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CONFRONTING PROBLEMATIC LEGAL FICTIONS IN GESTATIONAL SURROGACY

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Infertility is a hot topic for investors and entrepreneurs in the United States, and recent years have seen a sharp rise of interest in various assisted reproductive technologies. Gestational surrogacy, a form of assisted reproduction where the surrogate mother is not (as) genetically related to the child she is carrying, is now the most popular form of surrogacy in the United States. It costs between \$75,000-150,000 per attempt, and results in the live births of hundreds of babies each year.

Alone amongst developed nations, the United States has left this vast industry largely unregulated. No federal laws address the practice or regulate the companies that facilitate it, while a patchwork of extant state laws run the gamut from criminalization and bans of commercial surrogacy to wholesale authorization of it. In the rare instances where courts have been asked to decide issues related to the same, they have been likewise brief and varied in their approaches.

Overall, when courts and lawmakers *have* addressed gestational surrogacy, they often oversimplify a complex biological phenomenon and cultural experience in favor of idealized fictions about reproductive biology and family life. As a result, policies surrounding gestational surrogacy do not align well with what actually happens to the mind and body during pregnancy, or how the surrogacy industry currently operates. A better understanding of the science of gestational pregnancy has the potential to animate legal policy that allocates rights amongst the parties involved more equitably, and in a way that reflects the reality of the physiological and psychological risks borne during the surrogacy process.

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INTRODUCTION

Today, one in sixty babies in the United States is born by means of in vitro fertilization (“IVF”) or other artificial treatments. Perhaps more astoundingly for a topic so seldom discussed, by the year 2026, the global fertility industry is predicted to make upwards of \$40 billion in sales alone.¹

A growing sector of the fertility industry involves surrogacy,² where a woman carries a child that she intends to hand over after birth to a separate set of intended parents.³ While surrogacy in its traditional form – that is, “using a substitute ‘mother’ to conceive, carry, and give birth before handing over the child to its ‘intended’ parents” – has been in practice since antiquity,⁴ gestational surrogacy has only existed since the 1970s. In gestational surrogacy, a woman is hired (with or without payment, depending on the jurisdiction) to carry a child that is the product of the “commissioning” (also referred to as “genetic” or “intended”) couple’s eggs and sperm.⁵ Sometimes, this is further complicated by the nature of the intended parents’ infertility or sexuality, and may involve eggs

1. *Seed Capital – The Fertility Business*, ECONOMIST, Aug. 10, 2019 at 51.

2. See Gaia Bernstein, *Unintended Consequences: Prohibitions on Gamete Donor Anonymity and the Fragile Practice of Surrogacy*, 10 IND. HEALTH L. REV. 291, 298 (2013) (explaining a study which observed that number of IVF cycles used for gestational surrogacy grew by 60% from 2004 to 2008).

3. Nayana Hitesh Patel et al., *Insight into Different Aspects of Surrogacy Practices*, 11 J. HUM. REPROD. SCI. 212, 212 (2018).

4. BABIES FOR SALE?: TRANSNATIONAL SURROGACY, HUMAN RIGHTS AND THE POLITICS OF REPRODUCTION 3 (Miranda Davies, ed., 2017) [hereinafter BABIES FOR SALE] (describing the earliest known description of surrogacy, in the Bible’s Book of Genesis); Patel et al., *supra* note 3, at 213 (observing that Babylonian law and customs allowed surrogacy as a means of preventing “otherwise inevitable” divorce).

5. Patel et al., *supra* note 3, at 212.

or sperm purchased from a donor.⁶ Either way, the resulting embryo is not intended to be genetically related to the surrogate mother⁷ and once created, is transferred into the surrogate's body via IVF.⁸

Common arguments against surrogacy have broad range but generally share similar core concerns. Some of the most popular arguments against surrogacy hold that it is dehumanizing: it commodifies women and children, encourages human rights violations, and in particular, exploits surrogates.⁹ However, more likely at the root of these common arguments against surrogacy is the fact that surrogacy's "subversive nature. . . disrupts two traditional conceptions that have long been comforting to the western world: *family* and *motherhood*."¹⁰ Gestational surrogacy challenges the idea that the biological mother-child bond is paramount, and that families must be structured around what is "natural" – indeed, it also challenges what kinds of family structures should be considered "natural" in the first place. As a basic example of this, note that while "in most countries, the woman who gives birth, even to a genetically unrelated child, is the legal mother," the same is not necessarily true in the United States.¹¹ In this country, surrogacy laws vary tremendously from state to state, with each state resolving questions of legal parentage and child custody in different and sometimes contradictory ways.¹²

In response to concerns about justice and equity in gestational surrogacy arrangements, both opponents and advocates of the practice have targeted the suitability of surrogacy law's reliance on biology.¹³ Critics of family law's historic framing of parentage and custody on biological motherhood rightly insist that gestational surrogacy should lead to significant revaluations of extant law and policy.¹⁴ Many state laws and courts have thus moved towards an approach that abandons biological considerations, substituting instead the parties'

6. See BABIES FOR SALE, *supra* note 4, at 5 (describing that how people live their "most intimate lives" has changed, including new family formations).

7. See *infra* Part II. Section A. Though this is how the industry and courts conceive of gestational surrogacy, it is not strictly true. Some genes may be able to cross the placenta barrier between surrogate mother and developing fetus, and it is well documented that the fetus's environment during development produces lasting epigenetic changes. See *infra* Part II Section A. For that reason, this paper does not refer to the intended parents as "genetic" parents, though the term appears throughout the literature cited.

8. Patel et al., *supra* note 3, at 212.

9. Nicole F. Bromfield, "Surrogacy Has Been One of the Most Rewarding Experiences in My Life": A Content Analysis of Blogs by U.S. Commercial Gestational Surrogates, 9 INT'L J. FEMINIST APPROACHES TO BIOETHICS 192, 194 (2016).

10. *Id.* (emphasis in original) (citation omitted).

11. Peter R. Brinsden, *Gestational Surrogacy*, 9 HUM. REPROD. UPDATE 483, 483 (2003).

12. See Courtney G. Joslin, (*Not*) *Just Surrogacy*, 109 CALIF. L. REV. 401, 464 (2021) (conducting a fifty-state survey of statutory and administrative provisions regarding surrogacy and cataloging differences in types of surrogacy arrangements authorized and the availability of compensation).

13. See *infra* Part I Section B.

14. See *infra* Part I Section B.

subjective intentions regarding the pregnancy and resulting child.¹⁵ The appeal of this simplified, personal approach is evident, especially as further advances in assisted reproductive technologies continue to distort traditional legal boundaries even further.

However, discarding the biological underpinnings of surrogacy and parentage laws, may do more harm than good. Laws and regulations in this space should instead realize that they can achieve the desired legal consistency and flexibility of family structures by looking to science – not the idealized science of traditional “biological motherhood,” but rather the complex biological realities of specific IVF and surrogacy procedures.

To that end, several prominent legal fictions in surrogacy law must be reconsidered, if not discarded entirely. The most prevalent of these legal fictions is one which holds that gestational surrogacy conceives a child that has only two genetic contributors, neither of which is the surrogate mother. This particular false narrative promotes the erasure of surrogates from a process that could not exist without them and risks undermining the civil liberties that reformers have long been aiming towards.

Part I of this Article outlines current trends in gestational surrogacy, both in the fast-moving world of industry practice and the slower one of case law.¹⁶ Part II then describes the science of pregnancy, including long- and short-term physical and psychological impacts on surrogate and child.¹⁷ Finally, Part III argues that industry practices likely shortchanges surrogates in both payment and later avenues for legal redress relative to the magnitude of the bodily changes they incur.¹⁸ Part III also explores some possible consequences of recognizing that surrogates and other tissue donors have a larger role in contributing biological material to the child than current discussion acknowledges.¹⁹ While each party’s contribution to the child’s development may not be equal, it is still meaningful in ways that the law currently fails to recognize and should be improved upon accordingly.

Lastly, before proceeding, we must acknowledge that language matters. In the context of gestational surrogacy, even common terms used to describe the surrogate who gives birth can be loaded, in that terms like “birth mother” or “surrogate mother” “explicitly acknowledge the material aspect of the woman’s role. . . [while] others, such as ‘gestational carrier’, make her maternity and even her personhood less visible.”²⁰ Moreover, the literature on surrogacy uses a wide and inconsistent range of terms to describe the parties involved. Thus, this Article

15. *See infra* Part I Section B.

16. *See infra* Part I.

17. *See infra* Part II.

18. *See infra* Part III.

19. *See infra* Part III.

20. BABIES FOR SALE, *supra* note 4, at 7 (citation omitted).

uses “surrogate” throughout to avoid importing normative values about motherhood, but where quoting from sources, uses the terms therein.

I. TRENDS IN GESTATIONAL SURROGACY

This section surveys the current state of the gestational surrogacy industry, as well as statutes and case law on the same. It highlights the exponential growth the industry has undergone in recent decades, in contrast to the few (or in some jurisdictions, essentially zero) laws and court rulings regarding surrogacy.

A. Booming Industry Growth

Regardless of lawmakers’ lack of attention, there can be no doubt that gestational surrogacy is here to stay. Initially used as a last resort for couples unable to get pregnant through traditional means but unwilling to adopt,²¹ gestational surrogacy today comprises as much as ninety-five percent of American surrogacy arrangements and even serves as a first option for many.²² In fact, surrogacy has recently gained significant attention for its many celebrity endorsers, including such figures as Elton John, Tyra Banks, Jimmy Fallon, Nicole Kidman, and Neil Patrick Harris.²³

Because gestational surrogacy is part of an international, billion-dollar industry of assisted reproduction, it can involve many players.²⁴ Though focus on the triumvirate of child, surrogate, and intended parents enables useful comparisons to the “adoption triangle,” “surrogacy tends to entail a far greater but less legitimate cast of characters” including the providers of the genetic material, doctors, recruiters, agents, and other intermediaries involved in the

21. See, e.g., Bonnie Johnson, *And Baby Makes Four: First Time a Surrogate Bears a Child Genetically Not Her Own*, PEOPLE, May 4, 1987, at 95, 95, 96, 98 (detailing how the couple to first successfully use a gestational surrogate in the United States only did so after “exhausting every other means available to them”).

22. See Alex Finkelstein et al., SURROGACY LAW AND POLICY IN THE U.S.: A NATIONAL CONVERSATION INFORMED BY GLOBAL LAWMAKING 7 (2016) (“By one estimation, ninety-five percent of all surrogacies in the U.S. utilize full surrogacy.”); see also Kiran M. Perkins et al., *Trends and Outcomes of Gestational Surrogacy in the United States*, 106 FERTILITY & STERILITY 435, 436–37 (2016) (observing that infertility diagnosis varied amongst those using gestational carriers as part of a Centers for Disease Control and Prevention report analyzing 2,071,984 assisted reproductive technology cycles performed in the United States between 1999 and 2013); see, e.g., Gabi Shaw, *23 Celebrity Parents Who Welcoming Babies Via Surrogates*, INSIDER (Mar. 3, 2021, 2:14 PM), <https://www.insider.com/celebrity-parents-who-used-surrogates-2020-5> (recounting brief anecdotes from twenty-three celebrities such as Kim Kardashian, Lucy Liu, and Anderson Cooper, who have used gestational surrogates for a variety of reasons ranging from concerns about ability to continue working in the entertainment industry to health risks).

23. Lindsay Tiger, *19 Celebrities Who Used Surrogates*, PARENTS (Feb. 9, 2016).

24. See Perkins et al., *supra* note 22, at 437 (highlighting that gestational carrier cycles resulted in 13,280 deliveries).

process.²⁵ Indeed, “intermediaries—such as surrogacy agencies, fertility clinics, health institutions, and medical tourism companies—are now regularly involved in the surrogacy industry” and reap large profits from doing so.²⁶ For intended parents, the cost of gestational surrogacy averages between \$60,000-\$150,000, depending on a variety of factors such as use of an agency, legal services, medical expenses, and surrogate compensation.²⁷

Those profits are advertised heavily, and large payouts are regularly used to entice women to serve as surrogate mothers. For instance, when a user opens the web page for Circle Surrogacy, the world’s largest full-service surrogate parenting agency, they are immediately asked whether they would like to become a parent or a surrogate. From there, if one selects “surrogate,” and inputs the following user information: female, in California, and has not previously carried a surrogate child, the Circle payment calculator reveals that the user may receive \$46,850 or more because California is a high-demand state, with additional benefits and medical costs fully covered.²⁸ For perspective, that amount is roughly equivalent to the average American’s annual wage in 2019.²⁹

The surrogacy industry represents a lucrative market not just because of the high costs charged to intended parents, but also because access to assistive reproduction technologies (“ARTs”) is not spread equally around the world, or even within individual countries.³⁰ The United States, for example, has both its own booming domestic surrogacy industry and is a popular destination for foreign intended parents. Notably, foreign intended parents may seek American surrogates because they come from countries either outlawing gestational surrogacy or lacking the infrastructure to enable it, or even, for many, because gestational surrogacy can result in U.S. citizenship for their children upon birth via an American surrogate.³¹ In fact, “the US stands out as the only country that

25. BABIES FOR SALE, *supra* note 4, at 6. Though the book focuses on transnational commercial surrogacy, the same litany of involved parties appear to be often involved in American arrangements (excepting travel agencies, etc.). *Id.*

26. See Finkelstein et al., *supra* note 22, at 7 (describing the surrogacy costs and the various types of intermediaries).

27. *Intended Parents: How Much Does Surrogacy Cost?*, SURROGATE.COM, <https://surrogate.com/intended-parents/the-surrogacy-process/how-much-does-surrogacy-cost/> (last visited May 11, 2020).

28. *How Much Do Surrogates Get Paid? Surrogate Mother Compensation and Benefits*, CIRCLE SURROGACY, <https://www.circlesurrogacy.com/surrogates/surrogate-pay> (last visited May 9, 2020).

29. See *Occupational Employment and Wage Statistics: May 2019 National Occupational Employment and Wage Estimates United States*, U.S. BUREAU OF LAB. STAT., https://www.bls.gov/oes/current/oes_nat.htm#00-0000 (last modified Mar. 31, 2020) (calculating the mean annual wage across all occupations as \$53,490).

30. G. David Adamson, *Global Cultural and Socioeconomic Factors that Influence Access to Assisted Reproductive Technologies*, 5 *WOMEN’S HEALTH* 351, 353 (2009).

31. See Nicole F. Bromfield, “*Surrogacy Has Been One of the Most Rewarding Experiences in My Life*”: A Content Analysis of Blogs by U.S. Commercial Gestational Surrogates, 9 *INT’L J. FEMINIST APPROACHES TO BIOETHICS* 192, 193 (2016) (noting that the over 2,000 commercial surrogacy

is ‘both a common source and destination country for global surrogacy arrangements.’”³² By contrast, most other countries have either criminalized and outright banned commercial surrogacy arrangements.³³

Worryingly, despite growing industry profits and increasing popularity of gestational surrogacy, how successful surrogacy is remains hard to measure. A survey by the Centers for Disease Control and Prevention indicates “IVF clinics in the US have a surrogacy success rate of about 75%. . . [and] once the surrogate is pregnant, the success rate for a healthy birth is as high as 95%.”³⁴ Yet, the Society for Assisted Reproductive Technology notes that “success varies with many factors.”³⁵ And though IVF clinics are likely to recommend Preimplantation Genetic Testing (“PGT”) such that the healthiest embryos are identified and transferred,³⁶ PGT is itself a new technology subject to a number of important open questions and hotly contested bioethical debates. For example, the accuracy of PGT remains unsettled, and PGT testing can result in both false positives (which “which could lead to discarding a normal embryo”) and false negatives (“which could lead to transferring an embryo with a chromosomal abnormality”).³⁷ Moreover, as a general matter, PGT only tests cells from a blastocyst’s outer trophoctoderm cells, which sometimes do not reflect the genetic profile of the inner cell mass cells that will give rise to the fetus.³⁸

Private surrogacy agencies thus require greater regulatory scrutiny because “there are no federal or state laws regulating agencies or who can own or operate these agencies.”³⁹ Many make claims about birthing success and child growth that cannot be true given current technological capabilities (e.g., promising a

arrangements in the United States in 2014 ranged from affluent Europeans seeking favorable contract law to Chinese couples seeking surrogacy so that their babies would be born as American citizens). *See also* Ovation Fertility, <https://www.ovationfertility.com/surrogacy-services/> (last visited June 1, 2021) (stating on its website that “[f]or more than 40 years, our intended parents have enjoyed a seamless process, with international parents traveling to the United States for their babies’ birth, receiving an American passport for their children, and returning home with their babies on average 14 days after birth”); Kalee Thompson, *Whoa, Baby! Why American Surrogates Are in Demand for Chinese Families*, THE HOLLYWOOD REPORTER (Nov. 4, 2016).

32. BABIES FOR SALE, *supra* note 4, at 6.

33. *See* Bromfield, *supra* note 31, at 196.

34. *Understanding Surrogacy Success Rates*, CONCEIVEABILITIES: BLOG (Sept. 18, 2018), <https://www.conceiveabilities.com/about/blog/understanding-surrogacy-success-rates>.

35. *Id.*

36. *Id.*

37. *See* Brigham and Women’s Hosp., *Non-Invasive, More Precise Preimplantation Genetic Test Under Development for IVF Embryos*, MED. XPRESS (June 24, 2019), <https://medicalxpress.com/news/2019-06-non-invasive-precise-preimplantation-genetic-ivf.html>.

38. *Id.*

39. Erika L. Fuchs et al., *Screening of Gestational Carriers in the United States*, 106 FERTILITY & STERILITY 1496, 1496 (2016).

child's intelligence level),⁴⁰ or which, even if true, speak to larger bioethical issues that deserve greater public attention.

B. Inconsistent Legal Treatment

Unfortunately, unbridled industry growth has outstripped accompanying attempts at regulation, and courts have seemingly struggled to remain consistent in their rulings on surrogacy issues when faced with that dearth of legislative guidance.

Over time, state legislatures have trended towards legalizing surrogacy, though there is substantial variation in what kind of surrogacy is permitted and how such arrangements may be made.⁴¹ At the time of the first gestational surrogacy births in the United States in the late 1970s, there were no laws expressly addressing surrogacy.⁴² But, unlike the surging numbers of gestational surrogacy arrangements, the regulatory landscape defies a neat trajectory. In the continuing absence of federal laws, twenty-seven states scattered across the country have enacted statutory provisions addressing surrogacy, while the remaining twenty-three say nothing on the matter.⁴³ Notably, of the twenty-two states that allow gestational surrogacy, America's three most populous states (California, Texas, and New York) essentially permit gestational surrogacy, while the nation's fourth most populous state (Florida) authorizes the practice outright.⁴⁴

As recent scholarship has shown, however, the devil is in the details. States do not just differ on the threshold question of whether or not they permit gestational surrogacy – there is also wide variation *within* permissive statutory schemes that can determine legal parentage, surrogates' bodily autonomy, the existence and kind of monetary compensation, and more.⁴⁵ Indeed, in the face

40. Notably, many surrogacy agencies that also offer egg donor services make a point of advertising the intelligence of their egg donors, thus presumably making customers an implied promise that the baby resulting from that donated egg will be likewise "more" intelligent than average. *See, e.g., Learn More, CONCEIVEABILITIES*, <https://www.conceiveabilities.com/> (last visited June 1, 2021) (promising the "best and brightest" egg donors are used); *A World-Class Surrogacy & Egg Donation Agency, GROWING GENERATIONS* <https://www.growinggenerations.com/> (last visited June 1, 2021) (stating that "our egg donors are creative, intelligent and charismatic women").

41. Joslin, *supra* note 12 at 413 (quoting the work of Professor Richard F. Storrow and conducting an additional survey of American surrogacy laws).

42. *Id.* at 432.

43. *Id.*

44. *See id.* at 464–73 (App. A) (listing the states and their respective statutory or administrative provisions regarding surrogacy); *see also Surrogacy State by State: Get the Facts, CIRCLE SURROGACY*, <https://www.circlesurrogacy.com/surrogacy/surrogacy-by-state-surrogacy-laws> (last visited May 12, 2020) (listing only four states where surrogacy contracts are "illegal" – interestingly, the agency's use of quotation marks implies that that illegality can be worked around in some manner).

45. *See generally* Joslin, *supra* note 12 (discussing surrogacy laws and their implications for participants).

of such patchwork laws, some have argued that the ART sector's growth may have "allowed the spurious concept of the 'right to a child' to eclipse the fundamental human rights of the children and women most at risk."⁴⁶

After all, the risks involved in gestational surrogacy are substantial. In a recent article by the New York Times on changes to New York's surrogacy laws, one interviewee provided the following advice to potential surrogates: "Don't try to do this without a lawyer. . . There are too many ramifications."⁴⁷ For a sampling, consider just a few of the issues provoked by gestational surrogacy: the reproductive freedom of both the surrogate and the intended parents; the rights and best interests of the anticipated child; and commodification of the body, reproduction, and motherhood.

But despite legal and bioethical concerns sounding in such diverse legal subjects as family law, labor and employment, and constitutional law, courts have addressed gestational surrogacy almost solely within the context of parentage and custody disputes after the birth of the child carried by the surrogate.⁴⁸ Moreover, these opinions' legal analyses tend to be devoid of up-to-date scientific reference. Instead, they lean on the language of the surrogacy contract itself, or draw authority from some nebulous public policy vision what families should look like.⁴⁹ To be fair, courts have no federal laws to look to,⁵⁰ and more often than not, no state laws⁵¹ from which to glean legislators' regulatory intent either.

Nevertheless, the common issue of legal parentage is one that both appears frequently in cases related to surrogacy and highlights the way in which surrogacy law references the science and technology at issue. Courts are routinely called upon to determine legal parentage, a status that has huge implications for everything from that child's rearing and citizenship to taxation and alimony. Historically, "in western societies the definition of motherhood was. . . grounded in biology, such that the woman who delivered a child was considered that child's mother," even if that child was then adopted by another

46. BABIES FOR SALE, *supra* note 4, at 12.

47. See Christina Caron, *Surrogacy Is Complicated. Just Ask New York*, N.Y. TIMES (Apr. 18, 2020), <https://www.nytimes.com/2020/04/18/parenting/pregnancy/surrogacy-laws-new-york.html> (outlining a number of reasons why a state bill to legalize paid surrogacy stalled in the New York Assembly). The above article was originally published on June 26, 2019, but was reprinted by the New York Times following the legalization of paid surrogacy (including gestational surrogacy) on Apr. 18, 2020. *Id.*

48. See generally Joslin, *supra* note 12.

49. *Id.*

50. J. Casolo et al., *Assisted Reproductive Technologies*, 10 GEO. J. GENDER & L. 313, 314–15 (2019).

51. See Joslin, *supra* note 12 at 432–34 (conducting a fifty-state survey of statutory and administrative provisions regarding surrogacy and cataloging differences in types of surrogacy arrangements authorized and the availability of compensation).

family.⁵² Thus, parentage determinations were long tethered to common understandings of biology, though increasingly, courts and state legislatures have recognized non-biological legal parents.⁵³ Today, exactly what establishes parentage depends on the jurisdiction in which the parties are present. Some states continue to recognize only biological parent-child connections, while others look to social criteria, equitable devices, and other methods to identify a legal parent.⁵⁴ Of the twenty-two states that allow some form surrogacy, thirteen specify that in gestational surrogacy arrangements there will be “automatic determinations that the intended parents are parents of children conceived.”⁵⁵ Advocates for this kind of predetermined legal parentage argue that this approach gives parties certainty and finality, enables greater economy in the courts, and provides surrogates with protection against having to assume responsibility for the child(ren) after birth.⁵⁶

The predetermined legal parentage approach is also clearly seen in the leading case on gestational surrogacy, *Johnson v. Calvert*,⁵⁷ and its progeny.⁵⁸ In *Johnson*, a gestational surrogate, Ms. Johnson, carried Mr. and Mrs. Calvert’s fertilized eggs to term, then sought to retain custody of the children post-birth.⁵⁹ Though it originated as a dispute over prompt payment, *Johnson* was decided as a constitutional and family law case by the Supreme Court of California in 1993.⁶⁰ The Court held that although both the gestational mother (Ms. Johnson) and the genetic mother (Mrs. Calvert) *could* be considered the child’s “natural mother” under California law, there could only be one for legal purposes.⁶¹ Ultimately, the Court ruled in favor of Mrs. Calvert because “but for [the Calverts’] acted-on intention, the child would not exist.”⁶² In so holding, the Court deliberately avoided prioritizing genetic consanguinity over proof of having given birth,⁶³ and would not or could not assess the parties’ arguments regarding

52. Laurel Swerdlow & Wendy Chavkin, *Motherhood in Fragments: The Disaggregation of Biology and Care, in* BABIES FOR SALE? TRANSNATIONAL SURROGACY, HUMAN RIGHTS AND THE POLITICS OF REPRODUCTION 19, 19 (Miranda Davies ed., 2017).

53. Douglas NeJaime, *The Constitution of Parenthood*, 72 STAN. L. REV. 261, 264 (2020).

54. *Id.*

55. See Joslin, *supra* note 12, at 439.

56. See *id.* at 439–40. (describing benefits for courts, parents, surrogates, and children).

57. 851 P.2d 776 (Cal. 1993).

58. See, e.g., *infra* notes 59–65 and accompanying text.

59. *Johnson*, 851 P.2d at 778.

60. See *id.* at 778 (noting that this lawsuit arose over a dispute regarding payments due to the surrogate from the defendants).

61. *Id.* at 781.

62. *Id.* at 782. In *Johnson*, the court set forth a new test that looks to the parties’ demonstrated intent to determine legal maternity, particularly where multiple women could qualify as the “natural mother.” *Id.*

63. See *id.* at 782 (determining parentage based on the parties’ intent to undergo in vitro fertilization).

the science of IVF and the biological composition of the zygote.⁶⁴ Future cases around the country went on to embrace the same approach, as in *McDonald v. McDonald* where a New York court held that, “in a true ‘egg donation’ situation, where a woman gestates and gives birth to a child formed from the egg of another woman with the intent to raise the child as her own, the birth mother is the natural mother.”⁶⁵

Legal practice guides also showcase how limited or outdated the law is in its understanding of biological contributions to a fertilized egg.⁶⁶ For example, in the American Jurisprudence Trials guide to the litigation of surrogate parenting agreements, the sections detailing possible parties involved and litigation strategies are incomplete.⁶⁷ The guide lists the parties involved as, at most, the intended parent(s), surrogate, surrogate’s spouse, sperm and egg donors, hospital where the child will be born, State Department of Health, registrar, and insurer.⁶⁸ However, this litany fails to reflect the reality of most commercial surrogacy agreements, which can also involve donors of other necessary organic materials (such as mitochondria⁶⁹ or cytoplasm⁷⁰), surrogacy agencies, and other middlemen.⁷¹

This cabining of a topic with broad implications to very specific issues of control is not uncommon in the law of ART more widely.⁷² In recent years, for instance, there has been considerable litigation around the custody and control of frozen embryos.⁷³ In these cases, the most common scenario features a heterosexual couple that undergoes an ART procedure, freezes their embryos or

64. *Id.*

65. *McDonald v. McDonald*, 608 N.Y.S.2d 477, 480 (N.Y. App. Div. 1994) (quoting *Johnson*, 851 P.2d at 782).

66. See *infra* note 71 and accompanying text.

67. 148 AM. JUR. TRIALS AM. 471 *Litigation of Surrogate Parenting Agreements* §§ 12, 19–35 (2017).

68. *Id.* § 12.

69. See Masahito Tachibana et al., *Mitochondrial Replacement Therapy and Assisted Reproductive Technology: A Paradigm Shift Toward Treatment of Genetic Diseases in Gametes or in Early Embryos*, 17 REPROD. MED. & BIOLOGY 421, 422 (2018) (detailing a form of germ line gene therapy using nuclear transfer techniques to prevent mitochondrial diseases).

70. Brittany Shoot, *3-Parent IVF: Why Isn't It Available in the United States?*, GUARDIAN (Feb. 27, 2015, 8:22 PM), <https://www.theguardian.com/sustainable-business/2015/feb/27/3-parent-ivf-us-mitochondria-dna-babies>. Assisted reproductive technologies that use cytoplasmic transfer (a process whereby donor egg cytoplasm is injected into another egg) were effectively banned in the United States in 2001 by the FDA, the technique predates mitochondrial replacement IVF. *Id.*

71. Swerdlow & Chavkin, *supra* note 52, at 20.

72. See *infra* notes 73–77 and accompanying text.

73. See, e.g., *J.B. v. M.B.* 783 A.2d 707, 710 (N.J. 2001) (noting that one party wished to discard the embryos and the other wished to have the embryos maintained for later implantation or donation); *Kass v. Kass*, 696 N.E.2d 174, 175 (N.Y. 1998) (noting that one party wished to implant the embryos and the other opposed implantation); *Davis v. Davis*, 842 S.W.2d 588, 589 (Tenn. 1992) (noting that at the time of the initial complaint, one party wished to implant the embryos while the other opposed the implantation).

pre-embryos, then later gets divorced.⁷⁴ At or after divorce, both parties want different things; maybe one wants to use the preserved materials in a subsequent attempt to have a child, while the other prefers to continue the embryos' frozen storage or destroy them.⁷⁵ Though holdings in these cases often fixate on property law concepts that are unsuited for surrogacy, they provide an interesting counterpoint to cases involving gestational surrogates, because courts have favored the party desiring embryo destruction in *every case* decided between the early 1970s and 2007.⁷⁶ Thus, these cases show how replacing biological tests for parentage with ones focused purely on the parties' intentions can produce a stalemate between (at least in the context of frozen embryo disputes) one party's right to procreate against the other party's right not to procreate.⁷⁷

Resolving legal issues like parentage and custody in a manner that is largely divorced from biological analysis appears to be gaining traction as the analytical method of choice amongst scholars and policymakers. In general, this drive appears to stem from a desire to seek greater recognition of nontraditional family structures and nonbiological parents.⁷⁸ To the extent that such scholars seek a more stable legal and inclusive footing for civil liberties than the fickle foundations of public policy,⁷⁹ such work is important. But, as Part III will argue, to wholly remove biology from the equation in such cases as a means for reforming legal policy is unnecessary, and in some instances, may be counterproductive.

II. THE SCIENCE OF SURROGACY

Family law's and related statutes' focus on eggs and sperm when discussing surrogacy promotes a narrow vision of marriage, family, and parentage, partly

74. See Angela K. Upchurch, *Postmodern Deconstruction of Frozen Embryo Disputes*, 39 CONN. L. REV. 2107, 2126–27 (2007) (explaining that disputes over implantation of embryos typically arise at the time of the progenitors' divorce or separation).

75. *Id.*

76. Shirley D. Howell, *The Frozen Embryo: Scholarly Theories, Case Law, and Proposed State Regulation*, 14 DEPAUL J. HEALTH CARE L. 407, 415 (2013) (citing Angela K. Upchurch, *Postmodern Deconstruction of Frozen Embryo Disputes*, 39 CONN. L. REV. 2107, 2128 (2007) (explaining that “no American court has ever upheld the award of disputed embryos to the [party] seeking to use them for implantation.”)).

77. I. Glenn Cohen & Eli Y. Adashi, *Embryo Disposition Disputes: Controversies and Case Law*, 46 HASTINGS CTR. REP. 13, 13 (2016).

78. See, e.g., Joslin, *supra* note 12 at 456 (identifying newer surrogacy laws' trend to “protect all intended parents—regardless of sex, sexual orientation, or marital status—and to jettison genetic connection requirements rooted in reproductive biology”); see also NeJaime, *supra* note 53, at 270 (advancing an affirmative case for constitutional protection for nonbiological parents by revisiting Supreme Court precedents from the 1970s and 1980s involving the rights of unmarried fathers and the status of foster parents).

79. 17A C.J.S. CONTRACTS § 300 (2020) (noting that courts have made public policy arguments both for and against upholding gestational surrogacy contracts).

because the law purports to reflect scientific reality.⁸⁰ On the contrary, an accurate understanding of biology suggests that surrogates and other tissue donors play a genetic role that courts and policymakers have not yet acknowledged.⁸¹ Once that biological contribution is recognized, it follows that surrogates and other tissue donors may possess rights related to contractual redress, legal parentage, and the like that they are currently prevented from accessing. This is particularly important, as we shall see, because “there is also a striking lack of attention to issues related to people acting as surrogates” in extant surrogacy law,⁸² though surrogates have the shorter end of legal and contractual stick in most surrogacy arrangements. Indeed, pregnancy is rife with serious short- and long-term physical and psychological consequences for both surrogate and child, neither of which can be comprehensively accounted for if law and policy removes biological understandings from their methods of analysis.⁸³

This Part provides an overview of the latter, in the hope that re-introducing scientific understandings of reproduction may give the law of gestational surrogacy greater flexibility, as well as increased protections and rights for surrogates and children.

A. Physical Effects

Though surrogacy law largely ignores them, the physical effects of pregnancy begin immediately, last indefinitely, and are by every measure profound.

Every step of the gestational surrogacy process entails significant health risks. First, the surrogate must undergo IVF to transfer the fertilized egg to her body.⁸⁴ This requires multiple rounds of aggressive hormone injections to

80. See, e.g., CAL. FAM. CODE § 7611 (2019) (listing criteria that can establish parentage); Johnson v. Calvert, 851 P.2d 776, 782 (Cal. 1993) (concluding that the California’s Uniform Parentage Act recognizes genetic consanguinity and giving birth as means of establishing parentage); see also McDonald v. McDonald, 608 N.Y.S.2d 477, 480 (N.Y. App. Div. 1994) (reasoning that where a woman gestates and gives birth to a child formed from the egg of another woman with intent to raise the child as her own, the birth mother is the natural mother).

81. See Tachibana et al., *supra* note 69, at 422 (discussing germline therapy to prevent mitochondrial disease); see also Shoot, *supra* note 70 (discussing reproductive technology involving cytoplasmic transfer). But see Johnson, 851 P.2d at 782 (holding that a party’s intent to procreate and raise a child can determine parentage when genetic consanguinity and giving birth are inconclusive); see also McDonald, 608 N.Y.S.2d at 480 (reasoning that where a woman gestates and gives birth to a child formed from the egg of another woman with intent to raise the child as her own, the birth mother is the natural mother).

82. See Joslin, *supra* note 12 at 422.

83. See *infra* Part II Sections A–B.

84. See Diane Beeson & Abby Lippman, *Gestational Surrogacy: How Safe?*, in BABIES FOR SALE? TRANSNATIONAL SURROGACY, HUMAN RIGHTS AND THE POLITICS OF REPRODUCTION 82, 83 (Miranda Davies ed., 2017) (describing the first successfully complete pregnancy conceived in vitro).

stimulate the surrogate's follicles and ovaries.⁸⁵ Despite winning the Nobel Prize for pioneering IVF, Sir Robert G. Edwards has himself "called on his colleagues to 'rethink' routine IVF in favour of natural cycle of minimal stimulation IVF" because "[c]linical and scientific doubts have emerged" about its safety.⁸⁶ But, Edwards's concerns about methods he deems "too extreme and too expensive"⁸⁷ are amplified when IVF is used to harvest eggs from donors. Fertility specialists frequently use synthetic hormones (usually administered in a powerful cocktail of off-label drugs) to push the egg donor's bodily limits in order to "obtain larger numbers of mature eggs to compensate for subsequent failures in fertilization and implantation."⁸⁸

The scientific advances that have made surrogacy more commonplace also create additional avenues for physical effects on the women involved and the developing embryo.⁸⁹ Technologies that often complement gestational surrogacy, such as egg freezing, are themselves intense procedures with unknown ramifications.⁹⁰ And, all the procedures abovementioned – from routine IVF to egg harvesting to egg transfer – exposes surrogates, donors, and intended children to "risks from anesthesia and still unknown surgical and psychological effects."⁹¹

These are just some of the short-term risks – despite the rising popularity of gestational surrogacy, the long-term effects of the abovementioned procedures remain unknown. There is "no long-term data tracking [of] the health risks women [face]. . . and no one knows how much of the chemicals used in the freezing process are absorbed by eggs, and whether they are toxic to cell development."⁹² But, worryingly, answers are unlikely to arrive any time soon, because the same institutions we usually depend on for medical research are often incentivized to look the other way.⁹³ One report found that "universities with medical school programs often host reproductive endocrinology departments that make enough money from IVF treatments to fund entire schools within the university [and that] fertility doctors are among the highest-paid

85. *See id.* at 84 (indicating that the global IVF industry centers on approaches that use aggressive hormonal manipulation of women's endocrine system).

86. *Id.*

87. *Id.*

88. *Id.* at 83, 84.

89. *See id.* at 84 (explaining that in addition to the usual risks of pregnancy and exogenous hormones, gestational mothers and fetuses may face risks from anesthesia and currently unknown surgical and psychological effects).

90. *Id.*

91. *Id.*

92. *See* Pamela Mahoney Tsigoinos, *The Sobering Facts About Egg Freezing That Nobody's Talking About*, WIRED (Oct. 24, 2014, 3:55 PM), <https://www.wired.com/2014/10/egg-freezing-risks/>.

93. *See generally id.* (discussing the need for women to be informed when making decision about reproductive medicine).

employees at private universities.”⁹⁴ Indeed, beyond university labs, “adequate oversight and follow-up tend to be poorest in those jurisdictions where commercial surrogacy is most prevalent.”⁹⁵

That said, there *is* plenty of research demonstrating that the pregnancy that follows IVF and related procedures is inherently dangerous.⁹⁶ Pregnancy normally incurs a multitude of body changes and discomforts, including but not limited to: aches and pains, constipation, dizziness, fatigue, sleep problems, bladder control problems, leg cramps, heartburn, indigestion, and tenderness of the breasts.⁹⁷ Common health problems can arise even in healthy women, including anemia, depression, gestational diabetes, placental problems, preeclampsia, and high blood pressure.⁹⁸ Moreover, pregnancy can induce transitory diseases with serious short- and long-term health consequences for mother and child, such as gestational diabetes mellitus.⁹⁹ In fact, gestational diabetes mellitus provides an important example of why the health risks surrogates face deserve greater scrutiny because it often results in macrosomia that makes Cesarean sections (the preferred delivery method in most gestational surrogacy arrangements) riskier.¹⁰⁰ It can also lead to increased risk of developing type two diabetes post-pregnancy and other long-term physical, mental, and socioeconomic consequences.¹⁰¹ That courts and lawmakers conceptually cut off the gestational and recovery periods immediately after birth is therefore utterly inconsistent with the reality that surrogates and conceived children face.¹⁰²

94. *Id.*

95. BABIES FOR SALE, *supra* note 4, at 84.

96. Louise Craig et al., *Women’s Experiences of a Diagnosis of Gestational Diabetes Mellitus: A Systematic Review*, 20 BMC PREGNANCY & CHILDBIRTH 1, 1 (2020).

97. See Office on Women’s Health, *Body Changes and Discomforts*, U.S. DEP’T HEALTH & HUM. SERVS. (Jan. 30, 2019), <https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/body-changes-and-discomforts> (summarizing the unexpected bodily changes that women go through as a result of pregnancy, including stretch marks, weight gain, and heartburn).

98. See Office on Women’s Health, *Pregnancy Complications*, U.S. DEP’T HEALTH & HUM. SERVS. (Apr. 19, 2019), <https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/pregnancy-complications> (explaining the complications associated with pregnancy and the health problems that occur as a result).

99. See Craig et al., *supra* note 96.

100. *Id.* at 2.

101. *Id.*

102. See, e.g., *McDonald*, 608 N.Y.S.2d at 480 (reasoning that where a woman gestates and gives birth to a child formed from the egg of another woman with intent to raise the child as her own, the birth mother is the natural mother); see also *Johnson*, 851 P.2d at 782 (holding that a party’s intent to procreate and raise a child can determine parentage when genetic consanguinity and giving birth are inconclusive).

The most severe possible risk of pregnancy is, of course, death – and in the United States, such a prospect is not a thing of the past.¹⁰³ The national maternal mortality rate (deaths caused or aggravated by pregnancy) was 17.4 maternal deaths per 100,000 live births in 2018, placing the United States fifty-fifth internationally and last among wealthy countries for maternal safety.¹⁰⁴ The problem is exacerbated for communities of color, who experience unequal access to healthcare resources and histories of unethical reproductive control. Black and Native American women, for example, face a particularly grim outlook: they are two to three times more likely to die from pregnancy-related causes than white women.¹⁰⁵ It is, furthermore, well-studied that “reproductive abuse involving controlling the fertility and reproductive labour of enslaved, colonized, and later impoverished and unmarried ‘free’ women has been central to European and Anglo-American . . . projects on both sides of the Atlantic,”¹⁰⁶ and that accompanying harms such as passive eugenics and forced sterilization may still present today.

Early studies also suggest that gestational carriers face added health burdens that traditional surrogates may not. Citing at least one research study that found that “women who became pregnant by using eggs from other women had an increased risk of pre-eclampsia,” a group of medical experts from institutions such as Columbia University signed a letter urging lawmakers to view surrogates’ health risks as being “above and beyond the risks of normal pregnancy and childbirth.”¹⁰⁷ After all, gestational surrogates are more likely to

103. See Julia Belluz, *We Finally Have a New US Maternal Mortality Estimate. It’s Still Terrible*, VOX (Jan. 30, 2020, 10:40 AM), <https://www.vox.com/2020/1/30/21113782/pregnancy-deaths-us-maternal-mortality-rate>.

104. *Id.*

105. See generally CTNS. FOR DISEASE CONTROL & PREVENTION, *Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths*, CDC NEWSROOM, <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html> (last visited Sept. 6, 2019) (summarizing a national study finding severe and persistent racial and ethnic disparities in maternal mortality, even for black women with hallmarks of decreased health risks otherwise, such as having a college degree or health insurance). Notably, the disparities are not evenly distributed geographically and have been documented for decades – this is not a new problem. See *id.* In fact, much of modern obstetrics and gynecology is the direct product of horrific experimentation on women of color. See also Camila Domonoske, *‘Father of Gynecology,’ Who Experimented on Slaves, No Longer on Pedestal in NYC*, NPR NEWS (Apr. 17, 2018, 1:39 PM), <https://www.npr.org/sections/thetwo-way/2018/04/17/603163394/-father-of-gynecology-who-experimented-on-slaves-no-longer-on-pedestal-in-nyc> (describing “father of gynecology” J. Marion Sims’s experiments on enslaved women, without their consent or anesthesia); Nina Martin & Renee Montagne, *Black Mothers Keep Dying After Giving Birth. Shalon Irving’s Story Explains Why*, NPR NEWS (Dec. 7, 2017, 7:51 PM), <https://www.npr.org/2017/12/07/568948782/black-mothers-keep-dying-after-giving-birth-shalon-irvings-story-explains-why> (noting, for example, that black mothers in New York City are twelve times more likely to die than white mothers and that doctors have been documenting such trends since at least 1903).

106. BABIES FOR SALE, *supra* note 4, at 106–07.

107. Caron, *supra* note 47.

undergo the implantation of multiple embryos, multiple pregnancies, and Caesarian sections, all of which increase health risks.¹⁰⁸ One survey of 300 American surrogates indicated that procedural differences abounded between gestational and traditional surrogates: gestational surrogates generally underwent more medical screenings, procedures, and interventions.¹⁰⁹

Finally, it is crucial that surrogacy law revise extant jurisprudence to recognize that the surrogate mother is *not* biologically separate from her fetus. While her genetic contribution may be less than that of the individuals providing sperm and egg, recent scientific literature suggests that surrogates contribute genetic material to the developing embryo both directly¹¹⁰ and indirectly by means of epigenetic¹¹¹ modifications and changes to the placental environment. The same is true at least sometimes in reverse, as well.¹¹² Such indirect genetic influences are especially important to the growing embryo, as epigenetic changes may impact everything from the future child's sensitivity to allergens¹¹³ to increased infant mortality and immune dysfunction.¹¹⁴ Indeed, though there are no studies on the functioning of surrogacy families after the pre-school years, comparable adoption studies have indicated that adopted children's adjustment

108. See BABIES FOR SALE, *supra* note 4, at 85–86; see generally Ryu Komatsu et al., *Factors Associated with Persistent Pain After Childbirth: A Narrative Review*, 27 J. WOMEN'S HEALTH 117, 120 (2018) (linking Caesarian sections to higher risk of operative complications (i.e., infections, hemorrhages, visceral injury, thromboembolism) and long-term postpartum psychological problems); Mona T. Lydon-Rochelle et al., *Delivery Method and Self-reported Postpartum General Health Status Among Primiparous Women*, 15 PAEDIATRIC & PERINATAL EPIDEMIOLOGY 232 (2001) (associating Caesarian sections with decreased general health status in the short-term); Perkins et al., *supra* note 24, at 437–38 (finding higher multiple birth and preterm delivery rates among gestational carriers largely as the result of frequent transfer of two or more embryos per cycle).

109. See generally Erika L. Fuchs & Abbey B. Berenson, *Outcomes for Gestational Carriers Versus Traditional Surrogates in the United States*, 27 J. WOMEN'S HEALTH 640 (2018) (discussing the differences in procedural outcomes between gestational carriers and traditional surrogates finding that practice guidelines for gestational carriers need to be offered to traditional surrogates to ensure optimal care for both categories).

110. See, e.g., Li Jin et al., *Small Non-Coding RNAs Transfer Through Mammalian Placenta and Directly Regulate Fetal Gene Expression*, 6 PROTEIN & CELL 391, 392 (2015) (demonstrating that noncoding microRNAs in maternal food can transfer through the placenta to regulate fetal gene expression).

111. Rachael Rettner, *Epigenetics: Definition & Examples*, LIVESCIENCE (June 24, 2013), <https://www.livescience.com/37703-epigenetics.html>.

112. See Viviane Callier, *Baby's Cells Can Manipulate Mom's Body for Decades*, SMITHSONIAN MAG. (Sept. 2, 2015), <https://www.smithsonianmag.com/science-nature/babys-cells-can-manipulate-moms-body-decades-180956493/> (describing the phenomenon of microchimerism, in which fetal cells cross the placenta and enter the woman's body, where they can become part of her tissues).

113. See Hani Harb et al., *Epigenetic Modifications in Placenta are Associated with the Child's Sensitization to Allergens*, 2019 BIOMED RSCH. INT'L 1, 2 (2019).

114. See Ciprian P. Gheorghe et al., *Gene Expression in the Placenta: Maternal Stress and Epigenetic Responses*, 54 INT'L J. DEVELOPMENTAL BIOLOGY 507, 508 (2010) (explaining the significance of placental development for infant growth and survival).

problems are largely related to factors that pre-date adoption, such as prenatal exposure to toxins or hazards.¹¹⁵

Thus, while gestational surrogacy does largely sever the genetic link between the surrogate and child, it does not do so entirely. That is, even if only genetic in small amounts, the biological connection between surrogate and child is undeniable. It is common knowledge that what happens during development can have enormous implications for the developing child,¹¹⁶ and that pregnancy transforms the female body significantly, both in the long- and short-term. Moreover, studies clearly show that poor maternal health impacts children's physical health for at least several years after birth, and a growing body of evidence indicates that IVF procedures might contribute to an increased risk of birth defects.¹¹⁷ As Part III will show, however, the law of surrogacy almost completely overlooks these biological realities when policing the balance of power between private parties in surrogacy arrangements, resulting in jurisprudence that poorly distributes related rights and remedies to the more vulnerable parties involved.

B. Psychological Effects

Increasingly, scientists and physicians recognize that the physical risks and effects of pregnancy go hand in hand with psychological ones.¹¹⁸ Pregnancy and the events leading up to it are a vulnerable period in a woman's mental health. For many, "the emotional toll associated with family-building failure can be crushing [with studies showing] that people coping with fertility failures are as distressed as cancer patients [while] many others suffer depression and post-traumatic stress disorder."¹¹⁹ Many women report depression and anxiety during pregnancy, which often includes worry for the baby's wellbeing.¹²⁰

115. Susan Golombok et al., *Families Created Through Surrogacy: Mother-Child Relationships and Children's Psychological Adjustment at Age 7*, 47 DEV. PSYCH. 1579, 1580 (2011).

116. See, e.g., Tessa J. Roseboom et al., *Hungry in the Womb: What Are the Consequences? Lessons From the Dutch Famine*, 70 MATURITAS 141, 141 (2011) (reviewing an increasing body of evidence that suggests prenatal malnutrition leads to large and long term negative consequences for both mental and physical health via studies on the Dutch famine of 1944 to 1945); see also Valentina Cinquina et al., *Life-Long Epigenetic Programming of Cortical Architecture By Maternal 'Western' Diet During Pregnancy*, 25 MOLECULAR PSYCHIATRY 22, 22 (2020) (uncovering a genetic regulatory mechanism for metabolic preferences that can be changed by maternal food preferences and could limit an offspring's brain function for life).

117. See Ching-Yu Cheng et al., *Postpartum Maternal Health Care in the United States: A Critical Review*, 15 J. PERINATAL EDUC. 34, 35 (2006) (observing that poor maternal physical health was related to children's reduced general physical health, frequent tantrums, and difficulty in playing with other children as well as the perception of poor maternal health leading to late vaccinations for children).

118. See Caroline Ronchini Ferreira et al., *Prevalence of Anxiety Symptoms and Depression in the Third Gestational Trimester*, 291 ARCHIVES GYNECOLOGY & OBSTETRICS 999, 999 (2015) (discussing the emotional health issues pregnant people face during their pregnancies).

119. Tsigoinos, *supra* note 92.

120. Ferreira, *supra* note 118.

Psychological health during pregnancy is related to maternal clinical outcomes such as preterm labor and preeclampsia, in addition to the cognitive and social development of infants.¹²¹ But, while almost all surrogates in one survey were informed of at least basic risks related to procedures and medications, they are less likely to have discussed possible psychosocial consequences with care providers and surrogacy agencies.¹²² Greater than ten percent were also not informed of the psychological risks of multiple pregnancies and more than a quarter were “not informed of the demands and risks of the medical protocol, coping with the pregnancy, risks of attachment to the child, and risks to their own children and marriage or partnership.”¹²³ The remaining at least 25% of pregnancies that are not successful¹²⁴ are significant. Though not much discussed in the context of surrogacy, early pregnancy loss is a common event that often incurs significant depression and anxiety – even post-traumatic stress symptoms – in women after the fact.¹²⁵

In addition, the unique nature of surrogates’ labor means they may face unexpected emotional challenges should something go wrong with the handoff to the intended parents and they are required to parent – not just gestate – a child that is not fully theirs. The recent pandemic has exposed this risk of gestational surrogacy arrangements in dramatic fashion. During the height of the COVID-19 crisis, both international and domestic travel restrictions left hundreds of infants stranded with their surrogate mother when intended parents were unable to pick up their children.¹²⁶ As a result, “many surrogates were asked, and in some cases expected, to parent the children they gave birth to until the intended parents arrive.”¹²⁷ Though no studies have yet analyzed the experience of these surrogate mothers, presumably they faced both the mental and physical strain of unanticipated childcare work (which any new parent can confirm is uniquely all-encompassing), and of spending extended time around the baby they had gestated at a time when key hormones related to pregnancy, such as oxytocin, which

121. See Julie Jomeen, *The Importance of Assessing Psychological Status During Pregnancy, Childbirth and the Postnatal Period as a Multidimensional Construct: A Literature Review*, 8 CLINICAL EFFECTIVENESS IN NURSING 143, 144 (2004) (focusing on constructs of anxiety and depression, worry, control, quality of life, sleep, and self-esteem in determining psychological status).

122. Fuchs, *supra* note 39, at 1501.

123. *Id.*

124. See *Understanding Surrogacy Success Rates*, *supra* note 34 (stating that surrogacy is successful 75% of the time generally and is successful 95% of the time once the surrogate is pregnant).

125. See Jessica Farren et al., *The Psychological Impact of Early Pregnancy Loss*, 24 HUM. REPROD. UPDATE 731, 732 (2018) (discussing how up to 41% of individuals experience anxiety and up to 36% experience depression a month after losing a pregnancy and up to 39% self-report experiencing post-traumatic stress symptoms).

126. See Sirin Kale, *Surrogacy: New Parents Stuck in US Amid Covid-19 Shutdown*, GUARDIAN (Mar. 26, 2020).

127. See Rose Holden Vacanti Gilroy, *COVID-19, Surrogacy, and Unplanned Childcare: Why the Commercial Surrogacy Industry Needs New Contractual Provisions After the Pandemic*, 12 GEORGETOWN J. GENDER & L. (Fall 2020).

promotes mother-child bonding, are high in order to promote the “physiologic need” mothers and newborns have to “be together.”¹²⁸

III. ACKNOWLEDGING GREATER SCIENTIFIC COMPLEXITY IMPROVES SURROGACY LAW

While the contributions of surrogates may not be as significant as contributing core genetic material, they are still meaningful in a way that the assisted reproduction industry and the law fail to recognize. Surrogates are not mere “fetal baby-sitter[s],” but nor are they inviolable “natural mothers” who take primacy over the intended parents.¹²⁹ They, and others involved directly in the conception and birth of a child, instead occupy a middle space that requires more nuanced legal treatment if the law is, indeed, to reflect biological facts and the lived experience of surrogates.¹³⁰ The reality that there are at least three persons having a biological and psychological impact on the fetus at issue complicates courts’ understanding of a variety of issues and should encourage greater legal flexibility when considering novel reproductive technologies like gestational surrogacy.

Armed with a more sophisticated knowledge of the science of gestational surrogacy, several legal reforms should become evident. First, rather than “replicat[ing] and reinfor[cing]” long-standing and limiting family law rules,¹³¹ increased reliance on biology would require lawmakers to think more flexibly about children’s biological origins and move away from rigid legal requirements such as deciding which two individuals are listed on a child’s birth certificate. Epigenetic changes, multiple tissue donors, and the like all demonstrate that a child of gestational surrogacy is not solely the product of the two individuals providing gametes. This reality, in fact, complicates a number of extant surrogacy laws, such as those in Connecticut, Illinois, New Hampshire, and Oklahoma, which permit gestational surrogacy but define the term to include only those arrangements in which the person acting as a surrogate has made no genetic contribution.¹³² Though no one has yet challenged those laws on the

128. See Jeannette T. Crenshaw, *Health Birth Practice #6: Keep Mother and Baby Together – It’s Best for Mother, Baby, and Breastfeeding*, 23 J. PERINATAL EDUCATION 211 (Fall 2014).

129. See Johnson, *supra* note 21, at 10 (discussing how Shannon Boff had no genetic relationship to the fetus she was carrying and would not be on the birth certificate in contrast to most surrogates prior to Ms. Boff who had some genetic relationship to the fetus).

130. See *id.* (discussing how the surrogate in this situation navigated being pregnant with someone else’s child while having her own children at home).

131. See Joslin, *supra* note 12, at 457 (stating that it is easy to replicate and reinforce long standing gender stereotypes in the law as well as to leave out the parents of the child or the surrogate from the family unit).

132. Notably, these four states use nearly identical language. See CONN. GEN. STAT. § 7-36(16); ILL. COMP. STAT. 47/10; N.H. REV. STAT. ANN. § 168-B:10, 168-B:1(XI); OKLA. STAT. tit. 10 § 557.3, 557.2(8).

grounds that, as written, the laws are biologically impossible to comply with, such a challenge could be brought and would have substantial scientific support – perhaps leading to the limiting of gestational surrogacy rather than the intended promotion of it. Accordingly, lawmakers in states that only permit gestational surrogacy where there is “no genetic contribution” from the surrogate must either rewrite their laws to specify what a “genetic contribution” entails, or do away with the genetic reference altogether.

Either route, importantly, would force policymakers to grapple more directly with our collective ranking of values and beliefs, rather than using outdated biology and language of science as stand-ins for unspoken public policy aims. In fact, though some have argued that today’s “surrogacy laws are more likely to protect all intended parents—regardless of sex, sexual orientation, or marital status” by “jettison[ing] genetic connection requirements rooted in reproductive biology,”¹³³ it isn’t actually science that is the problem – a more nuanced scientific understanding suggests that the goal of more inclusive parentage laws is not automatically at cross-purposes with laws that use biology as their basis.

Improved incorporation of the language of biology is also crucial because it could help protect surrogates, who, under current arrangements, are almost always at the bottom end of a significant power imbalance. Indeed, acknowledgement of surrogates’ particular health risks and lifelong impacts on children’s lives could finally force courts to engage head-on with the socioeconomic implications of an industry that is here to stay. In light of how important surrogates are to healthy and successful gestational surrogacy, it may hitherto be laughable to suggest that so-called “altruistic” surrogacy (wherein surrogates receive no monetary compensation but instead have their costs covered and/or receive “gifts” from the intended parents) is a scalable business model. Though feminists have split over whether “the payment of money to a ‘surrogate’ mother [is] illegal, perhaps criminal, and potentially degrading to women,”¹³⁴ that payment might be required, legal “employee” status attached, or payment substituted with something like lifelong health insurance coverage, in part to mitigate the risks surrogates face. More broadly, that kind of realization would also require lawmakers to see that, when ascribing value, not all biological contributions are created equal. Take, for instance, how many surrogacy cases treat the eggs and sperm required to create the embryo as having equal weight, even though the process of harvesting and preserving each looks quite

133. *Id.* at 456.

134. See *Matter of Baby M*, 537 A.2d 1227, 1234 (N.J. 1988) (explaining that the payment of money to a surrogate could be illegal, criminal, or degrading to women); see also Vivian Wang, *Surrogate Pregnancy Battle Pits Progressives Against Feminists*, N.Y. TIMES (June 12, 2019), <https://www.nytimes.com/2019/06/12/nyregion/surrogate-pregnancy-law-ny.html> (discussing the issues of passing a surrogacy bill in New York and how it split feminists and progressives).

different.¹³⁵ While the seminal case of *Baby M.* distinguished between the relative ease of sperm donation and “the time invested in a nine-month pregnancy,”¹³⁶ harvesting eggs for many ART procedures likewise requires significantly more effort and risk than does sperm donation. In particular, procedures assumed by courts to be routine, such as IVF and Caesarian sections, might be formally recognized as a path towards indefinite standing to sue, and be weighed differently when calculating things like damages or constitutional protections. Standing may be critical, however, because it is unclear whether consumer protection law protects either intended parents or surrogates from gestational surrogacy arrangements gone bad. New York’s highest court first held that intended parents could assert consumer protection claims based on misrepresentations of success rates and health risks by an IVF program in 1999,¹³⁷ such cases are few and far between because of their difficulty for plaintiffs to bring.¹³⁸

Issues relating to the latter are worth a hard look, given the myriad express and implied promises that many surrogacy providers give to intended parents. Arguably, for instance, one reason why surrogacy is treated as an elite, exclusive, and safe arrangement is because there are strict requirements for who can serve as a surrogate mother – and those requirements generally exclude, through indirect means, poor women and women of color. Officially, of course, there are no racial or ethnic requirements to serve as a surrogate. The American Society for Reproductive Medicine’s ethical guidelines require that: “Carriers should be at least 21 years of age, healthy, have a stable social environment, and have had at least one uncomplicated pregnancy that resulted in the delivery of a healthy child.”¹³⁹ But, by nature of socioeconomic and racial disparities (disregarding, for time being, potential racial biases in surrogate selection), these official guidelines rule out many women of color from serving as surrogates. Survey research bears this out: most American surrogates are “lower middle-class or middle-class women. . . in their twenties or thirties, and. . . white, Christian, and married with families.”¹⁴⁰ In more obvious ways, market demand for young, white, and “stable” surrogate mothers is also revealed by explicit prohibitions on

135. See *Matter of Baby M*, 537 A.2d at 1256 (stressing that under the Parentage Act, claims of the natural father and the natural mother are given equal weight as to the custody of the child produced by artificial insemination); see also *P.M. v. T.B.*, 907 N.W.2d 522, 541 (Iowa 2018) (holding that a surrogate mother is not included in the definition of biological parent, but rather a biological parent is determined by whose genetic egg and sperm were used to create the embryo).

136. *Matter of Baby M*, 537 A.2d at 1254.

137. *Karlin v. IVF Am., Inc.*, 712 N.E.2d 662, 664–68 (N.Y. 1999).

138. See Tsigoinos, *supra* note 92 (stating that “[w]hen it comes to reproductive medicine it is buyer beware”).

139. Ethics Comm. of the Am. Soc’y for Reprod. Med., *Consideration of the Gestational Carrier: An Ethics Committee Opinion*, 110 FERTILITY & STERILITY 1015, 1019 (2018).

140. Bromfield, *supra* note 31, at 197.

surrogate applicants from certain backgrounds. For instance, some intermediaries, such as leading surrogacy agency Circle Surrogacy, refuse point-blank to accept surrogate applicants who are enrolled in “stricter” government assistance programs such as cash assistance, welfare, public housing, and Section 8 housing, which again, disproportionately prevents women of color from serving as surrogates.¹⁴¹

Thus, improved acknowledgement of the science of gestational surrogacy may offer a way to advocate for more equitable policy that is in line with courts’ extant intuitions about the role of biology in reproductive biology.¹⁴² For instance, instead of going to court to litigate which two individuals should be listed on the two lines of a birth certificate, science itself may suggest that birth certificates need additional lines for names as a consequence of the surrogate’s biological contributions to the child. Indeed, children conceived using gestational surrogacy might have up to seven potential “parents” involved: the two intended parents, separate egg and sperm donors, the surrogate, and perhaps separate mitochondrial and cytoplasm donors.¹⁴³ The value afforded different contributing parties under current law is rife with contradictions, but that may be in part because those laws are *not* grounded in science rather than that science serving as a corset to craft a nuclear family.

CONCLUSION

While transnational surrogacy has so far drawn the lion’s share of scholarly interest due to human rights concerns that may arise from transactional arrangements between intended parents from highly developed countries and surrogates from developing countries,¹⁴⁴ gestational surrogacy in the United States is itself replete with ethical issues ranging on topics from reproductive freedom to imbalanced power relations in contracting to eugenics.

Married couples with biological children are no longer the only family model in play: single parenthood, gay partnerships, cohabitation, and divorce have all challenged the traditional vision of the nuclear family that American law was largely written for. Advances in ART, including gestational surrogacy, mean that the law must increasingly confront a myriad of issues – such as child custody, property rights, and citizenship issues – that involve present different depictions of “the family” than the law that might apply envisioned. Where

141. *FAQs: Surrogates*, CIRCLE SURROGACY, <https://www.circlesurrogacy.com/surrogates/faqs> (last visited May 12, 2020).

142. See *supra* notes 62–64 and accompanying text (describing how the court in *Johnson* failed to address the role of biology).

143. Swerdlow & Chavkin, *supra* note 52, at 20.

144. See Alison Bailey, *Reconceiving Surrogacy: Toward a Reproductive Justice Account of Indian Surrogacy*, 26 *HYPATIA* 715, 715 (2011) (discussing common Western feminist and human rights critiques of transnational surrogacy, as well as the risks and inherent neocolonialism in importing Western frameworks to surrogacy in foreign countries).

regulation of “this difficult moral issue” was perhaps “premature” in 1993 when *Johnson v. Calvert* was decided,¹⁴⁵ gestational surrogacy has now existed for roughly half a century and is only increasing in popularity both at home and abroad. Moreover, culture and government have always proscribed a whole host of things that pregnant women can and cannot do, and for courts to tacitly sanction the status quo of family law rules built on histories of systemic discrimination is unjust.

A legal understanding of gestational surrogacy that better accounts for its biological complexity helps give this area of law greater flexibility and more robust reasoning. And, at the very least, this Article illustrates that there are different means of achieving the same end of more equitable legal policies.

145. 851 P.2d 776, 787 (Cal. 1993).