

Dear Finance Committee,

I am writing to urge you as strongly as possible to oppose SB 798. I know that not everyone on this committee is a Democrat, but the majority of you do affiliate in this way. The Democratic Party claims to be a party of science. It is scientifically undeniable that the life of a new human being begins at conception. We are kidding ourselves when we try to use newspeak such as "reproductive rights" to talk about abortion. We know what is happening. The life of a human being is being extinguished. Below are a list of references that support the undeniable scientific **fact** that a unique human life begins at conception.

"Development of the embryo begins at Stage 1 when a sperm fertilizes an oocyte and together they form a zygote."

[England, Marjorie A. *Life Before Birth*. 2nd ed. England: Mosby-Wolfe, 1996, p.31]

"Human development begins after the union of male and female gametes or germ cells during a process known as *fertilization* (conception).

"Fertilization is a sequence of events that begins with the contact of a *sperm* (spermatozoon) with a *secondary oocyte* (ovum) and ends with the fusion of their *pronuclei* (the haploid nuclei of the sperm and ovum) and the mingling of their chromosomes to form a new cell. This fertilized ovum, known as a *zygote*, is a large diploid cell that is the beginning, or *primordium*, of a human being."

[Moore, Keith L. *Essentials of Human Embryology*. Toronto: B.C. Decker Inc, 1988, p.2]

"Embryo: the developing organism from the time of fertilization until significant differentiation has occurred, when the organism becomes known as a fetus."

[*Cloning Human Beings*. Report and Recommendations of the National Bioethics Advisory Commission. Rockville, MD: GPO, 1997, Appendix-2.]

"Embryo: An organism in the earliest stage of development; in a man, from the time of conception to the end of the second month in the uterus."

[Dox, Ida G. et al. *The Harper Collins Illustrated Medical Dictionary*. New York: Harper Perennial, 1993, p. 146]

"Embryo: The early developing fertilized egg that is growing into another individual of the species. In man the term 'embryo' is usually restricted to the period of development from fertilization until the end of the eighth week of pregnancy."

[Walters, William and Singer, Peter (eds.). *Test-Tube Babies*. Melbourne: Oxford University Press, 1982, p. 160]

"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*."

[Langman, Jan. *Medical Embryology*. 3rd edition. Baltimore: Williams and Wilkins, 1975, p. 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."

[Considine, Douglas (ed.). *Van Nostrand's Scientific Encyclopedia*. 5th edition. New York: Van Nostrand Reinhold Company, 1976, p. 943]

"I would say that among most scientists, the word 'embryo' includes the time from after fertilization..."
[Dr. John Eppig, Senior Staff Scientist, Jackson Laboratory (Bar Harbor, Maine) and Member of the NIH Human Embryo Research Panel -- Panel Transcript, February 2, 1994, p. 31]

"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, p. 3]

"The question came up of what is an embryo, when does an embryo exist, when does it occur. I think, as you know, that in development, life is a continuum.... But I think one of the useful definitions that has come out, especially from Germany, has been the stage at which these two nuclei [from sperm and egg] come together and the membranes between the two break down."
[Jonathan Van Blerkom of University of Colorado, expert witness on human embryology before the NIH Human Embryo Research Panel -- Panel Transcript, February 2, 1994, p. 63]

"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."
[Moore, Keith L. and Persaud, T.V.N. *Before We Are Born: Essentials of Embryology and Birth Defects*. 4th edition. Philadelphia: W.B. Saunders Company, 1993, p. 1]

"The chromosomes of the oocyte and sperm are...respectively enclosed within *female* and *male pronuclei*. These pronuclei fuse with each other to produce the single, diploid, 2N nucleus of the fertilized *zygote*. This moment of zygote formation may be taken as the beginning or zero time point of embryonic development."
[Larsen, William J. *Human Embryology*. 2nd edition. New York: Churchill Livingstone, 1997, p. 17]

"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, pp. 8, 29. This textbook lists "pre-embryo" among "discarded and replaced terms" in modern embryology, describing it as "ill-defined and inaccurate" (p. 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."
[Carlson, Bruce M. *Patten's Foundations of Embryology*. 6th edition. New York: McGraw-Hill, 1996, p. 3]

"[A]nimal biologists use the term *embryo* to describe the single cell stage, the two-cell stage, and all subsequent stages up until a time when recognizable humanlike limbs and facial features begin to appear between six to eight weeks after fertilization....

"[A] number of specialists working in the field of human reproduction have suggested that we stop using the word *embryo* to describe the developing entity that exists for the first two weeks after fertilization. In its place, they proposed the term *pre-embryo*....

"I'll let you in on a secret. The term pre-embryo has been embraced wholeheartedly by IVF practitioners

for reasons that are political, not scientific. The new term is used to provide the illusion that there is something profoundly different between what we nonmedical biologists still call a six-day-old embryo and what we and everyone else call a sixteen-day-old embryo.

"The term pre-embryo is useful in the political arena -- where decisions are made about whether to allow early embryo (now called pre-embryo) experimentation -- as well as in the confines of a doctor's office, where it can be used to allay moral concerns that might be expressed by IVF patients. 'Don't worry,' a doctor might say, 'it's only pre-embryos that we're manipulating or freezing. They won't turn into real human embryos until after we've put them back into your body.'"

[Silver, Lee M. *Remaking Eden: Cloning and Beyond in a Brave New World*. New York: Avon Books, 1997, p. 39]

I would also encourage you to read the scientific paper titled "Biologists' Consensus on 'When Life Begins'" which demonstrated that 95% of biologists agree with the biological view that a human's life begins at conception. This study included over 5,000 biologists of a variety of political views and worldviews. I have submitted a copy of this study with my written testimony.

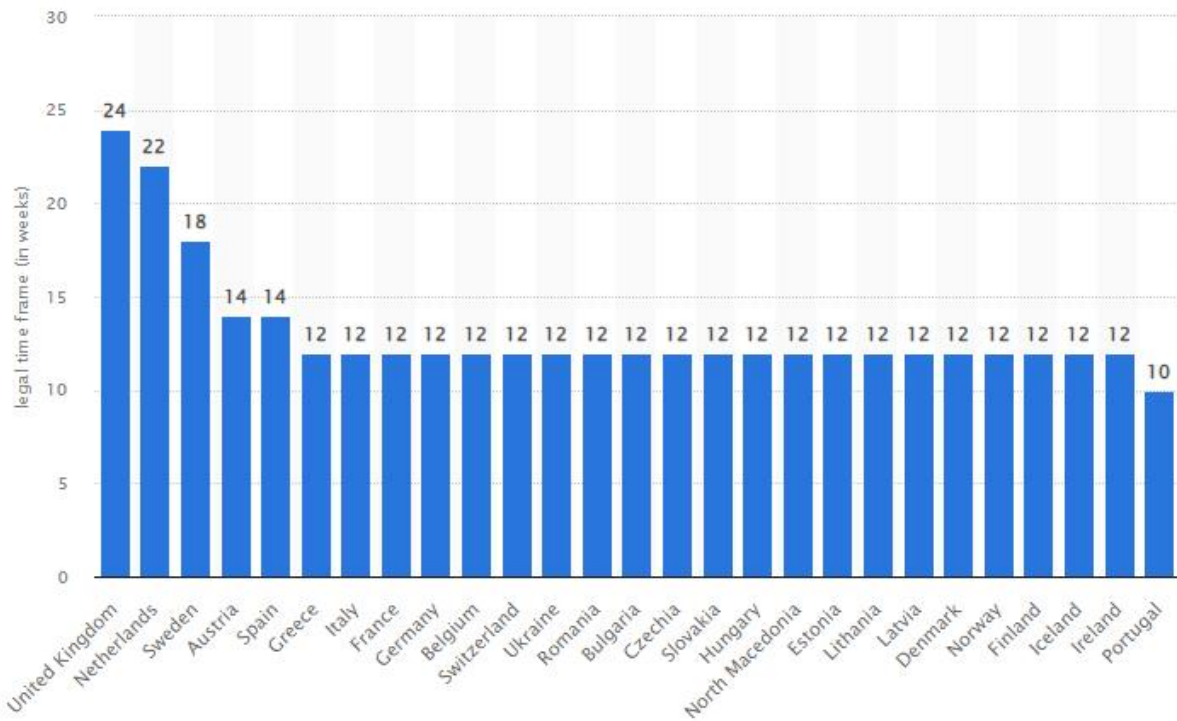
SB 798 attempts to enshrine abortion, which is deceptively never mentioned by name in the bill and referred to as "reproductive freedom" and the "right...to end one's own pregnancy" as a civil right in the Maryland state constitution. However, the bill fails to recognize that there are two individuals being affected in any abortion and one of them is a human being whose life is being terminated. This is not a political question. This is a moral question. If you fail to stand for the unborn, you are responsible for their deaths and you will be morally responsible for their destruction. "Rescue those being led away to death; hold back those staggering toward slaughter. If you say, "But we knew nothing about this, does not he who weighs the heart perceive it? Does not he who guards your life know it? Will he not repay everyone according to what they have done?" (Proverbs 24:11-12). What kind of society are we if we are unwilling to protect the lives of the most vulnerable among us? As a leader with influence and authority, you will be held morally accountable if you fail to stand against this death, destruction, and moral degradation.

Furthermore, as a taxpayer, I am appalled that my tax dollars would go towards funding abortion. I am morally opposed to this and feel that this bill infringes on my own religious liberties and moral conscience by codifying the use of taxpayer dollars to fund all abortions.

Finally, though I would find this bill to be morally reprehensible even if it honestly defined terms, I am further concerned by some of the vague language contained in the bill. The bill says that "every person...has the fundamental right to reproductive liberty, including but not limited to the ability to make and effectuate decisions to prevent, continue, or end one's own pregnancy." The bill does not limit this right to adults. Does a 13-year old have the fundamental right to choose to reproduce with a 25-year old? What if another 13-year old wants to have a hysterectomy? Can they do so without parental consent? Would taxpayers be forced to pay for it? The bill also says that these "reproductive rights" can be denied by a "compelling state interest," but these are also left undefined. Would overpopulation or a climate crisis be a reason for the state to use its interest to force sterilization or abortion against a woman's will? All of these questions remain unanswered by the bill and I believe that the vague nature of the bill leaves open too many opportunities for harmful and destructive decisions and state actions beyond enshrining state funded abortion as a civil right.

Additionally, this bill puts no limit on the timeframe in which abortions can occur. This leaves open the door to legalize abortions up until the time of delivery. This would put Maryland far outside the

accepted limits to abortion in the rest of the western world. The graph below shows the legal timeframe for abortion in European countries in 2020 (See <https://www.statista.com/statistics/1268439/legal-abortion-time-frames-in-europe/>). Twenty-four out of twenty-seven countries capped abortions at 14 weeks or lower. The most liberal limit was the United Kingdom at 24 weeks.



If Maryland allows all-cause abortions up until delivery, we would be a wicked abomination in comparison to the rest of the world. If you allow this to occur, history will look scornfully at your failure to lead with courage and moral clarity. Please choose wisely.

I hope that you take these concerns to heart. I will be watching with great interest to see how this committee responds to this bill. You have the power to stand for the unborn and most vulnerable in our society. Please use it wisely and courageously.

Sincerely,

Justin Kuk

Baltimore City