, and the final formation of the zygote. The single-cell human being throughout the entire process constitutes Stage 1 of the Carnegie Stages [continuously updated since 1942] of early human embryonic development.

[<http://amhm.washingtondc.museum/collections/hdac/stage1.pdf>].

Most of these events during the process of fertilization have been claimed to be the beginning of human life. However, this is disingenuous. The point of initiation, that is, the *moment* of the beginning of the new individual human life, is **first contact** between the plasma membrane of the sperm and the plasma membrane of the oocyte, as documented in Carnegie Stage 1.

Biologically, then, **first contact** is the event from which all else will follow. There is no point beyond that at which development is suspended or held in abeyance. The formation of the zygote cannot be the point of the new individual human life because the zygote would not have formed unless **first contact** had first been made. Therefore, the first cell of human life is the **penetrated oocyte**, which is formed by **first contact** of the oocyte by the sperm. The second cell to be formed is the **ootid**, which contains the male and female pronuclei. The third cell to be formed is the **zygote**, which occurs after syngamy. This is in accord with the Carnegie Stages of Human Embryology.

Very often when young pregnant mothers are shown ultrasounds of their embryo or fetus, their minds change from having an abortion to keeping the pregnancy. But, could their minds be changed if they contemplate a single celled embryo, or, for that matter, an oocyte contacted by the sperm, in their pregnancy? It is doubtful. Nascent life should be respected in its entirety, and not be compartmentalized for political reasons.

Why are these facts of science not acceptable to so many, especially in the various fields of clergy, law, social science, etc.? Blackmun deliberately obscured the science in his Roe opinion using specious reasoning. Worse than that, others are just simply **arrogant** through attempts to minimize, or deconstruct, the importance or significance of human life. For example, Dr. Mary

Hendrix, whose credentials are that of an Anatomist, testified before Senator Harkins [Iowa] Committee in 2001, and said the embryo [the blastocyst]: “is so small it can fit on the tip of a sewing needle.” David Baltimore, President of Cal Tech, in the same year, said in the Wall Street Journal: “to me, a tiny mass of cells that has never been in a uterus is hardly a human being.”

Jonathan Turley, a constitutional lawyer, writing in USA Today, July 18th, 2006, sought to invoke a religious definition of life by referring to the smallness of the embryo as a “holy dot”. The definition of when human life begins does not depend on anything religious. However, many religions depend on scientific facts for their reverence for life.

Recently, President Obama’s new regulatory Czar, Cass Sunstein, publicly asserted that the human embryo is “just a handful of cells”.

These representations of the early human embryo, the early human being, represent the most shallow uses of human intelligence.

The point is: Where has respect for the recognition of human life gone?

What will it take to get the O’Reillys, the Hatches, the Hendrixs, the Baltimores, the Turleys, and the Sunsteins, to recognize the long established objective scientific facts of Human Embryology? These are the people who are refractive to the truth, and they do not bother to consult the basics of scientific truth, which have been and are readily available.

The only conclusion we can draw is that they prefer to insult the collective intelligence of science by elevating political correctness over and above the objective truth. But, sooner or later such political correctness will backfire – on all of us.

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