ValpoScholar Valparaiso University Law Review

Volume 48 Number 1 Fall 2013

pp.469-518

Fall 2013

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Recommended Citation

Janelle E. Thompson, The Eggsploitation of the United States' Organ and Egg Donation Systems, 48 Val. U. L. Rev. 469 (2013).

Available at: https://scholar.valpo.edu/vulr/vol48/iss1/11

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THE EGGSPLOITATION OF THE UNITED STATES' ORGAN AND EGG DONATION SYSTEMS

I. INTRODUCTION

Since the development of organ donation, the United States has operated under an altruistic model, but this approach has failed to address the shortage of transplantable organs throughout the nation.¹ The possibility of implementing a market system for organ donation was discussed throughout the 1990s but never adopted.² By examining the drawbacks of the current organ donation process and considering Congress's reasoning behind prohibiting a market system for organ donation—while allowing compensation for female egg donation—this Note provides an update on why adopting a market approach to organ donation is timely.³ The following two individuals who received the gift of life illustrate the discrepancies between the two donation systems.

Colter Meinart is a nine-year old boy who, like the average second-grader, obsesses over Star Wars memorabilia, completes math problems using his fingers, and bolts from school as soon as the bell rings.⁴ However, beneath Colter's sweatshirts and backpack is a pump that provides him with medicine twenty-four hours a day—medicine that prevents his heart from failing.⁵ At younger than a day old, the doctors discovered that Colter suffered from hypoplastic left heart syndrome, "a birth defect that affects normal blood flow through the heart." The doctors informed the Meinart family that Colter was missing the left

¹ See Charles C. Dunham IV, "Body Property": Challenging the Ethical Barriers in Organ Transplantation to Protect Individual Autonomy, 17 ANNALS HEALTH L. 39, 59 (2008) (recognizing that the government's altruistic approach has been failing for several decades); U.S. Dep't of Health & Human Servs., Organ Donation: The Process, ORGANDONOR.GOV, http://www.organdonor.gov/about/organdonationprocess.html (last visited Aug. 15, 2013) (identifying that the United States operates under an altruistic organ donation system).

² See, e.g., Gregory S. Crespi, Overcoming the Legal Obstacles to the Creation of a Futures Market in Bodily Organs, 55 OHIO ST. L.J. 1, 7 (1994) (insisting the adoption of a futures market for organ donation would benefit the organ shortage).

 $^{^3}$ See infra Part III (analyzing the shortcomings of organ donation legislation and analogizing the organ donation and egg donation processes).

Dan Lieberman & Ely Brown, *The Waiting Game: 9 Organ Transplant Patients Fight to Survive*, ABC NEWS (May 1, 2012), http://abcnews.go.com/Health/waiting-game-organ-transplant-patients-fight-survive/story?id=16245341#.ULGNh47_Q20.

⁵ Id

⁶ *Id.*; see Congenital Heart Defects: Facts About Hypoplastic Left Heart Syndrome, CENTERS FOR DISEASE CONTROL & PREVENTION, http://www.cdc.gov/ncbddd/heartdefects/hlhs. html (last updated Mar. 28, 2013) (defining hypoplastic left heart syndrome as "a birth defect that affects normal blood flow through the heart").

portion of his heart.⁷ At only six-weeks old, Colter received a heart transplant.⁸ The transplant was successful and allowed Colter to live the life of an average child—attending school and playing with his friends—until the summer of 2011 when Colter's heart again began to fail.⁹

The once rambunctious young boy and his parents were forced to anxiously await a second life-saving heart transplant.¹⁰ However, Colter's failing heart was no longer the Meinart family's sole concern because doctors discovered that the medicine Colter was taking to compensate for his heart condition had also caused damage to one of his kidneys.¹¹ Immediately, doctors placed Colter on the kidney transplant waiting list out of fear that his kidney would also soon fail.¹² In some respects Colter was fortunate because after nine months of waiting he received a heart transplant.¹³ Days later, he was on the road to recovery and returned to obsessing about anything relating to Star Wars.¹⁴ However, the successful transplant surgery does not mark the end of Colter's recovery because he and his family now must wait to see if he will also need a kidney transplant.¹⁵

The second individual, Melinda, is a woman who wanted desperately to have a child of her own. Melinda and her husband spent seven years undergoing in vitro fertilization treatments, but the treatments were unsuccessful, resulting in numerous miscarriages. Finally the doctors presented Melinda with an alternative option, an

⁷ Lieberman & Brown, *supra* note 4; *see Congenital Heart Defects: Facts About Hypoplastic Left Heart Syndrome, supra* note 6 (explaining that hypoplastic left heart syndrome is a condition that occurs during pregnancy when the left side of the baby's heart does not develop properly).

⁸ Lieberman & Brown, *supra* note 4.

⁹ See id. (recognizing that Jeff Meinart, Colter's father, asked the doctor whether he and his wife should hold Colter back from running and playing, and the doctor responded they should "let him do what he wants").

¹⁰ See id. (identifying that after about seven years healthcare professionals started to analyze whether another transplant was necessary).

¹¹ Id

 $^{^{12}}$ See id. (pointing out that the doctors thought Colter may also need a kidney transplant).

¹³ See id. (explaining that Colter asked his mother where his heart and kidney were going to come from, and she responded "when another child loses his life, that that's where they are going to get the heart and kidney from").

¹⁴ Id

¹⁵ Id

¹⁶ See Gratitude Details: Melinda's Letter, COLO. CENTER FOR REPROD. MED., http://www.coloeggdonor.com/Gratitude/Details/Melinda_s_Letter.aspx (last visited Aug. 15, 2013) (containing Melinda's letter, which expresses her desire to raise children).

See id. (explaining that, as a couple, Melinda and her husband experienced nine years of infertility and tried to conceive a child using in vitro fertilization during seven of those years).

option that could give her the family she always dreamed of having. The doctors informed Melinda that her only alternative was the egg donor program. 18

Originally, Melinda and her husband decided against egg donation because they believed that it would be too difficult to love a child that was not their own. ¹⁹ Four years later, the couple came to terms with the idea that egg donation may provide the only means for them to have the family they desired.²⁰ Although Melinda was concerned about developing a bond and expressing love for a child who was not biologically her own, her outlook regarding egg donation changed after the birth of her newborn.²¹ As soon as Melinda held her child and their eyes met, she fell in love, and she believes that the gift of a child is the most precious gift she has ever received.²² The egg donation process changed Melinda's life and family for the better, and it is all because a wonderful and beautiful woman gave what Melinda describes as "the best gift anyone could ever give, the gift of life."²³

The main difference between Colter's and Melinda's stories is that Melinda had the option of obtaining the gift of life—through a newborn child—by compensating a young woman who chose to donate her eggs.²⁴ Unlike Melinda, federal law prohibits Colter's family from

¹⁸ See id. (identifying that doctors presented the egg donor program to Melinda and her husband as an alternative option).

¹⁹ See id. (explaining Melinda's and her husband's reaction to the egg donor program as hesitant because they believed that they could not bear to "go that route").

²⁰ See id. (explaining that Melinda and her husband later understood that donors are people, like them, who could help her and her husband have a child).

²¹ See id. (stating Melinda believed that she could not love a baby that was not truly her own).

²² See id. (recognizing that their child's egg donor blessed Melinda and her husband with a "precious gift"). Melinda's letter identified that she immediately loved the baby and her love has since grown stronger over time. *Id.*

²³ Id

See Compensation, COLO. CENTER FOR REPROD. MED., http://www.coloeggdonor.com/Compensation.aspx (last visited Aug. 15, 2013) (recognizing that egg donors receive \$5000 following the completion of their first egg donation, and that amount can increase to \$5500 for a donor's second or third donation); Egg Donor Compensation, EGG DONATION, INC., https://www.eggdonor.com/donors/egg-donor-compensation/ (last visited Aug. 15, 2013) (recognizing that egg donors receive anywhere from \$5000 to \$10,000 for donating their eggs); see also Cost Estimate for Egg Donation, EGG DONOR PROGRAM, http://www.eggdonation.com/PDF/Cost_Estimate_Egg_Donation.pdf (last visited Aug. 15, 2013) (providing a list of the various fees associated with the donation process). But see LA. REV. STAT. ANN. § 9:122 (2008) (expressly prohibiting "[t]he sale of human ovum, fertilized human ovum, or human embryo"); John A. Robertson, Legal Uncertainties in Human Egg Donation, in New Ways of Making Babies: The Case of Egg Donation 175, 182–83 (Cynthia B. Cohen ed., 1996) (examining whether prosecution for the sale of eggs has occurred under various state statutes that expressly prohibit the sale of human organs).

paying compensation to any person willing to donate a heart or kidney to Colter.²⁵ Therefore, while Colter's kidney continues to fail he will remain on the kidney transplant waiting list, along with 97,229 other patients.²⁶ Even after already undergoing two heart transplants, Colter may not have the opportunity to live the life that his parents imagined for him. The current organ donation process could deprive the Meinart family of their own child and strip Colter of the gift of life he received nine years ago.

So what is it that makes Melinda more worthy of obtaining the gift of life compared to Colter? Currently, 119,246 people nationwide await an organ transplant, but between January and May of 2013, only 11,579 people received the transplant they needed.²⁷ This Note provides an indepth critique of the organ donation process currently operating within the United States.²⁸ Part II reviews the history and legal framework of the rights recognized in the human body and also explores the organ and

²⁵ See 42 U.S.C. § 274e(a) (2012) (stating it is "unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation").

²⁶ See Data, Organ Procurement & Transplantation Network, http://optn.transplant.hrsa.gov/data/ (last visited Aug. 15, 2013) (stating that as of 5:03 p.m. on August 15, 2013, 97,229 people were on the kidney transplant waiting list); see also The Kidney Transplant Waiting List, UPTODATE.COM, http://www.uptodate.com/contents/the-kidney-transplant-waiting-list (last visited Aug. 15, 2013) (identifying that as of late 2010, approximately 93,000 patients were on the kidney transplant list and the kidney transplant list has expanded by 3000 to 4000 patients each year).

See Data, supra note 26 (stating that as of 5:03 p.m. on August 5, 2013, 119,246 people were on the waiting list for an organ but doctors only performed 11,579 transplants between January 2013 and May 2013); see also The Kidney Transplant Waiting List, supra note 26 (identifying that in late 2010, "approximately 93,000 patients were registered on the kidney transplant waiting list at the United Network for Organ Sharing (UNOS) in the United States"); The Troubling Shortage of Organ Donors in the U.S., FORBES (Feb. 28, 2011, 9:48 AM), http://www.forbes.com/sites/marcsiegel/2011/02/28/the-troubling-shortage-of-organ-donors-in-the-u-s/ (explaining that in the United States there is a large organ shortage and this shortage is especially prominent when it comes to needing a kidney).

See Damien Gayle, An Organ Is Sold Every Hour, WHO Warns: Brutal Black Market on the Rise Again Thanks to Diseases of Affluence, MAIL ONLINE (May 27, 2012, 11:52 PM), http://www.dailymail.co.uk/health/article-2150932/An-organ-sold-hour-WHO-warns-Brutal-black-market-rise-thanks-diseases-affluence.html (recognizing the World Health Organization's fear that the illegal trade of organs has again developed); U.S. Dep't of Health & Human Servs., The Need Is Real: Data, ORGANDONOR.GOV, http://www.organ donor.gov/about/data.html (last visited Aug. 15, 2013) (providing statistics that illustrate the increased need for organ transplantation). But see Talk of the Nation: Human Organ Trade, NPR (Dec. 9, 2003), http://www.npr.org/templates/story/story.php?storyID=1538955 (discussing the illegal trading of human organs that occurred in Africa). See generally Why Be an Organ Donor?, N.Y. ORGAN DONOR NETWORK, http://www.donatelifeny.org/about-donation/why-be-an-organ-donor/ (last visited Aug. 15, 2013) (pointing out that by donating one's organs a person has the potential to "save a life").

egg donation processes.²⁹ Part III analyzes why the courts and legislature have chosen to treat the two donation systems differently and also examines the similarities and differences between the egg donation and organ donation processes.³⁰ Finally, Part IV proposes an amendment to the National Organ Transplant Act of 1984 ("NOTA") and suggests that Congress should implement a supervised market approach to organ and egg donation.³¹ These amendments will allow for a more holistic approach to the donation systems and will increase the supply of organs to help resolve the United States' organ shortage.

II. BACKGROUND

To gain a better understanding of the need for a supervised market approach, this Part provides an overview of the history of organ donation in the United States and considers the critical aspects of the organ and egg donation processes.³² First, Part II.A describes the cases that played a critical role in identifying the property rights associated with the human body.³³ Second, Part II.B discusses the model codes adopted by numerous state legislatures and considers NOTA, a federal law that prohibits the sale of human organs.³⁴ Third, Part II.C explains the process of organ donation for deceased and living donors.³⁵ Finally, Part II.D discusses female egg donation and the various risks associated with the procurement process.³⁶

A. The Legal Framework

Throughout history, courts have interpreted the rights associated with a human body differently depending on whether the person is

²⁹ See infra Part II (discussing the property rights associated with the human body, the model codes and statutes governing organ donation, and the processes of donating organs and female eggs).

³⁰ See infra Part III (analyzing Congress's prohibition on the sale of human organs and the similarities between the organ and egg donation systems).

³¹ See infra Part IV (suggesting an amendment to the National Organ Transplant Act of 1984 ("NOTA") that would reconcile the differences between the United States' approach to organ and egg donation, while also reducing the shortage of human organs).

³² See infra Parts II.A-D (discussing property rights in the human body, the prohibition of selling one's organs, and the organ and egg donation processes).

³³ See infra Part II.A (discussing the judiciary's interpretation of property rights in a deceased's and living person's human organs).

³⁵ See infra Part II.C (explaining the organ donation process for deceased and living donors).

³⁶ See infra Part II.D (exploring the female egg donation process).

deceased or living.³⁷ This Part discusses these differences and the recent case law that has interpreted the rights associated with the human body.³⁸ First, Part II.A.1 explains the recognition of a quasi-property right in a decedent's body.³⁹ Second, Part II.A.2 elaborates on the lack of property interests that a person retains in his living body and the subparts thereof.⁴⁰ Only after considering the rights that courts have recognized in a human body can one gain a better understanding of the critical movement toward enacting model codes and federal legislation that prevents the sale of the human body and its subparts.⁴¹

1. Property Interests in a Decedent's Organs

Prior to the creation of the Uniform Anatomical Gift Act ("UAGA") in 1968, common law principles governed organ transplantation.⁴² Originally, under the English common law, courts recognized a property right in the deceased body.⁴³ For example, old British courts permitted a creditor to arrest the body of a deceased debtor for any debts owed.⁴⁴ However, after consideration of moral principles, the courts began to condemn such practices and denied that persons maintained an absolute property right to a corpse.⁴⁵ For instance, in *Regina v. Sharpe*, the British

³⁷ See infra Parts II.A.1-2 (discussing that the next-of-kin maintains a quasi-property interest in a deceased's body, but a living person does not possesses an absolute property right in his own body).

³⁸ See infra Part II.A.2 (explaining the lack of property rights a living person maintains in his body parts).

³⁹ See infra Part II.A.1 (discussing the recognition of property rights by the English and American courts).

⁴⁰ See infra Part II.A.2 (identifying case law that shaped an understanding of a lack of property rights in a living person's body).

⁴¹ See infra Part II.B (discussing the model codes and federal legislation that prohibits the sale of the human body and its subparts).

⁴² See Crespi, supra note 2, at 10 (identifying that, before the Second World War, common law principles guided organ transplantation throughout the United States). See generally UNIF. ANATOMICAL GIFT ACT (1968) (providing the language of the UAGA, as enacted in 1968).

⁴³ See, e.g., R. v. Cheere, (1825) 107 Eng. Rep. 1294 (K.B.); 4 B. & C. 902. The government indicted the defendant for interfering and preventing the burial of John Dawes. *Id.* at 1295. The court held that the indictment for the alleged offense was invalid because it did not appear the Clerk had a right to bury the corpse, and the threats allegedly spoken by the defendant were not included within the indictment. *Id.* at 1296.

⁴⁴ See Monique C. Gorsline & Rachelle L.K. Johnson, Note, *The United States System of Organ Donation, the International Solution, and the Cadaveric Organ Donor Act: "And the Winner Is...,"* 20 J. CORP. L. 5, 11 (1994) (stating that historically, "a creditor could force payment of a debt by personally attaching the debtor and placing the debtor in prison").

⁴⁵ See, e.g., Jones v. Ashburnham, (1804) 102 Eng. Rep. 905 (K.B.) 909; 4 East 455, 465 (condemning the practice of arresting a debtor as being "contrary to every principle of law and moral feeling").

court upheld the conviction of a man charged with illegally entering his mother's grave and removing her corpse.⁴⁶ The court held that persons, including the next-of-kin, did not possess a property right to a family member's remains.⁴⁷

Similarly, the United States judiciary has hesitated to acknowledge an absolute property right to a deceased's body.⁴⁸ American courts recognize an individual's right to determine the fate of his remains through the creation of a contract or will.⁴⁹ However, in circumstances where a decedent fails to memorialize his wishes, the decedent's family retains the ability to decide the disposition of the decedent's corpse.⁵⁰ In

⁴⁶ See Regina v. Sharpe, (1857) 169 Eng. Rep. 959 (Crim. App.) 960; Dears. & Bell 159, 161–62 (laying out the facts of the case).

See id. (holding that there is not an absolute property right to a corpse).

See, e.g., Newman v. Sathyavaglswaran, 287 F.3d 786, 795-97 (9th Cir. 2002) (holding that California infringed on the dignity of the deceased children by extracting their corneas without the parents' consent); Dougherty v. Mercantile-Safe Deposition & Trust Co., 387 A.2d 244, 246 n.2 (Md. 1978) ("It is universally recognized that there is no property in a dead body in a commercial or material sense."); Keyes v. Kenkel, 78 N.W. 649, 649 (Mich. 1899) (holding that the action brought against funeral directors, seeking replevin of a human corpse, could not succeed); see also Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 435 (1982) (explaining that "[p]roperty rights in a physical thing have been described as the rights 'to possess, use and dispose of it'" (quoting United States v. General Motors Corp., 323 U.S. 373, 378 (1945))); Kimball Laundry Co. v. United States, 338 U.S. 1, 5 (1949) ("The value compensable under the Fifth Amendment, therefore, is only that value which is capable of transfer from owner to owner and thus of exchange for some equivalent."). But see Erik S. Jaffe, Note, "She's Got Bette Davis['s] Eyes": Assessing the Nonconsensual Removal of Cadaver Organs Under the Takings and Due Process Clauses, 90 COLUM. L. REV. 528, 528 (1990) (contending that property rights exist in the body and the subparts thereof). See generally BLACK'S LAW DICTIONARY 1335 (9th ed. 2009) (defining property). Black's Law Dictonary defines property as "[t]he right to possess, use, and enjoy a determinate thing (either a tract of land or a chattel); the right of ownership," and recognizes the most common usage is a "bundle of rights." Id.

⁴⁹ See, e.g., Gorsline & Johnson, *supra* note 44, at 10 (pointing out that under American law persons can supervise the disposal of their remains by executing a will or contract).

See id. (recognizing that if the decedent fails to exercise the right to dispose of his remains, then the decedent's family may exercise the right); see also Whaley v. Cnty. of Tuscola, 58 F.3d 1111, 1114 (6th Cir. 1995) (explaining that a common law right to possess the body for burial purposes and a right to bring a claim against persons who disturb the body vests in the next-of-kin); Brotherton v. Cleveland, 923 F.2d 477, 482 (6th Cir. 1991) (holding that the Due Process Clause of the U.S. Constitution protected a widow's right to her deceased husband's body, including his corneas); Cohen v. Groman Mortuary, Inc., 41 Cal. Rptr. 481, 483 (Dist. Ct. App. 1964) (identifying that a quasi-property right to the corpse for burial purposes existed); Crocker v. Pleasant, 778 So. 2d 978, 985 (Fla. 2001) (recognizing that the narrow construction given to the statute in an earlier decision does not translate into the general conclusion that the Fourteenth Amendment should not protect the right to possess a decedent's remains for burial); Georgia Lions Eye Bank, Inc. v. Lavant, 335 S.E.2d 127, 128 (Ga. 1985) (holding that courts formulated the quasi-property right to acknowledge the interests of surviving relatives to control the decedent's remains but does not constitute "property" as defined in the constitutional sense); Sanford v. Ware,

other words, family members retain a "quasi-property right" to determine the fate of the deceased's remains.⁵¹

Although courts recognize the limited quasi-property right to possess the corpse for burial purposes, they have rejected any claim that a consent form constitutes a contract.⁵² For instance, in *Perry v. Saint Francis Hospital and Medical Center, Inc.*, a nurse assured the decedent's family that doctors would only remove his corneas and bone marrow; but, in fact, the hospital removed the deceased's eyes and major bones as well.⁵³ In discussing the hospital's pending motion for summary judgment, the U.S. district court sustained the family's claim for intentional infliction of emotional distress but rejected its breach of contract claim with regard to the donation consent form.⁵⁴ The court

60 S.E.2d 10, 12 (Va. 1950) ("Although there is no right of property in a commercial sense in the dead body of a human being, the right to bury and preserve the remains is recognized and protected as a quasi-property right."). *But see* State v. Powell, 497 So. 2d 1188, 1191–92 (Fla. 1986) (finding that the removal of the decedent's corneas without consent did not violate the state constitution because a person's protected rights under the constitution end upon death and the next-of-kin maintains no property right in the decedent's remains).

⁵¹ See Newman, 287 F.3d at 797 n.13 ("There is no entry for 'quasi property' in Blacks [sic] Law Dictionary (6th Ed.1990) or Ballentine's Law Dictionary (3d ed.1969), although each contains entries for 'quasi contract.'").

⁵² See Perry v. Saint Francis Hosp. & Med. Ctr., Inc., 886 F. Supp. 1551, 1563 (D. Kan. 1995) (stating that Kansas common law is identical to the position universally held by other jurisdictions, in that there is no property right in a corpse itself but only the right of possession to dispose of the corpse); Hearon v. City of Chicago, 510 N.E.2d 1192, 1195 (Ill. App. Ct. 1987) (recognizing that the right to possess the deceased's body vests in the next-of-kin for them to make appropriate disposition decisions); Dougherty, 387 A.2d at 246 n.2 (identifying the universal consensus that there is no property right to a corpse in either a commercial or material sense); Strachan v. John F. Kennedy Mem'l Hosp., 538 A.2d 346, 350 (N.J. 1988) (explaining that the state has recognized a quasi-property right in the body of the deceased for more than fifty years).

s86 F. Supp. at 1551. On January 28, 1992, Kenneth Perry suffered a heart attack while at his home and paramedics transported him to St. Francis Hospital. *Id.* at 1555. The hospital was unable to resuscitate Perry and he died shortly after his arrival at St. Francis. *Id.* Following his death, a nurse approached the family and discussed donating Perry's body for research or potentially donating his tissue. *Id.* The nurse recognized that organ donation was not possible because of the manner in which Perry died. *Id.* The family originally declined to donate any of Perry's body but later consented to donating his corneas because the nurse explained that the procedure only involved peeling the corneas off of his eye. *Id.* The nurse then questioned the family about donating bone marrow, which again the family initially rejected and only later consented to after the nurse explained the process could be done with a needle and syringe. *Id.* The widow later learned that the hospital removed the large major bones from Perry's "upper arm, hip and leg regions" and, after litigation commenced, also discovered that the hospital removed Perry's corneas as well as his entire eyes. *Id.* at 1553, 1556.

54 Id. at 1561, 1563. The court believed that the nurse lied numerous times about the limited surgical procedures and the consequences of signing the consent form. Id. at 1562. Such deception resulted in mutilation to Perry's remains and caused the family to donate more than they believed Perry would have wanted donated. Id. Thus, the court sustained

identified that resorting to contract law was irreconcilable with society's beliefs and values concerning organ donation.⁵⁵

2. Property Rights (or a Lack Thereof) in the Living Body

Historically, under certain circumstances, courts considered the living human body property, although the recognition of a property right did not grant an individual absolute control over his own body.⁵⁶

the decision that St. Francis was not entitled to summary judgment on the intentional infliction of emotional distress claim. *Id.* The court also held that the widow's property right in the deceased's body did not include a right to convey the body for consideration. *Id.* at 1563. Instead, under Kansas law, the widow maintained a quasi-property right in the body, comprised of the right to possess it for the purposes of burial and preservation. *Id.* Therefore, the court denied that the consent form constituted a contract. *Id.*

The court cited State v. Powell for the proposition "that laws regarding the removal of human tissues for transplantation implicate moral, ethical, theological, philosophical, and economic concerns which do not readily lend themselves to analysis within a traditional legal framework." Id. at 1563 n.7 (quoting Powell, 497 So. 2d at 1194). Instead, the court identified the appropriate approach was to look at statutes written on organ and tissue donation. Id. For instance, in Moore v. Regents of the University of California, the California Supreme Court supported looking to the specialized statutes governing human biological materials as objects rather than abandoning the statutes and considering the general law of personal property. Id. The district court concluded that "[t]he same could be said for resorting strictly to contract law when there is an alleged agreement for the transfer of human remains." Id.

⁵⁶ See Gorsline & Johnson, supra note 44, at 11 (stating that historically, under various circumstances, property rights existed in the living body). Gorsline and Johnson note that under the common law:

[A] creditor could force payment of a debt by personally attaching the debtor and placing the debtor in prison. Furthermore, a woman's body was considered the property of her husband. Finally, during a dark period in our nation's history, we recognized the ownership of living human beings under the institution of slavery.

Id. (footnotes omitted). For a discussion of property rights associated with a decedent's body, see Newman, 287 F.3d at 796, where the court held that California infringed on the dignity of the deceased children by extracting their corneas without the consent of the parents. Other courts have similarly held that the next-of-kin retains a limited quasiproperty right to the deceased. See, e.g., Brotherton v. Cleveland, 923 F.2d 477, 481 (6th Cir. 1991) (recognizing that the prevailing view of courts is that the next-of-kin maintains a quasi-property right for burial or other purposes); Cohen v. Groman Mortuary, Inc., 41 Cal. Rptr. 481, 483 (Dist. Ct. App. 1964) (identifying that a quasi-property right to the corpse for burial purposes existed); Keyes v. Kenkel, 78 N.W. 649, 649 (Mich. 1899) (holding that the action against funeral directors seeking replevin of a human corpse could not succeed); Sanford v. Ware, 60 S.E.2d 10, 12 (Va. 1950) ("Although there is no right of property in a commercial sense in the dead body of a human being, the right to bury and preserve the remains is recognized and protected as a quasi-property right."). But see Regina v. Sharpe, (1857) 169 Eng. Rep. 959 (Crim. App.) 960; Dears. & Bell 159, 163 (describing that there are no property rights to a corpse); Brian G. Hannemann, Note, Body Parts and Property Rights: A New Commodity for the 1990s, 22 SW. U.L. REV. 399, 404 (1993) ("[O]ver three hundred years of common law failed to recognize a property right in the human body.").

Courts today are reluctant to identify a property right associated with the human body during life, and instead, certain jurisdictions recognize that a person maintains a privacy interest in his living body.⁵⁷

For instance, in *McFall v. Shimp*, a Pennsylvania court considered whether society maintained the right to infringe upon one's human body in order to protect the life of another.⁵⁸ Robert McFall ("McFall") suffered from a rare bone marrow disease, and without a bone marrow transplant, he faced imminent death.⁵⁹ McFall's cousin, David Shimp ("Shimp"), was a bone marrow match, and McFall petitioned the court to issue an injunction requiring Shimp to donate his bone marrow.⁶⁰ The court denied McFall's injunction, recognizing that under the common law "one human being is under no legal compulsion to give aid or to take action to save another human being or to rescue."⁶¹

A similar situation arose in *Curran v. Bosze*, a case in which a father sought an injunction mandating that a mother allow doctors to perform blood tests on her twin children.⁶² The father's son, who was the twin children's half-brother, faced impending death unless the family was able to secure a bone marrow transplant.⁶³ Similar to the court in *McFall*, the *Curran* court denied the injunction.⁶⁴

One of the most widely recognized cases rejecting a living person's property interest in human tissue is *Moore v. Regents of the University of*

⁵⁷ See Moore v. Regents of the Univ. of Cal., 793 P.2d 479, 480 (Cal. 1990) (rejecting the claim for conversion brought by the plaintiff and discussing a living person's respective right to privacy in his body). See generally Susan L. Crockin, Statutory and Case Law Governing Oocyte and Embryo Donation, in PRINCIPLES OF OOCYTE AND EMBRYO DONATION at 241 (Mark V. Sauer ed., 2d ed. 1998) (discussing the current state of the law that governs female egg donation).

⁵⁸ See 10 Pa. D. & C.3d 90, 90–91 (Ct. Com. Pl. 1978) (addressing the issue of whether a person has an interest in infringing on the body of another).

⁵⁹ *Id.* at 90

⁶⁰ Id.; see A Cousin's Stunning Refusal to Donate Bone Marrow Leaves Robert McFall Facing Death, PEOPLE, Aug. 14, 1978, at 52, available at http://www.people.com/people/archive/article/0,,20071484,00.html (elaborating on the familial tension between the McFall and Shimp families and suggesting that the cousins may have in fact been half-brothers, which is why, as cousins, McFall and Shimp were a bone marrow match).

⁶¹ McFall, 10 Pa. D. & C.3d at 91-92; see A Cousin's Stunning Refusal to Donate Bone Marrow Leaves Robert McFall Facing Death, supra note 60 (quoting the judge as describing Shimp's position as "morally indefensible").

⁶² See Curran v. Bosze, 566 N.E.2d 1319, 1321 (III. 1990) (identifying a father's request for an injunction that would have mandated a mother to allow doctors to perform blood tests on their twin children).

⁶³ See id. (pointing out that the half-brother needed a life-saving bone marrow transplant).

⁶⁴ See id. at 1345 (denying the father's request for an injunction).

California.⁶⁵ In Moore, John Moore ("Moore") obtained medical treatment from the UCLA Medical Center after doctors diagnosed him with hairy-cell leukemia.⁶⁶ For seven years, Moore periodically visited the medical center, and during each visit Dr. Golde removed samples of Moore's blood, sperm, bone marrow, and skin.⁶⁷ In actuality, Dr. Golde was removing Moore's tissues and selling them to a researcher for commercial development.⁶⁸ After discovering Dr. Golde's transactions, Moore sued for conversion of property, among other things.⁶⁹

The California Supreme Court recognized that Dr. Golde failed to meet the full disclosure requirements under state law.⁷⁰ Acknowledging that Moore did not give informed consent, the court found that Moore's cause of action could proceed under his breach of a fiduciary duty

^{65 793} P.2d 479 (Cal. 1990). See generally Joseph Shapiro & Sandra Bartlett, All Things Considered: Calculating the Value of Human Tissue Donation, NPR (July 17, 2012), http://www.npr.org/2012/07/17/156876476/calculating-the-value-of-human-tissue-donation (providing a personal account of the tissue donation process, compared to organ donation). One gentleman who works with tissue donations at an organ bank in Madison, Wisconsin recognized that "[t]issue donation was totally different, and I knew it going into it We're recovering skin, bones, tendons, heart valves, veins, those sorts of things." Id. Essentially, tissue encompasses the parts of the human body that are not living organs. Id.

⁶⁶ Moore, 793 P.2d at 480. Dr. David W. Golde confirmed Moore's diagnosis of leukemia and recommended that Moore undergo surgery to have his spleen removed. *Id.* at 481. Moore followed Dr. Golde's advice and consented to the surgery. *Id.*

⁶⁷ Id. Moore gave his consent to the removal of these samples, after Dr. Golde told him that the samples and removal of his spleen were pertinent to his health. Id.

⁶⁸ *Id.* Dr. Golde recognized that Moore's blood was unique in composition and that his blood contained competitive, commercial advantages. *Id.* at 482. Eventually Dr. Golde utilized Moore's cells in the creation of a patented cell line, which listed Dr. Golde as the inventor. *Id.* at 481–82.

⁶⁹ See id. at 482 n.4. (identifying Moore's thirteen original claims asserted against Dr. Golde: "(1) [c]onversion; (2) lack of informed consent; (3) breach of fiduciary duty; (4) fraud and deceit; (5) unjust enrichment; (6) quasi-contract; (7) bad faith breach of the implied covenant of good faith and fair dealing; (8) intentional infliction of emotional distress; (9) negligent misrepresentation; (10) intentional interference with prospective advantageous economic relationships; (11) slander of title; (12) accounting; and (13) declaratory relief" (internal quotation marks omitted)). At the start of the action, the trial court determined that twelve of the additional claims merged into the conversion claim. Id. at 482. Thus, the trial court only considered the conversion claim, which it ultimately denied. Id.; see Moore v. Regents of the Univ. of Cal., 249 Cal. Rptr. 494, 502 (Ct. App. 1988) (remanding the case with instructions that the trial court should rule on the conversion claim along with the other twelve causes of action it failed to originally consider). On appeal, the California Court of Appeals found that Moore's claim stated a valid cause of action for conversion. Id.

See Moore, 793 P.2d at 484 (recognizing that a physician can solve a conflict of interest with his patients by ensuring that there is prior disclosure). In its decision, the court relied on legislation concerning a physician's commercial investment in clinical laboratories. *Id.* at 483–84.

claim.⁷¹ However, the court denied Moore's conversion claim and explained that Moore did not retain an ownership interest in the patented cell line.⁷² In pertinent part, the court found that Moore had no claim to the patented cells because they were legally and factually different from Moore's own cells.⁷³ The California Supreme Court declined to expand the law of conversion to these circumstances because the court believed that Moore's breach of fiduciary duty and informed consent claims adequately protected his interests.⁷⁴

In addition, within the last ten years, additional cases addressing tissues and cells as intellectual property have emerged.⁷⁵ In *Greenberg v. Miami Children's Hospital Research Institute, Inc.*, both parties sought to detect and cure a genetic disorder called Canavan disease.⁷⁶ Plaintiffs provided blood, urine, and autopsy samples, along with confidential information, believing that doctors would use the samples for research to

⁷¹ See id. at 483 (recognizing that Dr. Golde's research interests may have conflicted with the medical procedures performed on Moore, and as such, Moore's claim could properly proceed as breach of a fiduciary duty because Dr. Golde failed to disclose and receive Moore's informed consent to perform the research and tests).

⁷² See id. at 489 (identifying three reasons to doubt that Moore intended to maintain an ownership interest in his donated cells). See generally E. RICHARD GOLD, BODY PARTS: PROPERTY RIGHTS AND THE OWNERSHIP OF HUMAN BIOLOGICAL MATERIALS 26–27 (1996) (contending that the court failed to recognize a property interest in Moore's tissues because it feared that doing so would hinder the exchange of human biological material and thus harm the development of pharmaceutical products). First, the court found that there was no case law acknowledging that a person retains an interest in excised cells so as to bring a claim for conversion. Moore, 793 P.2d at 489. Second, the court reasoned that California statutory law drastically limited a person's control over excised cells. Id. at 491. Finally, and most importantly, the court found that the patented cells could not constitute Moore's property because "the patented cell line is both factually and legally distinct from the cells taken from Moore's body." Id. at 492.

Moore, 793 P.2d at 492; see Denise Spellman, Note, Encouragement Is Not Enough: The Benefits of Instituting a Mandated Choice Organ Procurement System, 56 SYRACUSE L. REV. 353, 358 (explaining the Moore decision and the court's refusal to recognize an ownership interest); see also Andrew W. Torrance, DNA Copyright, 46 VAL. U. L. REV. 1, 7 (2011) (discussing the aptness of DNA patent protection).

⁷⁴ See Moore, 793 P.2d at 489 (stating that the court balanced policy considerations against the decision to expand the underlying principles of property law); see also Spellman, supra note 73, at 359 (identifying that the court believed informed consent and fiduciary duty adequately protected Moore's claim).

⁷⁵ See, e.g., Greenberg v. Miami Children's Hosp. Research Inst., Inc., 264 F. Supp. 2d 1064, 1066 (S.D. Fla. 2003) (discussing a research team that isolated the gene responsible for Canavan disease, and recognizing that after patenting the gene, individuals who provided samples, confidential information, and sources for the research sued the team).

⁷⁶ See id. (identifying that Greenberg approached Dr. Matalon of the University of Illinois at Chicago for assistance in determining what genes were responsible for the fatal Canavan disease).

identify mutations that could help detect carriers of the disease.⁷⁷ After defendants had a breakthrough and isolated the gene responsible for Canavan disease, they sought and obtained a patent on the research.⁷⁸ Although the plaintiffs' complaint identified six counts, the court held that only the unjust enrichment claim should survive the motion to dismiss.⁷⁹ The court rejected the plaintiffs' claim for conversion, analogizing the facts in *Greenberg* to the facts in *Moore*.⁸⁰

Thus, the current precedent rejects any claim that a living person possesses an absolute property right in his living body or its subparts. ⁸¹ On the other hand, there are certain tissues and fluids—including blood, hair, ova, and semen—which persons maintain the right to trade or sell under current legislation and precedent. ⁸²

⁷⁷ *Id.* at 1067. Plaintiff Greenberg assisted in locating other Canavan families and urged them to donate blood and tissue samples to help further the research. *Id.* Greenberg was also responsible for creating a confidential database that contained information about the families. *Id.* The plaintiffs provided Dr. Matalon with the samples and information believing the research was to discover mutations and benefit the population at large. *Id.*

⁷⁸ *Id.* In 1993, Dr. Matalon and his research team had a breakthrough after successfully isolating the mutated gene. *Id.* This was due in part to the samples of blood and tissue provided by the plaintiffs, along with the familial pedigree information, other contacts, and financial support. *Id.* Plaintiffs claimed that they continued to provide tissue and blood samples to Dr. Matalon so the research team could discover more about the disease and the mutated gene. *Id.* Then, in September 1994, without the plaintiffs' knowledge, the defendants submitted a patent application for the genetic sequence. *Id.*

⁷⁹ See id. at 1073 (denying the defendant's motion to dismiss concerning the unjust enrichment claim).

See id. at 1074–75 (quoting the California Supreme Court in Moore, stating "[n]o court has ever in a reported decision imposed conversion liability for the use of human cells in medical research"). The court agreed with the California Supreme Court in Moore that the patented cell line was factually and legally distinct from the samples originally taken. Id. The court also pointed to State v. Powell and agreed that property rights associated with body tissues evaporated after individuals voluntarily provided the samples to a third party. Id. at 1075.

⁸¹ See supra notes 58–80 and accompanying text (illustrating the lack of an absolute property right in the living human body).

See Gorsline & Johnson, *supra* note 44, at 11 n.61 (recognizing that blood is widely purchased and sold; however, "urine, skin, sweat, saliva, semen, and pituitary glands also are traded in exchange for money"). In fact, "[b]etween 1965 and 1967, 80% of the blood collected in the United States came from donors who were paid or rewarded in some way, while only 7% came from voluntary nonpaid donors." *Id.* at 11–12 n.61. These body tissues maintain various rights that are associated with property. *Id.* at 11–12. However, courts are split on whether the sale of blood constitutes the sale of a product or service. *Id.* at 12. This is critical in understanding whether a court can find the hospital or blood bank responsible for supplying the blood liable for any defects in the blood under a theory of strict products liability. *Id.* On the other hand, if the court deems the sale of blood is a service, then the hospital would not be liable for any deficiencies with the blood. *Id.*

B. Organ Donation Legislation

Political and social circumstances played an important role in shaping the organ donation process and procedure.⁸³ This Part considers the legislature's approach to organ donation by discussing the model codes and statutes that oversee the organ donation process.⁸⁴ Part II.B.1 reviews the 1968 UAGA and briefly discusses the revisions to the UAGA implemented in 1987 and 2006.⁸⁵ Then, Part II.B.2 addresses NOTA, a federal law that expressly prohibits the sale of human organs.⁸⁶ Understanding the prohibition in NOTA first requires a brief consideration of the UAGA and its revisions since 1968.⁸⁷

1. The Uniform Anatomical Gift Act

Following World War II, the need for human tissues and organs increased drastically.⁸⁸ The enlarged demand coupled with the exhibited willingness of individuals to donate caused some states to enact organ donation legislation during the 1950s and 1960s.⁸⁹ Although commentators considered these state statutes a large improvement from the common law approach, which placed no restrictions on organ

⁸³ See infra Parts II.B.1-2 (discussing various social circumstances that influenced the changes in the model codes and legislation).

⁸⁴ See infra Parts II.B.1-2 (describing the UAGA, the revisions made to the UAGA, and the only piece of federal legislation that governs the sale of human organs, NOTA).

⁸⁵ See infra Part II.B.1 (examining the UAGA provisions and the 1987 and 2006 revisions).

See infra Part II.B.2 (discussing the enactment of NOTA in 1984).

 $^{^{87}}$ See infra Part II.B.1 (considering the UAGA and its subsequent revisions in 1987 and 2006).

See Crespi, supra note 2, at 11 (identifying that as the medical community continued to break ground in the science of organ transplantation after World War II there was an increase in the demand of organs used for medical research, education and therapeutic purposes, and someday for transplantation); see also Abena Richards, Comment, Don't Take Your Organs to Heaven... Heaven Knows We Need Them Here: Another Look at the Required Response System, 26 N. Ill. U. L. Rev. 365, 370 (2006) (explaining that people initially donated organs for medical reasons). According to one source, the first successful transplantation involved skin and corneas. Id. Then, in 1954, "the first successful invasive procedure occurred... when Dr. Joseph E. Murray was able to remove a kidney from one identical twin and transplant it to the other." Id. at 370–71.

see Crespi, supra note 2, at 12 (stating that California initiated the movement toward enacting organ donation legislation in 1947, and other states followed throughout the 1950s and early 1960s); see also Richards, supra note 88, at 371 (explaining that by 1968 forty-two states had introduced legislation that would allow for individuals to donate their organs after death). The state legislation granted individuals or their surviving kin the right to make an anatomical gift for a variety of medical purposes, including transplantation. Crespi, supra note 2, at 12. Some of the early legislation also allowed for restricted commerce in human organs, even though evidence of commercial transactions occurring had not materialized. Id.

procurement, the state-enacted legislation contained unmanageable standards.⁹⁰ Many states enacted deficiently drafted statutes and issues arose regarding the disparate approaches to organ donation from state to state.⁹¹ As the number of transferrable organs continued to decline and the advancement in transplant techniques began to thrive, the shortcomings of state donation laws came to the forefront.⁹² Finally, in 1965, the National Conference of Commissioners on Uniform State Laws ("National Conference of Commissioners") established a subcommittee to commence in drafting a model act that would provide uniformity for state legislation addressing organ donation.⁹³

In 1968, the National Conference of Commissioners approved the UAGA.⁹⁴ The central purpose of the UAGA was to develop a model code that would promote consistency among state statutes and provide a method for states to tackle the organ shortage.⁹⁵ By 1973, all fifty states, along with the District of Columbia, adopted the UAGA.⁹⁶ The UAGA

⁹⁰ See Crespi, supra note 2, at 12 (pointing out that the statutes were a marked improvement in the common law understanding of property rights in bodily organs).

⁹¹ See UNIF. ANATOMICAL GIFT ACT prefatory note (1968) (discussing issues with state statutes regarding organ donation). The Commission begins by identifying the shortcomings of state statutes, in that they differ both as to coverage and content. *Id.*

[[]The state laws] differ in their enumeration of permissible donees (some require specified donees, others permit gifts to any hospital or physician in charge at death); they differ as to acceptable purpose of gifts (some, for example, do not include licensed tissue banks); some differ as to the minimum age of the donor; others as to the manner of execution of gifts and the manner of revocation. Some require delivery of the instrument of gift or filing in a public office, or both, as a condition of validity. Others make no such provision.

Id. These differences were understood to create legal problems for doctors who would rely upon the donation laws of the state where they performed the transplant but then would be in violation of organ donation laws in another state. *Id.*

 $^{^{92}}$ See Crespi, supra note 2, at 12 (acknowledging that the medical field made great strides during the 1960s regarding transplant technology, and yet the shortage of transplantable organs continued to persist). This dilemma directed focus to the state-enacted legislation and the shortcomings of those statutes. *Id.*

⁹³ See id. ("In 1965 the National Conference of Commissioners on Uniform State Law appointed a subcommittee to draft a model act that would encourage the donation and use of cadaveric organs."); Richards, supra note 88, at 371 (discussing that the lack of uniformity among the states prompted the National Conference of Commissioners to introduce the UAGA).

⁹⁴ See Crespi, supra note 2, at 12 (identifying that the National Conference of Commissioners approved the model act in 1968 and even received the endorsement of the American Bar Association).

⁹⁵ See UNIF. ANATOMICAL GIFT ACT prefatory note (1968) (proposing that the adoption of the UAGA would provide for a uniform legal environment as the nation approached the "new frontier of modern medicine").

⁹⁶ See Dunham, supra note 1 (stating that by 1973 all fifty states, along with the District of Columbia, had enacted the UAGA); see also Richards, supra note 88, at 372 ("[T]oday only

addressed an individual's right to execute an anatomical gift, which is "[a] testamentary donation of a bodily organ or organs, esp[ecially] for transplant or for medical research." The UAGA helped shape the formation of the U.S. organ donation system. 98

However, after further advancement in transplant procedures, the National Conference of Commissioners reconvened in 1985 to revise the UAGA.⁹⁹ During this process, they focused on emphasizing donation for transplantation, as opposed to donation for research or education.¹⁰⁰ The National Conference of Commissioners also concentrated on simplifying and improving the process of making an anatomical gift.¹⁰¹ In some

thirty states have gift laws derived from the 1968 UAGA. Some states have made only slight modifications to the UAGA, thereby allowing the UAGA to continue to achieve one of its primary goals—establishing uniformity in organ donation laws." (footnotes omitted)).

97 BLACK'S LAW DICTIONARY 757 (9th ed. 2009).

See UNIF. ANATOMICAL GIFT ACT (1968) (setting forth three important provisions that helped to shape the formation of the United States organ donation system). First, the individual maintained the right to determine whether to execute an anatomical gift. Id. § 2(a). The UAGA provided alternative methods to establish a person's postmortem wishes in writing, including gift by will, or by a document other than a will and in the presence of two witnesses. Id. § 4(a)-(b). In addition, an individual could make a gift by identifying a specific donee or without identifying a specific donee. Id. § 4(c). The donor also had the power to establish, within the document, the surgeon or physician to carry out the transplant procedure. Id. § 4(d). In situations where the donor did not specify a physician, the donee or other party accepting the gift retained the power to authorize any physician to perform the procedure. Id. Second, the UAGA identified that the decedent's postmortem wishes regarding anatomical gifts were paramount to the wishes of others. Id. § 2(e). Only in situations where the decedent failed to identify his desire to donate prior to death did the decedent's family members retain the power to choose whether to donate any or all of the decedent's bodily organs. Id. § 2(b). Third, due to the civil and criminal liability associated with procuring organs, the UAGA provided that courts would not hold individuals liable so long as they acted in "good faith" and in compliance with the UAGA provisions. Id. § 7(c). Regardless, some physicians and hospitals refused to perform organ donation procedures unless they secured the consent of the decedent's family. See Gorsline & Johnson, supra note 44, at 15-16 (stating that despite the UAGA's language that persons in good faith will avoid liability, doctors, medical facilities, and Organ Procurement Organizations generally rejected the anatomical gifts unless they were able to secure consent from the decedent's family).

⁹⁹ See UNIF. ANATOMICAL GIFT ACT prefatory note (1987) (identifying that the issue of organ transplantation sat idle for many years, but with the advancement in transplant procedures—including the creation of new immunosuppressive drugs, like Cyclosporine—the transplantation process "was brought back into the center stage of public policy concern"). The 1968 UAGA proved to be ineffective in generating a greater supply of organs to match the demand. *Id.*

See id. § 6 cmt. (recognizing that the 1987 UAGA reversed the sequence of purposes for which an individual may make an anatomical gift to emphasize transplantation as the primary purpose).

¹⁰¹ See id. at prefatory note (specifying the proposed amendments would simplify the procedure for making an anatomical gift and allow for the donor's intentions to prevail).

respects they were successful. 102 In addition, they added a provision in the 1987 amendments that prohibited the sale of organs. 103 This limitation "[did] not include reasonable payment for the removal, processing, disposal, preservation, quality control, storage, transportation, or implantation of a part." 104

In 2006, the National Conference of Commissioners again revised the UAGA to more accurately reflect the current system of organ transplantation. In order to make the process of donating more manageable, the newly amended UAGA included a provision that allows for the donor's driver's license to indicate his donative intent. These amendments also strengthened the donor's consent and prevented

See id. § 2 cmt. (stating that the revisions deleted the requirement of two witnesses' signatures to simplify the gifting of anatomical parts). Other revisions attempted to ensure that the donor's intent received priority because previously, under the 1968 UAGA, circumstances arose in which the family's donative intent preempted the decedent's intent. See, e.g., id. § 2(h) ("An anatomical gift that is not revoked by the donor before death is irrevocable."). This was important because few organ transplant centers were inclined to procure organs based solely on the decedent's organ donor card or driver's license consent. Id. § 2 cmt. Rather, if the transplant centers were unable to locate the decedent's family members, less than twenty-five percent procured the organ despite the donor's written consent. Id. The amendments also resolved any confusion regarding carrying a specific organ donor card (i.e. a kidney donation card). Id. This alteration attempted to ensure that the type of organ donor card did not restrict anatomical gifts to that type of organ only. Id. 103 See id. § 10 (prohibiting the sale or purchase of a part); see also Gorsline & Johnson, supra note 44, at 10 (explaining that the 1987 UAGA limited a person's power to control the disposition of his remains by prohibiting the sale or purchase of body parts). Section 10(a) states in relevant part: "[a] person may not knowingly, for valuable consideration,

UNIF. ANATOMICAL GIFT ACT \S 10(b) (1987). The prohibition is not limited only to donors but applies to any individual seeking to engage in the sale or purchase of an organ. *Id.* \S 10 cmt. However, the prohibition does not include the sale of organs from living donors provided that the donation occurs prior to the donor's death. *Id.*

purchase or sell a part for transplantation or therapy, if removal of the part is intended to occur after the death of the decedent." UNIF. ANATOMICAL GIFT ACT § 10(2) (1987); see id. § 1(7) (defining "part" as "an organ, tissue, eye, bone, artery, blood, fluid, or other portion

¹⁰⁵ See Legislative Fact Sheet—Anatomical Gift Act (2006), UNIFORM L. COMMISSION, http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Anatomical%20Gift%20Act %20(2006) (last visited Aug. 15, 2013) (identifying that the 2006 UAGA revises the former versions in light of the changes in federal regulations and law, and other developments in the science of organ donation).

See UNIF. ANATOMICAL GIFT ACT § 5(a)(1) (2006) (amended 2008) (entitling a donor to make an anatomical gift by authorizing a statement or symbol on the donor's driver's license or identification card that indicates the intent to donate); see also U.S. Dep't of Health & Human Servs., State Organ Donation Legislation, ORGANDONOR.GOV http://www.organdonor.gov/legislation_micro/index.html#tableTitle (last visited Jan. 1, 2013) (identifying that all fifty states approved a designation on a person's driver's license denoting their status as an organ donor).

of a human body").

others from amending or revoking the donor's consent.¹⁰⁷ Thus far, forty-five states, along with the U.S. Virgin Islands and the District of Columbia, have enacted some version of the 2006 Revised UAGA.¹⁰⁸

2. The National Organ Transplant Act of 1984

During the 1980s, after the enactment of the original UAGA, Congress directed its attention to the nationwide organ shortage and enacted NOTA.¹⁰⁹ When Congress passed NOTA the United States suffered from a shortage of organs available for transplantation.¹¹⁰

(5) adult siblings of the decedent;

Id.

¹⁰⁷ See Nat'l Conference of Comm'rs on Unif. State Laws, Why States Should Adopt UAGA, UNIFORM L. COMMISSION, http://www.uniformlaws.org/Narrative.aspx?title=Why%20 States%20Should%20Adopt%20UAGA (last visited Sept. 20, 2012) (identifying numerous reasons why states should adopt the updated 2006 UAGA, which substantially strengthened first person consent under the revisions); see also UNIF. ANATOMICAL GIFT ACT § 9 (2006) (amended 2008) (providing an updated list of those classes of persons that may make an anatomical gift of a decedent's body). The 2006 UAGA updated the current list of parties who may make anatomical gifts of a decedent's body in the following order of priority:

an agent of the decedent at the time of death who could have made an anatomical gift under Section 4(2) immediately before the decedent's death;

⁽²⁾ the spouse of the decedent;

⁽³⁾ adult children of the decedent;

⁽⁴⁾ parents of the decedent;

⁽⁶⁾ adult grandchildren of the decedent;

⁽⁷⁾ grandparents of the decedent;

⁽⁸⁾ an adult who exhibited special care and concern for the decedent;

⁽⁹⁾ the persons who were acting as the [guardians] of the person of the decedent at the time of death; and

⁽¹⁰⁾ any other person having the authority to dispose of the decedent's body.

Legislative Fact Sheet – Anatomical Gift Act (2006), supra note 105. According to the legislative fact sheet, the following jurisdictions have enacted the 2006 UAGA: "Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Georgia, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, U.S. Virgin Islands, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, [and] Wyoming." *Id.* Additionally, the Pennsylvania and Illinois legislatures introduced the 2006 UAGA in 2013. *Id.*

¹⁰⁹ See Sarah Elizabeth Statz, Note, Finding the Winning Combination: How Blending Organ Procurement Systems Used Internationally Can Reduce the Organ Shortage, 39 VAND. J. TRANSNAT'L L. 1677, 1685 (2006) (pointing out that the 1968 UAGA failed to increase the supply of organs as much as expected).

¹¹⁰ See S. REP. No. 98-382, at 2 (1984), reprinted in 1984 U.S.C.C.A.N. 3975, 3976 (identifying that, at the time Congress passed NOTA, an average of 20,000 people died

Congress's motivation to act quickly was due in part to its fear that a market system for organs would soon develop.¹¹¹

Led by Congressman Al Gore, Congress enacted NOTA to protect the altruistic nature of organ donation and implement a more effective system for organizing and encouraging organ donation. While Congress was proposing a system for organ procurement, Dr. Barry Jacobs testified at a congressional subcommittee hearing and explained in detail his theory of developing an "organs-for-sale" system to organ procurement. Congress thereafter inserted a provision into Gore's draft bill that banned payment for organs. The inserted provision received almost unanimous approval.

NOTA's primary purpose was to establish a national organ procurement system known as the Organ Procurement and Transplantation Network. Prior to the creation of the Organ Procurement and Transplantation Network, some private individuals publicly campaigned in an attempt to obtain an organ match for their

annually under conditions that would permit for hospitals to use their organs in transplantation, yet less than 15% of those individuals underwent organ procurement).

See Steve P. Calandrillo, Cash for Kidneys? Utilizing Incentives to End America's Organ Shortage, 13 GEO. MASON L. REV. 69, 79 (2004) (identifying that the organ brokerage proposed by Doctor Barry Jacobs, which suggested selling and purchasing organs, did not receive wide support from the National Kidney Foundation or American politicians).

¹¹² See id. at 79–80 (pointing out that the motivation behind NOTA was both to preserve the "gift" aspect of organ donation and provide for an organized donation system).

¹¹³ See Sally L. Satel & Benjamin E. Hippen, When Altruism Is Not Enough: The Worsening Organ Shortage and What It Means for the Elderly, 15 ELDER L.J. 153, 188 (2007) (explaining Dr. Jacob's theory behind an organ procurement system that operated under a market approach). See generally Robyn S. Shapiro, Legal Issues in Payment of Living Donors for Solid Organs, HUM. RTS. MAG., Spring 2003, at 19, 20 (explaining that each year between 200 and 300 Americans purchase organs from individuals in third world countries).

See Satel & Hippen, supra note 113, at 188 (identifying Congress's fear of Dr. Jacob's scheme and Congress's refusal to acknowledge that a market approach could work). Congress promulgated the provision against the sale of organs after Dr. Barry Jacobs, a Virginia physician, attempted to institute an organ brokerage called the International Kidney Exchange. *Id.* Dr. Jacobs planned to sell organs, specifically kidneys, to individuals seeking to avoid further dialysis, after marking up the pricing of the kidney anywhere from \$2000 to \$5000 dollars. *Id.* Dr. Jacobs testified at a congressional subcommittee hearing entitled "Procurement and Allocation of Human Organs for Transplantation" and presented his theory of implementing an "organs-for-sale" system. *Id.* Congress not only refused to entertain Dr. Jacobs's scheme, but Congress thereafter took action to implement a prohibition against the sale of organs. *Id.* Congressman Al Gore quickly inserted a provision in his draft bill that banned payment for organs. *Id.*

 $^{^{115}}$ See id. (explaining that the provision banning the sale of human organs received widespread support throughout Congress).

¹¹⁶ See generally 42 U.S.C. § 274 (2006), which addresses the Organ Procurement and Transplantation Network.

loved ones. 117 However, following the enactment of NOTA, the Organ Procurement and Transplantation Network created a national list of individuals seeking organs and assisted in developing systems for procuring and allocating available organs. 118 This provided a more cohesive framework for individuals to obtain transplantable organs. 119

In addition to providing a more effective means of procuring organs, NOTA banned the sale of organs from both living and deceased donors. Specifically, NOTA made it "unlawful for any person to knowingly acquire, receive, or otherwise transfer *any human organ for valuable consideration* for use in human transplantation." The

Satel & Hippen, *supra* note 113, at 185. Charles Fisk gained widespread attention in his search to find an organ for his baby girl. *Id.* His daughter, Jamie, was dying of biliary atresia, where "bile ducts that normally discharge metabolic waste products do not develop" and the toxins endure within the liver, eventually destroying it. *Id.* During October of 1982, Fisk pleaded with the American Academy of Pediatricians at their annual meeting. *Id. Time Magazine* recognized his campaign as "a remarkably skillful publicity campaign," which proved to pay off when the son of a Utah couple died in a car accident and the family donated the boy's liver to eleven-month-old Jamie. *Id.*

¹¹⁸ 42 U.S.C. § 274(a), (b)(2). The difference between an organ procurement system and an organ allocation system is critical. Organ procurement pertains to the acquiring of transplantable organs; whereas, organ allocation involves distributing the transplantable organs to donees. *See About Organ Allocation*, TRANSPLANT LIVING, http://www.transplantliving.org/before-the-transplant/about-organ-allocation/ (last visited Aug. 18, 2013) (providing links that discuss the matching, waiting, and allocation process and policies); *see also* Satel & Hippen, *supra* note 113, at 184 (describing that, prior to NOTA, some medical facilities would establish their own system of matching, which did not prove effective for patients who did not reside within that geographic area).

¹¹⁹ See 42 U.S.C. § 273(b)(3)(C) (identifying that Congress designed the Organ Procurement and Transplantation Network to alleviate the previous problems associated with organ procurement); see also U.S. Dep't of Health & Human Servs., About OPTN, ORGAN PROCUREMENT & TRANSPLANTATION NETWORK, http://optn.transplant.hrsa.gov/optn/profile.asp (last visited Aug. 13, 2013) (explaining the purpose of the Organ Procurement and Transplantation Network).

¹²⁰ See 42 U.S.C. § 274e(a) ("It shall be unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce."); Satel & Hippen, supra note 113, at 188 (explaining that the major goal behind NOTA was coordination of distribution systems).

^{121 42} U.S.C. § 274e(a) (emphasis added); see id. § 274e(c)(2) (stating "'valuable consideration' does not include the reasonable payments associated with the removal, transportation, implantation, processing, preservation, quality control, and storage of a human organ or the expenses of travel, housing, and lost wages incurred by the donor of a human organ in connection with the donation of the organ"). See generally DAVID L. KASERMAN & A.H. BARNETT, THE U.S. ORGAN PROCUREMENT SYSTEM: A PRESCRIPTION FOR REFORM 76-77 (2002) (arguing that a market system for organ donation will not necessarily result in exploitation of the poor). For a discussion of the varying views concerning a market system to organ donation, compare Abdallah S. Daar, Paid Organ Donation: Towards an Understanding of the Issues, in ORGAN AND TISSUE DONATION FOR TRANSPLANTATION 46, 54 (Jeremy R. Chapman et al. eds., 1997) (explaining that the primary concern in adopting a

Department of Justice clarified that "valuable consideration" refers to commercial transactions for the sale of organs and does not prohibit states from utilizing incentives to increase organ donation. The term organ includes: "kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone, and skin . . . and any other human organ . . . specified by the Secretary of Health and Human Services by regulation." 123

Recently, in 2011, the Ninth Circuit limited the term "bone marrow" found within NOTA's definition of "human organ" in the case of *Flynn v*. *Holder*. ¹²⁴ The court held that individuals donating bone marrow through the process of aspiration cannot receive compensation because the material extracted via aspiration is undoubtedly bone marrow. ¹²⁵ However, individuals who donate bone marrow using the newer apheresis method, which involves withdrawing the donor's blood to

market for organ donation is the abuse of such a system), with Lori B. Andrews, *My Body, My Property*, 16 HASTINGS CENTER REP. 28, 28 (1986) (identifying that "[a] market in body parts and products [is needed] . . . to ensure that patients are protected from coercion and given the chance to be paid fairly for their contributions").

Lisa M. Derco, Note, *America's Organ Donation Crisis: How Current Legislation Must Be Shaped by Successes Abroad*, 27 J. CONTEMP. HEALTH L. & POL'Y 154, 160 (2010). *See generally* RUSSELL SCOTT, THE BODY AS PROPERTY 190 (1981) (explaining that individuals regularly sell human body parts—such as blood, blood products, sperm, and human hair). The Department of Justice ("DOJ") stated that "valuable consideration" is limited to commercial transactions because one of the goals of NOTA was to prevent the sale of organs. Derco, *supra*. In addition, NOTA's legislative history supports that interpretation and clarifies that Congress designed the provision concerning valuable consideration to criminalize the sale and purchase of human organs. *Id.*

42 U.S.C. § 274e(c)(1); see S. REP. No. 98-382, at 16-17, reprinted in 1984 U.S.C.C.A.N. 3975, 3982 (distinguishing between the sale and purchase of human organs compared to blood products, and finding that the blood products are regenerative and fail to pose a threat to the donor's health); see also Flynn v. Holder, 684 F.3d 852, 862 (9th Cir. 2012) (limiting the term bone marrow to include only the soft, fatty marrow obtained through aspiration and not the marrow cells obtained through apheresis).

See 684 F.3d at 862 (holding that the soft, fatty marrow obtained through aspiration is bone marrow, but that the cells drawn from the veins through apheresis is analogous to blood and not bone marrow). The court held that NOTA's ban on compensating bone marrow donations through aspiration did not violate the Equal Protection Clause. Id. In part, the court reasoned that Congress provided a rational basis for prohibiting compensation for bone marrow donations extracted through aspiration. Id. The court identified that Congress feared commodification of one's bodily tissues and recognized that society strongly believes in bodily integrity. Id. at 861. The Ninth Circuit recognized that both policy concerns and philosophical concerns supported the prohibition on compensation for bone marrow. Id. These concerns included: the fear that the rich may induce the poor to sell their organs, the fear of organs extracted through fraud or force, or the fear of degradation of the organ supply by encouraging individuals to lie about their medical conditions in order to sell their organs. Id. at 860.

¹²⁵ See id. at 859 (holding the plaintiff's challenge against the ban on obtaining bone marrow donations through aspiration failed). Aspiration occurs when "a long needle is inserted into the cavity of the hip bone to extract the soft, fatty marrow." *Id.*

extract hematopoietic blood stem cells, can receive compensation. ¹²⁶ The court reasoned that apheresis is similar to blood donation and, because NOTA's definition of "human organ" does not include blood, the statute does not prohibit compensation for apheresis bone marrow donors. ¹²⁷ However, the Ninth Circuit limited the holding in *Flynn* to the specific facts of the case, and although the Ninth Circuit created a limited definition of bone marrow, it upheld the constitutionality of NOTA's ban on the sale of human organs. ¹²⁸

Further, anyone convicted of violating NOTA faces up to five years in prison and a fine of \$50,000.¹²⁹ This punishment has forced states to give the term "valuable consideration" a broad interpretation.¹³⁰ The legislative meaning of valuable consideration was and remains a crucial area of debate because the term's interpretation shapes the incentives states are willing to provide for organ donation.¹³¹ Also, although NOTA prohibits the sale of organs themselves, everything else associated with the organ donation process comes at a high price for those in need.¹³²

¹²⁶ Id. at 862. The court recognized that although the medical field identifies the process of apheresis as a bone marrow transplant, the cells drawn from the veins include only cells outside the marrow rather than the soft, fatty marrow. Id. Furthermore, Congress could not have intended to prohibit the apheresis method when passing NOTA because the method did not exist at the time. Id. Therefore, the Ninth Circuit concluded that because Congress omitted blood from the definition of "human organ" under NOTA, Congress did not intend to prohibit compensation for blood and because apheresis extracted blood cells only, individuals could receive compensation. Id.

¹²⁷ See id. at 860, 863 (recognizing that "human organ" does not include blood and rejecting the argument that the cells obtained from apheresis should be considered a "subpart thereof" of bone marrow.) The court identified that payment for blood donors has been common, and the silence within NOTA on compensating blood donors is indicative of allowing such compensation. *Id.* at 862.

¹²⁸ See id. at 865 (stating that the apheresis method of bone marrow transplantation "is not a transfer of a 'human organ' or a 'subpart thereof' as defined by [NOTA]...so the statute does not criminalize compensating the donor").

¹²⁹ See 42 U.S.C. § 274e(b) (2006) (identifying the fine and prison sentence imposed if a person violates NOTA).

Wait-Listed to Death: Improving Incentives for Organ Donations, WALL St. J. (Dec. 17, 2008, 12:01 AM), http://online.wsj.com/news/articles/SB122948107890913051. The potential for large fines and imprisonment discourages states from providing incentives to donors. Id. Congress's failure to define the term "valuable consideration" forces the states to determine whether to gamble with their own interpretation of the definition and potentially face the risk that the definition is incorrect, resulting in the state receiving harsh punishment. Id.

¹³¹ See Derco, supra note 122, at 161 (identifying that the definition of "valuable consideration" plays a significant role when states determine what incentives they may legally employ to promote organ donation).

¹³² See U.S. Dep't of Health & Human Servs., Organ Transplantation: The Process, ORGANDONOR.GOV, http://www.organdonor.gov/about/transplantationprocess.html (last

C. The Organ Donation Process

The United States' altruistic model of organ donation is built on principles of volunteerism.¹³³ Equal access is the hallmark of organ donation, making certain that whoever is first on the organ donation list receives the first organ available.¹³⁴ This means that "[t]he prisoner in California gets the heart transplant because he needs it and is first on the list. [The selection process is] blind to whether you're a saint or a sinner or a celebrity. [That is] key to maintaining the public trust."¹³⁵

Through the enactment of NOTA, Congress established the Organ Procurement and Transplantation Network to facilitate the organ donation process. The United Network for Organ Sharing ("UNOS"), a nonprofit, private organization, currently holds the federal government contract to implement the Organ Procurement and Transplantation Network. UNOS maintains a centralized computer network responsible for connecting Organ Procurement Organizations with transplant centers. A patient awaiting an organ is placed on a waiting

visited Aug. 15, 2013) ("The average cost of transplantation in 2008 ranged from \$259,000 for a single kidney to over \$1,200,000 for a heart-lung transplant); Peter S. Young, Moving to Compensate Families in the Human-Organ Market, N.Y. TIMES (July 8, 1994), http://www.ny times.com/1994/07/08/us/moving-to-compensate-families-in-human-organ-market.html (recognizing that the medical industry placed a big markup on organ transplantation services).

- See U.S. Dep't of Health & Human Servs., supra note 1 (identifying that the United States' organ donation system is altruistic); see also Serena Gordon, Risks and Benefits of Egg Donation Reported, U.S. NEWS & WORLD REP. (Dec. 26, 2008), http://health.usnews.com/health-news/family-health/womens-health/articles/2008/12/26/risks-and-benefits-of-egg-donation-reported (recognizing that various factors influenced a woman deciding whether to donate her eggs, which included: the feeling of altruism, obtaining financial compensation, and often times both altruism and financial compensation).
- ¹³⁴ See Satel & Hippen, supra note 113, at 189 (recognizing that the "bedrock principle" of American organ donation has been equal access).
- 135 Id. (quoting Mark Fox, the former head of the UNOS ethics committee).
- ¹³⁶ See Gorsline & Johnson, supra note 44, at 19 (recognizing that NOTA established the National Organ Procurement and Transplantation Network); Policy Management National Organ Transplant Act, ORGAN PROCUREMENT & TRANSPLANTATION NETWORK, http://optn.transplant.hrsa.gov/policiesAndBylaws/nota.asp (last visited Aug. 15, 2013) (stating NOTA created the Organ Procurement and Transplantation Network, which developed a national registry for organ matching).
- ¹³⁷ See About Us, UNITED NETWORK FOR ORGAN SHARING, http://www.unos.org/about/index.php (last visited Aug. 15, 2013) (identifying that UNOS holds the contract with the federal government to manage the national organ transplant system).
- Organ Allocation, UNITED NETWORK FOR ORGAN SHARING, http://www.unos.org/donation/index.php?topic=organ_allocation (last visited Aug. 15, 2013). UNet was created so Organ Procurement Organizations and transplant centers could register transplant patients, match donated organs to potential donees, and readily manage patients' data. *Id.* In 2006, UNOS launched DonorNet, a subpart of Unet, in an attempt to increase the

list and registered with UNOS, where their personal information, including name and medical history, is inserted into the computer network at the UNOS Organ Center.¹³⁹

The cadaveric donation process is typically set into motion following an illness or tragic accident.¹⁴⁰ After exhausting all possible efforts to save the patient's life, the attending physician performs tests to confirm that the patient is brain dead.¹⁴¹ Thereafter, the hospital contacts an Organ Procurement Organization and identifies that the potential donor is nearing death or already dead.¹⁴² The Organ Procurement Organization then searches the registry to determine if the decedent was registered as a donor.¹⁴³ In circumstances where the decedent did not provide consent during life, the Organ Procurement Organization will reach out to the next-of-kin for consent.¹⁴⁴ If either the decedent

efficiency and accuracy of transplantable organ placement. *Id.* Prior to the establishment of DonorNet, the transplant community relied upon fax and telephone communication to exchange information and match organs. *Id.* However, under DonorNet, electronic information can be sent out to multiple transplant centers with compatible patients in an effort to speed up the donation process. *Id.*

¹³⁹ See id. (recognizing that the UNet database is responsible for gathering donor information and running matches between donors and individuals seeking a transplant); see also Data, supra note 26 (identifying that 119,246 people are awaiting a transplant); U.S. Dep't of Health & Human Servs., supra note 132 (specifying that the average wait time for a heart is 113 days, a lung 141 days, an intestine 159 days, a pancreas 260 days, a liver 361 days, and a kidney 1219 days).

¹⁴⁰ See U.S. Dep't of Health & Human Servs., supra note 1 (recognizing that often times donors have suffered severe head trauma, a stroke, or brain aneurysm).

¹⁴¹ See id. (identifying that under most circumstances neurosurgeons or neurologists perform tests to check for brain death by following commonly accepted medical practices and state law). The distinguishing characteristic between a coma and brain death is that brain death is a form of death, whereas a comatose person is are still alive. *Id*.

Procurement Organizations of every patient that is nearing death or has died); see also Sean T. Gallagher, Note, The Spanish Model's Capacity to Save Lives by Increasing Organ Donation Rates, 18 TEMP. INT'L & COMP. L.J. 403, 420 (2004) (explaining that fifty-eight Organ Procurement Organizations exist in the United States, each of which is responsible for a large area of the country); Organ Procurement Organization, ORGANDONOR.GOV, http://organdonor.gov/materialsresources/materialsopolist.html (last visited Aug. 18, 2013) (stating that the primary functions of an Organ Procurement Organization are to increase the number of donors registered and assist in the coordination of the donation process when a donor becomes available). For an example of an Organ Procurement Organization, see Gallagher, supra.

143 See U.S. Dep't of Health & Human Servs., supra note 1 (identifying that the hospital provides the Organ Procurement Organization with the deceased's information so the hospital can confirm the deceased's status as a donor).

¹⁴⁴ See id. (specifying that if the deceased did not register as a donor during life and after death there is no other indication of the deceased's legal consent—for example a driver's license indicator—then the Organ Procurement Organization will seek consent from the next-of-kin).

consented during life to organ donation or the decedent's family consented following the decedent's death, then the hospital proceeds with further medical evaluation of the donor.¹⁴⁵

If further evaluation does not prohibit donation, the Organ Procurement Organization contacts the Organ Procurement and Transplantation Network to determine whether there is a patient awaiting a transplant that matches the donor. The Organ Procurement Organization inputs the donor's characteristics into the computer network to conduct a comparative analysis with those individuals awaiting a transplant. After the computer network formulates a list of patients matching the donor, the Organ Precurement Organization offers organ to the first patient on the match list. 148

The procurement coordinator at the Organ Procurement Organization then immediately contacts the transplant team in charge of the patient at the top of the list. The timeliness of organ procurement is crucial because organs can only remain outside the human body for a limited amount of time. After the hospital organizes the surgical transplant team, it takes the donor into surgery where the transplant

¹⁴⁵ See id. (stating that the hospital obtains the deceased's complete medical and social history from the family as part of the medical evaluation); see also U.S. Dep't Health & Human Servs., About Transplantation: Donor Matching System, ORGAN PROCUREMENT & TRANSPLANTATION NETWORK, http://optn.transplant.hrsa.gov/about/transplantation/matchingProcess.asp (last visited Aug. 20, 2013) (pointing out that the Organ Procurement Organization is responsible for assessing whether the donor is a suitable candidate for donation).

¹⁴⁶ See U.S. Dep't of Health & Human Servs., supra note 1 (identifying that if the evaluation does not rule out donation, then the Organ Procurement Organization contacts the Organ Procurement and Transplantation Network to start the search for matching recipients).

¹⁴⁷ *Id.*; see U.S. Dep't of Health & Human Servs., supra note 145 (explaining that the Organ Procurement Organization enters the donor's information into the computer network to find a match). Characteristics such as "blood type, tissue type, height, and weight....length of time the patient has been waiting, the severity of the patient's illness, and the distance between the donor's and recipient's hospitals also figure into who is the best match for the specific organ." U.S. Dep't of Health & Human Servs., supra note 1. However, the network does not consider factors such as race, gender, and financial or social status. *Id.*

¹⁴⁸ See U.S. Dep't of Health & Human Servs., supra note 1 (recognizing that in some circumstances the attending surgeon can reject the organ for the patient, for example, if the patient is too sick).

¹⁴⁹ See id. (stating that procurement coordinators offer roughly 75% of organs to local patients within that Organ Procurement Organization, but if there is no match then the coordinator offers the organ at the regional and national level).

¹⁵⁰ See id. (identifying that time is of the essence in organ procurement); see also Organ Allocation, supra note 138 (identifying that various organs or tissues can remain outside the body for the following time ranges: heart for 4–6 hours, liver for 12–24 hours, kidney for 48–72 hours, and lung for 4–6 hours).

team removes any donated organs or tissues.¹⁵¹ Then, the Organ Procurement Organization representative arranges for transportation of the procured organ or organs.¹⁵² Oftentimes, before the donated organ arrives at the donee's hospital, doctors have begun surgery, and the donee is awaiting the lifesaving organ in the operating room.¹⁵³

Living organ donation entails a process similar to cadaveric donation.¹⁵⁴ An interested donor must first contact the transplant center.¹⁵⁵ The transplant staff questions the interested donor about his medical history and explains the risks and benefits of organ donation.¹⁵⁶ If the donor remains interested, the staff conducts further tests, including medical, physical, and psychological evaluations.¹⁵⁷ Following the

U.S. Dep't of Health & Human Servs., *supra* note 1 (pointing out doctors perform the surgery under circumstances similar to any regular surgery); *see* U.S. Dep't Health & Human Servs., *About Transplantation: Transplant Process*, ORGAN PROCUREMENT & TRANSPLANTATION NETWORK, http://optn.transplant.hrsa.gov/about/transplantation/transplantProcess.asp (last visited Aug. 20, 2013) (identifying the various individuals that may be part of the transplant team, including: clinical transplant coordinators, transplant physicians, transplant surgeons, financial coordinators, and social workers). During the surgery, doctors first remove the organs and then recover tissue including bone, cornea, and skin. U.S. Dep't of Health & Human Servs., *supra* note 1.

¹⁵² See U.S. Dep't of Health & Human Servs., supra note 1 (stating that most forms of transportation include airplanes, helicopters, or ambulances).

¹⁵³ See id. (identifying that typically the transplant recipient is at the hospital and sometimes in the operating room waiting for the donated organ).

Compare supra notes 140–53 and accompanying text (discussing the cadaveric organ donation process), with Talking About Transplantation: Living Donation Information You Need to Know, UNITED NETWORK FOR ORGAN SHARING 1 (2009), http://www.unos.org/docs/Living_Donation.pdf (outlining the process for living organ donation).

Talking About Transplantation: Living Donation Information You Need to Know, supra note 154, at 2. In a situation where the donor intends to donate to an identified person, the donor must contact the transplant center caring for that person. *Id.* Otherwise, where the donor wants to make an anonymous donation or non-directed donation, without specifying the intended recipient, he may contact any transplant center to determine whether that type of donation is available at the center. *Id.*

living donation/ being-a-living-donor/risks/ (last visited Aug. 15, 2013) (outlining the risks associated with living donation); see also Talking About Transplantation: Living Donation Information You Need to Know, supra note 154, at 2 (specifying that hospitals ask about a person's medical history to discover whether the donor has any conditions that would prevent organ donation). The risks associated with living organ donation include the complications associated with major surgery, such as: pain, infection, incision hernia, pneumonia, blood clots, hemorrhaging, allergic reactions from anesthesia, potential need for blood transfusions, and death. Risks, supra. Other long-term side effects include further complications with the remaining organ and psychological concerns. Id.

Talking about Transplantation: Living Donation Information You Need to Know, supra note 154, at 4. Doctors conduct a physical, psychological, and medical evaluation to ensure the risks associated with donation are minimal. *Id.* at 4–6. The types of medical tests conducted, include: urine testing, chest x-rays, electrocardiogram (EKG), radiological testing, psychosocial evaluation, psychological evaluation, gynecological examination,

evaluations, if neither the donor nor the medical personnel have any concerns regarding the risks associated with donating, then the donor must complete the living donor informed consent process.¹⁵⁸ After freely providing consent, the donor undergoes surgery for the removal of the life-saving organ, and the doctors transplant the organ into the donee.¹⁵⁹ Although organ donation requires a donor to undergo numerous tedious evaluations, the egg donor process is not as thorough.¹⁶⁰

D. Female Egg Procurement Process

Similar to organ donation, the demand for female reproductive eggs far exceeds the number of potential egg donors. ¹⁶¹ Women are born with a finite number of eggs, somewhere between one to two million. ¹⁶² However, at the time of puberty, the ovaries only possess approximately 400,000 to 500,000 eggs of the original one to two million. ¹⁶³ During

cancer screening, blood testing, tissue typing, antibody screening, and screening for transmittable diseases. *Id.*

¹⁵⁸ See generally id. at 6 (detailing the informed consent process).

¹⁵⁹ See Techniques for Organ Preservation, MEDSCAPE REFERENCE, http://emedicine.medscape.com/article/431140-overview#aw2aab6b5 (last updated Sept. 30, 2011) (identifying updated techniques used for organ preservation, including hypothermic preservation).

See infra Part II.D (considering the female egg donation process).

See Frequently Asked Questions, EGGSPLOITATION, http://www.eggsploitation.com/faq.htm (last visited Aug. 15, 2013) (identifying the demand for female eggs is greater than the donors available, which is why compensation for egg donation is so high); Roni Caryn Rabin, As Demand for Donor Eggs Soars, High Prices Stir Ethical Concerns, N.Y. TIMES (May 15, 2007), http://www.nytimes.com/2007/05/15/health/15cons.html?_r=0 (pointing out that the price for donated eggs has increased greatly due to the increased demand and lack of potential donors); see also Compensation, supra note 24 (identifying that donors receive compensation for donating eggs, which usually is around \$5000 for the first donation). For examples of websites that help locate egg donors, see EGG DONATION INC, https://www.eggdonor.com/ (last visited Sept. 5, 2013) and THE EGG DONOR PROGRAM, http://www.eggdonation.com/ (last visited Sept. 5, 2013).

162 See Egg Donor/Becoming an Egg Donor, JOHNS HOPKINS MED. FERTILITY CTR., http://www.hopkinsmedicine.org/fertility/services/donor/index.html (last visited Aug. 15, 2013) (stating that at the time of puberty the ovaries contain only 400,000 to 500,000 eggs); Frequently Asked Questions, supra note 161 (identifying that the number of eggs decreases as females age). Originally women are born with one to two million eggs. Id. At the age of puberty, around twelve years old, roughly 300,000 to 400,000 eggs remain. Id.; see Thinking About Donating Your Eggs? Think Again, CTR. FOR BIOETHICS & CULTURE NETWORK, http://www.cbc-network.org/2010/02/thinking-about-donating-your-eggs-think-again/ (last visited Aug. 15, 2013) (explaining that eggs are a non-replenishable resource).

¹⁶³ See Egg Donor/Becoming an Egg Donor, supra note 162 (identifying that at puberty only 400,000 to 500,000 eggs remain within the female ovaries); see also EMILY JACKSON, REGULATING REPRODUCTION: LAW, TECHNOLOGY AND AUTONOMY 165–66 (2001) (recognizing that female ova do not regenerate after birth).

reproductive years, a woman loses about 1000 eggs each month through the process of atresia, meaning they fail to mature and are gradually absorbed by the woman's body. ¹⁶⁴ In other words, only 400 to 500 of the original 400,000 to 500,000 eggs will develop to the point of ovulation. ¹⁶⁵ The remaining 399,500 are lost through atresia. ¹⁶⁶

The egg donation process consists of two primary stages: (1) ovarian hyperstimulation; and (2) egg retrieval. ¹⁶⁷ Prior to beginning the first stage, the donor undergoes medical screening and testing to ensure that the donation process is safe to the donor's health. ¹⁶⁸ At this time, some women may also take birth control to assist in regulating their menstrual cycle. ¹⁶⁹ Then, during the ovarian hyperstimulation phase, donors receive various hormonal drug injections that cause the ovaries to produce a greater number of mature eggs during their menstrual cycle. ¹⁷⁰ The first class of drugs creates an artificial menopause in

¹⁶⁴ See Egg Donor/Becoming an Egg Donor, supra note 162 (explaining that atresia is when the eggs "fail to mature and are gradually absorbed by the body between puberty and menopause"); Frequently Asked Questions, supra note 161 (identifying that the process of atresia entails egg degeneration so that when a woman undergoes menopause she will have no remaining eggs).

See Egg Donor/Becoming an Egg Donor, supra note 162 (recognizing that only 400 to 500 eggs develop to the point of ovulation during the female's childbearing years).

See id. (identifying that roughly 399,500 to 499,500 eggs undergo atresia).

¹⁶⁷ See The Medical Procedure of Egg Donation, EGG DONOR INFO. PROJECT, http://www.stanford.edu/class/siw198q/websites/eggdonor/procedures.html (last visited Aug. 15, 2013) (acknowledging that egg donation consists of two phases).

siw198q/websites/eggdonor/screening, EGG DONOR INFO. PROJECT, http://www.stanford.edu/class/siw198q/websites/eggdonor/screening.html (last visited Aug. 15, 2013) (outlining that clinics have not implemented standardized screening guidelines and that the process often differs among the numerous clinics). Donors generally must provide detailed information regarding their medical history in order to check for genetic abnormalities or diseases. *Id.* In addition, doctors conduct a fertility evaluation to verify the donor's capacity to produce eggs. *Id.* Following these initial tests, doctors conduct a more thorough physical examination that includes blood testing for blood type, RH incompatibility, HIV, hepatitis, syphilis, drug use, chlamydia, gonorrhea, and HTLV I. *Id.* It is equally important that the donor inform the clinic of any menstrual abnormalities or hormonal imbalances, which are indications of a pituitary tumor. *Id.* This is a concern because one of the drugs provided during the hyperstimulation phase can aggravate the tumor and lead to a stroke or brain damage. *Id.*

¹⁶⁹ See The Medical Procedure of Egg Donation, supra note 167 (stating that doctors encourage and require some women to take birth control to ensure a more consistent menstrual cycle).

¹⁷⁰ See id. (specifying that the first stage of the hormonal drug regimen uses gonadotropin-releasing hormone agonist analogues); see also How the Egg Donor Process Works, CTR. FOR HUM. REPROD., http://www.centerforhumanreprod.com/egg_donor.html (last visited Aug. 15, 2013) (pointing out that egg donors use daily injections that stimulate the ovaries). Donors often administer these drugs through daily injections. The Medical Procedure of Egg Donation, supra note 167. Other alternatives to the injection include a daily nasal spray or a single injection of Depot Lupron at the start of the treatment. Id.

donors.¹⁷¹ This allows for physicians, through the use of other medications, to control the ovulation and maturation of the donor's eggs.¹⁷²

After doctors effectively control the hormone levels through the first set of drugs, the donor undergoes another set of daily injections that encourages the development of multiple egg follicles.¹⁷³ The production of multiple egg follicles allows doctors to retrieve more than one mature egg during a single retrieval procedure.¹⁷⁴ After testing reveals that the donor's eggs are matured, the doctor injects the donor with human chorionic gonadotropin, triggering ovulation.¹⁷⁵ Thirty-four to thirty-six hours after the injection, the donor undergoes the second stage: egg retrieval.¹⁷⁶

During egg retrieval, the doctors perform a surgical procedure, known as transvaginal ultrasound aspiration, while the donor is under conscious sedation.¹⁷⁷ The physician uses a tube attached to an ultrasound probe and guides a suctioning needle into each of the donor's ovaries, removing mature eggs from the follicles.¹⁷⁸ Following the

¹⁷¹ See The Medical Procedure of Egg Donation, supra note 167 (identifying that doctors use the first class of drugs to "suppress the release of luteinizing hormone (LH) by the pituitary gland, which normally triggers eggs to mature within the body").

¹⁷² See id. (addressing that physicians have the ability through other medications to control the conditions of egg maturation and ovulation); see also How the Egg Donor Process Works, supra note 170 (explaining that doctors closely monitor donors to ensure that their ovaries do not go into hyperstimulation).

¹⁷³ See The Medical Procedure of Egg Donation, supra note 167 (identifying that the second drug regimen utilizes a "follicle stimulating hormone (FSH) or human menopausal gonadotropin (hMG)").

nature eggs at one time"). Typically, only one egg matures during each cycle, but due to the gonadotropin injections, more than one egg matures. How the Egg Donor Process Works, supra note 170. Due to the increased level of fertility at this stage, doctors often prohibit donors from engaging in sexual intercourse. The Medical Procedure of Egg Donation, supra note 167. Donors must undergo daily ultrasounds and blood tests during the last few days of the hyperstimulation phase. Id.

¹⁷⁵ See The Medical Procedure of Egg Donation, supra note 167 (identifying that a single injection of the human chorionic gonadotropin triggers the donor's ovulation).

¹⁷⁶ See id. ("Egg retrieval occurs 34–36 hours after this injection."); see also How the Egg Donor Process Works, supra note 170 (recognizing that doctors retrieve the eggs about two days after the injection of human chorionic gonadotropin).

¹⁷⁷ See The Medical Procedure of Egg Donation, supra note 167 (explaining the donor undergoes transvaginal ultrasound aspiration, which is a surgical procedure performed while the donor is under conscious sedation).

¹⁷⁸ See id. ("Using a tube attached to an ultrasound probe, a physician guides a suctioning needle into each ovary and removes mature [eggs] from the follicles."); see also How the Egg Donor Process Works, supra note 170 (explaining that the stage of egg retrieval involves "an aspiration needle, guided by ultrasound . . . [that] is used transvaginally to aspirate the

procedure, donors remain in the clinic for a few hours before returning home for further recovery.¹⁷⁹ The medical field recognizes various side effects associated with both stages of the egg donation process.¹⁸⁰ However, the medical community knows very little about the long-term effects of procuring female ova.¹⁸¹ Following egg retrieval, doctors fertilize the eggs obtained from the donor with the partner's semen.¹⁸²

eggs"). Sometimes doctors give the donor an oral medication to prevent nausea during the surgical procedure. *The Medical Procedure of Egg Donation, supra* note 167.

See id. (identifying the various side effects associated with each phase of the egg donation process); see also Egg "Donation" and Exploitation of Women, CENTER FOR BIOETHICS & CULTURE NETWORK, http://www.cbc-network.org/issues/making-life/egg-donationand-exploitation-of-women/ (last visited Aug. 24, 2013) (identifying the short-term health complications of egg donation, which include: "ovarian hyperstimulation syndrome (OHSS), loss of fertility, ovarian torsion, blood clots, kidney disease, premature menopause, ovarian cysts, chronic pelvic pain, stroke, reproductive cancers, and in some cases, death"); Egg Donation Risks - 7 Dangers of Donating Eggs, FERTILITY NATION, http://www.fertilitynation.com/7-egg-donation-risks-every-donor-should-know-about/ (last visited Aug. 24, 2013) (explaining the various risks associated with egg donation). See generally Inst. of Med. & Nat'l Research Council of Nat'l Acads., Assessing the MEDICAL RISKS OF HUMAN OOCYTE DONATION FOR STEM CELL RESEARCH 11 (Linda Giudice et al. eds., 2007) (pointing out various risks of egg donation). Side effects of ovarian hyperstimulation include: allergic reactions to the medication, abdominal swelling, mood swings, bruising at injection sights, tension and pressure in the ovarian area, temporary menopausal symptoms, unintentional pregnancy, and ovarian hyperstimulation syndrome ("OHSS") which can result in death. The Medical Procedure of Egg Donation, supra note 167. One study identified that OHSS affects 1% to 10% of egg donors. Id. OHSS can also result in dehydration, blood clotting disorders, and kidney damage. Id. A majority of donors experience pain and mild side effects from the process. Id. One survey revealed that 64% of donors found the physical side effects to be a negative consequence of donation. Id. On the other hand, side effects from the egg retrieval stage include damage to other organs found near the ovaries, such as the bladder, bowel, blood vessels, or uterus. Id. The process also results in discomfort, although the donor is under mild anesthesia. Id. One study found that 1.5% of donors had complications during the retrieval process and required hospitalization. Id.

See Frequently Asked Questions, supra note 161 (identifying that research about long-term effects of egg donation is not readily available, although there is widespread research about infertile women); Thinking About Donating Your Eggs? Think Again, supra note 162 (recognizing that the long-term side effects of egg donation are unknown because there is a lack of long-term medical research and follow up with former egg donors); see also Mary Ann Toman-Miller, Panelists Discuss Egg Donor Risks, STANFORD DAILY (May 2, 2012), http://www.stanforddaily.com/2012/05/02/panelists-discuss-egg-donor-risks/ ("No financial compensation is enough to make up for the potential long-term health consequences of egg donation."). Egg donation is inherently risky and can result in "[s]troke, organ failure, infection, cancer, loss of future fertility, and in rare instances, even death." Id.

¹⁸² See How the Egg Donor Process Works, supra note 170 (explaining that fertilization of the egg occurs before transferring the egg into the recipient).

¹⁷⁹ See The Medical Procedure of Egg Donation, supra note 167 (identifying that the donor remains in the clinic for one to two hours after the procedure before returning home to recover).

The resulting embryos are incubated and graded before being transferred into the donee's uterus, about three days after the egg retrieval process.¹⁸³

Although the procedures of organ and egg donation are distinct, the two procurement methods also contain many similarities.¹⁸⁴ Thus, Part III of this Note analyzes the current legal framework and evaluates why Congress has failed to treat the two donation processes in the same manner.¹⁸⁵ Only after thoroughly examining the current methods employed can one gain a better understanding of the need for a supervised market approach to organ and egg donation.¹⁸⁶

III. ANALYSIS

The current legal framework for organ and egg donation are markedly different, although both organs and eggs are in high demand and the donation procedures entail various risks. This Part analyzes the discrepancies between organ donation and egg donation. First, Part III.A examines the legal definition of property and how the judiciary's interpretation of property rights in the human body placed limits on the adoption of a market approach to the organ procurement process. Second, Part III.B considers the advantages and shortcomings of the primary federal statute that governs organ donation: NOTA. Hird, Part III.C analyzes the similarities between the organ and egg procurement processes. This analysis reveals that the current legislation governing organ donation has ineffectively increased the organ supply, and thus, the legislature should amend NOTA and adopt a supervised market approach for organ and egg donation.

¹⁸³ See id. (identifying that approximately three days after fertilization, doctors transfer the egg into the donee).

See infra Part III.C (examining the similarities between organ and egg donation).

¹⁸⁵ See infra Part III (analyzing the case law, legislation, and methods that govern organ donation).

¹⁸⁶ See infra Part IV (proposing a supervised market approach to the donation systems).

¹⁸⁷ See supra text accompanying notes 1, 161 (recognizing the high demand for organs and eggs); supra notes 156, 180-81 (explaining the risks associated with organ donation and egg donation).

¹⁸⁸ See infra Part III.C (discussing the numerous similarities between the organ and egg donation processes).

¹⁸⁹ See infra Part III.A (analyzing the consequences of the judiciary's failure to recognize property rights in the human body).

¹⁹⁰ See infra Part III.B (examining the prohibition on the sale of organs under NOTA).

¹⁹¹ See infra Part III.C (analogizing the organ and egg donation processes and disputing the criticisms relating to adopting a market system).

¹⁹² See infra Part IV (suggesting an amendment to NOTA that would implement a supervised market system for organ and egg donation).

A. What Rights Do Individuals Maintain in the Human Body?

Although some courts recognize a quasi-property right in a decedent's remains and a privacy right in a living person's bodily organs, the Supreme Court has not addressed this issue.¹⁹³ State and federal jurisdictions have consistently rejected the argument that a person has an absolute property interest in a living or deceased human body.¹⁹⁴ This Part considers the reasons most courts have failed to classify the human body as property in the fullest sense of the term.¹⁹⁵

Property is commonly referred to as a bundle of rights.¹⁹⁶ This includes the right to possess, use, exclude, sell, and dispose of the property.¹⁹⁷ Currently, the court system does not acknowledge an

¹⁹³ See, e.g., Moore v. Regents of the Univ. of Cal., 793 P.2d 479, 489 (Cal. 1990) (refusing to recognize that an individual "retains a sufficient interest in excised cells to support a cause of action for conversion"); Cohen v. Groman Mortuary, Inc., 41 Cal. Rptr. 481, 483 (Dist. Ct. App. 1964) (identifying a quasi-property right to the decedent's corpse for burial purposes); Sanford v. Ware, 60 S.E.2d 10, 12 (Va. 1950) ("Although there is no right of property in a commercial sense in the dead body of a human being, the right to bury and preserve the remains is recognized and protected as a quasi-property right.").

See Newman v. Sathyavaglswaran, 287 F.3d 786, 797 (9th Cir. 2002) (holding that the next-of-kin's right to possess a decedent family member's body created a property interest afforded due process protection and recognizing that even though state law forbids the trading of body parts, it does not follow that such restriction strips the next-of-kin of a property interest in the decedent's body); Whaley v. County of Tuscola, 58 F.3d 1111, 1114 (6th Cir. 1995) (explaining that a common law right vests in the next-of-kin to possess the body for burial and to bring a claim against persons who disturb the body); Brotherton v. Cleveland, 923 F.2d 477, 482 (6th Cir. 1991) (holding that a deprivation of constitutionally protected property took place when a coroner removed and donated the decedent's corneas without first obtaining consent); Crocker v. Pleasant, 778 So. 2d 978, 985 (Fla. 2001) (narrowing the scope of State v. Powell by recognizing that the narrow construction given to the statute in Powell does not translate into a generalized conclusion that the Fourteenth Amendment should not protect the right to possess a family member's remains for burial purposes); State v. Powell, 497 So. 2d 1188, 1191-92 (Fla. 1986) (reasoning that the removal of the decedent's corneas without consent did not violate the state constitution because a person's constitutional rights end upon death and the next-of-kin possesses no property right in the decedent's remains); Georgia Lions Eye Bank, Inc. v. Lavant, 335 S.E.2d 127, 128 (Ga. 1985) (holding that any quasi-property right that the next-of-kin possesses in a corpse was one established at common law and not created by either the United States or Georgia constitutions, and thus the court upheld the Georgia cornea removal statute).

¹⁹⁵ See supra Part II.A (acknowledging that courts have failed to identify an absolute property right in the human body).

¹⁹⁶ BLACK'S LAW DICTIONARY 1335 (9th ed. 2009); see Jaffe, supra note 48, at 528 (arguing that the body is property and deserves protection under the Due Process and Takings Clauses of the U.S. Constitution).

¹⁹⁷ See, e.g., Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 435 (1982) (explaining that property includes "the rights 'to possess, use and dispose'" (quoting United States v. General Motors Corp., 323 U.S. 373, 378 (1945))).

absolute property interest in the human body.¹⁹⁸ Arguably, it is difficulty to recognize the body as property because there is not a general right to sell the human body or its subparts; thus, it lacks an essential quality of property.¹⁹⁹ The right to sell is so essential to a property interest that the lack of this attribute disqualifies the human body from classification as property.²⁰⁰

Justice Frankfurter stated that one of the distinguishing characteristics of property is that it is "capable of transfer from owner to owner and thus of exchange for some equivalent." Through the organ procurement process, human organs and tissues are capable of transfer from owner to owner. However, Congress established a system, under NOTA, that disallows the *exchange for some equivalent*. Thus,

One who is entitled to the disposition of the body of a deceased person has a cause of action in tort against one who intentionally, recklessly or negligently mistreats or improperly deals with the body, or prevents its proper burial or cremation. The technical basis of the cause of action is the interference with the exclusive right of control of the body, which frequently has been called by the courts a "property" or a "quasi-property" right. This [right of control] does not, however, fit very well into the category of property, since the body ordinarily cannot be sold or transferred, has no utility and can be used only for the one purpose of interment or cremation.

¹⁹⁸ See Cohen, 41 Cal. Rptr. at 483 (acknowledging that the next-of-kin maintains a quasiproperty right to a decedent's corpse for burial purposes); Powell, 497 So. 2d at 1192 (reasoning that a person's constitutional rights end upon death and the next-of-kin possesses no property right in the decedent's remains); Georgia Lions Eye Bank, Inc., 335 S.E.2d at 128 (holding that the common law established the quasi-property right to recognize the interests of surviving relatives to control the decedent's remains; however, this right is not of a constitutional dimension); Sanford, 60 S.E.2d at 12 (declining to recognize a property right for commercial purposes in a decedent's body; however, the next-of-kin held a protected quasi-property right to bury and preserve the decedent's remains); see also Hannemann, supra note 56, at 404 (explaining that prior to the American court's recognition of a right to donate one's organs, the common law failed to identify a property right in the body).

¹⁹⁹ See Jaffe, supra note 48, at 551 (claiming that the inability to sell human body parts creates issues with classifying the body as a property in the fullest sense of the term). See generally 42 U.S.C. § 274e (2006) (banning the sale of human organs).

²⁰⁰ See RESTATEMENT (SECOND) OF TORTS § 868 cmt. a (1979) (discussing the Restatement section regarding interference with dead bodies). Comment a states:

Id. But see Jaffe, *supra* note 48, at 551 (discussing that the notion of property does not always include the right to sell because other items deemed property—such as "certain licenses, drugs for restricted use and, under some circumstances, leases"—are also not alienable (footnotes omitted)).

²⁰¹ Kimball Laundry Co. v. United States, 338 U.S. 1, 5 (1949).

²⁰² See supra Part II.C (discussing the organ donation process).

²⁰³ See 42 U.S.C. § 274e(a) (identifying it is "unlawful for any person to knowingly acquire, receive or otherwise transfer any human organ for valuable consideration for use in human transplantation"); see also id. § 274e(c)(2) (stating "valuable consideration" does

Congress's decision to criminalize the sale of organs stripped a living person of the ability to claim a property interest in his bodily organs under the legal definition of the term.²⁰⁴

Moore v. Regents of the University of California is a prime example of the judiciary's refusal to recognize the living body as property. In Moore, the California Appellate Court properly identified a lack of public policy and statutory authority against realizing an absolute property interest in one's body. However, the Supreme Court of California expressly denied the conversion of property claim, explaining that public policy implications balanced in favor of not allowing Moore to retain ownership rights in his own cells. Undoubtedly, the court feared that the creation of such rights would discourage the exchange of biological materials and impede on the biotechnology industry. Yet, it seems that the opposite result has since occurred, and the court's failure to recognize a property right in the human body instead has inhibited the exchange of human biological materials and contributed to the shortage of transplantable organs.

not encompass the donor's reasonable payments for medical expenses from the donation process or expenses associated with travel, housing, and lost wages).

204 See 42 U.S.C. § 274e (recognizing the inability to "acquire, receive or otherwise transfer a human organ for valuable consideration" prohibits the ability to sell the organ).

See Dunham, supra note 1, at 52 (pointing out that Moore v. Regents of the University of California is a benchmark case and the judiciary has chosen to limit the property rights that exist in the body of the dead while failing to extend the rights to a living person's body). Similarly, other courts have failed to recognize an absolute property right in the human body but have instead recognized that one may not compel a person to donate their body parts or tissues. See, e.g., McFall v. Shimp. 10 Pa. D. & C.3d 90, 90–91 (Ct. Com. Pl. 1978) (denying McFall's injunction and remarking that under the common law "one human being is under no legal compulsion to give aid or to take action to save another human being or to rescue"); see also A Cousin's Stunning Refusal to Donate Bone Marrow Leaves Robert McFall Facing Death, supra note 60 (explaining the family turmoil surrounding Shimp's refusal to donate his bone marrow to McFall).

²⁰⁶ Moore v. Regents of Univ. of Cal., 249 Cal. Rptr. 494, 504 (Dist. Ct. App. 1988) ("[N]o public policy has ever been articulated, nor is there any statutory authority, against a property interest in one's own body.").

²⁰⁷ See Moore v. Regents of Univ. of Cal., 793 P.2d 479, 492 (Cal. 1990) (holding that a patient must hold the ultimate power to control what happens to his tissues and that negative public policy would result from allowing a patient to retain a property right in such tissues after doctors remove them).

²⁰⁸ See Dunham, supra note 1, at 53 (stating the policy consideration was "the fear that the establishment of such rights would hinder the free exchange of human biological materials"). But see GOLD, supra note 72, at 26–27 (recognizing that the exchange of human biological materials is crucial to the future of healthcare).

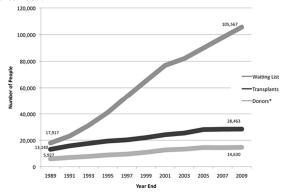
²⁰⁹ See Data, supra note 26 (outlining that 119,246 people were awaiting a transplant on August 15, 2013, but that doctors only performed 11,579 total transplants between January and May of 2013); Lieberman & Brown, supra note 4 (mentioning that according to the U.S.

The Supreme Court of California failed to consider that recognizing the human body as property would allow for the implementation of a market system for organ donation and would enhance the supply of organs. Arguably, "courts are likely to award property rights if to do so will enhance such trade." Yet, "[i]f... the allocation of property rights... hinder[s] trade in the good, the court is unlikely to award a property right." Recognizing a property interest in human organs would enhance the availability of organs. If courts recognized the human body as property, individuals could buy and sell organs legally rather than engaging in the illegal purchase and sale that currently exists on the black market. 213

Further, the adoption of a market system for organ donation would create implications opposite those feared by the California Supreme

Department of Health and Human Services, "[o]ver 100,000 people in the United States need organ transplants and 18 people die each day waiting for one").

²¹³ See Calandrillo, supra note 111, at 86 (identifying that it is illegal to buy or sell a human organ in almost all developed nations, with the exception of Iran and Pakistan, which operate a legal market for the sale of organs); Shapiro, supra note 113, at 20 (asserting that a booming transplant tourism industry has emerged along with a global black market in human organs); see also Gayle, supra note 28 (stating that the World Health Organization warns that once an hour someone sells an organ on the market and "[t]he U[nited] N[ations] public health body estimates that 10,000 organs are now traded every year"); U.S. Dep't of Health & Human Servs., supra note 28 (illustrating the drastic increase in the demand for organs, although the supply of transplants and donors fails to climb as rapidly). The below graph represents the increase in the demand for organs in the United States from 1989 to 2009.



²¹⁰ See GOLD, supra note 72, at 44 (identifying that the Supreme Court in *Moore* quickly concluded that a market system would be against public policy, without considering the potential benefits that could have resulted from adopting a market approach).

²¹¹ Id.

²¹² Id.

Court in *Moore*.²¹⁴ Rather than discouraging the exchange of organs, the creation of property rights would strengthen the number of available human organs because the supply would increase if compensation were allowed.²¹⁵ This system would benefit both the biotechnology industry and the thousands of lives awaiting a lifesaving organ transplant.²¹⁶

In addition, recognizing the human body as property would allow individuals to contract for the sale of their organs, either during life or after death.²¹⁷ In *Greenberg*, the U.S. district court allowed the plaintiffs to proceed under their contract claim of unjust enrichment.²¹⁸ On the other hand, other courts, such as the court in *Perry*, have rejected breach of contract claims concerning the disposal of a decedent's remains.²¹⁹ Recognizing a property right in the human body would benefit society and also increase society's confidence in organ donation because individuals would likely have a remedy under contract law in circumstances where hospitals did not honor their wishes.²²⁰

²¹⁴ See Dunham, supra note 1, at 59 (recognizing that the government's altruistic approach has been failing for several decades). See generally Crespi, supra note 2 (insisting the adoption of a futures market for organ donation would benefit the organ shortage).

²¹⁵ See Dunham, supra note 1, at 53 ("[O]ffering compensation for organs will not necessarily lead to exploitation—on the contrary, it may be regarded as necessary to minimize the level of inequities that exists in current organ procurement systems.").

²¹⁶ See Data, supra note 26 (explaining that although 119,246 people are awaiting a transplant, only 5692 organs were recovered between January and May of 2013); The Kidney Transplant Waiting List, supra note 26 (explaining that the kidney transplant waiting list has increased by 3000 to 4000 people each year); The Troubling Shortage of Organ Donors in the U.S., supra note 27 ("Over 110,000 Americans are on the list for organs, and more than 87,000 of these patients need kidneys[,] [yet] only about 17,000 Americans get kidneys each year, while more than 4,600 die waiting."); U.S. Dep't of Health & Human Servs., supra note 28 (explaining various statistics concerning the demand for organ donors). Daily, an average of seventy-nine people will receive an organ transplant, and eighteen people will die waiting for a transplant. The Troubling Shortage of Organ Donors in the U.S., supra note 27.

²¹⁷ See supra notes 98–104 and accompanying text (discussing the provisions of the UAGA and the ability to transfer an anatomical gift). Under the UAGA, a person can create a contract or will to specify their intent to execute an anatomical gift. Supra note 98; see Nat'l Conference of Comm'rs on Unif. State Laws, supra note 107 (discussing various reasons each state should adopt the UAGA).

²¹⁸ Greenberg v. Miami Children's Hosp. Research Inst., Inc., 264 F. Supp. 2d 1064, 1073 (S.D. Fla. 2003); *see supra* notes 79–80 and accompanying text (stating that the *Greenberg* court allowed the claim of unjust enrichment but denied the other five counts, including conversion)

²¹⁹ Perry v. Saint Francis Hosp. & Med. Ctr., Inc., 886 F. Supp. 1551, 1561, 1563 (D. Kan. 1995); *see supra* note 54 and accompanying text (identifying that the court denied the family's claim for breach of contract with regard to the consent form executed by the widow).

²²⁰ See Talk of the Nation: Human Organ Trade, supra note 28 (discussing the social concerns and moral implications of adopting a market system for organ donation). Conan identifies

B. The Legislature's Favorable or Unfavorable Treatment of Organ Donation

The legislature placed limitations on the sale of human organs, but has not expressly restricted the development of a market system for egg procurement.²²¹ In creating NOTA, Congress reacted quickly out of fear of a market system for organ donation and failed to adequately consider the consequences of its actions.²²² This Part briefly examines Congress's intent in placing restrictions on organs and considers why Congress has not approached egg donation in the same manner.

Congress assumed without further consideration that allowing compensation for organ donors would impinge upon fundamental social norms.²²³ However, Congress made no attempt to examine alternative

that society has lost confidence in the organ donation process due to the misappropriation of organs and theft of body parts. *Id.*

See supra Part II.B (discussing the uniform model code's and statute's limitation on the organ donation process, including NOTA, which prohibits the sale of human organs but does not define "organ" as including sperm or ovum); see also Gorsline & Johnson, supra note 44, at 10 (discussing the 1987 amendments to the UAGA that limited a person's right to dispose of their remains by restricting the sale or purchase of human body parts). Although Congress did not establish the UAGA, it undoubtedly influenced the adoption of NOTA, and NOTA subsequently influenced the alterations made to the UAGA in 2006. See Legislative Fact Sheet – Anatomical Gift Act (2006), supra note 105 (recognizing that the National Conference of Commissioners revised the UAGA in light of subsequent changes in federal laws concerning organ donation). See generally Nat'l Conference of Comm'rs on Unif. State Laws, supra note 107 (explaining why each state should adopt the UAGA); U.S. Dep't of Health & Human Servs., supra note 106 (presenting a map that identifies the states that have adopted the various versions of the UAGA).

²²² See Calandrillo, supra note 111, at 79 (identifying that Dr. Barry Jacobs's proposed organ brokerage, which would have permitted the sale and purchase of organs, did not receive wide support from the National Kidney Foundation or American politicians); Satel & Hippen, supra note 113, at 188 (explaining that Congress promulgated the provision against the sale of organs after Dr. Jacobs, a Virginia physician, attempted to institute an organ brokerage called the International Kidney Exchange); see also Statz, supra note 109, at 1685 (recognizing that when Congress passed NOTA an estimated "20,000 people died annually under circumstances that would allow for organ transplantation but that organs were procured from less than 15% of them"); Talk of the Nation: Human Organ Trade, supra note 28 (discussing the social and moral consequences of adopting a market system). See generally Policy Management National Organ Transplant Act, supra note 136 (recognizing that another fundamental purpose behind NOTA was the creation of the Organ Procurement and Transplantation Network that would be responsible for developing a national registry for organ matching).

See Crespi, supra note 2, at 15 (explaining that Congress quickly assumed, without reflection, that any form of compensation would violate social norms). But see Derco, supra note 122, at 160 (recognizing that NOTA's legislative history never explicitly defined "valuable consideration," rather "the Senate's Labor and Human Resources Committee Report stated that '[i]t is the sense of the Committee that individuals or organizations should not profit by the sale of human organs for transplantation'"). As a result, the term "valuable consideration" has encouraged a broad interpretation so as to avoid the potential consequences of violating NOTA. See Wait-Listed to Death: Improving Incentives for Organ

frameworks that could harness financial incentives to increase organ availability without transgressing those norms.²²⁴ The thought alone of purchasing or selling human organs caused Congress to react quickly in enacting the provision in NOTA that bans the sale of organs.²²⁵

Yet, why has the legislature not taken a similar approach to egg donation? Currently, there is no federal law prohibiting financial compensation for egg or sperm donation.²²⁶ In fact, Louisiana is the only state that has enacted a law prohibiting an egg donor from receiving compensation.²²⁷ The same negative societal implications related to organ donation are also associated with egg donation, but Congress and forty-nine other states, not including Louisiana, have failed to implement any legislative protections for egg donors.²²⁸ Also, egg donation is arguably more dangerous because of the medical field's failure to study

Donations, supra note 130 (explaining that the threat of criminal penalties has encouraged a broad interpretation of "valuable consideration").

See Crespi, supra note 2, at 15 (noting that Congress conducted very little policy analysis in promulgating NOTA); see also Gorsline & Johnson, supra note 44, at 19 (identifying that the national system designed to facilitate organ sharing and procurement has failed to alleviate the organ shortage). Crespi points out that the legislative history of NOTA reveals that Congress failed to conduct a thorough analysis of the prohibition on all organ sales. Crespi, supra note 2, at 15. Since then, Congress has reaffirmed the blanket prohibition on the sale of organs, due mainly to the observation that society's values are against viewing the human body as a commodity. Id. Thus, to encourage the altruistic nature of organ donation, the ban on all organs remains. Id.; Talk of the Nation: Human Organ Trade, supra note 28 (discussing the social concerns and moral implications of adopting a market system for organ donation).

²²⁵ See supra notes 112–15 and accompanying text (discussing Congress's fear of a market system developing for organs).

See 42 U.S.C. § 274e(c)(1) (2006) (excluding the term gametes or ova specifically from the definition of a human organ); UNIF. ANATOMICAL GIFT ACT § 1(7) (2006) (amended 2008) (defining the word "part" as "an organ, an eye, or tissue of a human being"). There is some debate about whether the UAGA prohibits the sale of eggs because the definition of organ under the 1987 UAGA is broad and encompasses "blood, fluid, or other portion of the human body." See UNIF. ANATOMICAL GIFT ACT § 1(7) (1987) (defining the word "part" as "an organ, tissue, eye, bone, artery, blood, fluid, or other portion of a human body"). See generally Crockin, supra note 57, at 241 (discussing the law as it relates to egg donation); Compensation, supra note 24 (recognizing that donors receive \$5000 after completing their first egg donation and often receive a larger amount of compensation during a second or third donation).

²²⁷ See LA. REV. STAT. ANN. § 9:122 (2008) ("The sale of human ovum, fertilized human ovum, or human embryo is expressly prohibited."); see also Robertson, supra note 24, at 182–83 (considering state legislation prohibiting the sale of organs and analyzing whether prosecution for the sale of eggs has occurred under those statutes).

²²⁸ See Robertson, supra note 24, at 182–83 (recognizing state statutes that prohibit the sale of organs have not resulted in prosecutions for the sale of eggs).

the long-term consequences of the egg donation process.²²⁹ In fact, some fear that egg donation causes cancer and other long-term health complications.²³⁰ Thus, although Congress has not chosen to treat organ and egg donation similarly under NOTA, the similarities between the two procurement processes demand that Congress employ a new approach.²³¹

C. Organ Donation vs. Egg Donation

In the United States, egg donation operates under a market approach that allows a recipient to pay out of pocket compensation to an egg donor.²³² Organ procurement, on the other hand, operates primarily under an altruistic model.²³³ The idea of adopting a market system for

²²⁹ See Frequently Asked Questions, supra note 161 (identifying that the research on long-term medical effects for the donor is not readily available, although there is widespread research about infertile women).

²³⁰ See Thinking About Donating Your Eggs? Think Again, supra note 162 (identifying that egg donation is inherently risky and can result in "[s]troke, organ failure, infection, cancer, loss of future fertility, and in rare instances, even death"). However, the long-term side effects are unknown because there is a lack of long-term medical research or follow-up with former egg donors. *Id.*

²³¹ See infra Part III.C (evaluating the similarities between organ donation and egg donation).

See Egg Donor Compensation, supra note 24 (explaining that clinics compensate egg donors anywhere from \$5000 to \$10,000 for their services). The website identifies that the donor company adheres to the American Society for Reproductive Medicine guidelines and states that "[a]lthough there is no consensus on the precise payment that oocyte donors should receive, at this time sums of \$5,000 or more require justification and sums above \$10,000 go beyond what is appropriate." *Id.* Furthermore, if a donor must travel, the recipient reimburses those expenses provided that the donor retains all original receipts. *Id.*; see Cost Estimate for Egg Donation, supra note 24 (displaying an itemized list of fees associated with egg donation including: a donor fee from \$7000 or more which increases with each donation; travel expenses if the donor must travel ranging from \$4000 to \$6000; a monitoring deposit if the donor is not local and needs a monitoring facility priced at \$1500 to \$2000; \$200 in medical fees if after the first screening the program determines that the donor is not appropriate through no fault of their own). Thus, clinics estimate that the total compensation is between \$13,850 and \$14,850 plus additional expenses ranging from \$5500 to \$8000. *Id.*

See supra note 133 and accompanying text (recognizing the organ donation system in the United States operates under an altruistic model); see also U.S. Dep't of Health & Human Servs., supra note 1 (recognizing that the process of organ donation is primarily altruistic). See generally About Us, supra note 137 (providing an overview of UNOS—the non-profit organization responsible for maintaining the organ transplant system); Organ Allocation, supra note 138 (describing the network responsible for allocating available organs); Talking about Transplantation: Living Donation Information You Need to Know, supra note 154 (explaining the process of living organ donation); Techniques for Organ Preservation, supra note 159 (discussing how medical personnel preserve and transfer organs); U.S. Dep't of Health & Human Servs., supra note 132 (outlining how to join the National Transplant Waiting List and plan for the expenses associated with organ procurement).

organ procurement raises concerns about exploitation.²³⁴ But is egg donation so distinct from organ donation that a market approach is appropriate for one and not the other?²³⁵ This Part analyzes the similarities between the two donation processes and considers why the legislature placed restrictions on organ procurement but chose to not enforce similar restrictions on the market system for egg donation.

Organ donation is analogous to egg donation in many respects.²³⁶ First, both procedures are physically invasive and can cause various health risks to donors.²³⁷ For instance, the procurement of an organ involves a major surgery to remove the organ, which can result in complications.²³⁸ Egg donation similarly involves a surgical procedure that can cause various short-term health effects or other long-term consequences.²³⁹ However, society does not widely recognize the long-term complications due to the medical field's failure to follow up with

²³⁴ But see Dunham, supra note 1, at 58 (stating that compensation for organs will not necessarily cause exploitation but could assist in minimizing the inequities that currently exist in the organ procurement system).

²³⁵ See Egg Donor Compensation, supra note 24 (claiming that egg donation is an altruistic act and that compensation serves to reimburse the donor's time and effort rather than serve as the donor's primary motivation); see also Gordon, supra note 133 (reporting that research of eighty egg donors revealed women's motivation for becoming an egg donor varied). Around 30% of women acknowledged they were motivated solely by the altruism of egg donation. *Id.* On the other hand, 20% claimed that the money alone was their reason for donating. *Id.* The greatest motivation, about 40%, recognized that both the altruism and promise of money served as their reason for becoming an egg donor. *Id.*

²³⁶ See infra text accompanying notes 237–48 (explaining that both donation processes involve physically invasive procedures, concern nonrenewable body parts, and play a crucial role in giving the gift of life).

²³⁷ See Risks, supra note 156 (outlining the various risks associated with living organ donation). These risks include: pain, infection, incisional hernia, pneumonia, blood clots, hemorrhaging, allergic reactions from anesthesia, a need for blood transfusions, and potentially even death. *Id.* Other long-term side effects include complications with other organs or psychological problems. *Id.*; see Egg Donation Risks – 7 Dangers of Donating Eggs, supra note 180 (identifying the various long- and short-term risks associated with egg donation).

²³⁸ See supra note 156 and accompanying text (identifying the risks of the organ procurement process).

See Egg "Donation" and Exploitation of Women, supra note 180 (recognizing various short-term health complications associated with egg donation); see also INST. OF MED. & NAT'L RESEARCH COUNCIL OF NAT'L ACADS., supra note 180 (identifying the potential risks of egg donation). See generally Egg Donor/Becoming an Egg Donor, supra note 162 (explaining the surgical process that a woman undergoes in donating her eggs); Egg Donor Screening, supra note 168 (outlining the screening process that donors undergo prior to donating their eggs); How the Egg Donor Process Works, supra note 170 (providing an overview of the donation process, which includes a page that answers frequent questions posed by donors); The Medical Procedure of Egg Donation, supra note 167 (explaining the different phases of the egg donation process).

egg donors after the egg procurement process.²⁴⁰ Thus, there is currently a lack of medical research addressing any potential long-term consequences of egg donation.²⁴¹

Second, neither eggs nor organs are considered renewable within the human body. Humans are born with a finite number of organs, although there are a much larger number of human tissues. Similarly, every female human body produces a finite number of eggs, ranging from 400,000 to 500,000 at the time of puberty. However, through the process of atresia, this number declines monthly by roughly 1000 eggs, and only 400 to 500 of the original 400,000 to 500,000 eggs develop to the point of ovulation.

Third, both serve an important social function through saving or creating a human life.²⁴⁶ Organ donation provides an individual with the opportunity to "save a life by donating an organ to someone in need."²⁴⁷ Similarly, egg donation gives women the opportunity to provide the gift of life to a family that is unable to conceive a child on their own.²⁴⁸ However, the legislature's failure to control both procurement procedures in the same manner gives more value to the

²⁴⁰ See Toman-Miller, supra note 181 (explaining that "the long-term effects of egg harvesting are uncertain, with better tracking needed").

²⁴¹ See INST. OF MED. AND NAT'L RESEARCH COUNCIL OF THE NAT'L ACADS., supra note 180 (explaining that long-term risks could potentially include breast, ovarian, and endometrial cancer or complications with future fertility).

²⁴² JACKSON, *supra* note 163, at 165–66 (explaining that human eggs do not regenerate after birth unlike human sperm, which constantly renew within the male human body).

Shapiro & Bartlett, *supra* note 65 (identifying tissue as "anything [that is] not a live organ and can be recovered from a dead body"). Each year, 1.5 million tissues are turned into medical products that are later given to American patients. *Id.* Examples of these medical products include: "[a] tendon from a cadaver can be used to repair a torn ACL; veins are used in heart bypass operations[;] [d]ental implants can be made from ground-up human bone, turned into a paste[;] [b]one also gets turned into screws and plates that look like something found in hardware stores[,] [and] [s]urgeons can use them to repair a broken leg." *Id*.

²⁴⁴ See supra note 163 and accompanying text (explaining that the number of ova remaining in the female body at the time of puberty ranges from 400,000 to 500,000 eggs).

²⁴⁵ See supra notes 164-66 and accompanying text (discussing atresia and the fact that only 400 to 500 eggs ever reach the point of ovulation).

²⁴⁶ See Why Be an Organ Donor?, supra note 28 (explaining that being an organ donor provides the donor with the opportunity to save a life).

²⁴⁷ See id. (discussing the benefits of organ donation). The benefits of organ donation for a donor and his family are the ability to save lives and comfort grieving families. *Id.* An organ donor can save up to eight lives and can save or improve up to fifty lives through the donation of tissues and eyes after death. *Id.* Furthermore, donating organs provides families who suffered the loss of a loved one comfort in knowing that their loved one's organs saved another's life. *Id.*

²⁴⁸ See Gordon, supra note 133 (recognizing women who donated eggs felt a sense of pride in having the ability to help an infertile couple).

creation of a human life through egg donation, as opposed to an individual's decision to save a human life by donating an organ.²⁴⁹

As previously mentioned, the legislature does not regulate egg donation in the same manner as organ donation.²⁵⁰ Instead, the Internet provides private companies with the opportunity to obtain eggs from willing donors and, thereafter, allocate the eggs to willing recipients.²⁵¹ The major concern associated with adopting a market approach to organ donation is the potential abuse of such a system.²⁵² Opponents against adopting a market system for organ donation allege it results in problems such as economic coercion, a reduction in altruism, and the creation of unequal access to organs depending on the wealth of the recipient.²⁵³ Yet, these same problems are similarly associated with the current egg procurement system.²⁵⁴

First, economic coercion applies only if the price of an organ is large enough to override any ethical concerns associated with becoming a donor.²⁵⁵ Currently, egg donation prices, which range from \$5000 to \$10,000 per donation, are within a price range that could cause

 $^{^{249}}$ See supra Part III.B (acknowledging the legislature developed statutes to protect against the sale of organs but has not similarly restricted compensation for egg donors).

²⁵⁰ See 42 U.S.C. § 274e(c)(1) (2006) (omitting eggs or sperm from the definition of a human organ, which means that NOTA does not prohibit the sale of such bodily tissues); see also Gordon, supra note 133 (identifying that the U.S. government does not regulate egg donation like other foreign countries, including the United Kingdom and Canada).

²⁵¹ See EGG DONATION INC, https://www.eggdonor.com/ (last visited Sept. 5, 2013) and THE EGG DONOR PROGRAM, http://www.eggdonation.com/ (last visited Sept. 5, 2013) for examples of internet websites responsible for procuring egg donors.

²⁵² See Daar, supra note 121, at 54 ("There is no compelling arguments against the sale of organs per se.... It is the potential abuse which is worrying."). But see Andrews, supra note 121, at 28 ("A market in body parts and products [is needed] . . . to ensure that patients are protected from coercion and given the chance to be paid fairly for their contributions.").

²⁵³ See infra notes 255–62 and accompanying text (refuting the arguments against adopting a market system for organ donation).

²⁵⁴ See infra notes 256, 259, 262 and accompanying text (explaining that the shortcomings of adopting a market system for organ donation are similarly associated with the egg donor process).

See Kaserman & Barnett, supra note 121, at 76–77 (identifying the shortcomings of the argument that adoption of a market system will result in economic coercion of the poor). See generally Young, supra note 132 (explaining the high costs of undergoing an organ transplant). According to one article, a woman ended an altercation with her boyfriend by removing a small gun from her purse and committing suicide. Id. The woman's family consented to the removal and transplantation of their daughter's heart, corneas, and liver, along with some bones and skin. Id. However, receiving no compensation for such donation, the family could not even afford a headstone for their daughter, and instead buried her in an unmarked grave. Id. Meanwhile, the doctors, surgeons, transplant agency, and hospitals responsible for performing the transplantation procedures obtained thousands of dollars. Id.

financially unsteady individuals to dismiss any ethical concerns associated with egg donation.²⁵⁶ Government monitoring of the market system would, however, reduce the coercive impact of operating under a market approach.²⁵⁷

Second, opponents contend that a market approach would reduce the altruistic nature of organ donation because those who donate organs for a sense of volunteerism will no longer want to donate under a market system.²⁵⁸ This concern is also unwarranted because studies analyzing the motivation of egg donors show that altruism, financial compensation, or, more commonly, both motivate individuals.²⁵⁹

The final concern with adopting a market system for organ donation addresses the concern of unequal access to organs. Commentators allege that under a market approach the wealthy have greater access to organs because of their wealth and that such privileged access would leave the poor helpless. Yet, egg donation also allows for unequal access; in fact, unequal access exists regarding all commodities or services operating under a market system in the United States. 262

²⁵⁶ See Cost Estimate for Egg Donation, supra note 24 (discussing an itemized list of expenses associated with compensating an egg donor, which includes travel expenses for out-of-state donors); Egg Donor Compensation, supra note 24 (recognizing that clinics compensate egg donors anywhere from \$5000 to \$10,000 for their services); see also Rabin, supra note 161 (providing the story of a woman who, after graduate school, donated eggs to an infertile couple, primarily because of the money).

²⁵⁷ See KASERMAN & BARNETT, supra note 121, at 76 (identifying that the economic coercion argument fails because those opponents fail to distinguish between organ procurement markets and organ allocation markets). In essence, "[p]aying a family to agree to organ donation is no more coercive than paying a coal miner to work in the mine, a professor to teach, or a surgeon to provide medical services." *Id.*

²⁵⁸ See id. at 79 (stating that a market approach may discourage donors with an altruistic intent from donating their organs upon death); see also U.S. Dep't of Health & Human Servs., supra note 1 (detailing the altruistic process of organ donation).

²⁵⁹ See Gordon, supra note 133 (reporting that research of eighty egg donors revealed women's motivation for becoming an egg donor varied). Around 30% of donors were motivated solely by the altruism of egg donation, whereas 20% claimed that money alone was their motivation. *Id.* About 40% recognized that both the altruism and promise of money was why they chose to become an egg donor. *Id.*; see Egg Donor Compensation, supra note 224 (claiming that egg donation is an altruistic act because it gives the gift of life, and compensation does not serve as the primary motivation but only as reimbursement to donors for their time and effort).

²⁶⁰ See KASERMAN & BARNETT, supra note 121, at 78 (stating that individuals "fear that, if organs are purchased from suppliers, only wealthy individuals will be able to afford transplants").

²⁶¹ See id. (explaining that an alleged shortcoming of a market system is unequal access because the wealthy have greater access to obtain organs).

²⁶² See Cost Estimate for Egg Donation, supra note 24 (discussing an itemized list of fees associated with egg donation that end up totaling around \$14,850 plus additional expenses ranging from \$5500 to \$8000 for travel).

Therefore, although the personal autonomy associated with being an egg donor could extend to organ donors, it seems that a more appropriate, supervised approach could benefit both systems. Rather than adopting an unsupervised market approach to organ donation, Part IV of this Note proposes that the legislature amend NOTA to implement a supervised market system governing both egg and organ donation. The government's supervision of the market system would help prevent coercion and corruption of individuals and their families.

IV. CONTRIBUTION

Although there are many risks associated with adopting a market approach, a market system to organ donation would most effectively alleviate the organ shortage that currently exists throughout our nation.266 This Part proposes that Congress amend NOTA and implement a supervised market approach - governing both the organ and egg donation systems-that appropriately safeguards against the risks associated with a market system.²⁶⁷ First, this Part suggests that these amendments include female eggs within the definition of a human organ under NOTA.²⁶⁸ Second, this Part proposes an amendment that implements a supervised market system for egg and organ donation, which would effectively safeguard against the risks of adopting a market approach.²⁶⁹ This system will allow for individuals to receive effective compensation for their donated organs and eggs, while also increasing the organ supply and consequently reducing the shortage of available organs.270

²⁶³ See Scott, supra note 122, at 190 (recognizing that markets for human body parts already exist for blood, blood products, sperm, and even human hair). In fact, individuals sold human hair and teeth on the open market as early as the Elizabethan era. *Id.* at 180.

²⁶⁴ See infra Part IV (suggesting an amendment to NOTA).

²⁶⁵ See infra Part IV (proposing an amendment to NOTA that would establish a supervised market approach for organ and egg donation).

²⁶⁶ See supra Part III.C (identifying the risks associated with a market system to organ donation).

²⁶⁷ See supra Part III (recognizing that the current organ donation system operating under an altruistic model has failed to alleviate the current organ shortage within the United States); infra Part IV.A (proposing an amendment to NOTA).

²⁶⁸ See infra note 273 (proposing an amendment to the definition of human organ).

²⁶⁹ See infra notes 274-75 (suggesting language that provides for an exemption to the current prohibition against the sale of human organs under NOTA).

²⁷⁰ See Statz, supra note 109 (recognizing that the 1968 UAGA failed to increase the supply of organs as much as expected); infra Part IV.B (explaining the positive implications of adopting the proposed amendment).

A. Proposed Amendment

This Part proposes an amendment to NOTA that reads as follows:²⁷¹

(a) Prohibition

It shall be unlawful for any person to knowingly acquire, receive, or otherwise transfer any human organ for valuable consideration for use in human transplantation if the transfer affects interstate commerce. The preceding sentence does not apply with respect to human organ paired donation *or the Human Organ Procurement Organization Market System*.²⁷²

. . .

(c) Definitions

For purposes of subsection (a) of this section:

- (1) The term "human organ" means the human (including fetal) kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone, *ovum*, ²⁷³ and skin or any subpart thereof and any other human organ (or any subpart thereof, including that derived from a fetus) specified by the Secretary of Health and Human Services by regulation.
- (2) The term "valuable consideration" does not include the reasonable payments associated with the removal, transportation, implantation, processing, preservation, quality control, and storage of a human organ or the expenses of travel, housing, and lost wages incurred by the donor of a human organ in connection with the donation of the organ.

. . .

²⁷¹ This Note proposes amending 42 U.S.C § 274e (2006). The text of NOTA appears in ordinary Times New Roman type, and the amendments are italicized.

The proposed amendments are italicized and are the contribution of the author. This proposed revision would adopt a supervised market system and create an exemption under NOTA. The proposed amendment relates to both living and deceased donors because NOTA governs the sale of human organs regardless of whether the donor is deceased or living.

²⁷³ This Note proposes including ovum within the definition of human organ, which in turn allows for more oversight regarding the female egg procurement process. Although the author acknowledges that ovum are not considered a human organ in the narrow sense of the term, arguably the term bone currently found within the definition of human organ is also not generally considered a human organ. Thus, including ovum within the definition of "human organ" is appropriate.

- (5) The term "Human Organ Procurement Organization Market System" ("HOPOMS") refers to the compensation for human organ donation when an individual meets all of the following conditions:²⁷⁴
 - (A) An individual receives the human organ from the Organ Procurement Organization, acting as a broker for the organ donation process;
 - (B) Compensation for the human organ does not exceed \$10,000;
 - (C) The donor properly executed the necessary paperwork, which shall ensure a good faith basis for retrieving the organ and a lack of coercion;
 - (D) In the case of a living donor, the donor registered with the Organ Procurement Organization to receive and submit follow-up information regarding their health conditions following the donation process;
 - (E) In the case of a deceased donor, the donor registered with the Organ Procurement Organization prior to death, and made arrangements with the Organ Procurement Organization relating to what tissues or organs are to be donated;
 - (F) A donee registered with the Organ Procurement Organization to receive and submit follow-up information regarding their health conditions following the donation process; and
 - (G) Other than described in paragraph (B), no other valuable consideration was acquired, received, or otherwise transferred with respect to the human organ referred to in such subparagraph.²⁷⁵

The author modeled this language after the "human organ paired donation" exemption currently found within NOTA. See 42 U.S.C. § 274e(c)(4) (providing the language relating to "human organ paired donation"). The amendment differs because rather than outlining numerous circumstances that would comply with the exception, under the amendment individuals must fulfill all of the applicable criteria before the exemption applies. However, the donor need only comply with either subsection (D) or (E) of the exception, depending on the circumstances. Mandating compliance with all of the criteria helps ensure proper government oversight and allows for research and regulation of the system.

The author modeled this language after the "human organ paired donation" exemption currently found within NOTA. See 42 U.S.C. § 274e(c)(4) (outlining the human organ paired donation exemption). The maximum amount of \$10,000 merely identifies the higher range of the compensation. However, this proposed amendment should undergo research by the legislature to determine if this amount is too large and thus will

2013]

Eggsploitation

515

B. Commentary

The amended language of NOTA serves two valuable purposes. First, the language includes female eggs or ova within the definition of human organ. This prohibits individuals from paying valuable consideration for female eggs that do not meet the exemption's requirements and also allows for greater oversight and control regarding the egg donation process. Second, and most importantly, the amendment establishes an exemption known as the Human Organ Procurement Organization Market System ("HOPOMS"). This exemption is, in many respects, analogous to NOTA's human organ paired donation exemption.

Under HOPOMS, so long as an individual meets the criteria outlined in the exemption, he will not be liable for punishment under NOTA.²⁷⁹ In essence, this provision creates a special exemption for liability.²⁸⁰ The HOPOMS exemption mandates that the Organ Procurement Organizations act as brokers. This allows for Organ Procurement Organizations to ensure that donors receive valuable consideration for their organs and, similarly, that donees obtain organs without overpaying on the black market.²⁸¹

Furthermore, by setting a maximum amount of compensation for organs, the amendments allow the government to safeguard against exploitation of the poor.²⁸² Also, by requiring that individuals comply with the proposed paperwork identifying their good faith basis for donating, Organ Procurement Organizations are able to safeguard against liability under NOTA. Under the current language of NOTA,

economically coerce individuals into donating their organs during financially difficult times.

²⁷⁶ See supra note 273 (explaining why the amendment includes ovum in the definition of human organ).

²⁷⁷ See supra notes 250–54 and accompanying text (identifying the lack of procedural safeguards and medical research governing the egg donation process).

²⁷⁸ See supra note 274 (explaining that the author modeled the amendment after the "human organ paired donation"); see also 42 U.S.C. § 274e(c)(4) (recognizing various circumstances under which paired organ donation is exempt from NOTA).

²⁷⁹ See supra notes 274–75 and accompanying text (identifying the criteria required to meet the added exemption under NOTA).

²⁸⁰ See 42 U.S.C. § 274e(c)(4) (identifying that human organ paired donation is exempt from liability under NOTA). The human organ paired donation exemption is similar to the proposed amendments under Part IV of this Note.

²⁸¹ See supra note 213 and accompanying text (identifying that a black market has developed due to the current national shortage for organs).

²⁸² See supra notes 260–61 and accompanying text (recognizing the argument that a market approach will not necessarily cause exploitation but could contribute to further inequities in organ procurement).

Organ Procurement Organizations are not exempt if they violate any of the provisions therein.²⁸³

Finally, the proposed amendments also require that Organ Procurement Organizations, or a subsection thereof, follow up with all living donors and donees. This requirement will address the problematic lack of medical research regarding the long-term consequences of egg donation by creating a larger research base regarding the risks of organ and egg donation.²⁸⁴

Although the proposed amendment would help to alleviate many of the issues concerning the present organ shortage, critics may argue that economic coercion, losing the altruistic nature of donation, and unequal access are still concerns in implementing a supervised market approach.²⁸⁵ First, as mentioned above, economic coercion would not present an issue because there is a maximum amount of compensation that parties could exchange for an organ.²⁸⁶ Although the proposed amendment identifies a maximum figure of \$10,000, the legislature should further research whether the \$10,000 maximum figure is unreasonable.²⁸⁷ The amount should be a number that it is not so overly large that it would encourage financially unsteady individuals to dismiss ethical issues associated with donating their organs or eggs.²⁸⁸ Second, the altruistic nature of donation will still exist because the HOPOMS exception does not completely remove the possibility of donating organs with an altruistic motivation.²⁸⁹ Individuals may still donate organs without receiving compensation, and studies have shown that altruism,

 $^{^{283}}$ $\,$ See 42 U.S.C. § 274e (failing to recognize any Organ Procurement Organization exemption from liability).

²⁸⁴ See supra notes 240-41 and accompanying text (recognizing the lack of medical research pertaining to the egg donation process).

²⁸⁵ See supra text accompanying notes 250–62 (explaining the arguments against adopting a market approach for organ donation and demonstrating how those same arguments could apply to the current market approach for egg donation).

²⁸⁶ See supra note 255 and accompanying text (explaining that economic coercion is one concern of adopting a market approach); supra note 275 (explaining that the maximum amount should depend on the research conducted by the legislature).

²⁸⁷ See supra note 275 (discussing that the legislature should investigate whether the \$10,000 figure is too high and thus may potentially coerce financially unstable individuals to donate their organs or eggs).

²⁸⁸ See supra text accompanying note 255 (explaining the importance in selecting a reasonable price for compensation).

²⁸⁹ See supra note 258 and accompanying text (recognizing that another concern in adopting a market approach to organ donation is removing the altruistic nature to donate); supra notes 274–75 (illustrating that the proposed language is one exception and would not necessarily alter the typical donation process).

financial compensation, or more commonly both motivate donors.²⁹⁰ Lastly, the concern of unequal access is also not an issue under the proposed amendment because providing compensation under some circumstances does not completely alleviate the current methods in place for organ donation.²⁹¹ In fact, HOPOMS is one exception that only applies if individuals meet all of the conditions.²⁹² States would still use the regular process for organ donation if a donor failed to register with the organ procurement organization before death and would only use the HOPOMS exception if the donor satisfied all the above criteria outlined thereunder.²⁹³

Overall, the current state of organ donation requires that the federal government take action to help alleviate the current shortage of organs throughout the United States. Together, the preceding amendments would effectively safeguard against abuse of the market system for organ and egg donation.²⁹⁴ The similarities between organ and egg procurement procedures mandate that the legislature take steps to govern both similarly.²⁹⁵

V. CONCLUSION

Courts have failed to recognize an absolute property right in the human body, which has prevented individuals from bringing claims for conversion and receiving compensation for their misappropriated organs.²⁹⁶ In addition, although NOTA expressly bans the sale of organs for valuable consideration, its prohibitions do not include female reproductive eggs.²⁹⁷ The current organ procurement policy is failing to

²⁹⁰ See supra text accompanying note 259 (identifying that women are motivated to donate their eggs for various reasons).

²⁹¹ See supra notes 260–61 and accompanying text (explaining that unequal access is another concern associated with adopting a market approach to organ donation); supra notes 274–75 and accompanying text (creating an additional exemption that would allow for individuals to obtain compensation but not otherwise altering the organ donation process to mandate compensation).

²⁹² See supra note 274 and accompanying text (recognizing that individuals must meet all of the exception's elements to escape liabilty under NOTA).

²⁹³ See supra notes 274–75 and accompanying text (establishing an exception to the prohibition on paying or receiving compensation for organs, but otherwise not significantly altering the organ donation process).

²⁹⁴ See supra Part III.C (identifying the potential risks of abuse in adopting a market system).

²⁹⁵ See supra Part III.C (pointing out the similarities between the egg procurement and organ procurement processes).

²⁹⁶ See supra Part II.A (recognizing that courts have failed to identify an absolute property right in the human body, which has limited the types of claims individuals can pursue).

²⁹⁷ See supra Part II.B.2 (outlining the requirements of NOTA and defining the term human organ).

meet the demand for organs, thus the legislature should implement the proposed NOTA amendments, which will allow for increased oversight of the egg donation process while also implementing a supervised market system for organ and egg donation.²⁹⁸

Returning to the stories of Melinda and Colter—"What makes Melinda more worthy of obtaining the gift of life compared to Colter?"²⁹⁹ This Note establishes that there is essentially no difference. Under the current organ and egg donation systems, Melinda was able to compensate an individual and receive the gift of life through a new born child. However, the Meinart family instead was forced to take a waitand-see approach as to whether Colter would receive the life-saving transplant he needs. The proposed amendments would resolve the current discrepancies between Colter's and Melinda's stories by allowing both Colter and Melinda the opportunity to comply with the HOPOMS exception and compensate an individual to receive a life-changing gift. Both organ donation and egg donation involve life-altering processes. Thus, the legislature should enact the proposed amendments to NOTA and ensure that Colter and Melinda each have the equal opportunity to receive the *gift of life*. Hopoments and the stories of the stories

Janelle E. Thompson

²⁹⁸ See supra Part IV (suggesting various amendments to NOTA that include: placing female eggs within the definition of human organ and adopting a supervised market approach to organ donation).

²⁹⁹ See supra Part I (discussing Colter's and Melinda's donation experiences).

³⁰⁰ See supra text accompanying note 24 (explaining that NOTA allows Melinda to pay a woman who donates her eggs).

³⁰¹ See supra text accompanying note 25 (recognizing that current legislation prohibits the Meinart family from compensating anyone willing to donate their organ to Colter).

³⁰² See supra notes 271–75 and accompanying text (outlining the language for the proposed amendment to NOTA).

³⁰³ See supra Part IV (discussing an amendment to NOTA that would ensure the market approach adopted for organ and egg donation receives supervision).

J.D. Candidate, Valparaiso University Law School (2014); B.A., Political Science, Business, Elmhurst College (2011). First, I would like to thank my mother, Margina Schwartzbach, for her endless love and support over the years and most importantly for instilling in me the courage to chase all my dreams, no matter how big. I would also like to thank my father, Kevin Thompson, for believing in me when I was not sure I should believe in myself and providing a voice of reason throughout my law school career and life. Thank you to my stepparents—Larry and Renee—and grandparents—Nancy, Terry, and Joyce—for their relentless support and encouragement throughout my life. I dedicate this Note to my grandpa, Don Bernard, a man who taught me the value and importance of living each day like it is the last. Additionally, to my loving and compassionate siblings, Jake, Tanner, and Jaclyn: thank you for providing me with endless hours of comedic relief and lending a listening ear when I needed it most. Lastly, I would like to thank my mentor, Keiko Yoshino, for taking the time to review countless edits of this Note and for helping me through some of the roughest weeks of my life during 2L year.