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Should Legal Precedent Based on Old, Flawed, Scientific Analysis Regarding When Life Begins, Continue to Apply to Parental Disputes Over the Fate of Frozen Embryos, When There Are Now Scientifically Known and Observed Facts Proving Life Begins at Fertilization?

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SHOULD LEGAL PRECEDENT BASED ON OLD, FLAWED, SCIENTIFIC ANALYSIS REGARDING WHEN LIFE BEGINS, CONTINUE TO APPLY TO PARENTAL DISPUTES OVER THE FATE OF FROZEN EMBRYOS, WHEN THERE ARE NOW SCIENTIFICALLY KNOWN AND OBSERVED FACTS PROVING LIFE BEGINS AT FERTILIZATION?

I. INTRODUCTION

The author submits that previous court decisions about the fate of stored embryos are flawed because they are not based on the current observable scientific facts of the behavior and composition of the human embryo, which has been scientifically identified as a human organism and an identifiable member of the same species of those who decide his or her fate.

Scientists now have films of early human embryo development revealing the behavior and composition of the embryo: from the time before the maternal and paternal pronuclei move to the center of the one cell human embryo, known as a zygote; through the time the chromosomes line up on a cleavage spindle to replicate the chromosomes in the next cell; through the development of each subsequent cell in the embryo; and, through the blastocyst stage of development, when the embryo contains the pluripotent cells, on which some scientists wish to do research.¹ At the

¹ Ronan O'Rahilly & Fabiola Muller, *Human Embryology & Teratology*, NEW YORK: WILEY-LISS at 89 (1996). *See also Stem Cell Key Terms*, CAL. INST. FOR REGENERATIVE MED., https://www.cirm.ca.gov/patients/stem-cell-key-terms (last visited May 7, 2018). Pluripotent cells can become any cell in the human body compared to totipotent cells that give rise to placenta cells and human body cells. *Pluripotent: Stem Cell Information – Glossary*, NAT'L INST. OF HEALTH – DEP'T OF HEALTH & HUMAN SERV.,

https://stemcells.nih.gov/glossary.htm#pluripotent (last visited May 14, 2018). Pluripotent cells cannot sustain full organismal development. Totipotent cells by division create the whole organism. *Totipotent: Stem Cell Information – Glossary*, NAT'L INST. OF HEALTH – DEP'T OF HEALTH & HUMAN SERV., https://stemcells.nih.gov/glossary.htm#totipotent (last visited May 14, 2018).

blastocyst stage of development, the inner cell mass, not the placental cells, but the stem cells which make the human body, are more easily seen in the embryo, and there is a difference between mere cells in the embryo and the embryos who are human organisms, human beings, and that biological difference can affect legal determinations that differentiate between human stem cells and human embryos.²

Observable facts of human development can be seen in films of one cell human embryos that were cryopreserved in a period of years before 2002, filmed in 2008, and reported in scientific journals and lectures after 2010.³ Misconceptions in previous court precedent that embryos in storage were mere undifferentiated cells or reproductive tissue, misled subsequent courts to resolve embryo disposition disputes by: (a) incorrectly framing the issue as one of division of marital property; (b) invoking a parents' so-called, but non-existent, "right not to procreate;" (c) ignoring the embryos' own interest in continued life; and (d) discounting the parents' constitutional rights to familial association with, and desire to care for and protect, their procreated child-in-being.

By recognizing that human embryos are human beings, courts are faced with parental disputes over the fate of created embryos to: (a) recognize that in deciding the disposition of human embryos they are determining the custody and fate of human beings, not marital property; (b) reject the so-called "right not to procreate" as inapplicable, because in the case of cryopreserved or vitrified embryos purposeful procreation has already occurred; (c) evaluate contracts that describe embryos as mere property as invalid, under known scientific fact, refuse

² See Sherley v. Sebelius, 689 F.3d 776, 779 (D.C. Cir. 2012), cert. den. U.S. Sup. Ct. No. 12-454 (2013).

³ Connie C. Wong et al., *Non-invasive imaging of human embryos before embryonic genome activation predicts development to the blastocyst stage*, 28 NATURE BIOTECHNOLOGY 1115, 1119-20, fig.6 (2010).

to allow contract law to condemn human life, and only consider actual advance directives concerning the embryos, in light of the embryos' best interests, and include the best interests of the embryos in the calculus leading to a disposition decision; and (d) consider as well the parents' constitutional rights and desire to bear, care for, and protect their unborn child(ren).

This article reports on the scientific facts observed about embryonic development, and particularly human embryonic development, subsequent to the decision of *Roe v. Wade*⁴, wherein the Court stated that it did not know when life began, and the 1992 seminal case of Davis v. Davis,⁵ wherein the Tennessee Supreme Court in *dicta*, reviewed the scientific evidence on the nature of the human embryo and adopted a legal status of "special respect," a status between personhood and property to be given to the human "pre-embryo."⁶ This article discusses the progeny of embryo cases since Davis, and questions whether legal precedent will continue to fail to take judicial notice of the human status of the human embryo.

Among the symbolic sculptures at the exit of the United States Supreme Court is a statue of a turtle which signifies that the law is slow to change. Now, forty-four years after Roe v. Wade, it is the time to re-examine scientific facts of human development based on the current scientific knowledge and allow the turtle of law to move to the point of recognizing that the law should protect human beings equally whether in vitro (in glass) or (in vivo in a uterus). In both cases the law must realize that it is dealing with human beings.

THE SCIENCE

II. SCIENTISTS KNOW THAT HUMAN LIFE BEGINS AT FERTILZATION AND THE NATURE OF THE CREATION.

⁴ 410 U.S. 113, 160 (1973). ⁵ 842 S.W.2d 588 (Tenn. 1992).

⁶ *Id.* at 597.

The question of when human life begins is no longer a mystery, but an observable fact and the data of human development is collected and reported on internet references, such as the Virtual Human Embryo (VHE), a 14,250-page illustrated atlas of human embryology, which describes the twenty-three stages of observations in human development called the Carnegie Stages.⁷ The Carnegie Stages are named for a U.S. Institute which began collecting and classifying embryos based on external or internal morphological features to standardize twenty-three stages of human development.⁸ Through the VHE, databases of film, research data, and explanation of scientific terms and source material are available for each of the Carnegie twenty-three stages of Human Development.

The opinion in *Roe* was made before the use of *in vitro* fertilization procedures, to conceive human individuals such as Louise Brown, born July 25, 1978. In the last forty-four years since *Roe*, scientists have been able to use time lapse photography to observe the development of human embryos.⁹

Renee Reijo Pera, Ph.D., former professor of Obstetrics and Gynecology at Stanford Medical School and former Director of the Center for Human Embryonic Stem Cell Research at Stanford's Institute for Stem Cell Biology and Reproductive Medicine, (who is now at Montana State University as Vice President for Research Creativity and Technology Transfer), studied and

⁷ The Virtual Human Embryo, THE ENDOWMENT FOR HUMAN DEV.,

www.prenatalorigins.org/virtual-human-embryo/ (last accessed Aug. 17, 2017). ⁸ *Id*.

⁹ Connie C. Wong et al., *Non-invasive imaging of human embryos before embryonic genome activation predicts development to the blastocyst stage*, 28 NATURE BIOTECHNOLOGY 1115 (2010).

recorded in 2008, the early development of one-hundred out of two-hundred-forty-two one cell human embryos created prior to 2002.¹⁰

The embryos had been preserved in a frozen state from a one cell or zygote stage of development twelve to eighteen hours after fertilization.¹¹ The scientists filmed the embryos with time-lapse video microscopy until the embryos had developed many cells in a hollow sphere ball shape called a blastocyst as seen in *Blastocyst Day 3-6 Movie*.¹² The study found that cells within the early human embryo developed on a self-determined schedule (first 1, then 2, then 3, then 4, then 5, then 6, etc..) and not in synchrony (not 2, 4, 6, 8, or 8 become 16 at the same time).¹³ Each cell was making autonomous decisions.¹⁴ Embryonic genes to develop the body were active in the embryo at the eighth-cell stage.¹⁵ At the eighth-cell stage, not all cells expressed embryonic genes.¹⁶ These scientific facts support the conclusion that the early embryo cells perform different tasks such as in gene expression, and yet work in an integrated, coordinated organismic program to reveal the body plan and supportive structures. They behave not as a cell aggregate, or mere tissue, but function as a developing human being with the cells working in an organized manner for the good of the organism's growth and development, not simply for the good of the individual cell.

¹⁰ Krista Conger, *Earlier, More Accurate Prediction of Embryo Survival Enabled by Research,* Stanford News and Medicine (Oct. 3, 2010), https://med.stanford.edu/news/all-

news/2010/10/earlier-more-accurate-prediction-of-embryo-survival-enabled-by-research.html. 11 Id.

¹² Blastocyst Day 3-6 Movie, EMBRYOLOGY (May 14, 2018),

https://embryology.med.unsw.edu.au/embryology/index.php/Blastocyst_Day_3-6_Movie. ¹³ Conger, *supra* note 10.

 $^{^{14}}$ *Id*.

¹⁵ *Id*.

¹⁶ Id.

Similarly, other scientists, such as Nobel Prize recipient, Robert Edwards, who helped create the first human baby born from IVF procedures, Louise Brown, published his findings about the differences found in the cells of the early embryo.¹⁷

Two of the cells in a four-cell embryo will often develop into the inner cell mass that has a role to play in body development.¹⁸ Another cell develops into the trophectoderm (the trophectoderm includes the placenta).¹⁹ The fourth cell of the four-cell stage will often develop into the germline, which will also play a role in human development.²⁰ Even at the fourth-cell stage, protein distributions in each cell can be different.²¹ For example, the fourth cell with mostly vegetal cytoplasm has small amounts of proteins leptin and STAT 3, whereas two cells have intermediate amounts and a third cell with mostly animal cytoplasm has large amounts.²² In addition, mRNA expression of proteins such as B-HCG secretions are different in trophectoderm

Scientist, Dr. Maureen Condic, who holds a doctorate in neurobiology from the University of California, Berkeley, and currently teaches human embryology as an Associate Professor of Neurobiology and Anatomy at the University of Utah School of Medicine, confirms, based on accepted scientific criteria, that human life begins at fertilization. Dr. Condic reports scientists determine when a new cell is formed based on two universal criteria, cell composition

- 20 *Id*.
- 21 Id.

¹⁷ Robert G. Edwards & Christopher Hansis, *Initial differentiation of blastomeres in 4-cell human embryos and its significance for early embryogenesis and implantation*, 11 REPRODUCTIVE BIOMEDICINE ONLINE 206 (2005), https://www.rbmojournal.com/article/S1472-6483(10)60960-1/pdf.

¹⁸ *Id.* at 208.

¹⁹ *Id*.

 $^{^{22}}$ Id.

²³ *Id.* at 208-09.

and cell behavior.²⁴ When sperm and egg plasma fuse in less than a second, a single cell is created that has a composition consisting of a gene set or genome that can be distinguished from the gene set of the sperm or the gene set of the egg. The new cell has sperm and egg derived components, but the molecular composition is unique.²⁵ The new cell immediately acts differently than either gamete and prepares to replicate.²⁶ The new cell acts not as a mere human cell, but as an organism undergoing a self-directed process of maturation.²⁷ Dr. Condic has given expert testimony to the same effect: "Thus the conclusion that a human zygote is a human being (i.e. a human organism) is not a matter of religious belief, societal convention or emotional reaction. It is a matter of observable, objective fact."²⁸

Other scientists confirm Dr. Condic's statements. Dr. Renee Reijo Pera, Ph.D., the Vice President of Research and Economic Development at Montana State University and former Professor of Obstetrics and Gynecology and former Director of Stanford Center for Human Pluripotent Stem Cell Research and Education, said in a 2010 lecture that she discovered in her research that what makes us human "wasn't consciousness, and it wasn't love, and it wasn't spirituality, but it just is: on day one, a human sperm and a human egg come together and we have a human embryo."²⁹

The scientific conclusion that human life begins at fertilization arises from scientists'

 ²⁴ Maureen L. Condic, When Does Human Life Begin? The Scientific Evidence And Terminology Revisited, 8 UNIV. OF ST. THOMAS J. L. & PUB. POL'Y 44, 46-47, 76-79 (2013).
²⁵ Id.

 $^{^{26}}$ Id.

²⁷ *Id.* at 48.

²⁸ Planned Parenthood of Indiana, Inc., et .al, v. Commissioner of the Indiana State Department of Health, 794 F. Supp. 2d 892, 916-17 (2011); Affirmed in part and reversed in part by, Remanded by Planned Parenthood of Ind., Inc. v. Comm'r of the Ind. State Department of Health, 699 F.3d 962 (7th Cir. 2012).

²⁹ IdeaCity, *Renee Reijo Pera – Synthetic Human Reproduction*, YOUTUBE (Sep. 1, 2010), https://youtube/mkHhTT5Qqsg.

observation of early embryonic development. Dr. Condic's 2014 paper relied upon over onehundred scientific research papers from 1995 onward describing and analyzing twenty-six separate developmental changes in the early embryo from sperm-egg binding through days four through six.³⁰ Her paper establishes that from the time of fertilization as a one-cell zygote, an embryo is not a mere collection or aggregate of cells, but an internally directed, dynamic organism.

Dr. Condic's paper points to confusing terminology describing the observable facts as causing disagreement over when life begins. According to Dr. Condic, the word "zygote" properly describes the youngest (one-cell) embryo,³¹ yet, the Carnegie Stages of Early Embryonic Development, which employs twenty-three stages to describe human development in the first fifty-six days of life, uses "zygote" to describe the embryo only at the end of stage one (which has phases a, b and c), while using the term "penetrated oocyte" (oocyte is an egg) to refer to the embryo before phase one-c.³² According to Dr. Condic, this "pre-zygote error" (labeling a human embryo a "penetrated oocyte" before it develops into a "zygote") ignores that immediately, *i.e.*, within a quarter of a second after fertilization, the embryo's cell composition and behavior -- the two principal characteristics determining cell classification -- change markedly from those of the sperm and oocyte individually.³³ Dr. Condic explains:

Modern scientific evidence demonstrates that the one-cell human embryo or zygote, is formed at the instant of sperm-egg plasma membrane fusion. The zygote has unique material composition that is distinct from either gamete. It immediately initiates a series of cellular and biochemical events that ultimately generate the cells, tissues and structures of the mature body in an orderly temporal and spatial

http://www.medicalmuseum.mil/index.cfm?p=collections.hdac.anatomy.s01.

³⁰ Condic, *supra* note 24, at 49-67.

³¹ *Id.* at 47.

³² *Id.* at 68-69. *See* O'Rahilly, *supra* note 1, at 89. *See also Developmental Anatomy*, NAT'L MUSEUM OF HEALTH & MED.,

³³ Condic, *supra* note 24, at 44, 47, 68-69, 79.

sequence. The capacity to undergo development is a defining characteristic of a human organism at the beginning of life. The scientific evidence presented here refutes the long standing "pre-zygote error" promoted by the Carnegie stages that the zygote is not formed until syngamy, and therefore, the cell produced by the fusion of the gametes is nothing more than a "penetrated oocyte." Ethical positions that deny the personhood of a human being at all stages of life are logically inconsistent and scientifically unsound, in addition to having significant, negative implications for the ethical treatment of all human persons.³⁴

According to Dr. Condic, a human embryo from the very start is markedly different from other human cells. While human cells sustain their cellular life through complex behaviors, they do not have a higher level of organization transcending their cells.³⁵ A human embryo, even as a single cell, is an organism, directing development first as a single cell, then in groups of interacting cells, tissues and structures, all in a specific spatial and temporal sequence.³⁶ This process continues throughout the organism's life, ending only with its demise. Cryostorage slows down the embryos' growth and metabolism, but they are still living human beings.

Dr. Condic explains the differences between an organism and an aggregate of cells, such as tissues or organs. While an aggregate of cells, "are alive and carry on the activities of cellular life, yet [they] fail to exhibit coordinated interactions directed towards any higher-level organization."³⁷ By contrast, an organism exhibits that "higher level" of organization, acting "in an interdependent and coordinated manner to 'carry on the activities of life."³⁸ An organism is

³⁴ *Id.* at 47-48, 75.

³⁵ *Id.* at 48. HeLa cells are an example of cell aggregates that are not human organisms but can grow and multiply. *See* Sarah Zielinski, *Cracking the Code of the Human Genome/ Henrietta Lack's 'Immortal' Cells*, SMITHSONIAN MAGAZINE (Jan. 22, 2010),

http://www.smithsonianmag.com/science-nature/henrietta-lacks-immortal-cells-6421299/?no-ist. ³⁶ Condic, *supra* note 24, at 48.

³⁷ Maureen L. Condic, *When Does Human Life Begin? A Scientific Perspective*, 1 THE WESTCHESTER INST. FOR ETHICS & THE HUM. PERSON WHITE PAPER 1, 6 (2008).

 $^{^{38}}$ *Id.* Condic notes that the word "organism" is defined by the NIH medical dictionary as "(1) a complex structure of interdependent and subordinate elements whose relations and properties are largely determined by their function in the whole and (2) an individual constituted to carry on the activities of life by means of organs separate in function but mutually dependent: a living being." *Id.* at n.22.

distinguished by the interaction of its parts "in the context of a coordinated whole."³⁹ Cells and organs are parts of an organism; the organism is the whole, directing the parts from the moment of fertilization. Condic elaborates on the organismic functioning of the zygote as follows:

From the moment of sperm-egg fusion, a human zygote acts as a complete whole, with all the parts of the zygote interacting in an orchestrated fashion to generate the structures and relationships required for the zygote to continue developing towards its state....[t]he zygote acts immediately and decisively to initiate a program of development that will, if uninterrupted by accident, disease, or external intervention, proceed seamlessly through formation of the definitive body, birth, childhood, adolescence, maturity, and aging, ending with death. This coordinated behavior is the very hallmark of an organism.⁴⁰

Condic concludes that the zygote, though only a single cell, "is not merely a unique human cell, but a cell with all the properties of a fully complete (human organism).⁴¹ Each of the scientific papers she cites in her 2014 paper (one-hundred-seventeen in all, dating from 1995 to 2013) document the fact that "the embryo does not function as a mere human cell or group of human cells, it functions as an organism; a complete human being at an immature stage of development."⁴²

In contrast to the research reported by Dr. Condic, in prior case law, the human embryos, human beings in development, human lives with full potential to complete life's cycle, are improperly described as pre-embryos, pre-zygotes, cells, tissue, and property. A review of the case law in this paper examines the scientific misunderstanding of the facts regarding behavior and composition of the early developing human embryo in American embryo fate dispute case precedent, compared to the factual observations made by modern science about the nature of the early developing human embryo, and discusses the scientific understanding of the court as to the

³⁹ Id.

⁴⁰ *Id.* at 7.

⁴¹ *Id*.

⁴² Condic, *supra* note 24, at 68.

nature of the embryo in the resulting decision on the fate of the embryos at issue.

This article also addresses much of the legal precedent cited by courts and raised in *amicus* briefs that opine on how to best resolve a dispute between parents about the fate of the embryos they created. The author urges the courts with embryo fate disputes before them to apply the law based on fact and not fiction, nor misconceived science from earlier case law that did not recognize the human embryo as a human organism, and a member of the same species that seeks to terminate or protect his or her future.

THE PRECEDENT

III. THE U.S. SUPREME COURT IN *ROE v. WADE* DECLINED TO ACKNOWLEDGE WHEN HUMAN LIFE BEGAN AND INCORRECTLY CHARACTERIZED THE STATE INTEREST AS AN INTEREST IN POTENTIAL HUMAN LIFE.

In Roe v. Wade, the U.S. Supreme Court said:

We need not resolve the difficult question of when life begins. When those trained in the respective disciplines of medicine, philosophy, and theology are unable to arrive at any consensus, the judiciary, *at this point in the development of man's knowledge*, is not in a position to speculate as to the answer.⁴³

Forty-three years later, scientists have determined with confidence the point at which a human

life begins, and, thus, have overcome the uncertainty confessed by the Roe court concerning "the

difficult question of when life begins."44 Once procreation has occurred and human life has

begun, the rights and interests at issue can no longer be framed as procreative or reproductive

interests of the parents. The rights and interests of the parents, the procreated human embryos,

and government's interest in protecting or experimenting on human life, must all be identified and

weighed on the scales of justice.

Roe, in its 1973 opinion, also, reported "new embryological data that purport to indicate

⁴³ *Roe*, 410 U.S. at 160.

⁴⁴ *Id.* at 159.

that conception is a 'process' over time rather than an event³⁴⁵ For the reasons discussed above and below, current human embryology establishes that indeed while human development is a process, lasting through the prenatal and postnatal life, it begins with a particular factually observable event: fertilization. It is time for courts to recognize the facts that: (1) a new human life is created at sperm-oocyte binding; (2) that the parents who contribute their sperm or oocyte for the purpose of fertilization exercise their right to procreate at fertilization; (3) a zygote, a new human being can be individually identified apart from any other human beings; and, (4) that the newly created human being has full potential to complete the life cycle and direct his or her own development until he or she dies.

IV. A CHRONOLOGICAL HISTORY OF AMERICAN LEGAL PRECEDENT IN ANALYZING THE FACTUAL EVIDENCE PRESENTED TO COURTS REGARDING WHEN PROCREATION OCCURS, THE NATURE OF THE EMBRYO, AND THE MISUNDERSTANDING OF THE SCIENTIFIC FACTS IN PRIOR CASES INVOLVING DISPUTES OVER WHO HAS THE AUTHORITY TO DECIDE EMBRYONIC FATE.

A. IN 1978, A JURY CORRECTLY FOUND VALUE IN THE LOSS OF CONTENTS OF A VIAL CONTAINING EGGS AND SPERM THAT WERE DELIBERTLY DESTROYED AND THAT SUCH DESTRUCTION CAUSED THE MOTHER WHO SOUGHT PARENTHOOD EMOTIONAL DISTRESS.

A married couple seeking infertility treatment at a university facility in New York had

provided eggs and sperm to be placed by health care providers in a vial in hopes of fertilization.⁴⁶

An informed consent was signed for the sperm and egg to combine *in-vitro*, or fertilization in

glass, with the intent of an operation to place the embryo in the natural mother with no guarantee

of pregnancy.⁴⁷ A doctor at the university facility, believing the acts of placing eggs and sperm

⁴⁵ *Id.* at 160.

⁴⁶ Del Zio v. Presbyterian Hospital in New York, No. 74 Civ. 3588 (CES), 1978 U.S. Dist. LEXIS 14450 (S.D.N.Y. 1978).

⁴⁷ Robin Marantz Henig, '*Pandora's Baby*, 'THE NEW YORK TIMES MAGAZINE (Mar. 28, 2004), https://www.nytimes.com/2004/03/28/books/chapters/pandoras-baby.html?_r=1.

in a vial to create a human being was unethical, removed the stopper from the vial, and, thus, destroyed the "experiment."⁴⁸ The same week the case was tried, the first test tube baby was born in England.⁴⁹

At trial, the mother received a \$50,000.00 verdict for emotional distress for her claim of physical and emotional damages and the father received \$3.00 for loss of consortium after the destruction of their fertilized egg.⁵⁰ At trial the jury rejected a property claim for the parents' interest in the embryo.⁵¹

This case is an example of showing destruction of life, even before it was placed in the womb, was recognized to have caused damage to a mother, and would not be the type of damage that would be expected had mere cells or tissue been destroyed. Loss of the created life, without even guarantee of birth, can profoundly affect the parent when that life is taken away.

B. IN VIRGINIA, AN IVF CLINIC WANTED TO KEEP CONTROL OF THE EMBRYOS, BUT THE COURT FOUND PROGENITOR RIGHTS PREVAILED OVER CLINIC RIGHTS IN *YORK v. JONES*.

The next reported case on who had rights to stored embryos, analyzed whether the clinic, the Jones Institute, or the parents, York, had rights to the created "human pre-zygotes" that had been created and stored at the Jones Institute pursuant to a cryopreservation agreement drafted by the clinic.⁵² The agreement explained that cryopreserving the embryos would reduce the risk of multiple births while "creating additional opportunities for initiation of a pregnancy with the

https://www.nytimes.com/2003/02/16/nyregion/dr-l-b-shettles-93-pioneer-in-human-fertility.html.

⁴⁸ Robin Marantz Henig, *The Lives They Lived; Second Best*, THE NEW YORK TIMES MAGAZINE (Dec. 28, 2003), https://www.nytimes.com/2003/12/28/magazine/the-lives-they-lived-second-best.html.

⁴⁹ *Id*.

⁵⁰ Del Zio, supra note 46. See also Stuart Lavietes, Dr. L. B. Shettles, 93, Pioneer in Human Fertility, THE NEW YORK TIMES MAGAZINE (Feb. 16, 2003),

⁵¹ Del Zio, supra note 46.

⁵² York v. Jones, 717 F. Supp. 421 (E.D. Va. 1989).

transfer of concepti developed from thawed, frozen, pre-zygotes."⁵³ The fact the embryos were labeled "human pre-zygotes" implies that the embryos were at a one cell developmental stage before the maternal and paternal pro-nuclei moved to the center of the cell, and the chromosomes had lined up at the center of the cell. The issue of whether the embryos were person or property was not challenged and the agreement indicated in a divorce proceeding ownership would be determined in a property settlement and released by court order.⁵⁴ The court noted the agreement was consistent with the American Fertility Society (AFS) in their ethical statement on *in-vitro* fertilization, claiming gametes and concepti are property of the donors.⁵⁵

The progenitors/parents wanted the embryos shipped in a dry freezer to an out of state clinic, where the parents planned to have the embryos undergo implantation at a later date.⁵⁶ The court examined the clinic consent form and noted while it gave the parents decision-making authority over the embryos, the form did not address whether the embryos could be taken from the clinic. Since the form did not address that issue, then the parties were not limited by the three options that they were to implement in the event they did not seek to have the embryos transferred in hopes of a pregnancy initiated at the Jones Institute.⁵⁷ The court held that the clinic was essentially holding the embryos as a bailment and favored progenitor rights over clinic rights and clinic forms, albeit by a property contract analysis based on a breach of contract claim filed by the progenitors.⁵⁸

⁵³ *Id.* at 424.

⁵⁴ Id.

⁵⁵ *Id.* Note later the AFS would change their position from referring the embryo as property to an entity deserving "special respect" more than any other human tissue, citing n. 53 *Fertility and Sterility* at 34S-35S (1990), referenced in *Davis*, 842 S.W.2d at 596-97.

⁵⁶ *York v. Jones*, 717 F. Supp. at 424.

⁵⁷ *Id.* at 427.

⁵⁸ Id.

This case is an example of wanting to promote a preference for parents and not clinics to have the ultimate authority over the life they have created. While this case failed to recognize or analyze the true nature of the embryo, it accepted the clinic definition of the embryo as property. Later case law precedent would uphold clinic forms allowing a clinic to control the embryos fate to prevail over parental rights.

C. THE SEMINAL CASE OF *DAVIS v. DAVIS* EXAMINED THE SCIENTIFIC EVIDENCE OF WHEN HUMAN LIFE BEGINS IN *DICTA*. AT THE TENNESSEE SUPREME COURT LEVEL, AFTER REJECTING THE TRIAL COURT FINDING THAT HUMAN EMBRYOS ARE HUMAN BEINGS, THE COURT RULED THAT IF THERE IS NO CONTRACT, THEN A RIGHT TO PROCREATE SHOULD BE BALANCED AGAINST A RIGHT NOT TO PROCREATE, IN RESOLVING DISPUTES ON THE DISPOSITION OF STORED EMBRYOS, REFERENCING A LAW REVIEW ARTICLE BY JOHN A. ROBERTSON, WHICH ARGUED THAT THE EMBRYO WAS UNDIFFERENTIATED CELLS THAT WOULD FIRST BECOME PLACENTA AND CORD.

Only one embryo custody dispute has been decided in which the trial court took evidence on the issue of whether a human embryo is a human being and deserving of legal protection.⁵⁹ The trial court in *Davis* found that, on the evidence considered, the human embryos before it were indeed human beings.⁶⁰ The appellate court reversed, and the Tennessee Supreme Court decided that the embryos occupied an intermediate status between person and property.⁶¹ But, its decision was made without the benefit of any advocacy for the embryos' status as human beings, as, by that time, the parties had abandoned any argument that the embryos were human beings.⁶² Therefore, the issue of the embryos' status as human beings was not properly before the Court and its opinion regarding the embryo's legal status was *dicta*. This legal precedent needs to be

⁵⁹ Davis, 842 S.W.2d at 597, n.10-11 cert. den. Stowe v. Davis, 507 U.S. 911 (1993).

⁶⁰ *Id.* at 589.

⁶¹ *Id*.

⁶² *Id.* at 588.

reconsidered in light of current scientific research, which, ironically, fully supports the expert testimony offered in the trial court for the humanity of the human embryo.

The Tennessee Supreme Court in *dicta* claimed a "pre-embryo. . . is due greater respect than any other human *tissue* [emphasis added] because of its potential to become a person and because of its symbolic meaning for many people."⁶³ Nevertheless, "it should not be treated as a person, because it has not yet developed the features of personhood, is not yet established developmentally as individual, and may never realize its biologic potential."⁶⁴

In so doing, the Tennessee Supreme Court adopted the rationale of the American Fertility Society in 1990 and granted a legal status of "*special respect*" for a human embryo in Tennessee and did not recognize the human embryo as an already created being.⁶⁵ The Tennessee Supreme Court opined that the special respect status left the decision-making power as to the embryos' fate with the progenitors, but if they could not agree then the constitutional rights of the parties to procreate or not procreate had to be balanced.⁶⁶

This lack of recognition that the human embryos were already biologically created human organisms has led to an erroneous precedent that embryos fate can be decided by contracts drafted by corporations and a claim that there is a right to procreate to be balanced against the right not to procreate, when the scientific fact is that human embryos are human beings and have already been procreated. In effect, what is balanced under this approach is a parent's right to terminate innocent unborn life living in a facility and not in a human womb, because the parent wants to escape the duties and responsibilities of parenthood for the created life, versus the

⁶³ *Id.* at 596.

⁶⁴ Id.

⁶⁵ Id.

⁶⁶ *Id.* at 603.

parent's right to provide for the care for the innocent unborn life of their son or daughter to grow and develop and to complete the cycle of life.⁶⁷ A re-examination of the misconceived science understood in 1990 by the Tennessee Supreme Court is warranted, as the misconception that stored embryos are mere cells or tissue still exists.⁶⁸

In rejecting Dr. LeJuene's testimony that the embryo was a human being, the Tennessee Supreme Court in *Davis*⁶⁹ gave more weight to the testimony of Dr. Robertson, who served on the American Fertility Society, Dr. King, who was the parents' IVF physician, and the post-trial American Fertility Society 1990s statement describing an embryo's first cellular differentiation relating to interaction with the mother at the time of implantation.⁷⁰ The analysis was really *dicta*, because, not only was there no advocacy in the briefs on personhood at the Tennessee Supreme Court, it was *dicta* because the Court commented that the distinction was not dispositive of the issues before it, but relevant as to whether research was permitted on the embryo.⁷¹

The Tennessee Supreme Court's opinion referenced Robertson's article,⁷² which was written subsequent to the trial court decision in *Davis*, and stated that "[c]learly the fertilized egg, embryo and fetus are human and are living."⁷³ Robertson claimed the question is whether embryos merit the moral protection accorded to clearly defined persons.⁷⁴ Robertson believed

⁷³ Robertson, *supra* note 72, at 444, n.24.

⁶⁷ Stanley v. Illinois, 405 U.S. 645, 651 (1972).

⁶⁸ *McQueen v. Gadberry*, 507 S.W.3d 127, n.4 (Mo. Ct. App. 2016); (referring to "pre-embryos as human tissue and genetic material and claiming the embryo proper or the actual embryo did not exist until implantation).

⁶⁹ *Davis*, 842 S.W.2d at 593-94.

⁷⁰ *Id*.

⁷¹ *Id.* at n.15.

⁷² John A. Robertson, *In the Beginning: The Legal Status of Embryos*, 76 VA. L. REV. 437 (1990). *See also Davis*, 842 S.W.2d at 597.

⁷⁴ Id.

there was a problem in determining the legal status of embryos in reconciling respect for human life and personhood with competing concerns of bodily integrity and procreative choice.⁷⁵ Robertson suggested when there was no agreement to govern the embryos fate that "[a]s long as the party wishing to reproduce could create other embryos, the desire to avoid biologic offspring should take priority over the desire to reproduce with the embryos in question."⁷⁶ This logic did not recognize that reproduction already has occurred and lacked respect for the dignity of the created human being.

Current reported scientific factual observations do not support Robertson's 1990 claim in the law review relied on by the Tennessee Supreme Court, that the embryo was not a created being, and Robertson's criticism that the trial judge in *Davis* ignored "the biological reality that the early embryos, while genetically unique, consist of a few undifferentiated cells that will first form the placenta before the embryo itself develops."⁷⁷ Robertson in 1990 did not acknowledge each stored embryo had the body part plan and components that were already developing in an orderly and temporal sequence in accord with the instructions written in the DNA of each human embryo, and each was developing uniquely from the other stored embryos in accordance with his or her own DNA instructions. Robertson recommended "that the party wishing to avoid reproduction should prevail whenever the other party has a reasonable chance of becoming a

⁷⁵ *Id.* at 437.

⁷⁶ *Id.* at 480.

⁷⁷ *Id.* at 482-83. *See also* Lori Andrews, *The Legal Status of the Embryos*, 32 LOYOLA L. REV. 357, 363-64 (1986). Andrews claimed "[m]oreover since embryos are **undifferentiated cell masses [emphasis added by the author]** and do not resemble people, it is unlikely that actions toward *in vitro* embryos will shape our actions towards new born children, comatose people, elderly patients or other persons." Andrews also reported that John Robertson's viewpoint of a human embryo was "a biological program that instructs a woman's body." *Id.* at n.2. The *Davis* case also referenced Andrews, in a discussion about resolution along with other disposition models in legal journals at the time. *Davis*, 842 S.W.2d at n.5.

parent by other means.^{**78} The Tennessee Supreme Court's decision essentially adopted Robertson's description of "biological reality" and his recommendation of a presumption in favor of a parental decision to terminate what he believed were "undifferentiated cells that will first form the placenta," not recognizing that the cells were live human organisms with potential to complete their life cycle.⁷⁹ In 1990, Robertson did not acknowledge that the role of the gamete providers was biologically completed in contributing to the makeup of the new created organism, and the new human organism was viable when stored and would remain viable until death, so the procreation was complete. The continued growth and development of the embryo would depend on shelter in a womb prenatally and nourishment, just as all humans need appropriate shelter and nourishment even during mature age, just as an astronaut in space or a serviceman in a submarine.⁸⁰

As discussed, Robertson's and others description of early embryos as "consist[ing] of a few undifferentiated cells," is scientifically incorrect as the embryo is acting as a human organism. Current scientific observations prove the opposite. Every cell in the embryo can have different behaviors working towards revealing different parts of the body plan as the human organism grows and develops.⁸¹

The *Davis* court's chief rationale and basis of the court opinion for denying the humanity of the early embryo was the alleged "undifferentiated" nature in that the opinion stated:

Thus the first cellular differentiation of the new generation relates to the

⁷⁸ Robertson, *supra* note 72, at 476. *See also* John A. Robertson, *Prior Agreements for Disposition of Frozen Embryos*, 51 OHIO ST. L. J. 407, 409, 480, n.107.

⁷⁹ Robertson, *supra* note 72, at 482.

⁸⁰ Kelly J. Hollowell, *Defining a Person Under the Fourteenth Amendment: A Constitutionally and Scientifically Based Analysis*, 14 REGENT U. L. REV. 67, 85 (2001), http://www.regent.edu/acad/schlaw/student_life/studentorgs/lawreview/docs/issues/v14n1/Vol.% 2014,%20No.%201,%203%20Hollowell.pdf.

⁸¹ Condic, *supra* note 24, at 58. *See also* Edwards, *supra* note 17, at 207.

physiological interaction with the mother, rather than to the establishment of the embryo itself. *It is for this reason that it is appropriate to refer to the developing entity up to this point as a preembryo rather than an embryo*...⁸²

Since the basis of denying the embryos humanity was based on the premise that the cells in the

embryo were not differentiating and the body parts of the embryo were not developing prior to

implantation in a womb, and that premise is contradicted by current scientific observation,⁸³ the

courts should no longer accept or rely on Davis or its progeny to privilege a parent's desire to

terminate embryonic life over the opposing parent's desire to preserve it, or for denying an

embryo's rights as a full human being.⁸⁴ Robertson's lack of understanding in 1990 of what a

⁸² *Davis*, 842 S.W.2d at 594; (citing the June 1990 American Fertility Society report on Ethical Considerations in the New Technologies).

⁸³ Hollowell, *supra* note 80, at 90-92; (discussing how cloning is proof the development of the embryo is separate from the mother who provides a nurturing environment).

⁸⁴ The school of thought of not giving a "moral" status of personhood to a human organism because "it has not yet developed the features of personhood, it is not yet established as developmental individual, and it may never reach its biological potential" was the position of the American Fertility Society in 1990, even though it had members that did not accept this school of thought. Fertility and Sterility, *Chapter 19: Status of the Conceptus*, 81 AM. FERTILITY SOC'Y 47 (May 2004), https://www.fertstert.org/article/S0015-0282(04)00294-8/pdf?code=fns-site. The report highlighted that the moral and legal status of the "developing human conceptus" was key to accepting many procedures such as selection for transfer and discard of embryos with or without preimplantation genetic diagnosis, experimentation, surrogacy and cryopreservation. The report also stated:

Not the least of the problem is that the moral and legal status may differ from each other in the minds of some individuals. For example, in the United States, according to the Supreme Court decision of *Roe v. Wade*, personhood (i.e., protection by society) begins only with viability, but **considerable** (emphasis added by author) opinion holds that pre-embryos should not be used for experimentation because they are persons, or at least they require the respect of an individual who is in being (i.e., a human being). *Id*.

Further, it reported that from the conducted survey, it did not intend the moral status to be related to research, but the replies to the survey must be evaluated with that connection. Further, "[i]t needs to be noted that the time limit for experimentation may or may not correspond to the acquisition for personhood." *Id.* Also, "[a]bout one half of the respondents indicated in their reply to the questionnaire that personhood was considered to begin with fertilization." *Id.* In addition, "it was difficult to know whether the survey respondents were stating religious tradition or legislative position." *Id.*

human organism is and how cells in the early embryo are communicating and directing the behavior of the progeny cells to reveal all the cells in the body plan until they cease to exist prenatally or postnatally, has been a basis for embryos to be treated as cells or tissues and therefore, property subjects in dispute, instead of the frank presentation to decision makers, such as courts, that *in-vitro* embryos like *in-vivo* embryos are created human beings, not mere reproductive tissue, and human beings are the subjects at issue in embryo fate disputes.

When balancing party rights, Robertson acknowledges that the pleasures of parenthood will be deeper and more intense than the discomfort of unwanted biological offspring, but Robertson would only grant this pleasure to the parent that cannot "reproduce."⁸⁵ The problem in the Robertson proposed balancing test of the right to procreate or not procreate or reproduce or not reproduce, is that it fails to recognize that procreation has occurred and fails to afford the dignity and respect due to protect the human rights of the already created human beings, with DNA different from progenitor and sibling embryos.

Similarly, the American Society for Reproductive Medicine (ASRM) recognizes diversity in its membership on whether an embryo has a "moral" status of a person. Ethics Committee of the American Society for Reproductive Medicine, *Donating embryos for human embryonic stem cell (Hesc) research: A Committee Opinion*, 100 FERTILITY & STERILITY 935 (2013), https://www.asrm.org/news-and-publications/ethics-committee-documents/. ASRM recognized diversity in viewpoints among its members and reported

^{...}the embryo used in research, which ranges in development from a single cell to hundreds cells has no nervous system and has a limited chance of developing to birth. The possibility of twinning or regression to a nonviable entity up to the 14^{th} day after fertilization is consistent with the notion that the embryo lacks individuality. *Id*.

The ASRM Ethics Committee regards the embryo as a "potential" human being worthy of "special respect." *Id.* Further, the committee claims, for good reason, the human embryo can be subject to experimental research before the primitive streak appears around day fourteen of development. Note that these international and national professional societies statement published a "moral" value, that not all of their own members share, and is not a reflection on the objective observable biologic fact that a human embryo is a developing human being. ⁸⁵ Robertson, *supra* note 72, at 481.

The Robertson approach promotes a culture having an affirmative right to terminate innocent wanted human life hidden under the guise of a right not to procreate, while ignoring that procreation has already occurred. According to Robertson, there is no loss of a right to procreate when any future children can be created, so if one weighs a right to procreate against a right not to procreate and one can still procreate, then the one opposing procreation always wins the balancing contest.⁸⁶

At the *Davis* trial, world-renowned human geneticist, Dr. Jerome LeJeune, in his expert testimony equated conception with fertilization, saying "[e]ach human has a unique beginning which occurs at the moment of conception."⁸⁷ He refuted the idea that there is a "subclass of the embryo to be called a preembryo," stating "there is nothing before the embryo; before an embryo there is only a sperm and an egg When the first cell exists all the 'tricks of the trade' to build itself into an individual already exists."⁸⁸

The trial court found Dr. LeJeune's testimony to be clear and unrebutted, and concluded,

⁸⁶ *Id.* at 480.

⁸⁷ Davis v. Davis, No. E-14496, 1989 Tenn. App. LEXIS 641, at *14 (Ct. App. Sep. 21, 1989). Dr. LeJeune's use of "conception" for fertilization or sperm-egg fusion reflected its common meaning at the time. Dr. LeJeune did not mean "completion of implantation," which is the definition of "conception." Am. C. of Obstetricians & Gynecologists, *Terminology Bulletin: Terms Used in Reference to the Fetus,* No. 1. PHILADELPHIA: DAVIS (Sept. 1965). The change in definition was made for other than scientific reasons. *See* Richard Sosnowski, *The Pursuit of Excellence: Have We Apprehended and Comprehended It?* 150 AM. J. OF OBSTETRICS & GYNECOLOGY 115, 117 (1984) (citing "I do not deem it excellent to play semantic gymnastics in a profession ... It is equally troublesome to me that, with no scientific evidence to validate the change, the definition of a fertilized ovum. It appears to me that the only reason for this was the dilemma produced by the possibility that the intrauterine device might function as an abortifacient.").

⁸⁸ *Davis, supra* note 87, at *14-15. Dr. LeJeune testified that "upon fertilization, the entire constitution of the man [human male and human female] is clearly, unequivocally spelled-out, including arms, legs, nervous systems and the like; that upon inspection via DNA manipulation, one can see the life codes for each of these otherwise unobservable elements of the unique individual." *Id.* at *27.

in agreement with Dr. LeJeune, "that the cells of human embryos are comprised of differentiated cells, unique in character and specialized to the highest degree of distinction."⁸⁹ Based on Dr. LeJeune's testimony, the trial court concluded that the "life codes for each special, unique individual are resident at conception and animate the new person very soon after fertilization occurs."⁹⁰ As discussed above, scientific research conducted since Dr. LeJeune's 1989 testimony fully validates it. Observable scientific facts reveal that an individual identifiable human life separate from the progenitors begins at fertilization.

The Tennessee Supreme Court's 1992 decision, however, rejected Dr. LeJeune's testimony and embraced the opinions of the three other trial experts including Professor John Robertson. Those opinions were based on statements of the Ethics Committee of the American Fertility Society (AFS) issued in 1986.⁹¹ Ironically, the Tennessee Supreme Court rejected Dr. LeJeune's opinion, that no such thing as a pre-embryo exists, as unscientific, concluding that he exhibited "profound confusion between science and religion,"⁹² but then approvingly cited the AFS *ethics* statements in support of its own decision.⁹³

⁸⁹ Id.

⁹⁰ Id.

⁹¹ The trial court noted that the three experts opposing Dr. LeJeune "rely at least to some degree on the report of the Ethics Committee of the American Fertility Society in forming the basis of their opinions." *Id.* at *16. Dr. Charles Alex Shivers testified that "[a]t the time of fertilization, genetic controls are 'locked in forever' and control who the pre-embryo will later be, but '... as far as we know ... to my knowledge. . . there is no way to distinguish the cells; that they are undifferentiated" *Id.* at *14. Professor Robertson also testified in the *Davis* trial that "[a] human embryo is an entity composed of a group of undifferentiated cells which have no organs or nervous system. That at about 10-14 days, the pre-embryo attaches itself to the uterine wall, develops its primitive streak and life then commences." *Id.* Dr. King, the treating IVF physician, testified that at about 14 days the group of embryonic cells begins to differentiate in a process that permits the eventual development of the different body parts which will become an individual. *Id.* at *13.

⁹² *Davis*, 842 S.W.2d at 593.

⁹³ The Tennessee Supreme Court quoted from "The [AF] Society's June 1990 report on Ethical Considerations of the New Reproductive Technologies," published in the official Journal of the

Each of the bases cited by the Tennessee Supreme Court in support of its ruling -- that there is something called a "pre-embryo" that is not a human being but an "entity deserving special respect" from days one to fourteen, and an "embryo" only at day fourteen and thereafter⁹⁴ -- is demonstrably wrong in view of subsequent research regarding human embryonic development (as discussed supra and infra).

The very term "pre-embryo" has been discredited. The International Federation of Associations of Anatomists, which is charged with defining phases of human embryonic development to appear in embryology textbooks, recommends against any scientific use of the term.⁹⁵ Embryologists confirm that it is scientifically inaccurate and ill-defined.⁹⁶ That is not

American Fertility Society. Davis, 842 S.W.2d. at 593-94, 596, n.14. Davis references Chapter 8, "The biologic characteristics of the preembryo." Id. at 593-594, 31S-33S. Davis also references Chapter 9, "The moral and legal status of the pre-embryo." Id. at 596, 34S-36S. These reports are a later edition of the AFS Ethics Statements quoted by the Davis trial court titled "Ethical Considerations of the New Reproductive Technologies," which appeared as in the Journal of the American Fertility Society. Id. at 593. Of significance today the American Society for Reproductive Medicine (ASRM) has a position statement against "personhood" of the embryo, making allegations about the impact of recognizing the embryo as a person on the practice medicine and instead describes the embryo as mere "fertilized reproductive tissues." ASRM Position Statement on Personhood Measures, AM. SOC'Y FOR REPROD. MED. https://www.asrm.org/ASRM_Position_Statement_on_Personhood_Measures/.

⁹⁴ Davis, 842 S.W.2d at 593-94, 596-97.

⁹⁵ See TE PrePublication, UNIFR at 10, n.32 (Apr. 21, 2010),

http://www.unifr.ch/ifaa/Public/EntryPage/ViewTE/TEe02.html; ("The foreshortened term 'preembryo', which has been used in legal and clinical contexts, is not recommended."). ⁹⁶ O'Rahilly, *supra* note 1, at 88. O'Rahilly explained why he did not use the term "pre-embryo" in his medical textbook:

The term "pre-embryo" is not used here for the following reasons: (1) it is ill-defined because it is said to end with the appearance of the primitive streak or to include neurulation; (2) it is inaccurate because purely embryonic cells can already be distinguished after a few days, as can also the embryonic (not pre-embryonic!) disc; (3) it is unjustified because the accepted meaning of the word embryo includes all of the first 8 weeks; (4) it is equivocal because it may convey the erroneous idea that a new human organism is formed at only some considerable time after fertilization; and (5) it was introduced in 1986 'largely for public policy reasons' (Biggers). ... Just as postnatal age begins at birth, prenatal age begins at fertilization. Id.

surprising since, as noted by the trial court, the term "pre-embryo" was created by the IVF industry itself to assist IVF practitioners defend themselves in malpractice suits.⁹⁷

Subsequent scientific research refutes the distinction between embryo and pre-embryo.

Scientific factual observations of human embryo development reveal that far from being a

"multicellular aggregate of undifferentiated cells" until fourteen days after fertilization, a human

zygote "from the moment of sperm-egg fusion onward" exhibits "globally coordinated functions

that promote the health and survival of the individual as a whole."98

The Court's statement that "the first cellular differentiation of the new generation relates

to physiologic interaction with the mother, rather than to the establishment of the embryo itself,"

See also Ferrer Colomer et al., The Preembryo's Short Lifetime. The History of a Word., 23 CUADERNOS DE BIOÉTICA 677, 678 (2013),

http://www.redalyc.org/html/875/87525473007/index.html. The term "preembryo" is rarely used today in scientific and bioethical literature.

⁹⁷ *Davis*, *supra* note 87, at *20.

⁹⁸ Condic, *supra* note 24, at 48. *See also* Renee Reijo Pera, *Earlier, more accurate prediction of embryo survival enabled by research*, STAN. NEWS CTR. (Oct. 3, 2010),

http://med.stanford.edu/news/all-news/2010/10/earlier-more-accurate-prediction-of-embryosurvival-enabled-by-research.html. (Dr. Pera emphasized that early embryos are not undifferentiated cell aggregates. She reported that she and her colleagues learned from filming 242 human zygotes developing that some cells in the eight-cell embryos express genes specific to further development of the embryonic body, and other cells express mostly maternal genes. She indicates that "[w]e've always thought of embryos as living or dying [as a whole], but in reality we find each cell is making decisions autonomously." Thus, the cells exhibit differentiated behavior). See also Connie C. Wong et al., Non-invasive imaging of human embryos before embryonic genome activation predicts development to the blastocyst stage, 28 NATURE BIOTECHNOLOGY 1115, 1119-20, fig.6 (2010); Renee Reijo Pera et al., Non-invasive imaging of human embryos before embryonic genome activation predicts development to the blastocyst stage, EXCEMED (2013), https://www.excemed.org/resources/l3-non-invasiveimaging-human-embryos-embryonic-genome-activation-predicts-development-blastocyst-stage. (Dr. Pera noted that not all cells within the human embryo divide in synchrony, but on a selfdetermined schedule. Prior to her 2008 research, she and other scientists believed that all cells of an eight-cell embryo acted as a colony, rather than each cell enacting its own program, which is what actually happens. She said she was surprised to learn that, in fact, each cell enacts its own program, which confirms that early embryo cells perform different tasks yet work in an integrated, coordinated, organismic program to elaborate the body plan and supportive structures).

is also incorrect given the embryo acts as an organism.⁹⁹ Scientific factual observation reveals the cells in the early embryo work together to develop the embryo body together with the placenta and cord cells.¹⁰⁰ The inner cell mass that will make the cells of the embryo/human body are believed to be present in two of the first four cells.¹⁰¹ The *Davis* Court also mistakenly discounted the individuality of the "preembryo" prior to fourteen days of development, referencing the AFS report.¹⁰²

The *Davis* Court also relied on an AFS assertion that, at the eighth cell stage, the developmental singleness of one person has not been established.¹⁰³ This AFS statement is outdated and incorrect. It is now known that only cells in earlier stages, perhaps up to the four-cell stage, may be totipotent (that is, "capable of generating a globally coordinated developmental sequence" necessary to constitute an organism).¹⁰⁴

Also, even assuming that a four-cell embryo possesses four totipotent cells, the embryo is not thereby comprised of four human beings. The four cells work in concert toward development unless and until disaggregated. If a four-cell embryo is scientifically manipulated to be taken apart cell by cell to develop four separate embryos; or a six to eight cell embryo is split into two three to four cells embryos to make two embryos, then the disaggregated cells need another

⁹⁹ *Davis*, 842 S.W.2d at 594. (The Supreme Court cited Robertson's law review article which criticized the *Davis* trial court for ignoring "the biological reality that the early embryos, while genetically unique, consist of a few undifferentiated cells that will first form the placenta before the embryo itself develops."). Robertson, *supra* note 72, at 482.

¹⁰⁰ Edwards Robert and Christoph Hansis, *Initial Differentiation of blastomeres in 4-cell human embryos and its significance for early embryogenesis and implantation*, 11 REPROD. BIOMEDICINE ONLINE 206, 206-18 (2005). (The author, Robert Edwards won the Nobel Prize for

helping create the first test tube baby in 1978).

¹⁰¹ *Davis*, 842 S.W.2d at 594.

¹⁰² *Id.* at 596.

¹⁰³ *Id.* at 593.

¹⁰⁴ Maureen L. Condic, *Totipotency: What It Is and What It Isn't*, 23 STEM CELLS & DEV. 796, 797, fig. 1 (2013), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3991987/.

empty zona pellucida¹⁰⁵ (the transparent more or less elastic noncellular outer layer or envelope of a mammalian ovum that is composed of glycoproteins)¹⁰⁶ to be placed in, in order for the disaggregated cells to grow as a human organism. The fact cells within an organism can be artificially manipulated to become duplicate does not diminish the human value of the developing organism or mean a human being is not in development.

Dr. Condic states: "Embryos repair injury. They adapt to changing environmental conditions. Most importantly, they show coordinated interactions between parts (molecules, cells, tissues, structures, and organs) that promote the survival, health, and continued development of the organism as a whole."¹⁰⁷ One human being is developing as the cells divide into more cells. Thus, "[t]he significant role of 'community effects' in development . . . clearly illustrates that the behavior of cells in groups is distinct from the behavior of the individual cells comprising the group."¹⁰⁸

Dr. Condic explains that when a human embryo at the blastocyst stage splits in half to produce a twin, the developmental process does not start again from a single cell.¹⁰⁹ Instead, the different cells in each half of the embryo repair and regenerate themselves consistent with being a human organism.¹¹⁰ Therefore, the fact that the human organism has a body plan to generate identical (twin) siblings (or is capable of reproducing a twin) does not mean that an individual

¹⁰⁵ Karl Illmensee et al., *Human embryo twinning with applications in reproductive medicine*, 93 Fertility & Sterility 423 (2010), https://www.fertstert.org/article/S0015-0282%2808%2904795-X/fulltext.

¹⁰⁶ Zona pellucida, MERRIAM WEBSTER DICTIONARY,

https://www.merriamwebster.com/dictionary/zona%20pellucida (last accessed Oct. 16, 2017).

¹⁰⁷ *Id.* at 800.

¹⁰⁸ Condic, *supra* note 104.

¹⁰⁹ *Id.* at 804-05, fig. 5.

¹¹⁰ *Id*.

human being is not present both before and after reproducing.¹¹¹

The additional AFS claim, cited by *Davis*,¹¹² that an embryo is not a human being because the embryo has not yet developed the "features of personhood," ignores that all human beings are not actually at all alike because each enjoys a unique genome, the internal development blueprint that produced a unique human being, with an identity that is different from other embryos. Cells in the early embryo are not featureless at all from the point of view that really matters in human development: genes. The AFS (and the *Davis* Supreme Court in reliance on the AFS) could ignore or discount such scientific knowledge in the 1990's. Courts may not do so today after the human genome has been mapped and its determinative influence on human life from the moment of fertilization is well recognized.¹¹³

¹¹¹ The AFS's related argument, that the "singleness" of a person is not established because each cell in the early embryo has the "totipotent" ability to independently develop into a complete adult, is meritless. (*Davis*, 842 S.W.2d at 593, citing AFS at 31S). Even assuming an eight-cell embryo has eight totipotent cells, the embryo does not thereby comprise eight human beings. One human being is developing. If one totipotent cell is manually extracted from the embryo at this time (not a normal event in embryonic development), the cell can rebuild, given a nutritive culture, and the remaining cells in the embryo from which the cell was extracted may regenerate the missing cell. But this behavior confirms that the extracted cell and the remaining intact cells each continue to behave as organisms after the cell is extracted. It does not in any way suggest that the embryo was somehow not a "single" organism before the totipotent cell was extracted. It was a single organism, just as an embryo prior to twinning is a single organism. *Condic, supra* note 104, at 804.

¹¹² *Davis*, 842 S.W.2d at 596.

¹¹³ See Helen Pearson, Your destiny, from day one, 418 NATURE PUBLISHING GROUP NEWS FEATURE 14, 15 (July 4, 2002),

http://www.public.iastate.edu/~zool.433/Lectures/mammal.egg.assym.pdf. (She states the following:

Your world was shaped in the first 24 hours after conception. Where your head and feet would sprout, and which side would form your back and which your belly, were being defined in the minutes and hours after sperm and egg united.

Just five years ago, this statement would have been heresy. Mammalian embryos were thought to spend their first few days as a featureless orb of cells. Only later, at about the time of implantation into the wall of the uterus, were cells thought to acquire distinct 'fates' determining their positions in the future body. But by tagging specific points on

Similarly, the AFS worry that an embryo is not a real human being because the embryo may die before reaching its potential,¹¹⁴ is no valid ground for denying human being status to an embryo.¹¹⁵ The same point can be made of any moment in a human being's life trajectory. Life issues no guarantee of continuity to anyone. Lady Justice wears a blindfold and would not speculate on the vulnerability of the human being invoking the courts protection to secure the unalienable right to life through a parent willing to take responsibility to care and nurture his or her offspring.

In short, none of the reasons cited by the *Davis* court is scientifically correct in light of current scientific research. While an early human embryo can be empirically observed in various recognized stages of development (ootid, zygote, embryo, fetus, baby, child, adolescent, adult, elder, etc.), "pre-embryo" is not one of these stages because a human organism is a whole human being in each developmental stage.¹¹⁶

Unfortunately, all subsequent case precedent has relied in whole or in part on Davis's

mammalian eggs shortly after fertilization, researchers have now shown that they come to lie at predictable points in the embryo. Rather than being a naive sphere, it seems that a newly fertilized egg has a defined top–bottom axis that sets up the equivalent axis in the future embryo. . . .

What is clear is that developmental biologists will no longer dismiss early mammalian embryos as featureless bundles of cells.) *Id.*

¹¹⁴ Davis, 842 S.W.2d at 596.

¹¹⁵ Pera, *supra* note 98. (Stanford News and Medicine reported that thirty-eight percent of the embryos in its study reached the blastocyst stage and a blastocyst is usually an indication of a healthy embryo).

¹¹⁶ The *Davis* Supreme Court worried that if the trial court ruling were affirmed, human embryos would be persons and have "legally cognizable interests different from those of their progenitors. Such a decision would doubtless have had the effect of outlawing IVF programs in the state of Tennessee." 842 S.W.2d at 595. The extreme effect envisioned by the Supreme Court in *Davis* is not a necessary outcome of recognizing the full humanity of a human embryo, as demonstrated in Louisiana where an embryo is recognized as a judicial person under the law, (LA-RS §124, LA-RS 9 §128), yet IVF has not been outlawed.

scientifically invalid analysis classifying embryos as deserving respect more than any other human tissue, rather than acknowledging, as the Patent Office does, that human embryos are human organisms.¹¹⁷

No later court has undertaken a re-analysis of the parties' rights and interests regarding the subject matter at issue, the embryos' fate, based on correctly identifying the nature of the human embryos as a human beings and human offspring who are existing with full potential to complete life's cycle and identifiable DNA distinct from the parties/ progenitors/parents who want the court to resolve their dispute over the embryos fate. These cases do not provide cogent or authoritative precedent for a decision based upon current scientific knowledge that would permit the rights and interests of all parties concerning the embryos at issue to be correctly identified and weighed on the scales of justice.

D. *KASS v. KASS*, DID NOT CHALLENGE THE LEGAL STATUS OF THE EMBRYOS AS NONPERSONS UNDER FEDERAL AND NEW YORK LAW, NOR THE NATURE OF THE HUMAN EMBRYOS AS DESCRIBED IN *DAVIS*, BUT TREATED THE EMBRYOS AS UNDIFFERENTIATED CELLULAR PROPERTY OF MOTHER AND FATHER THAT COULD BE OWNED BY A CLINIC PURSUSANT TO CONTRACT, CONTRARY TO THE TRIAL COURT FINDING THAT STORED EMBRYOS WERE PROCREATED POTENTIAL LIFE WITH FATE TO BE DETERMINED BY THE MOTHER, AND THE RIGHTS INVOLVED WERE MORE PRECIOUS THAN PROPERTY RIGHTS.

After the Davis case, the trial court in Kass v. Kass was the next court to address a

parental dispute regarding the fate of stored embryos.¹¹⁸ At both the trial and appellate levels, the

courts treated the nature of the parents' interest in their cryopreserved offspring as a property

interest, even though in the Davis decision the embryos were deemed neither person nor

¹¹⁷ Leahy-Smith America Invents Act of September 16, 2011, Pub. L. No. 112-29.

¹¹⁸ Kass v. Kass, No. 19658/93, 1995 WL 110368, at *1 (N.Y. Sup. Ct. Jan. 18, 1995), *rev'd*, 235 A.D.2d 150, 663 N.Y.S.2d 581 (1997), *aff'd*, 91 N.Y.2d 554, 696 N.E.2d 174 (1998).

property.¹¹⁹ The *Kass* offspring were at an earlier stage of development than the four to eight cell embryos described in the *Davis* case, and the offspring were defined as "pre-zygotes," as were the embryos in the *York* case.¹²⁰

At the trial stage, the *Kass* case raised the questions as to when procreation occurs and what rights a person not bearing the created life has to request termination of even a "potential life."¹²¹ The trial court saw the embryos as procreated potential life whose fate depended on the mother's choice, and thought the rights at issue were far more precious than property rights, noting it was absurd to equate zygotes with property like washing machines and jewelry.¹²² In contrast, the highest court of New York in describing the development of the early embryos, paints a picture of the stored embryos as undifferentiated cells in quoting the description by the *Davis* court.¹²³ The appellate courts emphasized deciding the embryos fate based on the contractual rights of the parties as the appropriate remedy, when disputes arise as to the fate of stored embryos.¹²⁴

In *Kass*, the IVF clinic document claimed that "pre-zygotes" were subject to a property settlement if the parties divorced.¹²⁵ A "pre-zygote" was defined as eggs penetrated by sperm which have not yet joined genetic material.¹²⁶ When IVF services were first provided, some providers believed a new human life was not yet created if the fertilized egg was cryopreserved before the pronuclei of the egg and sperm membranes broke down and the chromosomes lined

- ¹²⁰ *Id.* at *4.
- ¹²¹ *Id.* at *3.
- 122 *Id.* at *2
- 123 *Id*.
- ¹²⁴ *Id*.
- ¹²⁵ *Id.* at *4.

¹¹⁹ *Id.* at *2.

¹²⁶ *Kass*, 91 N.Y.2d at 557.

up at the cell's center to form a cleavage spindle, allowing the cell to split into two cells with identical chromosomes.¹²⁷

The *Kass* trial court did not have a trial with experts to address the nature of "prezygotes."¹²⁸ The trial court defined a zygote as a cell formed by the union of two reproductive cells or gametes.¹²⁹ The court claimed that the term most commonly used following creation is pre-embryo (no citation provided by court) and the court would use both terms interchangeably.¹³⁰ The *Kass* trial court thought a key to an intelligent discussion was if the product of an *in vitro* fertilization had a conceptual or propositional difference from the product of an *in vivo* fertilization.¹³¹

The trial court commented that:

Fertilization is fertilization and fertilization of the ovum is the inception of the reproductive process. Biological life exists from that moment forward, the fact that an in vitro zygote does not seek to fulfill its biological destiny immediately upon such fertilization does not alter that fact. The rights of the parties are dependent on the nature of the zygote not the stage of its development or locations.¹³²

Unlike the Davis Tennessee Supreme Court, the Kass trial court reasoned that a right not

to procreate was waived for a husband after coital reproduction and it would be waived and non-

existent after participation in an *in vitro* program.¹³³ The court noted that to transform a right not

to procreate founded in restraint to a right to take positive steps to terminate a potential human

¹²⁷ Condic, *supra* note 24, at 68; (explaining how Germany allows research experimentation on "pre-zygotes" but not "embryos.").

¹²⁸ *Kass, supra* note 118, at *1.

¹²⁹ *Id*.

¹³⁰ *Id*.

¹³¹ *Id.* at *3.

 $^{^{132}}$ *Id.* at *2.

¹³³ *Id*.

life, was a right the Supreme Court of the United States expressly refused to recognize.¹³⁴

The *Kass* trial court then examined the conduct of the wife and the clinic informed consent form to determine if the parties' constitutional rights were waived.¹³⁵ The trial court found express terms "[i]n the event of divorce, we understand that legal ownership of any pre-zygotes must be determined in a property settlement and will be released as directed by order of a Court of competent jurisdiction" meant the clinic agreement regarding the embryos distribution would be subject to directives of the divorce court.¹³⁶ An addendum to the consent form indicated that if the husband and wife did not want to initiate a pregnancy and were "unable to make a decision" about what to do, then they would let the "pre-zygotes" be disposed of by the IVF Program for approved research investigation.¹³⁷ The trial court reasoned that terms in the Addendum were contingent upon neither party being able to determine the disposition, and did not think there was any rule of construction that would apply the addendum in the clinic contract to a divorce situation.¹³⁸

Later, the appellate court rejected the trial ruling that the mother alone had the power to decide the fate of the zygote and ruled that a woman's right to privacy and bodily integrity like the one in *Roe v. Wade* are not implicated before implantation occurs.¹³⁹ The appeals court unanimously believed that when the parties in the custody dispute had an agreement about the disposition of unused fertilized eggs the agreement should control.¹⁴⁰

The highest court in New York treated the embryos as property and held that the clinic

¹³⁴ Id. at *3; (citing Planned Parenthood of Missouri v. Danforth, 428 U.S. 52 (1976)).

¹³⁵ *Id.* at *4.

¹³⁶ *Id.* at *3.

¹³⁷ *Id.* at *4.

¹³⁸ *Id*.

¹³⁹ *Kass*, 663 N.Y.S.2d at 586.

¹⁴⁰ *Id.* at 587.

contract that allowed for the clinic to use the "pre-zygotes" for approved research investigation if the parties were unable to come to a decision was valid, and therefore the clinic was awarded the embryos. This implies that the New York highest court did not consider the embryos as human beings, but considered the embryos as cellular or tissue property, in allowing an institution, the clinic, to receive the embryos for research. While the trial court had considered the *Kass* offspring potential life, and found pursuant to *Planned Parenthood of Missouri v. Danforth*, there was no right to terminate potential human life by a person who was not carrying the offspring, the recognition of the right of a parent to protect offspring was not discussed in *Kass* by the highest New York Court reviewing the trial court decision.¹⁴¹

The highest court in *Kass v. Kass* accepted and relied on the factual statements about how cells differentiate from the *Davis* case, in that the court stated:

Once a sperm cell fertilizes the egg, this fusion –or pre-zygote-divides until it reaches the four- to eight-cell stage, after which several pre-zygotes are transferred to the woman's uterus by a cervical catheter. If the procedure succeeds, an embryo will attach itself to the uterine wall, differentiate and develop into a fetus....¹⁴²

This above statement by the *Kass* court illustrates the State Court of New York's scientific terminology confusion and misunderstanding as to the factual nature and development of a fertilized ovum or offspring created. First, according to embryologists that rely on the Carnegie Stages terminology to describe human embryonic development, there is no "prezygote" after a human organism has chromosomes lined up at the cleavage spindle and has further divided into two cells within the embryo.¹⁴³ Second, a zygote is a one cell embryo, as described in most scientific literature and a zygote does not have multiple cells, nor does a "pre-zygote"

¹⁴¹ *Kass*, *supra* note 118, at *3.

¹⁴² <u>*Kass*</u>, 91 N.Y.2d at 557.

¹⁴³ O'Rahilly, *supra* note 1, at 89.

have multiple cells but is a term to describe the zygote at a stage of development prior to the chromosomes lining up at the cleavage spindle in the zygote cell before division.¹⁴⁴ Third, a one cell zygote behaves as a human organism from the moment of sperm and egg binding.¹⁴⁵ Fourth, cell differentiation among cells within the embryo is observed in the early embryo prior to implantation.¹⁴⁶

The wrong assumption about the biological status of the pre-zygote led to the decision in *Kass, which* favored a property contractual remedy for the fate of the "pre-zygotes."¹⁴⁷ Yet, the *Kass* court denied it needed to determine the legal status of the embryos.¹⁴⁸ Rather than scientifically viewing the facts about the nature of the embryo, the *Kass* court found the embryos were not persons under constitutional law.¹⁴⁹ Thus, having determined for constitutional purposes the "pre-zygotes" were not persons, the *Kass* court opined the next step in the test was who had the decision-making authority.¹⁵⁰ The highest court held the "parties" agreement" had the authority and it did not have to determine the legal status of the embryos or balance the rights of the parties as the *Davis* court did.¹⁵¹

Note: a clinic drafted consent form for the embryos fate that was agreed upon was upheld, despite the fact that a parent wanted to protect their offspring and a lower court did not find the agreed clinic contract allowing the clinic to own the embryos, when the progenitors were undecided about what to do, should apply when progenitors divorce and had disagreement about

¹⁴⁴ Condic, *supra* note 24, at 44, 56-60.

¹⁴⁵ *Id.* at 47-48.

¹⁴⁶ Edwards & Hansis, *supra* note 17.

¹⁴⁷ *Kass, supra* note 118, at *2.

¹⁴⁸ *Id*.

¹⁴⁹ Id. (Citing Roe v. Wadeand Bryn v. New York City Health & Hosp. Corp., 410 U.S. 949 (1972).

¹⁵⁰ <u>*Kass*</u>, 91 N.Y.2d at 561.

¹⁵¹ *Id.* at 564-65.
what to do. The *Kass* precedent that a corporation, a fictional person, has rights to conduct research on embryos under a contract (over the objection of a parent seeking to protect offspring) was founded on property law that ignored constitutional rights that protect parental rights to protect offspring.¹⁵² Further, the decision in *Kass* was based on erroneous misconceived science that thought the stored human embryo was not a human being and the decision was also based on case precedent in federal and state law that did not know when human life begins.

Yet, the importance that a procreation right had been exercised is reflected indirectly in the opinion, as the *Kass* court stressed that the agreement of the parties prior to the time of the procedure to create offspring was to govern by stating:

[C]ourts seek to honor the parties' expressions of choice, made before disputes erupt, with the parties' over-all direction uppermost in the analysis. Knowing advance agreement will be enforced underscores the seriousness and the integrity of the consent process. Advance agreements as to disposition would have little purpose if they were enforceable only in the event the parties continue to agree. To the extent possible it should be the progenitors---not the State----and not the courts--- who by their prior directive made this deeply personal choice.¹⁵³

Note, a progenitor is one who has provided a gamete for the procreation of a child and one would need to procreate a child to be the child's progenitor.¹⁵⁴ The parties in *Kass* did not raise the issue of the legality of the clinic's form presented to them that described the embryos as joint property. Despite one of the progenitors' coming to a decision of wanting to care and provide for the human beings created, a contract analysis of a clinic consent form resulted in the clinic receiving the embryos, because the court bound the progenitors to a contract that claimed the clinic had the authority to use embryos for research if the progenitors were undecided as to

¹⁵² See Stanley v. Illinois, 405 U.S 645, 651 (1972).

¹⁵³ <u>*Kass*</u>, 91 N.Y.2d at 566.

¹⁵⁴ *Progenitor*, ENGLISH OXFORD LIVING DICTIONARIES, https://en.oxforddictionaries.com/definition/progenitor.

E. FEDERAL COURT REFUSED STANDING TO HUMAN EMBRYOS IN *DOE V. SHALALA*.

When a ban was lifted on funding for research involving human embryos, a lawsuit was filed on behalf of Mary Doe, "a preborn child in being as a human embryo" along with other plaintiffs, to block a nationally appointed panel making guidelines about embryo research.¹⁵⁶ The court stated the embryo was not a "person" under the Fourteenth Amendment, and therefore could not have a guardian appointed to represent her pursuant to Fed.R.Civ.P. 17(c) and further to have a guardian represent all 20,000 embryos believed to be in storage at that time would be an impossible task.¹⁵⁷

F. VIRGINIA FEDERAL COURT TREATED EMBRYOS, SPERM AND EGGS CONTAMINATED WITH HUMAN ALBUMIN EXPOSED TO CRUZEFELD-JACOBS DISEASE AS AN ECONOMIC LOSS PRECLUDING RECOVERY UNDER NEGLIGENCE, AND CLAIMED PLAINTIFFS SOUGHT TO RECOVER A LOSS FOR PHYSICIAL HARM TO PROPERTY OTHER THAN THE ALBUMIN MANUFACTURED BY DEFENDANT, BAXTER, AND DISTRIBUTED BY DEFENDANT, IRVINE, IN *DOE v. IRVINE SCIENTIFIC*.

A class action lawsuit was brought by plaintiffs who underwent in-vitro fertilization treatment at the Jones Institute for Women's Health.¹⁵⁸ Specific plaintiffs, Jane and John Doe had embryos created with donor eggs from a third party, and John's sperm.¹⁵⁹ Three embryos were transferred to Jane Doe for hopeful implantation, while the other embryos were cryopreserved.¹⁶⁰ The Jones Institute had utilized the Human Albumin product manufactured by Baxter Healthcare Corporation (Baxter) and was distributed by Irvine Scientific Sales Company

¹⁵⁵ <u>*Kass*</u>, 91 N.Y.2d at 566.

¹⁵⁶ Doe v. Shalala, 862 F. Supp. 1421, 1423 (D. Md. 1994).

¹⁵⁷ *Id.* at 1426-27.

¹⁵⁸ Doe v. Irvine Scientific Sales Co., Inc., 7 F. Supp. 2d 737, 738 (E.D. Va. 1998).

¹⁵⁹ Id.

¹⁶⁰ *Id.* at 739.

(Irvine) in the process of creating the embryos.¹⁶¹ The Human Albumin was potentially contaminated by two donors to the pool of plasma from which the lots were processed, who were found to be at risk for Cruzeldt-Jacob Disease, which causes a fatal neurological disorder in humans.¹⁶² The plaintiffs claimed the Jones Institute was not timely informed of Baxter's withdrawal of the contaminated Albumin and that it failed to timely warn the distributors and consumers in the stream of commerce about the dangers of the product.¹⁶³ Plaintiffs further alleged that Irvine failed to timely cooperate with Baxter and withdraw the contaminated albumin and want of the dangers based on Federal Drug Administration recommendations.¹⁶⁴ Plaintiffs' complaint sought recovery based on theories of personal injury, property damage, emotional distress and economic loss.¹⁶⁵

The motion to dismiss for failure to state a claim for negligent infliction of emotional distress was denied on the basis there was no record evidence that CJD had actually contaminated "the three reproductive organisms."¹⁶⁶ The Virginia Federal Court, without scientific analysis, equated the sperm, egg, and embryo to all be "reproductive organisms."¹⁶⁷

Yet, a sperm by itself cannot make a human body, nor can an egg make a human body by itself. Unlike the human embryo, which has all the components needed to reveal the body plan in an orderly and temporal sequence both pre and postnatally, sperm and egg only have a plan to bind with another gamete. While the court's inaccurate scientific analysis of what a sperm and an egg is compared to an embryo did not refute the courts finding of no proof of contamination

¹⁶¹ *Id*.

- ¹⁶² *Id*.
- ¹⁶³ *Id*.
- ¹⁶⁴ *Id*.
- ¹⁶⁵ *Id*.

¹⁶⁶ *Id.* at 740.

¹⁶⁷ *Id.* at 741.

or harm to the embryo, it revealed a lack of appreciation of the distinct difference between gametes and the procreated embryo.

The Virginia Federal Court in analyzing whether the plaintiffs could recover in tort, reasoned the harm was to the embryos and the embryos were not persons pursuant to *Roe v*. *Wade*;¹⁶⁸ and the court had not recognized a status that would entitle them to special treatment because of their potential of human life.¹⁶⁹ The Virginia Federal Court did acknowledge the case of *Davis v. Davis*, which found the embryos deserved a special respect legal status for just the potential for life.¹⁷⁰ Nonetheless, the Virginia Federal Court claimed Plaintiffs could not bring a tort action on the embryos behalf and dismissed the tort and negligence claim.¹⁷¹

The Virginia Federal Court stated the gist of the Plaintiffs claim was to recover the loss of their stored embryos which were rendered unsafe for implantation as a result of being exposed to the recalled albumin.¹⁷² The court claimed the losses occurred, because the Jones Institute goods and services were unsatisfactory, the transferred embryos did not result in a pregnancy, and the other embryos were unsafe for implantation.¹⁷³ The Virginia Federal Court reasoned the plaintiffs were seeking to recover from harm to "property" other than the albumin manufactured by Baxter and distributed by Irvine.¹⁷⁴ The court characterized the plaintiffs' loss as neither personal or property injury, but an economic loss, because economic expectations were disappointed.¹⁷⁵ Plaintiffs could not recover against defendants for economic loss, because they

¹⁷¹ *Id*.

- ¹⁷³ *Id*.
- ¹⁷⁴ *Id*.
- ¹⁷⁵ Id.

¹⁶⁸ 410 U.S. 113 (1973) (ruling the unborn were not persons as the word is used in the Fourteenth Amendment).

¹⁶⁹ *Doe*, 7 F. Supp. 2d at 742.

¹⁷⁰ *Id*.

¹⁷² *Id.* at 743.

had not complied with the economic loss rule and showed privity with the defendants.¹⁷⁶ Thus, the complaint was dismissed.¹⁷⁷

Today, if a court would equate the embryo as a "good" created in an IVF clinic, or property, or the equivalent of a gamete, then that would be an analysis based on flawed scientific facts and the *Roe* decision that did not know when human life began.

G. IN AN UNPUBLISHED OPINION, MICHIGAN COURT OF APPEALS, AFFIREMED A TRIAL COURT DECISION ON CONTRACT AND CUSTODY CLAIMS INVOLVING "FROZEN HUMAN CELLS, (ZYGOTES)", CLAIMING THE DISPUTE INVOLVED TWO GAMETE PROVIDERS AND UNDETERMINED RIGHTS OF EX-UTERO PREEMBRYONIC CELLS IN BOHN V. ANN ARBOR REPRODUCTIVE MEDICINE ASSOCIATES, P. C.

A trial court in Michigan ruled that until the progenitors of embryos stored at the clinic would reach an agreement, their zygotes would remain cryopreserved and in the possession of the clinic.¹⁷⁸ The opinion stated "[o]f the eighteen oocytes removed from plaintiff's body and inseminated with defendant Mosbly's sperm, eight became 'partially fertilized' or 'zygotes,' in that the two nuclei from the oocyte and the sperm did not merge and no cell division took place."¹⁷⁹ Three of the zygotes were transferred to the mother resulting in the birth of one child and five zygotes remained in storage.¹⁸⁰ The Court of Appeals in the first footnote on the word "zygote" stated "[t]he stage of development and thus, the proper scientific term for these human cells is not clear from the limited record before us. Although the term may not be accurate, we will refer to the cells at issue here as zygotes for purposes of this discussion."¹⁸¹

¹⁷⁶ *Id*.

¹⁷⁷ *Id*.

 ¹⁷⁸ Bohn v. Ann Arbor Reproductive Medicine Associates, P.C., No. 213550, No. 213551, 1999
 Mich. App. LEXIS 2210, at *1 (Ct. App. Dec. 17, 1999).
 ¹⁷⁹ Id. at *2.

 $^{^{180}}$ Id.

 $^{^{181}}$ *Id.* at n.1.

Ia. at fi.1

The Michigan court acknowledged that the case concerned a number of complicated questions concerning the parameters of human life and its protection for which there were no clearly defined answers in Michigan law or jurisprudence.¹⁸² The court reported that the state of Louisiana had codified the legal status of pre-embryos as persons referencing La. Rev. Stat. Ann. Sec 9.124 (1991), but that Michigan had no comparable law.¹⁸³ While the plaintiff mother, Bohn, had premised many of her claims to the embryos on a woman's right to bodily integrity, the court said that was not at issue since a pregnancy was not involved.¹⁸⁴ The court claimed the dispute involved two gamete providers and undetermined rights of ex-utero pre-embryonic cells.¹⁸⁵

The Michigan court thought the facts in the case raised questions of the utmost gravity, and there was no question that the state had an interest in protecting "potential life."¹⁸⁶ The question of when life begins was not raised in the trial court; thus, the court declined to address a question that reached beyond those issues framed by the plaintiff in her complaint and cited in the trial court, but urged the Michigan legislature to attend to the profoundly complicated and unexplored area.¹⁸⁷

The mother had argued that Black's Law Dictionary defined a child as: "progeny; offspring of parentage, *Unborn or recently born human being*."¹⁸⁸ Thus, the Michigan Child Custody Act¹⁸⁹applies to "children." The Court of Appeals did not want to extend the definition

- ¹⁸⁴ *Id*.
- ¹⁸⁵ *Id*.
- ¹⁸⁶ Id.
- 187 *Id.* at *5.
- ¹⁸⁸ *Id.* at *16.

¹⁸² *Id.* at *3.

¹⁸³ *Id.* at *4.

¹⁸⁹ MCL 722.21 *et. seq.*, MSA 25.312 (1).

of "child" as suggested by the plaintiff mother, stating authority in Michigan that such as extension would require legislative rather than judicial action.¹⁹⁰ As a result, it did not address whether the father had an obligation of child support of zygotes, because the father consented to conception and there was no statutory authority for the support of zygotes and no child support issue raised.¹⁹¹

The mother's claim against the clinic for a breach of contract to transfer the zygotes to her, because documents indicated the medical staff had discretion as to whether zygotes would be transferred or preserved and a medical authorization form, does not constitute a contract under Michigan law.¹⁹² In addition, there was no writing signed by an authorized representative of the clinic as to the essential terms of the alleged contract.¹⁹³ The count found no evidence of fraud or misrepresentation.¹⁹⁴ Further, the court found no breach of the mother's privacy by the clinic in releasing information to defendant, Mosley, that she had undergone the zygote intra fallopian transfer (ZIFT) and had five stored embryos, as he was co-creator of the zygotes and knew of their existence, and she had announced her complaint on television and it was proper for the defendant attorneys to look into the matter.¹⁹⁵ The court noted the plaintiff could not claim the defendant clinic could not be charged with extreme and outrageous conduct in not releasing to her the embryos created from her ova, because she ignored that they were also created with defendant Mosley's gametes.¹⁹⁶ The plaintiff could not claim negligent infliction from emotional distress in watching the embryos "slowly die," as the defendants presented evidence

- ¹⁹² *Id.* at 9.
- ¹⁹³ Id.
- ¹⁹⁴ *Id.* at 10.

¹⁹⁶ *Id.* at 12.

¹⁹⁰ *Bohn, supra* note 178, at *16.

¹⁹¹ *Id.* at 17.

¹⁹⁵ *Id.* at 14.

that the embryos could be stored indefinitely.¹⁹⁷

The Michigan Court of Appeals recognized an important issue in the case was when did human life begin, but did not think it had to address it since it was not addressed in the trial court.¹⁹⁸ The Court of Appeals, which acknowledged that the state had an interest in protecting "potential life," was not destroying life as it was informed that the embryos could stay stored indefinitely, but did not ask the future question as to whether that ruling meant the party that outlived the other party would have the ultimate decision on the embryos fate, nor did it decide if the zygotes were lives with potential rather than potential life.¹⁹⁹ There was no discussion of the Michigan court about the differences between human cells and human beings other than deferring to the legislature to give it guidance in the future.²⁰⁰ Michigan choose not to publish its opinion and give it precedential value, yet it has been cited in an ACLU *amicus* brief in *McQueen v. Gadberry*,²⁰¹ for the proposition that an embryo should not be allowed to be "procreated" by giving the embryo to the parent who wants continued life for the embryo and forcing the other parent to procreate. Note, this was not what was stated by the Michigan Court.

Further, the understanding that after sperm-egg binding a human organism does not exist is incorrect as explained in this article. This case was not about frozen human cells like the HeLa cells used in tissue culture, but about frozen human beings in the earliest observable developmental stages. Courts can take judicial notice of known scientific facts, unlike the Michigan Court of Appeals which admittedly did not know the accurate scientific description of the subjects at issue, and thought it was for the legislature to determine the rights of ex-utero pre-

- ¹⁹⁸ *Id.* at 4.
- ¹⁹⁹ *Id.* at 12.
- ²⁰⁰ *Id.* at 5.

¹⁹⁷ Id.

²⁰¹ 507 S.W.3D 127 (Mo. Ct. App. (2016).

embryonic cells, not realizing the zygotes were human organisms with identities distinct from other organisms.

H. ALABAMA LAW ALLOWED AGREED CONTRACT PLAIN LANGUAGE TO PERMIT A UNIVERSITY TO OWN EMBRYOS IN *CAHILL v. CAHILL*.

In *Cahill v. Cahill*, during a divorce proceeding in Alabama, the wife sought an award under a property theory for the three remaining zygotes stored in Michigan.²⁰² The court began the resolution process asking for a copy of the contract signed with the University where the zygotes were stored.²⁰³ The actual contract was not found, but a blank form was provided to the court and the terms of the agreement were not disputed.²⁰⁴ Pursuant to the plain language, the agreement provided that if there was dissolution of marriage, the zygotes were relinquished to the "Physicians of the Department of Obstetrics and Gynecology."²⁰⁵ The court ordered "the zygotes shall not be the property of either party" and according to the evidence, the University of Michigan appears to be the owners of the zygotes.²⁰⁶ The *Cahill* case demonstrates how like in *Kass* and *Litowitz*, the characterization of human life as property has led to corporate persons having rights to own human beings as property.

I. THE MASSACHUSETTS COURT, DID NOT RECOGNIZE EMBRYOS CAME TO BE CREATED AS THE RESULT OF EXERCISED PROCREATION RIGHTS AND HELD A POLICY AGAINST FORCED PROCREATION WOULD USURP PRIOR PARTY AGREEMENT TO PERMIT EMBRYO DEVELOPMENT IN THE CASE OF *A.Z. v. B.Z.*

In A.Z. v. B.Z.,²⁰⁷ the Supreme Court of Massachusetts examined consent forms signed

by the parties and testimony about the conduct of the parties in executing the agreement and

- ²⁰³ *Id.* at 466.
- 204 *Id*.
- 205 *Id*.
- ²⁰⁶ *Id.* at 467.

²⁰² 757 So. 2d. 465, 466 (Ala. Civ. App. 2000).

²⁰⁷ A.Z. v. B.Z., 725 N.E.2d 1051 (2000).

concluded the forms did not represent the clear intention of the parties as to the proper disposition of their embryos should a later dispute arise between them.²⁰⁸ The court also examined the question of whether prior directives should ever be enforced by courts in embryo disputes.²⁰⁹ The court concluded that "even had the [progenitors] entered into an unambiguous agreement between themselves regarding the disposition of frozen pre-embryos, [it] would not enforce an agreement that would" permit the use of a frozen embryo for implantation by one progenitor over the objection of the other, because such an agreement "would compel one donor to become a parent against his or her will."²¹⁰ Further, the court ruled that "forced procreation is not an area amenable to judicial enforcement" and would violate public policy.²¹¹ No argument was made that the husband was already a parent or that the frozen embryos were human beings. No argument was made the frozen embryos were human beings entitled to the basic human right of life itself. Basically, "conception was the goal in *A.Z.*-the desire not to be a parent was only manifested after conception had already taken place."²¹²

J. NEW JERSEY CLINIC FORM DESCRIBED EMBRYOS AS MERE TISSUES AND PROVIDED FOR RELINQUISHMENT OF TISSUES TO THE CLINIC IN THE EVENT OF DIVORCE, UNLESS THE COURT SPECIFIED OTHERWISE, IN J.B v. M.B, WHERE THE COURT, RELYING ON DAVIS, THOUGHT THE RIGHT NOT TO PROCREATE SHOULD ORDINARILY PREVAIL WHEN PARTIES DISAGREE, AND HELD PARTY RIGHTS SHOULD BE BALANCED WHEN PARTIES DISAGREE AFTER ORIGINAL AGREEMENT AS TO THE EMBRYOS FATE.

J.B. filed a divorce complaint and asked for an order permitting the remaining seven

embryos to be discarded, but M.B. sought to have the embryos implanted or donated to other

²⁰⁸ *Id.* at 1057.

²⁰⁹ *Id.* at 1059.

²¹⁰ *Id.* at 1057.

²¹¹ *Id.* at 1058.

²¹² Mark P. Strasser, You Take the Embryos but I Get the House (and the Business): Recent Trends in Awards Involving Embryos upon Divorce, 57 BUFFALO L. REV. 1159, 1192.

infertile couples.²¹³ In the *J.B. v. M.B.* case, the court referenced the American Heritage Stedman's Medical Dictionary for a definition of a pre-embryo as a fertilized ovum (egg cell) up to approximately fourteen days old (the point at which it implants in the uterus).²¹⁴ In addition, the court emphasized how "[t]hroughout the opinion [they] use[d] the term 'preembryo" rather than 'embryo' because a preembryo is technically descriptive of the cells stage of development when they are cryopreserved (frozen)."²¹⁵

Note that the courts use of words "cells *stage of development*" would not show the court had an understanding a human organism is what was cryopreserved. It appears all the court references were to the American Heritage Stedmans Medical Dictionary. The court reported a zygote develops into a four to eight-cell preembryo that are returned to a woman's uterus for implantation or cryopreserved.²¹⁶

J.B.'s and M.B.'s consent agreement with the clinic stated in pertinent part: "I, J.B. (patient), and M.B. (partner) agree that all control, direction and ownership of our tissues will be relinquished to the IVF Program under the following circumstances: 1. A dissolution of marriage by court order, unless the court specifies who takes control and direction of the tissues."²¹⁷

In analyzing the consent form, the court held that the thrust of the document was that the clinic obtains control over the pre-embryos unless the parties choose otherwise in a writing, or unless a court directs otherwise in the case of divorce.²¹⁸ The court first did a contact analysis and found that there was not a binding separate contact providing for disposition, but a decision

- ²¹⁴ *Id.* at n.1.
- ²¹⁵ Id.
- ²¹⁶ *Id.* at 709.
- ²¹⁷ *Id.* at 713.

²¹³ J.B. v. M.B., 783 A.2d 707, 710 (N.J. 2001).

 $^{^{218}}$ Id.

that in the event of divorce the court was to be the one to decide the disposition of the preembryos.²¹⁹

M.B. had sought a remand to the lower court to conduct an evidentiary hearing to determine the parties' intentions at the time of the I.V.F. procedure.²²⁰ However, the court did not remand the case to the trial court to take evidence on husband's claim, that there were extensive discussions, as to whether they were going to use the embryos themselves or donate to others. The husband also claimed his religious convictions and the state interest in protecting human life should take precedence over his wife not wanting to use the embryos as agreed. The wife claimed giving the husband the embryos was violative of public policy and her right not to procreate.

The court held that a formal, unambiguous memorialization of the parties intentions would be required to confirm their prior agreement and that since such writing was lacking and held that J.B. and M. B. never entered into a binding contract providing for the disposition of the pre-embryosin the possession of the Cooper Center.²²¹ The court, also, agreed with *Davis*, supra, that "[ordinarily the party wishing to avoid procreation should prevail."²²² But, the court disagreed as to the strict enforcement of contracts stating: "[w]e believe that the better rule, and the one we adopt is to enforce agreements entered into at the time in vitro fertilization is begun, subject to the right of either party to change their mind about disposition or use or destruction of

²¹⁹ *Id.* at 714-15.

²²⁰ Id. at 714. The court did not remand to have evidence on husband's claim, that was denied by wife, that there were extensive discussions, where they were going to use the embryos themselves or donate to others-the husband had claimed his religious convictions and the state interest in protecting human life should take precedence over his wife not wanting to use the embryos as agreed. The wife claimed giving the husband the embryos was violative of public policy and her right not to procreate. 221 *Id*.

²²² Id. at 716.

any stored pre-embryos."²²³ Finally, if there is disagreement as to the disposition because one party has reconsidered his or her earlier decision, the interests of both parties must be evaluated.²²⁴

Thus, the failure of court to recognize embryos were not mere tissue as described in the clinic form, or undifferentiated cells as described in *Davis*, but deliberately created human beings led to a perpetuation of the Robertson principle accepted by the *Davis* court, that a right to avoid procreation should prevail on the mistaken factual understanding that an embryo was undifferentiated cells that would first be placenta and cord cells before the body of the embryo was formed.

K. IN RHODE ISLAND, THREE COUPLES SUING AN IVF CLINIC FOR LOSS OF "PRE-EMBRYOS" WERE ALLOWED TO PROCEED WITH A CLAIM FOR EMOTIONAL DISTRESS DUE TO BREACH OF CONTRACT FOR WHICH THE CLINIC CLAIMED THE DEFENSE OF ASSUMPTION OF THE RISK, BUT NOT A CAUSE OF ACTION FOR NEGLIGENT INFLICTION OF EMOTIONAL DISTRESS.

In Frisina v. Women & Infants Hospital of Rhode Island, three couples sought recovery

against the IVF clinic for loss of their embryos under a theory that they suffered emotional distress and that their right of action in their pre-embryos was because embryos were "irreplaceable property."²²⁵ The *Frisina*, court referenced *A.Z. v. B.Z.* for the statement that the term pre-embryo is used to describe the four to eight cell developmental stage of a fertilized egg.²²⁶ The *Frisina* court also looked at the embryos custody dispute precedent regarding parental rights and interest in their embryos.²²⁷ The clinic claimed the damages were the failure

²²⁵ C.A. No. 95-4037, C.A. No. 95-4469, C.A. No. 95-5827, 2002 R.I. Super. LEXIS 73, at *6 (Super. Ct. May 30, 2002).

²²³ *Id.* at 719.

²²⁴ Id.

 $^{^{226}}$ *Id.* at n.2.

²²⁷ *Id.* at *14.

to achieve a pregnancy, and under Rhode Island law since there was no recovery for a nonviable fetus there should not be recovery for a pre-embryo.²²⁸

The court found that given that Rhode Island law did not allow recovery for a nonviable fetus, the plaintiffs were not present when the embryos were lost, and they did not have a physical manifestation of their emotional distress, they failed to meet the elements for negligent infliction of emotional distress.²²⁹ The court agreed, however; that the plaintiffs were seeking to recover for loss of the embryos and not the failure to achieve a pregnancy and further found that while the plaintiffs signed an informed consent acknowledging that the embryos could be lost due to laboratory error, they did not exculpate the clinic from the clinic's negligence.²³⁰ Therefore the plaintiff could pursue a cause of action for a breach of contract causing emotional distress.

Thus, while *Frisina* was not asked to claim that "pre-embryos" were persons and rely on other case precedent for its understanding of the nature of the embryo, it found a cause of action for the specific loss of the "pre-embryo" at that stage of development, and did not require an analysis of whether the particular lost embryos would have ultimately been born, albeit by a property based theory awarding parents the loss of "irreplaceable property."

L. THE WASHINGTON COURT CLAIMED THERE WAS NO AUTHORITY BEFORE IT AS TO WHETHER "PRE-EMBRYO" OR CHILD WAS THE PROPER TERM AND THE COURT DENIED THE REQUEST OF EACH PARTY TO HAVE THE EMBRYOS FOR IMPLANTATION AND AWARDED THE EMBRYOS TO THE CLINIC BASED ON CONTRACT LANGUAGE IN *LITOWITZ v. LITOWITZ.*

In Litowitz v. Litowitz, a question before the court was the award of two cryopreserved

²²⁸ *Id.* at *7.

²²⁹ *Id.* at *29-30.

²³⁰ *Id.* at *45.

embryos to David Litowitz.²³¹ Both divorcing parties wanted the frozen embryos to be implanted, but Becky Litowitz, who had no uterus, wanted to have them implanted in a surrogate and to raise them herself.²³² On the other hand, David Litowitz wanted to have them placed for adoption.²³³ The trial court had applied a best interest of the child standard and awarded them to David holding adoption by a two parent family was in the best interest of the child.²³⁴

The Washington Appellate Court looked at the contract and concluded that the contract did not require a continuation of a family plan not to have another child and thought David Litowitz had a right not to procreate and he was given the embryos because adoption allowed him to avoid an unwanted parenting role.²³⁵

The Washington Supreme Court applied the *Davis* framework principles, noting that Becky argued the egg donor contract gave her a right to the "pre-embryos" and biological parenting should not be the only factor in deciding who received the embryos.²³⁶ The court differentiated between the egg donor contract and the cryopreservation contract and held the egg donor contract did not apply to fertilized eggs.²³⁷ Becky argued the term "child" rather than the term "pre-embryo" was the appropriate term for the court to consider and that she had a constitutional right to the custody and companionship of a child.²³⁸ While the trial judge characterized the "pre-embryo" as a "child," the Washington Supreme Court thought the issue whether a pre-embryo was a child was not a logical or relevant inquiry under the record before

²³² Id.

- ²³⁴ *Id.* at 272.
- ²³⁵ *Id.* at 265.
- ²³⁶ *Id*.
- ²³⁷ *Id.* at 268.
- ²³⁸ *Id.* at 269.

²³¹ 48 P.3d 261, 262 (Wash. App. Ct. 2002).

²³³ *Id.* at 264.

the court and the argument was not supported by sufficient authority.²³⁹

In making its ruling, the *Litowitz* court stated it did not have to engage in a medical or philosophical discussion whether the pre-embryos were children or if Becky was a progenitor without citing additional authority.²⁴⁰ The decision was solely based on the cryopreservation contract.²⁴¹ Here,

[t]hey directed that the remaining pre-embryos be 'thawed out but not allowed to undergo further development and disposed of when the pre-embryos have been maintained in cryopreservation for five (5) years under the initial date of cryopreservation unless the Center agreed at [the Litowitzes' request, to extend [their] participation for an additional period of time.²⁴²

The record did not indicate if the two cryopreserved pre-embryos were still in existence, and neither party had requested an extension of time.²⁴³ The court concluded that "[c]ustody of the remaining two pre-embryos was taken by the Loma Linda Center under the cryopreservation contract on the date the other three were implanted in the surrogate mother."²⁴⁴ Thus, the award to David Litowitz was reversed. ²⁴⁵

Justice Chambers commented that the case should have been remanded to the trial court to evaluate the case under a contract principle.²⁴⁶ Another justice noted the contract provided for a court order in the event of divorce and the contractual storage limit was tolled by the filing of the lawsuit.²⁴⁷ Justice Sanders emphasized what the parties did not intend was for the subject of the contract to be destroyed, and he could not fault a trial judge who reached a result to at least

 241 *Id*.

- ²⁴³ *Id*.
- ²⁴⁴ Id.
- 245 *Id.*

²³⁹ Id.

²⁴⁰ *Id.* at 264.

²⁴² *Id.* at 271.

²⁴⁶ *Id.* (Chambers, J., concurring in part, dissenting in part).

²⁴⁷ Id. at 272-73 (Sanders, J., dissenting).

effectuate the intent of the parties and recognized the contract dealt with the prospect that a child would be born, and the future of which was of paramount concern and profound responsibility.²⁴⁸

Essentially, the *Litowitz* court by applying a strict contract resolution to the dispute over the embryos fate treated the embryos as property on the basis there was not authority before it to establish that the embryos were children. The *Litowitz* case is an example of innocent human lives being terminated by court order, contrary to the intent of both parties/parents requesting the clinic not to have control of the embryos for destruction pursuant to a form provided to the parties/parents by the clinic.

M. THE IOWA COURT WOULD NOT RESOLVE A DISPUTE OVER THE STORED EMBRYOS FATE BETWEEN PROGENITORS/PARENTS CLAIMING THAT IOWA COURTS CONCERN IS WITH BORN CHILDREN AND DID NOT RECOGNIZE REPRODUCTION HAD ALREADY OCCURRED *IN RE: MARRIAGE OF WITTEN*.

In the case of *In Re: Marriage of Witten*, the male progenitor, Trip, did not want to destroy the embryos but did not want his ex-wife Tamera to have them.²⁴⁹ The court was to determine if either party could use or dispose of their embryos without the consent of the other.²⁵⁰ The court was to determine if the embryos have the legal status of children pursuant to Iowa Dissolution of Marriage statutes and not to address the moral and philosophical status of the embryos.²⁵¹ The court stated in Iowa that the state is concerned for the physical, emotional and psychological well-being of children who have been born, not fertilized eggs that have not resulted in a pregnancy.²⁵² The court believed it was against public policy to force an agreement

²⁴⁸ *Id.* at 273-74.

²⁴⁹ 672 N.W. 2d 768, 773 (Iowa 2003).

²⁵⁰ *Id.* at 782.

²⁵¹ *Id.* at 781.

²⁵² *Id.* at 780.

in the highly personal area of "reproductive choice."²⁵³ The court did not recognize that reproduction had already taken place. The Witten court noted that "[w]hether embryos are viewed as having life or simply as having the potential for life, this characteristic or potential renders embryos fundamentally distinct from the chattels, real estate and money that are the subject of antenuptial agreements."²⁵⁴ Thus, unlike contracts where property is distributed according to prenuptial agreements, the state would not intervene to make a decision or enforce a disputed contract on the embryos fate, but required the parents to resolve the matter by their contemporaneous mutual consent.²⁵⁵

Although the court rejected a contract approach to resolving a dispute about disposition of the parties' stored embryos, it would honor a contract where the parties did not dispute.²⁵⁶ The court stated there would be no use or disposition of the embryos until the parties reached an agreement, with the caveat that the clinic was not required to store the embryos beyond the time in the clinic contract.²⁵⁷

The *Witten* embryo dispute contemporaneous mutual consent resolution model, which was similar to the resolution model of the Michigan Court of Appeals in *Bohn*, was criticized subsequently for not resolving the dispute between the parent/progenitors who were seeking the courts assistance, and would result in being able to leave one party hostage to the other who refuses to agree.²⁵⁸

This mutual consent resolution model seems to award the decision as to the embryos fate

²⁵³ *Id.* at 781.

²⁵⁴ Id.

²⁵⁵ *Id.* at 782.

²⁵⁶ *Id*.

²⁵⁷ *Id.* at 783.

²⁵⁸ Szarfranski v. Dunston, 993 N.E.2d 502, 512 (Ill. App. Ct. 2013); (citing Strasser, supra note 212, at 1210).

to the parent who outlives the other parent and runs the risk of pushing embryo disposition decisions to future generations, since frozen embryos can outlive their progenitors. Live births have been reported from stored embryos a decade and more (even up to twenty-four years) after cryopreservation.²⁵⁹ Most importantly, the contemporaneous mutual consent resolution model does not recognize the dignity of a human being by making an embryo dispute resolution in the same manner as other disputes parents have over children when parents disagree and the court determines what is in the best interest of the child.

N. IN ARIZONA, THE COURT ALLOWED PARENTS TO SUE A CLINIC FOR LOSS OF FIVE EMBRYOS UNDER THEORIES OF BREACH OF A BAILMENT CONTRACT, BREACH OF FIDUCIARY DUTY, AND NEGLIGENT LOSS OR DESTRUCTION OF PRE-EMBRYOS, BUT NOT FOR WRONGFUL DEATH.

The Arizona court looked at other state precedent, and the lack of an Arizona Legislative determination about a conception outside the womb of a "three day old 8- cell pre-embryo" was not a person, and based on "statutory construction, the status of scientific knowledge concerning embryonic development, the ongoing discussion concerning when life begins, the unintended consequences that may result" if an embryo was a person and declined to make a judicial determination that the legislature intended to allow a cause of action under the wrongful death act for loss of an embryo.²⁶⁰ In further discussing the basis for the court's opinion, the court explained that the plaintiff, Jeter was not making a case that the embryo ex-utero can survive, exist and develop ex-utero, but were claiming the pre-embryos would become viable, if later implanted in the womb.²⁶¹ The *Jeter* court believed expanding the definition of viability to

²⁵⁹ Donna Dowling-Lacey et al., *Live birth from a frozen-thawed pronuclear stage embryo almost 20 years after its cryopreservation*, 95 FERTILITY & STERILITY 1120.el, http://www.fertstert.org/article/S0015- 0282%2810%2902470-2/abstract#.VYhyG071Alw.email; Scutti, Susan, *The mother is just a year younger than the mother who birthed her*, CNN (Dec. 21, 2017), https://www.cnn.com/2017/12/19/health/snowbaby-oldest-embryo-bn/index.html.
²⁶⁰ Jeter v. Mayo Clinic Arizona, 121 P.3d 1256, 1261 (Ariz. Ct. App. 2005).
²⁶¹ Id. at 1265.

potential viability would counter Arizona case precedent and legislative intent that would consider the entity "viable" only when the entity could exist and fully develop to birth outside the womb.²⁶²

Pursuant to *Summerfield v. Superior Court*, the Arizona court had allowed plaintiffs to sue for wrongful death in a malpractice action against a physician for the stillbirth of a thirty-seven week old fetus, holding that under Arizona law a "viable fetus" was encompassed in the word "person" for purposes of the wrongful death act.²⁶³ Subsequently, the Arizona legislature did not amend the wrongful death statute to include application to a non-viable fetus or cryopreserved three day old embryo. Therefore, the *Jeter* court concluded the Arizona legislature approved of limiting recovery under the wrongful death statute to viable fetuses.²⁶⁴

The Jeter court reviewed multiple references and recited its understanding of the

scientific facts of embryonic development including the following:

Traditionally an egg is fertilized by the combining of an egg and a sperm, which are collectively referred to as gametes. Once an egg is fertilized, whether in vivo or in vitro, it can be referred to as a one-cell zygote. After two to three days of division, the cells are blastomeres. At that time, the pre-embryo consists of eight cells, all of which are totipotent, meaning that any of the cells could develop into any type of tissue and could theoretically develop into eight separate fetuses. At four to six days, it is .1 millimeter in diameter, at which time the cells begin to separate and migrate.

If growth proceeds normally, the outer cells will eventually become the placenta and tissue supporting the fetus while the inner cells, called the inner cell mass, will become the fetus. At five to six days of development, it is called a blastocyst and consists of a hollow ball of approximately 100 cells. These cells are pluripotent, meaning that they have started to specialize but can still develop into various types of tissue. Scientists are still learning how the cells function at this point of development.

²⁶² Id.

²⁶³ Summerfield v. Superior Court, 698 P.2d 712, 722-24 (Ariz. 1985).

²⁶⁴ *Jeter*, 121 P.3d at 1264.

By the ninth or tenth day, if in vivo and if it has continued to develop, the blastocyst will implant in the uterine wall. At day fourteen, a critical development occurs-the creation of the primitive streak with three layers of specialized cells that will develop into all the fetus' tissues and cells if development continues. At this point it has approximately 2000 cells; the groove or middle line reflects a head-tail and left-right orientation. By day 22 of normal development, the heart begins to beat, and, by day 40, some body parts are recognizable in primitive form. At eight weeks, if it has continued to develop, most of the organ systems have appeared.

As noted above, the occurrence of each of these events depends on the ability of the organism to continue to develop. This is problematic because the percentage of pre-embryos that develop into a fetus and a live birth is not high, regardless whether it is developing in vivo or in vitro, but it is significantly lower for cryopreserved pre-embryos. The President's Council on Bioethics has estimated that, in 2001, only 32.8% of assisted reproductive technology fertilized organisms developed into a pregnancy if not cryopreserved. Only 27% led to live births. For cryopreserved pre-embryos, only 65% survived thawing and only 20.3% led to live births. Moreover, in 2001, 72% of all assisted reproductive technology transfers failed to lead to a birth.²⁶⁵

The Jeter court's report of the scientific facts, in 2005, does not recognize as reported,

infra, in this paper, that cells within the embryo at a one cell stage may already be forming the body axis, and by day three of development each of the cells within the embryo are already executing their own programs for the development of the organism. The scientific fact report by the *Jeter* court notes statistics about the low percentage of eventual live births due to the low percentage of survival of unborn human life as reported for ex-utero human life. The *Jeter* court indicated the fact that many variables may affect whether an embryo is born makes it speculative to conclude in a wrongful death action that "but for the injury" to the "fertilized egg" a child would have been born and therefore entitled to bring a lawsuit for the injury.²⁶⁶ Thus, for purposes of considering an embryo a person under the wrongful death act, the fact proving

²⁶⁵ *Id.* at 1266.

²⁶⁶ *Id.* at 1262.

causation of death by another would be speculative due to the high risk of death already present in the embryo, was a reason listed to support the *Jeter* court's conclusion not to consider the exutero embryo a person under the Arizona wrongful death statute.²⁶⁷

The *Jeter* court also expressed a concern that considering an embryo a person under the wrongful death statute could have the unintended consequence of making clinics liable for wrongful death claims.²⁶⁸ The court then also examined at what stage "society" (consisting of scientists, philosophers, ethicists and the public on the whole) should consider when human life begins, and reported on opposing viewpoints, declaring the Arizona legislature is in a better position than the court to determine if the word "person" in the Arizona wrongful death statute should include embryos.²⁶⁹ The *Jeter* court reviewed the societal interests in stem cell research²⁷⁰ balanced against respect for human life to support its opinion that it was not the duty of the court to determine if an embryo was protected as a person under the Arizona wrongful death act.²⁷¹

The *Jeter* court emphasized that the court's conclusion that absent clear legislative direction the three day old, eight cell pre-embryos are not "persons under the Arizona wrongful death statute, [and]...does not mean they are property."²⁷² The *Jeter* court then cited the *Davis* court for the principle that embryos are entitled to "special respect" because of their "potential to

²⁶⁷ *Id.* at 1272.

²⁶⁸ *Id.* at 1264.

²⁶⁹ *Id.* at 1267-68.

²⁷⁰ Note it was not until 2007 that it was discovered that induced pluripotent stem cells can be made from skin cells, essentially making adult skin cells turn back their cellular instructions to an earlier embryonic stage for use in stem cell therapy. *See* Martin Fackler, *Risk taking is in his genes*, N.Y. TIMES (Dec. 11, 2007)

http://www.nytimes.com/2007/12/11/science/11prof.html?_r=0.

²⁷¹ Jeter, 121 P.3d at 1269.

²⁷² *Id.* at 1270.

become persons" and are due varying degrees of respect depending on the issue involved.²⁷³ The Jeter court then went on to elaborate that this holding did not deny all causes of action for the loss of embryos and upheld the claims for negligent loss or destruction of the pre-embryos, breach of fiduciary duty, and breach of bailment contract.²⁷⁴

O. TEXAS COURT WAS NOT ASKED TO DETERMINE IF EMBRYOS WERE "JOINT PROPERTY" AND FOLLOWED CONTRACT LAW, EVEN THOUGH THE COURT RECOGNIZED EMBRYOS ARE DISTINCT FROM CHATTLES, REAL ESTATE AND MONEY IN *ROMAN v. ROMAN*.

In *Roman v. Roman*, the embryo agreement at issue referred to the embryos as "joint property" and because it was not necessary to the disposition of the appeal, the court did not address characterization of the embryos as "joint property."²⁷⁵ The wife in *Roman* challenged the validity of a signed embryo storage agreement indicating in the event of divorce, the embryos were to be discarded.²⁷⁶ The *Roman* court reviewed the three resolution approaches have been used: (1) best interest of the child; (2) a contractual approach and (3) a contemporaneous mutual consent model.²⁷⁷ The court noted that embryos were fundamentally distinct from chattels, real estate, and money which are the subjects of ante prenuptial agreements.²⁷⁸

Next, the *Roman* court reviewed its state law on assisted reproduction and gestational agreements contained within the Uniform Parentage Act and found no directive on determining embryo disposition in a divorce.²⁷⁹ Then, the *Roman* court viewed other state law on gestational agreements and gleaned from Texas law that there was no public policy against deciding the

²⁷⁸ *Id.* at n.10.

²⁷³ *Id.* at 1271.

²⁷⁴ *Id.* at 1271, 1276.

²⁷⁵ Roman v. Roman, 193 S.W.3d 40, n.7 (Tex. App. 2006).

²⁷⁶ *Id.* at 44-45.

²⁷⁷ *Id.* at 48, n.9.

²⁷⁹ *Id.* at 49.

disposition of frozen embryos in the event such as divorce, death, or changed circumstances.²⁸⁰

The *Roman* court then analyzed the embryo agreement under contract law principles.²⁸¹ The progenitors did not dispute the pages in the agreement were initialed and signed and that in the event of divorce the embryos were to be discarded.²⁸² The wife claimed she did not understand the agreement to apply until after she had a successful implantation, but the court held the language was clear.²⁸³ The wife raised the argument that the husband "breached the intent and purpose of the IVF agreements," but did not cite authority or argument for that position, so it was not considered.²⁸⁴ The wife also argued her husband deceived her as to his true state of mind, so there was no meeting of the minds, but the court found that parole evidence did not replace the unambiguous written contract language.²⁸⁵ The wife also argued the agreement was moot because the center agreed to do whatever the court ordered it to do, but cited no authority for that argument and it was denied.²⁸⁶ The agreement in effect at the time of the divorce controlled, and the court ordered the embryos discarded.²⁸⁷

The *Roman* case is another example that a description of embryos as "joint property" results in progenitors being informed embryos can be thrown away and courts based on contract law analysis order termination of innocent human life, even when a parent claims the contract was not understood and wants the embryo to grow and develop. The wife in *Roman* did not provide the court with authority that she was denied her unalienable rights to care for the health

 280 *Id*.

- ²⁸¹ *Id.* at 50.
- ²⁸² *Id.* at 51-52.
- ²⁸³ *Id.* at 52.
- ²⁸⁴ *Id.* at 54.
- ²⁸⁵ Id.
- ²⁸⁶ Id.

²⁸⁷ *Id.* at 55.

of her offspring and her pursuit of happiness to care for the life created and to have the companionship of the created life.

P. WITHOUT SCIENTIFIC ANALYSIS OF THE NATURE OF THE EMBRYOS, OR ARGUMENT THE AGREEMENT WAS INVALID, THE OREGON COURT FOUND EMBRYOS DEFINED IN A CLINC AGREEMENT AS PERSONAL PROPERTY, ALSO MET THE BROAD DEFINITION OF PROPERTY UNDER OREGON LAW IN DAHL v. ANGLE.

In *Dahl v. Angle*, the father in an embryo property settlement dispute stated "there is no pain greater than having participated in the demise of your own child."²⁸⁸ In describing the subjects of the dispute, the court noted that the agreement of the parties in the appendix defined the embryos as cleaving embryos, as distinguished from zygotes and blastocysts and there was no trial evidence regarding the embryos' stage of development.²⁸⁹ The *Dahl* court ruled that a contractual right to dispose of embryos created during a marriage constitutes personal property under Oregon law and is subject to the court's authority to distribute embryos in a subsequent dissolution proceeding.²⁹⁰ Secondly, the court held it had the authority to distribute the embryos in a manner of distribution of that property that is "just and proper in all circumstances."²⁹¹

In reaching the decision, the *Dahl* court reviewed the language in the storage agreement between the University and the "clients" that labeled the embryos as personal property and that the "clients represent and warrant they have lawful possession of and the legal right and authority to store the embryos under the terms of this agreement."²⁹² The court determined pursuant to the case of *In Re Marriage of Massee*,²⁹³ that the definition of property as something

²⁹¹ *Id.* at 839.

²⁸⁸ 194 P.3d 834, 837 (Ore. App. 2008).

²⁸⁹ *Id.* at n.1.

²⁹⁰ *Id.* at 838.

²⁹² Id.

²⁹³ 970 P.2d 1203, 1212 (1999).

"[t]hat is or may be owned or possessed, or the exclusive right to possess, use, enjoy or dispose of a thing" was a definition broad enough to apply to embryos.²⁹⁴ *Dahl* accepted the resolution framework set forth by *Davis*, as consistent with Oregon law that gave effect to prenuptial agreements, and state policy enforcing marital agreements.²⁹⁵

While the agreement did not address disposition in the event of marital dissolution or separation, it did contemplate the contingency of who had the primary authority as decision maker if the parties disagreed and the agreement stated the wife was the decision maker.²⁹⁶ At the trial court level, the husband denied he ever initialed or read the agreement and stated he signed only the last page without a notary present; however, the trial court found the husband was not untruthful, but had an inaccurate recollection.²⁹⁷ The validity of the contract was not challenged further. On appeal, the husband did not argue the agreement was ambiguous or invalid for public policy reasons.²⁹⁸

Thus, the appellate court in *Dahl* did not honor the husband's request to balance his "belief" that the embryos are life and his desire to donate the embryos in a way to allow "his offspring to develop their full potential as human beings" should outweigh the wife's interest in avoiding genetic parenthood.²⁹⁹ On appeal, the court did not find the trial court had abused its discretion in determining to give effect to the embryo disposition agreement.³⁰⁰

The confusion regarding the legal status of the embryo may have led the husband in *Dahl* to argue a just and proper distribution of "property" applied to embryos pursuant to Oregon

²⁹⁴ *Dahl*, 194 P.3d at 838.

²⁹⁵ *Id.* at 840.

²⁹⁶ Id.

²⁹⁷ *Id.* at 837.

²⁹⁸ *Id.* at 841.

²⁹⁹ Id.

³⁰⁰ Id.

marital dissolution laws, although to him, the embryos were "living things" he did not want killed; and the wife, who wanted the embryos destroyed argued that the embryos were not "property" subject to a distribution of marital property, but if they were, then the court could not impose a genetic parental relationship.³⁰¹ Perhaps, the father reasoned the best chance to save the embryos was to have them classified as property in hope a fair and just distribution of property in divorce would give the embryos a chance at continued life, while the mother who wished for no action to be taken to preserve the lives of the offspring argued against a property status. Factually, it is important to note that the progenitors already establish genetic parenthood and not the courts, and therefore the courts in balancing rights, should accurately define the rights to be weighed.

Q. IN FLORIDA, CASE LAW DID NOT ADDRESS THE NATURE OF THE EMBRYO, BUT ONLY PARTY RIGHTS PURUSANT TO SETTLEMENT ENFORCEMENT IN *VITAKIS V. VALCHINE*.

In *Vitakis v. Valchine*, the parties, a divorcing husband and wife, saw a mediator, and the wife had claimed she entered her divorce mediation agreement under duress and coercion.³⁰² Part of the settlement agreement was for the wife to "provide" the couple's frozen embryos to the husband so he could dispose of them, and further that the divorce agreement could only be modified by written agreement.³⁰³ The appellate court had first remanded the case to the trial court that found no mediator misconduct, or duress or coercion and upheld the settlement agreement.³⁰⁴ After the ruling that the settlement agreement was enforceable, the husband filed a motion to force the wife to provide the embryos to him.³⁰⁵ The wife argued that during the

³⁰¹ *Id.* at 837-38, 841.

³⁰² 987 So.2d 171 (Fla. Ct. App. 2008).

³⁰³ *Id*.

³⁰⁴ *Id. See also Valchine v. Valchine*, 923 So. 2d. 511 (Fla. 4th DCA 2006).

³⁰⁵ Id.

pendency of the appeals her husband had a "change of heart" granting her the embryos, but she had nothing in writing modifying the agreement.³⁰⁶ Thus, the court on appeal affirmed that the settlement agreement was valid.³⁰⁷

Florida statutory law refers to the nature of the embryo as a pre-embryo.³⁰⁸ In *Vitakis v. Valchine*, there was no mention of any party challenging the nature of the embryo, so the humanity of the embryo and the constitutional rights of a parent to protect offspring was not raised by this decision. Further, as explained in this article, "preembryo" was a term that the *Davis* court adopted from the American Fertility Society that had believed there was no cellular differentiation in the early developing embryo until implantation. As discussed in the article, the label of "pre-embryo" is not a scientific term that actually describes the composition and the behavior of the early human embryo based on what is known about the early human embryo in 2018.

R. ILLINOIS HOLDS ITS WRONGFUL DEATH ACT IS IN DEROGATION OF THE COMMON LAW AND MUST BE STRICLTY CONSTRUED, AND, THEREFORE, ONLY THE LEGISLATURE CAN DETERMINE IF THERE IS RECOVERY FOR LOSS OF AN UNIMPLANTED EMBRYO.

The Illinois Wrongful Death Act permits recovery for death of a person.³⁰⁹ The law provides that the "state of gestation or development of a human being" when the injury is caused would not prohibit a cause of action.³¹⁰ The term "human being" was not defined in the Wrongful Death Act, so the court looked to legislative history.³¹¹ The legislative history did not

³⁰⁶ *Id.* at 172.

³⁰⁷ *Id*.

³⁰⁸ Fla. Stat. Ann Sec. 742.17(2). Absent a written agreement, decision making authority regarding the pre-embryos shall reside jointly with the commissioning couple. ³⁰⁹ 740 ILCS 180/0.01 *et. seq.* (2002).

³¹⁰ *Id.* at § 2.2.

³¹¹ Miller v. American Infertility Group of Illinois, 897 N.E. 2d 837, 844-45 (Ill. App. Ct. 2008).

mention *in vitro* fertilization embryos.³¹² The court found the purpose of Section 2.2 was to extend a cause of action to pregnancies in the mother's body regardless of whether the fetus was viable or nonviable and therefore refused to extend the statute to apply to embryos created by in vitro fertilization that were not implanted in the mother.³¹³ The court further pronounced that the language "the state of gestation" refers to the in utero fetus and "the stage of development" refers to the live born fetus.³¹⁴

The Illinois Court had not addressed the fact that the culture medium in which the embryos are stored acts like an artificial womb and that the growth and development of embryos are factually observed in the culture medium.

S. IN ARKANSAS, A CLINIC DISPOSITION STATEMENT GIVING THE CLINIC CONTROL AND DIRECTION OF TISSUES IN THE EVENT OF A DISSOLUTION OF MARRIAGE PREVAILED OVER THE WIFE'S OBJECTION CLAIMING THE HUSBAND HAD AGREED IN A MARITAL PROPERTY SETTLEMENT THAT SHE COULD DECIDE EMBRYO DISPOSITION.

In *Dodson v. Univ. of Ark. for Med. Sciences*, the Federal Court ruled that the Arkansas state court had applied state law and upheld pre-IVF agreement that a university would take control of couple's frozen pre-embryos in the case of divorce, and that the federal courts were barred from revisiting that holding under the *Rooker-Feldman* doctrine, which claims federal district courts generally lack subject matter jurisdiction over attempted appeals from state court judgment.³¹⁵ A review of the facts in the underlying state case reveals that the clinic described the embryos to the husband and wife as "tissue" and the court believed biological parenthood

³¹² *Id.* at 845.

³¹³ *Id.* at 840.

³¹⁴ 601 F.3d 750, 752 (8th Cir. 2010),

³¹⁵ *Id.* at 754, 756.

did not begin until after birth.³¹⁶ The facts also indicate the dispute was initially attempted to be resolved in a marital property settlement.³¹⁷

The plaintiffs, Dodson, the wife, and her husband, Lay, had eighteen cryopreserved embryos in storage at the University of Arkansas for Medical Sciences (UAMS).³¹⁸ The UAMS had a disposition statement, which indicated that in the event of martial dissolution by court order then "all control and direction of [their] tissues will be relinquished to the medical director."³¹⁹ The UAMS had acknowledged that Dodson and Lay would control and direct disposition of the tissues.³²⁰ Further, at any time prior to implantation in Dodson's uterus the couple or surviving spouse could have the tissues destroyed, used for medical research, or transferred to the custody of another physician at another health care facility.³²¹

During 1997 divorce proceedings the court affirmed a property settlement where the terms of the UAMS disposition statement were affirmed, but in addition it was decreed Dodson "shall have the right to choose from available options, if any, for disposition listed in the [Disposition Statement]."³²² Subsequently, in 1999, Dobson requested UAMS transfer the embryos to her, but UAMS would not do so without Lay's consent.³²³ Lay only consented to the three options in the disposition statement, but did not consent to transfer to Dobson for implantation.³²⁴ Dobson sought relief in chancery court that determined the UAMS disposition statement was in control and UAMS who was not a party and the chancery court stated it would

- ³¹⁷ *Id.* at 752.
- ³¹⁸ *Id*.
- ³¹⁹ Id.
- ³²⁰ *Id*.
- ³²¹ *Id*.
- ³²² *Id.*
- ³²³ Id. ³²⁴ Id.

65

³¹⁶ *Id.* at 751, 753.

not interpret a third party contract.³²⁵

Subsequently, UAMS offered Dobson twenty-one days in which to exercise one of the three options in the disposition statement.³²⁶ Dodson filed a declaratory judgment action against UAMS, the UAMS Chancellor, the IVF Program Director, and later substituted in the UAMS Board of Trustees for the Chancellor and the Director.³²⁷

Dodson alleged that her ex-husband had relinquished his right to consent or object to the implantation of certain embryos into her, and secondly that she had fulfilled her rights and obligations to UAMS.³²⁸ Third, plaintiff alleged UAMS must fulfill its obligation to her and implant the embryos.³²⁹ Fourth, Dodson requested a preliminary injunction prohibiting UAMS from disposing or injuring the embryos until a final hearing on the merits.³³⁰

The court denied the cause of action explaining that Dodson along with Lay had agreed to let the IVF Program control the embryos in the event of a divorce and the Director was reasonable in giving Dodson three of the previous agreed dispositions to select.³³¹ The court further found that it was reasonable for the program Director to request the ex-husband's consent "to become a biological father."³³² Dobson appealed the ruling to the Arkansas Supreme Court, but her case was dismissed because she failed to order a transcript of the chancery court proceedings.³³³

The Dodson case is another example of a clinic drafted disposition of an embryo

 325 Id.

- 326 *Id*.
- ³²⁷ *Id.* at 753.
- ³²⁸ *Id*.
- ³²⁹ *Id*.
- ³³⁰ *Id*.
- ³³¹ *Id*.
- ³³² Id.
- ³³³ Id.

agreement trumping the rights of a parent to protect offspring by not recognizing the offspring as a human being but referring to the procreated embryo as tissue. While clinic documents defining rights of the parties may be essential to clinic functions, the clinics need to accurately state that who is being created is not mere cells and tissue, but an identifiable human organism, who is distinguishable from all other human organisms, in accordance with currently known and observed biological facts.

T. FEDERAL COURT DENIES A CLASS ACTION COMPLAINT THAT DID NOT NAME THE PLAINTIFF'S "PARTICULARIZED CHARACTERISTICS" IN *DOE v. OBAMA*.

In *Doe v. Obama*, Mary Scott Doe, a human embryo on behalf of other embryos in storage and potential adoptive parents sought in the trial court to block federally funded research on human embryonic stem cells as violating the embryos Thirteenth and Fourteenth Amendment rights, and the Dickey Wicker Amendment prohibiting federal funds for destruction of human embryos.³³⁴ The Fourth Circuit found that the progenitor/parents of the embryos were the ones who caused the embryos to be donated for research and there was no evidence that it was the executive order permitting research that caused harm to the embryos.³³⁵ The court noted that Mary Scott Doe could have been placed for adoption by her parents and there was no proof she was harmed.³³⁶ The trial court found that the allegations were to an "amorphous frozen embryo class" and parents who may want to adopt in the future.³³⁷ The court found this case at least acknowledged that a complaint might have described particular characteristics and harm done to particular embryos. The court's "conclusion that plaintiffs cannot establish standing in this case

³³⁴ 631 F. 3d 157 (4th Cir. 2011).

³³⁵ *Id.* at 159.

³³⁶ *Id.* at 161.

³³⁷ *Id.* at 160.

is a narrow one, for [it] do[es] not suggest that no party would ever have standing to assert similar claims.³³⁸ Further, "[t]he bar of standing must not be set too high, lest many regulatory actions escape review contrary to the intent of Congress.³³⁹ The court indicated that "[a] complaint that provided more concrete information about the identity of the named plaintiff embryo or the plaintiff parents' plans for adoption would at least address more directly what the Supreme Court has identified as serious constitutional concerns.³⁴⁰

Note that embryos belonging to specific couples in divorce cases can be identified and likely have documentation in a medical record describing the developmental stage and appearance of each embryo. The rights of parents to protect their particular embryos and to bring a cause of action to protect them is in accordance with the spirit of the Declaration of Independence and the many state constitutions that protect inalienable rights and that recognizes that we were each created with endowed inalienable rights and the job of government is to protect those rights.

U. THE OHIO COURT CLAIMED A FATHER FAILED TO CITE ANY AUTHORITY TO SUPPORT THE CLAIM THAT THE THIRTEENTH AMENDMENT APPLIES TO FROZEN EMBRYOS, AND UPHELD ENFORCEMENT OF A CLINIC DOCUMENT DEFINING THE EMBRYOS AS PROPERTY AND GIVING DISPOSTION TO THE WIFE AFTER DIVORCE AS PREVIOUSLY AGREED IN THE SIGNED CLINIC DOCUMENT IN *CWIK V. CWIK.*

In *Cwik v. Cwik* under a heading marked by the court as "III. Property Issues, A. Frozen Embryos," the court reported that the father argued that it would be in the best interest of the embryos that he be granted custody of the embryos because he would hire a surrogate to give birth to the embryos, but the trial court had upheld an informed consent document that he has

³³⁸ *Id.* at 163.

³³⁹ Id.

³⁴⁰ *Id*.

signed earlier declaring the embryos were the sole property of his wife.³⁴¹ While the court noted that he had cited the Thirteenth Amendment in support of his argument that the clinic contract was unconstitutional, the court stated he failed to cite any authority to support this claim.³⁴² Instead, the court referenced *Doe v. Obama*, for the proposition that courts have not afforded frozen embryos legally protected interests akin to persons, so embryos would not be persons under the Thirteenth Amendment.³⁴³

Secondly, the husband argued that the clinic document was unconscionable and should not be upheld.³⁴⁴ The Ohio Court referenced *Karmasu v. Karmasu*,³⁴⁵ which held a trial court "had no authority or jurisdiction to interfere in a contract made between the parties herein and a third party, which was not a party to the divorce action."³⁴⁶ Thus, the Ohio court found there was no abuse of discretion in the trial court awarding the embryos to the mother pursuant to the signed contract.³⁴⁷

Note, the decision in *Doe v. Obama, supra*, did not specifically address the merits of the class of embryos claims under the Thirteenth and Fourteenth Amendment because the court found specific characteristics of the embryos and the harm suffered were not described to indicate there was standing for an actual case or controversy because the only embryos researched on would be embryos whose parents consented to donate them to research. The court never considered the logic that no human being has been classified as property since the Thirteenth Amendment was ratified in 1865 and to treat human beings as property is contrary to

³⁴⁴ *Id*.

³⁴⁶ Cwik, 2011 WL 346173, at *10.

³⁴¹ 2011 WL 346173, at *10 (Ohio Ct. App. 2011).

³⁴² *Id.* at *9.

³⁴³ *Id*.

³⁴⁵ No. 2008CA00231, 2009-Ohio-2552 (2009).

³⁴⁷ *Id.* at *5.

the Thirteenth Amendment, particularly when balanced against parental constitutional rights to protect their begotten offspring.

V. NEITHER PARENT CHALLENGED THE PROPERTY CHARACTERIZATION OF THE EMBRYOS, YET PENNSYLVANIA COURT RAISES ISSUE OF WHEN PROCREATION OCCURS IN PURPOSEFULLY CREATING EMBRYOS, AND DISTINGUISHES BETWEEN AGREEMENTS BETWEEN EACH PARENT AND AGREEMENTS BETWEEN CLINICS AND PARENTS IN *REBER v. REISS*.

In *Reber v. Reiss*, the Superior Court analyzed the form entitled "Informed Consent for Cryopreservation and Storage of Embryos."³⁴⁸ The form gave the husband and wife the opportunity to indicate what the fate of the embryos would be in the event of their divorce, but neither party completed that portion of the consent form.³⁴⁹ The second page of the form stated in pertinent part, "[m]aximum duration of embryos storage for each group or partial group of embryos is not to exceed three years."³⁵⁰ The contract also provided the facility would send notice of intent to destroy the pre-embryos via certified mail when it came time to destroy them.³⁵¹

In 2006, the husband filed for divorce.³⁵² He claimed he just created the embryos as a "safeguard" and did not intend to have a child with his wife.³⁵³ After the husband filed for divorce he went on to purposefully have a biological child with another woman and indicated he planned to have more children.³⁵⁴

The wife, in contrast, had undergone extensive cancer treatment including two surgeries,

- ³⁴⁹ Id.
- ³⁵⁰ *Id*.
- ³⁵¹ *Id*.
- ³⁵² *Id.* at 1137.
- ³⁵³ *Id.* at 1140.
- ³⁵⁴ *Id.* at 1133.

³⁴⁸ 42 A.3d 1131, 1136 (Pa. 2012).

eight rounds of chemotherapy and thirty-seven rounds of radiation and during the divorce hearing and testified that her physicians led her to believe she was unable to now conceive.³⁵⁵ The Superior Court supported the Master and Trial Court's finding that the "safeguard" was to guard against the very situation where wife could not have a biological child.³⁵⁶ The Court determined the husband voluntarily provided wife with sperm when wife's doctors recommended IVF treatment to preserve her fertility.³⁵⁷ The Court found clearly the husband knew his participation in IVF was going to result in a child at some point in the future and that the only reason one undergoes IVF is to have a child.³⁵⁸ The Court found the agreement made between husband and wife for use of the pre-embryos was not contingent on the parties remaining married and when given the opportunity to indicate on the form the fate of the embryos in the event of divorce, neither party completed that section.³⁵⁹

The husband also argued that the trial court should have enforced the provision in the consent form that the embryos would be destroyed after three years.³⁶⁰ The Superior Court found that the duration section of the signed agreement was between the husband and wife and the storage facility about the destruction of the pre-embryos and it was not an agreement between the husband and wife that the embryos be destroyed if they became divorced.³⁶¹ The Court stated the contract also provided the clinic would send notice of intent to destroy the pre-embryos via certified mail when it came time to destroy them. Husband and wife both testified

- ³⁵⁷ Id.
- ³⁵⁸ *Id*.
- ³⁵⁹ Id.

³⁶¹ *Id*.

³⁵⁵ Id.

³⁵⁶ *Id.* at 1140.

³⁶⁰ *Id.* at 1136.
they had not received notice of destruction.³⁶²

The husband argued he was being forced to procreate against his will.³⁶³ The Superior Court, however, agreed with the trial court that Pennsylvania public policy is silent on the issue of forced procreation under these circumstances.³⁶⁴ However, other states have adopted policies. In Texas, "[t]he consent of a former spouse to assisted reproduction may be withdrawn by that individual in a record kept by a licensed physician at any time before placement of eggs, sperm or embryos.³⁶⁵ In Florida, absent a written agreement, the decision making authority resides jointly with the couple.³⁶⁶ The trial court offered the following analysis about the weight of the forced procreation argument:

We believe that Husband implicitly agreed to procreate with Wife when he agreed to undergo IVF, signed the consent form, provided sperm for the creation of the pre-embryos and agreed to the fertilization causing the pre-embryos to be created. The use of the pre-embryos was never made contingent upon the parties being married. In fact, when provided the opportunity to resolve the fate of the pre-embryos in the event of divorce neither party completed that portion of the IVF form.³⁶⁷

Given the court did not find a valid contract; the rights of the parties were balanced.³⁶⁸ Neither party disputed that the court could treat the pre-embryos as marital property.³⁶⁹ In weighing the husband's interest against unwanted procreation, the Court found Pennsylvania law silent on the issue of forced procreation under the circumstances before it and found husband had not made his voluntary decision to let the pre-embryos be created contingent on remaining

³⁶⁴ *Id*.

 $^{^{362}}$ *Id*.

³⁶³ *Id.* at 1142.

³⁶⁵ Tex. Fam. Code Ann. Sec. 160.706 (b) (Vernon 2011).

³⁶⁶ Fla.Stat.Ann Sec. 742.17(2).

³⁶⁷ *Reber*, 42 A.3d at 1140.

³⁶⁸ *Id.* at 1136.

³⁶⁹ *Id.* at n.7.

married.³⁷⁰ The wife testified that the husband would not need to be concerned that his child would not know his biological father, as the wife would allow him to be involved in the child's life if he desired.³⁷¹

The husband was concerned about his financial duty of support.³⁷² The wife's counsel reported extensively about how she would not look to the husband for financial support.³⁷³ Given the wife's testimony that she would not seek financial support from the husband, the court left open the right to determine if the issue of financial support was an actual case or controversy.³⁷⁴ The husband's financial concerns were considered in light of wife's agreement to do her best to assure that the husband never has to pay child support.³⁷⁵ The Superior Court concluded that:

In this case, because the Husband and Wife never made an agreement prior to undergoing IVF, and these pre-embryos are likely the Wife's only opportunity to achieve biological parenthood and her best chance to achieve parenthood at all, we agree with the trial court that the balancing of interests tips in the Wife's favor.³⁷⁶

The Reber court did not recognize that the true balancing test was the wife's right to

provide care for her offspring and pursue the happiness of the care and companionship of her

offspring versus the husband's right to terminate his parental duties and responsibilities to the

offspring created by having the life he created terminated.

W. EVIDENCE THAT A MALE PROGENITOR AGREED WITH THE FEMALE PROGENITOR THAT SHE COULD HAVE THE EMBRYOS CREATED, AND LACK OF EVIDENCE THAT LEGAL PARENTHOOD WAS FORCED ON THE MALE PROGENITOR RESULTED IN THE ILLINOIS COURT HONORING THE VERBAL AGREEMENT BETWEEN PROGENITORS PRIOR TO

³⁷⁰ *Id.* at 1140.
³⁷¹ *Id.*³⁷² *Id.* at 1141.
³⁷³ *Id.*³⁷⁴ *Id.* at 1142.
³⁷⁵ *Id.*³⁷⁶ *Id.*

CREATION OF THE EMBRYOS IN SZARFRANSKI V. DUNSTON.

In Szarfranski v. Dunston, the appellate court reviewed a case that was remanded to determine if there was an advance agreement between an unmarried couple as to the embryos disposition and if not, to weigh the parties relative interests.³⁷⁷ At issue was a clinic document stating: "Embryos are understood to be your property with rights of survivorship. No use can be made of these embryos without consent of both parties."³⁷⁸ The trial and appellate court did not find the clinic document countered a prior oral agreement by Szarfranski to allow Dunston to have her eggs fertilized with his sperm to create a child.³⁷⁹ Nonetheless, the court also balanced the interest of the parties and the appellate court affirmed Dunston would be given the embryos and that the "pre-embryos" represent Karla's last and only opportunity to have a biological child.³⁸⁰ Justice Harris, dissenting, reported there was "genuine and understandable sympathy for the predicament of one of the parties" and that parties "contemplating issues with significant implications such as creating and bringing a child into the world, that they make their intentions regarding material concerns clearly known. ... "³⁸¹ Neither the court, nor the dissenting Justice, mentioned any sympathy for the life created or the justice of leaving human life in storage, or terminating innocent life, or deciding the fate of human beings on a clinic form that describes them as property. The case was decided on contract law principles, but the court did not only look to the clinic consent form for evidence of party agreement prior to creation of the embryos in determining there was an agreement to procreate.

Currently, in Illinois the test to resolve embryo disputes will be to analyze what the

³⁸⁰ *Id.* at 1137.

³⁷⁷ 34 N.E. 3d 1132, 1136 (Ill. App. Ct. 2015).

³⁷⁸ *Id.* at 1138.

³⁷⁹ *Id.* at 1155.

³⁸¹ *Id.* at 1167.

agreement was between the parties as to the fate of the created embryos and if no agreement exists to balance party rights. The court commented that while it was not ruling on his parenthood status, if the unmarried male progenitor did not want to be a father he had a legal remedy under Illinois law to be declared a sperm donor.³⁸²

X. A CALIFORNIA TRIAL COURT LACKING ADVOCACY THAT THE SUBJECTS OF A DIVORCE DISPUTE, FROZEN EMBRYOS WERE HUMAN BEINGS, NONETHELESS FOUND THE EMBRYOS WERE NOT PROPERTY, BUT, MISTAKENLY BELIEVED HUMAN BEINGS HAD TO BE "FULLY FORMED" TO HAVE HUMAN RIGHTS AND DID NOT RECOGNIZE THEM AS CREATED WITH UNALIENABLE RIGHTS, THUS, DECLARING A RIGHT NOT TO PROCREATE OF THE FATHER PREVENTED THE MOTHER'S RIGHT TO BEAR HER OFFSPRING.

In *In re the Marriage of Stephen E. Findley, Petitioner v. Mimi C. Lee, Respondent, The Regents of the University of California*, there was no advocacy on behalf of the five human embryos before the trial court, but nonetheless the court held that "[e]mbryos in this case represent the nascent stage of five human lives. They are not property nor are they a fully formed human being. They are, in the construct of the law, sui generis and will be deemed as such in this statement of decision."³⁸³

The court's holding that human embryos may not be treated as property, is a correct understanding of observable scientific facts, but the author of this paper submits the court did not fully understand the nature of the embryos when it concluded that human embryos fall short of being fully human because they are not "fully formed." The human embryos chosen for storage are fully formed human beings in accordance with their stage of development. The court did not

³⁸² *Id.* at 1163.

³⁸³ NO. FDI-13-780539, 2016 WL 270083, at *1, *44, *82 (Cal. Super. Ct. Jan. 11, 2016), https://www.sfsuperiorcourt.org/sites/default/files/pdfs/FINDLEY_Statement_Of_Decision%20 Rev_1.pdf.

recognize that no human beings are "fully formed" at any given age, but undergo continuous change from fertilization to death. A human being develops rapidly initially, but reaches sexual maturity only in young adulthood, and psychological maturity even later. Changes continue into old age -- e.g., with age spots and senescence -- until death. The only "fully formed" reality in this process is the human organism's unique development plan, initiated at fertilization, which directs each person's growth from fertilization until death.³⁸⁴

The trial court in *Findley* recognized that the embryos before it were sui generis (unique),³⁸⁵ but could not articulate a valid basis for holding that they were less than fully human. This is not surprising given the lack of any advocacy by the parties (or by anyone else on behalf of the embryos) for the position that they are fully human beings. Nonetheless, the trial court in *Findley* was not presented by the parties with the observed scientific facts about what a human organism is, an identifiable human being in existence. Therefore, *Findley* should not a be considered as legal precedent to deny a parent the right to protect and nurture and care for their offspring, as even born children are not fully formed, nor is any human being ever fully formed but always forming until death. The act of procreation by the progenitors was completed. The female progenitor did not argue that the legal issue was whether the government through the justice system should protect the human beings created by acting in the embryos best interest and allow parental care and nurturing so that their created life could continue and did not urge the court to recognize parental rights to protect their children begin at the moment of spermegg binding. Instead the court mistakenly weighed "procreation rights."

Y. IN *MCQUEEN V. GADBERRY*, THE THE MISSOURI COURT CITED 87 ALR5TH 253 THAT CLAIMED THE EMBRYO PROPER OR ACTUAL EMBRYO DID NOT EXIST UNTIL IMPLANTATION AND DESCRIBED THE

³⁸⁴ Id.

³⁸⁵ Id.

EMBRYO AS "PREEMBRYO"; "HUMAN TISSUE"; "MARITAL PROPERTY OF A SPECIAL CHARACTER."

In 2016, two of three justices in *McQueen v. Gadberry*, upheld the trial court's decision to treat the embryos as marital property of a special character, finding property to be an external thing over which the rights of use are exercised and found the *in vitro* embryos to be external and human tissue.³⁸⁶ The majority opinion referenced the *Davis* case to support that: "…frozen pre-embryos are unlike traditional forms of property because they are comprised of a woman and man's genetic material, are human tissue, and have the potential to become born children "³⁸⁷

The Missouri court also discussed *Davis* and progeny cases for the idea that each party had procreational autonomy rights, a right to procreate and a right not to procreate, not recognizing that the human embryos were already procreated and in a stage of early human development.³⁸⁸

The resolution model of the *Witten* Court in Iowa that awarded the embryos jointly to the parties, was followed by the trial court and upheld by the Missouri Appeals Court.³⁸⁹

The majority opinion that the embryos were 'tissue' did not acknowledge the observable scientific facts known in 2016 that a human embryo is a human organism in development prior to implantation in the womb, but instead referenced 87 A.L.R.5th 253, (originally published in 2001), reporting:

In this case, there was no evidence introduced at trial with respect to the science of IVF, related scientific terms, or the division or cell stages of the frozen pre-embryos at issue in this case. However, it appears the parties do not dispute the facts or science concerning the stages of development involved in IVF. As explained in American Law Reports:

... Typically, the [IVF] procedure begins with hormonal stimulation of a woman's ovaries to produce multiple eggs. The eggs are then removed

³⁸⁶ McQueen v. Gadberry, 507 S.W.3d 127, 148-49 (Mo. Ct. App. 2016).

³⁸⁷ *Id.* at 157.

³⁸⁸ *Id*.at 145-48.

³⁸⁹ *Id.* at 157.

by laparoscopy or ultrasound-directed needle aspiration and placed in a glass dish, where sperm are introduced. Once a sperm cell fertilizes the egg, this fusion, or pre-zygote, divides until it reaches the four-to-eight cell stages, after which several pre-zygotes are transferred to the woman's uterus by a cervical catheter. If the procedure succeeds, an embryo will attach itself to the uterine wall, differentiate, and develop into a fetus. As an alternative to immediate implantation, pre-zygotes may be cryopreserved indefinitely in liquid nitrogen for later use. 'Preembryo' is a medically accurate term for a zygote or fertilized egg that has not been implanted in a uterus. It refers to the approximately 14-day period of development from fertilization to the time when the embryo implants in the uterine wall and the 'primitive streak,' the precursor to the nervous system, appears. An embryo proper develops only after implantation. The term 'frozen embryos' is a term of art denoting cryogenically preserved pre-embryos. Elizabeth A. Trainor, Annotation, Right of Husband, Wife, or Other Party to Custody of Frozen Embryo, Preembryo, or Pre-zygote in Event of Divorce, Death, or Other Circumstances, 87 A.L.R.5th 253 (originally published in 2001).³⁹⁰

In McQueen, the dissenting justice, James Dowd, indicated that the declaration of Missouri

law in subsection 1.205, 188.010 and 188.0155 supported the fact that life begins at conception, including every stage of biological development, conceptus, zygote, morula, blastocyst, embryo and fetus; and that conception is defined as the fertilization of the ovum of a female by the sperm of a male.³⁹¹ The dissent pointed out there was no classification of "marital property of a special character" in Missouri law and no Supreme Court decision that justifies the finding that the embryos are property.³⁹² Justice Dowd stated that the *Thirteenth Amendment* removes all human beings from the category of property.³⁹³

It is incredulous to the author of this paper that the two majority justices in *McQueen* can claim there was no dispute between the parties as to the facts or science regarding the developmental stages involved in IVF, when there is a scientific difference between property such

³⁹⁰ *Id.* at 133, n.4.

³⁹¹ *Id.* at 158-59.

³⁹² *Id.* at 158.

³⁹³ *Id*.

as cells and tissue compared to human organisms, human offspring, identifiable human beings distinguishable from parents and sibling embryos as well as born siblings. The father was arguing he had procreation rights at issue and yet, procreation rights were already exercised producing four human beings.³⁹⁴ The created offspring included the two cryopreserved siblings and the couple's two other children, who were all created at the same time, and cryopreserved at one of the biological stages of development as identified by Missouri law Sections 188.010 and 188.015(3) and (10).³⁹⁵ Despite the fact that it is known today that the origins of the human body begin prior to implantation in the uterus, and that the inner cell mass visualized in the embryos at the blastocyst stage of development is desired for embryonic stem cell research, the Missouri court majority opinion was referencing old scientific thought that the "embryo proper" developed after implantation which is not consistent with current scientific findings.³⁹⁶

The Missouri Supreme Court denied appeal. The mother announced in a tearful YouTube video that she had reached an agreement with her ex-husband that the embryos will be adopted, and she wanted to assure their continued life rather than have the United States Supreme Court decide their fate, so she was not appealing the case further.³⁹⁷

Z. IN *LOEB v. VERGARA*, PETIONER-FATHER SEEKING CUSTODY OF HIS EMBRYOS WAS ORDERED TO IDENTIFY WHOM HE FATHERED CHILDREN WITH IN THE PAST AND WHO HAD ABORTIONS, RESULTING IN THE PETITIONER FATHER ABANDONING HIS CALIFORNIA LAWSUIT.

³⁹⁴ *Id.* at 134.

³⁹⁵ *Id.* at 134, n.4.

³⁹⁶ See Sherley v. Sebelius, 689 F.3d 776, 779 (D.C. Cir. 2012), cert. den. U.S. Sup. Ct. No. 12-454 (2013).

³⁹⁷ Embryo Defense, *Embryo Case Decision*, YOUTUBE (May 11, 2017), https://www.youtube.com/watch?v=rw_eUQ2gSpg.

Petitioner Loeb's contention was that he is the "father" of the female embryos before the Court, whom he views as "his daughters," and that the "Female Embryos have been conceived."³⁹⁸ Loeb and Vergara's plan was to transfer the embryos to a surrogate mother's uterus. At some point the embryos were cryopreserved. Later the parties separated, and disagreed over disposition of their embryos, prompting the lawsuit.³⁹⁹

Press releases revealed that Respondent, Vergara wanted the embryos to remain cryopreserved until either she or Loeb died, at which time the embryos would be thawed "with no action taken," meaning they would not be given the opportunity for further cell metabolism and would die.⁴⁰⁰

Loeb sought custody of the embryos, so he could find a surrogate mother to bear them.⁴⁰¹ The parents never intended that Vergara would physically bear the embryos, so a mother's right to choose to bear, or not to bear, a child was not implicated.⁴⁰²

According to the complaint, the parties in the informed consent forms they executed to engage the IVF clinic's services never provided a directive for disposition in the event of their separation, only a directive for disposition in the event of their death ("thaw with no action").⁴⁰³ Loeb further asserted that assigning a disposition upon one event (death) does not govern disposition upon a different, uncontemplated event (separation).⁴⁰⁴ He asserted that he would not

³⁹⁸ Third Amended Complaint at ¶45, *Loeb v Vergara*, SS 024581 (Ca. Super. Ct. 2014).

³⁹⁹ *Id.* at \P 1.

⁴⁰⁰ *Id.* at ¶¶ 31-33. *See also* Danielle & Andy Mayoras, *Sofia Vergara Lawsuit Teaches Lesson for Couples Seeking IVF*, Forbes (2015),

https://www.forbes.com/sites/trialandheirs/2015/04/21/sofia-vergara-lawsuit-teaches-lesson-for-couples-seeking-ivf/2/#2d29ad513b74.

 $^{^{401}}$ *Id.* at ¶ 1.

 $^{^{402}}$ *Id.* at ¶ 15.

 $^{^{403}}$ *Id.* at ¶ 84.

 $^{^{404}}$ *Id.* at ¶ 80.

have selected the disposition (thaw with no action) if he had an inkling that it might be enforced in the event of his and Vergara's separation.⁴⁰⁵ He also asserted that he signed the form under duress.⁴⁰⁶ Finally, Loeb claimed that the clinic forms are void because they do not list all the options, including "donation to another couple" or "other disposition" that the California Code requires.⁴⁰⁷ Loeb requested the court to find that the forms he and Vergara executed were invalid and to award him custody of the embryos.⁴⁰⁸

During the discovery phase of litigation, the Petitioner, Loeb was ordered by the court, to identify women with whom he had fathered children in the past who subsequently had abortions.⁴⁰⁹ The Petitioner stated he would rather go to jail than identify the women who had aborted his prior children.⁴¹⁰ On December 6, 2016, he dismissed his California lawsuit. Then on December 7, 2016 he brought a lawsuit on behalf of his cryopreserved daughters, whom he named Emma and Isabella in the state of Louisiana.⁴¹¹

AA.THE HUMAN EMBRYOS DID NOT HAVE A CASE TO PRESENT IN THE STATE OF LOUISIANA WHERE THE COURT LACKED PERSONAL JURISDICTION OVER THE MOTHER.

In Human Embryo #4 HB-A v. Vergara, Loeb, the father and Plaintiff, filed a lawsuit on

behalf of his embryonic daughters, Emma and Isabella, in a state where embryos are judicial

 $^{^{405}}$ *Id.* at ¶ 77.

 $^{^{406}}$ *Id.* at ¶ 90.

⁴⁰⁷ *Id. See also* §125315 (b) of the California Health & Safety Code.

⁴⁰⁸ *Id.* at Counts V & VI.

⁴⁰⁹ Danielle & Andy Mayoras, *Embryo Lawsuit Between Sofia Vergara and Nick Loeb Getting Out of Hand*, FORBES (Nov. 18, 2016),

https://www.forbes.com/sites/trialandheirs/2016/11/18/embryo-lawsuit-between-sofia-vergaraand-nick-loeb-getting-out-of-hand/#5749d8493d65.

⁴¹⁰ *Id.* at 2.

⁴¹¹ *Human Embryo #4 HB-A v. Vergara*, No. 17-1498, 2017 U.S. Dist. LEXIS 136782 (E.D. La. Aug. 25, 2017).

people who have the right to sue and be sued and cannot be intentionally destroyed.⁴¹² Loeb had created a Louisiana Trust in 2016 to benefit Isabella and Emma if they were born alive.

Plaintiff's sought:

- (1) A declaratory judgment declaring that the Form Directive is a void and unenforceable contract between Loeb and Vergara under California law because it does not contain certain required provisions pertaining to the deposition of the preembryos under certain circumstances;
- (2) A declaratory judgment declaring that the Form Directive does not control decisions regarding the future disposition of Emma and Isabella in the event of Loeb and Vergara's separation because it lacks such provisions, which are required by California law.
- (3) Rescission of the Form Directive because Loeb signed it under duress;
- (4) Rescission of the General Informed Consent as against public policy and Louisiana law because it declares that the pre-embryos are property instead of people;
- (5) Rescission of the Form Directive for fraud and misrepresentation because, at the time the pre-embryos were created through the IVF process, Loeb was relying on Vergara's representations that she wanted them to be transferred to a surrogate;
- (6) Declaratory judgment prohibiting Vergara from consenting to the pre-embryos' destruction;
- (7) Declaratory judgment mandating that Vergara release the pre-embryos for uterine transfer;
- (8) Finding a breach of an oral contract between Loeb and Vergara to have the preembryos transferred to a surrogate which has prevented them from being born and gaining their inheritance in the Trust;
- (9) Finding of tortious interference with the pre-embryos' ability to inherit from the Trust by not permitting them to be transferred to a surrogate;
- (10) Appointment of Loeb as the pre-embryos' curator;
- (11) An order declaring Vergara to be an egg donor under California law; and
- (12) An order terminating Vergara's parental rights.⁴¹³

⁴¹² *Id. See also* La. Rev. Stat. sec. 9:121 *et. seq.*

⁴¹³ *Id.* at *8-*10.

The court did not proceed with the case, however, because it found there was not personal jurisdiction over the mother, Vergara, as the cause of action that was alleged in the complaint did not arise out of the mother's contacts with Louisiana and she did not otherwise have enough minimum contacts with the state of Louisiana to invoke jurisdiction.⁴¹⁴

BB. *ROOK V. ROOKS* HELD THAT A FATHER HAD A RIGHT NOT TO "PROCREATE" EVEN THOUGH HE ACKNOWLEGED HE WAS THE "BIOLOGICAL PARENT' AND THE TRIAL COURT ACKNOWLEGED THAT THE EMBRYOS WERE BIOLOGICALLY AND SCIENTIFICALLY LIFE

The parties, Respondent-Appellant Mandy Rooks and Petitioner-Appellee Drake Rooks, while married, used in-vitro fertilization (IVF) to have three children and they also have six additional embryos in storage that were created.⁴¹⁵ The father then petitioned for divorce.⁴¹⁶ He asked the court to deliver the six embryos to him for discard.⁴¹⁷ The mother seeks their preservation for future implantation.⁴¹⁸

The trial court awarded the embryos to the father, finding them to be property disposable under terms of the parties' IVF agreement.⁴¹⁹ The trial court alternatively balanced the mother's desire for additional children against the father's desire not to continue to be the embryos' father.⁴²⁰ The court found the father enjoyed a "negative right" to avoid further burdens of genetic parenthood and decided that the right outweighed the mother's interest in preserving the embryos.⁴²¹

- ⁴¹⁶ *Id.* at *7.
- ⁴¹⁷ *Id*.
- ⁴¹⁸ *Id*.
- 419 *Id.* at *60.
- ⁴²⁰ *Id.* at 45.

⁴¹⁴ *Id.* at *17.

⁴¹⁵ In re Marriage of Rooks, 2016 COA 153, at *8.

⁴²¹ *Id.* at 53.

The appellate court affirmed the trial court's judgment under a "balancing of interest approach."⁴²² Because no Colorado statute or appellate decision addresses disposition of cryopreserved embryos on dissolution of marriage the appellate court looked for persuasive guidance to decisions of other jurisdictions.⁴²³ The Appellate Court concurred with courts adopting a contract approach which enforces a valid agreement of the spouses, and absent agreement, balances the spouses' respective interests.⁴²⁴ Here the court, finding no valid agreement, balanced the Rooks' interests.⁴²⁵

In doing so, the appellate court considered the seminal case of *Davis v. Davis*, and its progeny. The appellate court held that the trial court could reasonably conclude that the husband's interest in not producing additional offspring outweighed the wife's interest in having a fourth child, citing *Davis*, and that the husband had a constitutional right "to determine that he does not want to have additional children who are joint genetic offspring of husband and wife," again citing *Davis*.⁴²⁶

Petitioner basically acknowledged the scientific recognition that he created human life when he illogically argued that "biological parents' have the right not to become parents"⁴²⁷ This admits he is the biological parent of the embryos before the court. The court itself found that the embryos are "biologically and scientifically 'life."⁴²⁸ (R.CF., p. 232). However, it decided it could not hold that the embryos had rights as human persons because Colorado does not count

⁴²² *Id.* at *6.

⁴²³ *Id.* at *13.

⁴²⁴ *Id.* at *24.

⁴²⁵ *Id.* at *36,*38.

⁴²⁶ *Id.* at *45, *53.

⁴²⁷ Petitioner-Appellee Amended Answer Brief at 11, In re Marriage of Rooks, 2016 COA 153.

⁴²⁸ Brief of American Association of Prolife Obstetricians and Gynecologists as *Amicus Curia* on Behalf of Petitioner Mandy Rooks at 6, *In re Marriage of Rooks*, 2016 COA 153.

unborn children as persons under its criminal laws, child dependency and neglect laws, and wrongful death statute.⁴²⁹

The Supreme Court of Colorado granted certiorari on April 17, 2017, on two issues:

- 1. Whether, in the absence of an agreement between the parties, the court of appeals erred in its adoption of the balance of interests approach to determine the disposition of the parties' cryogenically frozen pre-embryos in a dissolution of marriage.
- 2. Whether the court of appeals erred in applying an abuse of discretion standard of review in reviewing the trial court's determination of the disposition of a couple's cryogenically frozen pre-embryos in a dissolution of marriage.⁴³⁰

The decision of the Colorado Supreme Court in this case is pending.

CC. IN *KARUNGI V. EJALU*, BY THE PLAIN LANGUAGE OF THE AGREEMENT "ANY AND ALL DISPUTES RELATAING TO THIS AGREEMENT OR ITS BREACH SHALL BE SETTLED BY ARBITRATION."

In *Karungi v. Ejalu*, the clinic agreement with the parties provided that by "any and all disputes relating to this agreement or its breach shall be settled by arbitration."⁴³¹ Two of three Michigan justices remanded the case back to the trial court for further consideration of the applicability of the arbitration clause as to whether the court had subject matter jurisdiction to decide the case.⁴³²

The dissenting justice disagreed that the arbitration applied to disagreements between the parties and thought the arbitration clause only applied to any disagreement between the clinic and the parties.⁴³³ According to the dissenting justice, there was no Michigan law to support the proposition that frozen embryos are persons subject to a custody determination, so the dissenting

⁴²⁹ In re Marriage of Rooks, 2016 COA 153, at *11.

⁴³⁰ In re Marriage of Rooks, No. 16SC906, 2017 Colo. LEXIS 286 (Apr. 17, 2017).

⁴³¹ *Karungi v. Ejalu*, No. 337152, 2017 Mich. App. LEXIS 1514, at *4 (Ct. App. Sep. 26, 2017). ⁴³² *Id.* at *1.

⁴³³ *Id.* at *11-12.

justice would have granted a summary disposition on the basis the court lacked legal authority to consider the disposition of embryos in the context of a custody case.⁴³⁴

The concurring opinion thought the majority opinion only decided that the trial court's reasoning that it did not have subject matter jurisdiction because it was captioned as a child support dispute rather than a custody dispute was misplaced.⁴³⁵ The concurring opinion thought it was proper to remand to the trial court for further proceedings and not for anything more.⁴³⁶

The justice that wrote the majority opinion thought the parties and the trial court both ignored the clinic contract where the embryos were defined as joint property of both the recipient and partner who were deemed to be the legal owners.⁴³⁷ The majority opinion also commented that according to the parties' agreement with the clinic that stored the embryos, any disputes regarding the agreement or its breach would be settled by arbitration and that the trial court should have considered this case a contract dispute.⁴³⁸ The opinion stated a family support court would also have original jurisdictions in other matters and would not be precluded from resolving the contract issue.⁴³⁹ The majority opinion claimed the plaintiff's arguments were based on a misconception that this was a custody dispute rather than a contract dispute and since the case was being remanded to the trial court for further proceedings the Appellate Court was not going to address the remainder of the plaintiff's claim.⁴⁴⁰

The Michigan Supreme Court denied the appeal. J. McCormick wrote a concurring opinion that the fact intensive questions should be decided by the trial court including whether contract

- ⁴³⁶ *Id.* at *9.
- ⁴³⁷ *Id.* at *3.
- ⁴³⁸ *Id.* at *4.
- ⁴³⁹ *Id.* at *2-3.
- ⁴⁴⁰ *Id.* at *3.

⁴³⁴ *Id.* at *14.

⁴³⁵ *Id.* at *8-9.

law applies, and also stated the trial court should not avoid the question argued by the parties whether frozen embryos are persons subject to a custody determination.

V. CONCLUSION

When deciding cases involving disposition of cryopreserved or "frozen" embryos, courts continue to rely on precedent based on dicta and erroneous scientific concepts, particularly those expressed in Davis v. Davis and its progeny. Courts also continue to mislabel human organisms, existing human beings, as "pre-embryos" with the potential for life as opposed to correctly defining them as human life with full potential to complete all of life's stages from conception until death and totally ignoring or disregarding the fact that the term "pre-embryo" is unacceptable in the scientific community. The courts classify the "frozen" "pre-embryos" as a form of marital property of a "special character" or "special respect" or entities to be disposed of according to clinic consent forms describing the embryos as property, without considering the basic human rights and interests or the constitutional rights and interests of the human organisms, human beings under the Thirteenth Amendment. Further, they refuse to recognize that once the progenitors have procreated human organisms, human life was created, and procreation rights were already exercised as to those particular human organisms, identifiable human beings. Accordingly, the right not to procreate does not exist as to those already created human organisms, existing human beings.

The time has come for courts to determine the fate of cryopreserved embryos based on the scientific truth that they are human organisms, existing human life, entitled to basic human rights and the full panoply of constitutional rights under the Thirteenth Amendment, not some form of property, that they are not mere human tissue with only a potential for life, and that once the progenitors have procreated particular human lives no right not to procreate can exist as to

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those existing created human organisms.

The government's duty is to secure and protect unalienable rights. Parental rights include the right to conceive and raise one's offspring. Thus, "[t]he rights to conceive and to raise one's children have been deemed 'essential,' 'basic civil rights of man', and 'rights far more precious . . . than property rights."⁴⁴¹

The duty of justice, through the courts, is to properly identify who the subjects are that seek governmental protection, and to secure rights and interests of the subject before it, and to correctly name the rights and interests on the scale of justice in any embryo dispute.⁴⁴² What needs to be weighed in disputes over human embryos' fate are human rights and not property rights.

⁴⁴¹ Stanley v. Illinois, 405 U.S. 645, 651 (1972).

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