

DEARLY DEPARTED, DEARLY NEEDED

Allison Slocum

Elders and their families suffer from confusion and misinformation regarding the choice to participate in whole-body donation. A void in regulation failing to modernize disposal of whole-body donations has come to define the legal framework of donation. Rooted in the historical reluctance of Congress to pass laws regarding the disposal of bodies, states attempted several ad-hoc efforts, culminating with the passage of state anatomical gift giving laws. However, the text of modern laws largely avoids regulating whole-body donations; this, among several other causes, underwrote an environment of distrust among donors, and continued unfulfilled medical demand for such donations.

Several scholars advocate for two proposals: laws which promote organ donation by default and the commercialization of organ sales before death. These proposals could also include whole-body donations. Ultimately, the author recommends improving coordination among donation agencies, awareness campaigns, uniformity among state legal frameworks, and promoting online donation registries to improve the substantive and procedural hurdles of whole-body donation.

Allison Slocum is an Associate Editor 2015-2016, Member 2014-2015, *The Elder Law Journal*; J.D. 2016, University of Illinois, Urbana-Champaign; Masters of Health Administration, Masters of Geriatric Health 2008, A.T. Still University, B.S. 1999, University of Texas at Austin.

Historically, the subject of organ and tissue donation has enjoyed much attention within the legislature, scholarly journals, and medical community.¹ Through the years, the discussion has focused on ante-mortem and post-mortem anatomical gifting issues.² Whole-body donations, on the other hand, have not enjoyed the same attention as these other anatomical gifts.³ Whole-body donations for medical education, technological advancement, and research suffer from similar problems as those plaguing individual-organ donation—lack of donors and legal inconsistency.⁴ Although organ and whole-body donations are anatomical gifts that would seemingly fall under the same federal and state purviews, they do not.⁵ Donated organs destined for transplantation are subject to a host of federal and state laws.⁶ Surprisingly, whole-body donations are largely unregulated.⁷ This lack of regulation provides a double-edged sword. Whole-body donation programs enjoy operational autonomy, yet have succumbed to governmental investigations, donor scrutiny, and a diminishing supply.⁸

This Note explores the reasons these similar anatomical gifts are governed by different laws, and outlines various historical attempts to rein in the disparities. It also provides a variety of recommendations for a more consistent legal regime.

Part I introduces, from a historical perspective, the issues surrounding whole-body donation. Part II examines the donation process, donor demographics as well as the benefits and challenges asso-

1. Michele Goodwin, *Rethinking Legislative Consent Law*, 5 DEPAUL J. HEALTH CARE L. 257, 262 (2002).

2. See discussion *infra* Part III; see also Gloria J. Banks, *Legal & Ethical Safeguards: Protection of Society's Most Vulnerable Participants in a Commercialized Organ Transplantation System*, 21 AM. J. L. & MED. 45, 58 (1995).

3. See generally Paula Span, *Donating the Body*, N.Y. TIMES (Sept. 18, 2014, 3:58 PM), http://newoldage.blogs.nytimes.com/2014/09/18/donating-the-body/?_r=0 (arguing that most individuals are approached to donate transplantable organs versus whole-body donation).

4. See discussion *infra* Parts II-III.

5. See discussion *infra* Part I; see also *Organ Donation vs. Whole Body Donation*, MEDCURE BLOG, <http://medcure.org/what-is-the-difference-between-body-donation-and-transplant-donation> (last visited Mar. 8, 2016) (noting that organ donation registration is fundamentally different than whole-body registration).

6. See discussion *infra* Part III.

7. Lauran Neergaard, *Medical Students Learn From Cadavers*, USA TODAY (Nov. 30, 2009), http://usatoday30.usatoday.com/news/education/2009-11-30-medical-students-anatomy_N.htm.

8. See discussion *infra* Part III.

ciated with such donations. Next, Part III examines the problems resulting from the inadequate donation supply. Part IV discusses the contemporary, legal debate regarding presumed consent and suggestions for commercializing the donor market. Part V provides a variety of substantive recommendations to cure the diminishing supply of cadavers for education and research. Finally, Part VI summarizes ways in which the dead can effectively teach the living.⁹

Part I

Background

Many of us think of grave robbers as thieves hoping to abscond with treasures, jewels, and family heirlooms.¹⁰ However, grave robbers of the late eighteenth century had a very different purpose than the one portrayed in horror films and pulp fiction novels of the same era.¹¹ Instead of raiding fresh gravesites for riches, thieves hoped for much different loot: an intact, well-preserved corpse.¹² The law, over 200 years ago, required a medical student to demonstrate competency in anatomy of the human body prior to practicing medicine; however, this created a legal conundrum.¹³ While medical students were required to be acquainted with anatomical structures, the law forbade the dissection of human remains for such purposes.¹⁴ The law only allowed human dissections as a form of “capital punishment” in lieu of formal, respectful burials.¹⁵ To that end, the initial demand for human cadavers for medical training was met through the execution of criminals in some states.¹⁶ For example, a Massachusetts’ law, known as the “Body of Liberties,” vested the judiciary with the ultimate dis-

9. Ann Garment et al., *Let the Dead Teach the Living: The Rise of Body Bequeathal in the 20th-Century America*, 82 ACAD. MED. 1000, 1000 (2007).

10. Paul Bahn, *Do Not Disturb? Archaeology and the Rights of the Dead*, 1 J. APPLIED PHIL. 213, 216 (1984).

11. Charles Bradford, *Countway Happenings: Resurrectionists and Spunkers*, 294 NEW ENGLAND J. MED. 1331, 1331-32 (June 10, 1976). See generally JACK FINNEY, *THE BODY SNATCHERS* (Dell Books, 1955); ROBERT L. STEVENSON, *THE BODY SNATCHER* (Pall Mall Gazette, 1884).

12. Bradford, *supra* note 11.

13. *Id.* at 1331.

14. *Id.*

15. Aaron D. Tward & Hugh A. Patterson, *From Grave Robbing to Gifting: Cadaver Supply in the United States*, 287 JAMA 1183, 1183 (2002).

16. *Id.*

cretion regarding the use of a criminal's dead body.¹⁷ It provided that for capital punishment cases, the court would determine whether a felon's corpse was to be used for dissection or banishment.¹⁸ Despite such laws, the demand outpaced the supply.¹⁹ Medical schools were forced to turn to an alternative source for study subjects: grave robbing.²⁰

The disinterring of dead bodies, albeit illegal, became the primary source of cadavers for anatomical study until the mid-nineteenth century.²¹ Not only did grave robbing have to occur in the secrecy of the night, but decomposition and nascent preservation techniques forced thieves to prey on the recently deceased.²² To ward off these aptly named "Resurrectionists," family members would actively watch over a relative's gravesite or enclose coffins in locked, steel cages known as mortsafes.²³ Despite the illegality and macabre nature of the practice, "it was more or less tolerated as long as it did not become too much of a public scandal."²⁴ However, scandals did result and were followed by public riots.²⁵ In 1788, a New York physician waved the arm of a cadaver at a boy peering in the window of the physician's anatomy lab.²⁶ The boy, who recently lost his mother, told his father about the physician's behavior.²⁷ As a result, the father visited the grave of his wife only to discover that the woman's body was gone.²⁸ These events led to the well-known New York Doctor's Riot of 1788.²⁹

History's most notorious case regarding medical grave-robbing involved William Burke and William Hare of Scotland.³⁰ The scandal even inspired the short story of Robert Lewis Stevenson's, *The*

17. See THE LIBERTIES OF THE MASSACHUSETTS COLONIE IN NEW ENGLAND, 1641, reprinted in OLD SOUTH LEAFLETS 261, 262 (Boston: Directors of the Old South Work, 1900).

18. *Id.* (the law stated: "in Capital[!] cases, or in cases concerning dismemb[e]ring or banishment according to that word to be judged by the General[!] Court").

19. Tward & Patterson, *supra* note 15.

20. *Id.*

21. Bradford, *supra* note 11.

22. *Id.* at 1331.

23. *Id.*

24. *Id.*

25. Tward & Patterson, *supra* note 15.

26. *Id.*

27. *Id.*

28. *Id.*

29. *Id.*

30. *Id.*

Bodysnatchers.³¹ Burke and Hare had a profitable business of selling cadavers to a local physician, Dr. Knox, who taught anatomy classes.³² Supposedly unbeknownst to Dr. Knox, the bodies were of murdered victims at the hands of Burke and Hare.³³ Hare was granted immunity for assisting in the investigation while Burke was hung, after which his body was ironically dissected and displayed to the public.³⁴ This event led to the passage of the “Warburton Anatomy Act of 1832 which provided unclaimed bodies to anatomists [for dissection] ultimately ending grave robbing in Britain.”³⁵ Likewise, a widespread lobbying effort occurred in the United States.³⁶ John Warrens of Massachusetts pressured the legislature to pass a similar Anatomy Act of 1831, putting an end to the state’s body snatching problems.³⁷ Other states eventually endorsed comparable laws³⁸ and, by the twentieth century, “cadavers were supplied almost exclusively from unclaimed bodies.”³⁹

Evidence suggests that some anatomical subjects of the late 1800s originated from individual donors.⁴⁰ A New York Times article of 1899 reported that a patient of Johns Hopkins Hospital bequeathed his body to the hospital upon his death.⁴¹ Many physicians of the early 1900s, familiar with the challenges of learning anatomy when cadavers were in short supply, also chose to donate their bodies.⁴² Despite these unconventional sources of individual donations, unclaimed bodies remained the primary means for anatomical study well into the 1920s.⁴³

The availability of the unclaimed was largely due to the inability of the indigent to pay for funerals.⁴⁴ The funeral costs at the time averaged \$150.⁴⁵ Today, this amount would equate to just over \$2000

31. STEVENSON, *supra* note 11.

32. Bradford, *supra* note 11.

33. *Id.*

34. Tward & Patterson, *supra* note 15.

35. *Id.*

36. Bradford, *supra* note 11.

37. *Id.*

38. Tward & Patterson, *supra* note 15.

39. *Id.*

40. Garment et al., *supra* note 9, at 1002.

41. *Gives His Body to Science: Johns Hopkins Hospital to Profit from a Patient's Gratitude*, N.Y. TIMES (May 7, 1899).

42. Garment et al., *supra* note 9, at 1002.

43. *Id.*

44. *Id.*

45. QUINCY L. DOWD, FUNERAL MANAGEMENT AND COSTS: A WORLD-SURVEY OF BURIAL AND CREMATION 3 (1921); Garment et al., *supra* note 9, at 1002.

based on a 2.9% yearly rate of inflation.⁴⁶ For those that could not afford to bury their loved ones, they simply left them for the state to handle.⁴⁷

A. A Change In Supply

Following the Great Depression, the availability of unclaimed bodies steadily declined.⁴⁸ Social reforms of the era facilitated burials of the unclaimed.⁴⁹ For example, the original Social Security Act for the elder population was modified in 1939 to include a death benefit for funeral expenses.⁵⁰ Although well-intentioned, the law proved to be a hotbed for exploitation.⁵¹ Unfortunately, many viewed these burial benefits as a way to circumvent prior Anatomy Acts that required unclaimed bodies be given to anatomists.⁵² Instead of distributing the cadavers as the Anatomy Acts mandated, some organizations haphazardly buried the bodies in order to make a profit on the burial payments.⁵³

Legislation was not the only influence affecting the availability of whole-bodies for scientific study.⁵⁴ Technological breakthroughs paved the way for individual organ transplantation.⁵⁵ As a result, attention shifted from whole-bodies for research to the need for viable organs for transplantation.⁵⁶

B. The Legal Framework

The desire for transplantable organs, coupled with the increase in organ donors, prompted the development of a legal framework for

46. COMPOUND INTEREST CALCULATOR, <http://www.thecalculatorsite.com/finance/calculators/compoundinterestcalculator.php> (last visited Mar. 8, 2016) (Online Compound Interest Calculator used to equate \$150 funeral cost based on an inflation rate of 2.9% over the course of ninety-five years).

47. See Garment et al., *supra* note 9.

48. Garment et al., *supra* note 9, at 1002.

49. *Id.*

50. *Id.*

51. *Id.*

52. *Id.*

53. *Id.*

54. *Id.*

55. Goodwin, *supra* note 1, at 261.

56. Claire Bushey, *Cadaver supply: The last industry to face big changes*, CRAIN'S CHICAGO BUSINESS (Feb. 23, 2013), <http://www.chicagobusiness.com/article/20130223/ISSUE01/302239987/cadaver-supply-the-last-industry-to-face-big-changes>.

anatomical gifts.⁵⁷ The following provides a cursory examination of organ and whole-body donation legislation. A more thorough analysis is provided later in Part III of this Note.

Prior to 1968, the legal framework regarding anatomical gift-giving was lackluster at best.⁵⁸ The Uniform Law Commission (the Commission), responsible for the Uniform Anatomical Gift Act of 1968 (UAGA), noted legal inconsistencies among the states.⁵⁹ They characterized the laws as “a confusing mixture of old common law dating back to the 17th century and state statutes that have been enacted from time to time.”⁶⁰ Additionally, the Commission acknowledged various problems associated with “competing interests” in anatomical gifts.⁶¹ Those competing interests included the state, individual donors, familial survivors, and medical researchers.⁶² The Commission, in adopting the first, comprehensive UAGA, sought not only to streamline the organ donation process, but also sought to address whole-body donations for purposes of research and medical education.⁶³ More specifically, Section Three of the Model Act acknowledged acceptable donees of anatomical gifts as “any accredited medical or dental school, college or university for education, research, advancement of medical or dental science, or therapy.”⁶⁴

This first UAGA was highly influential.⁶⁵ It was adopted and codified in every state by 1970 – just two years after its creation.⁶⁶ This version lasted for almost twenty years until it was updated in 1987.⁶⁷ The update addressed deficiencies in the previous version and purported to further simplify the anatomical gifting process.⁶⁸ The 1987 revision was only adopted by twenty states, once again leaving incon-

57. *See generally* UNIF. ANATOMICAL GIFT ACT (1968) (amended 2006).

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

62. *Id.*

63. UNIF. ANATOMICAL GIFT ACT (1968) (amended 2006).

64. *Id.* at § 3.

65. *See* Sheldon F. Kurtz et al., *The 2006 Revised Uniform Anatomical Gift Act – A Law to Save Lives*, HEALTH LAWYERS NEWS 44, 44 (Feb. 2007).

66. *Id.*

67. UNIF. ANATOMICAL GIFT ACT (1987) (amended in 2006).

68. Kurtz et al., *supra* note 65, at 45.

sistencies within the donation framework.⁶⁹ In 2006, yet another revision to the UAGA was completed.⁷⁰

The Uniform Anatomical Gift Acts were legislative models developed for state adoption;⁷¹ however, federal laws regulating organ donations also surfaced.⁷² In 1984, the National Organ Transplant Act (NOTA) was passed, creating the Task Force on Organ Transplantation and the Organ Procurement and Transplantation Network (OPTN).⁷³ Additionally, amendments to the federal Social Security Act broadened Medicare participation guidelines for health care entities to include an organ donation and procurement process.⁷⁴ The new provision required participating hospitals to raise awareness of organ donation with donor families and to notify a designated organ procurement agency when they had a potential donor.⁷⁵ It is important to note that whole-body donations were absent from these federal regulatory efforts.⁷⁶ As will be explored later, whole-body donations still remain largely unregulated today.⁷⁷

69. *Legislative Fact Sheet – Anatomical Gift Act (1987)*, UNIF. LAW COMM'N, [http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Anatomical%20Gift%20Act%20\(1987\)](http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Anatomical%20Gift%20Act%20(1987)) (last visited Mar. 8, 2016).

70. UNIF. ANATOMICAL GIFT ACT (2006).

71. Kurtz et al., *supra* note 65, at 44.

72. Banks, *supra* note 2, at 68.

73. National Organ Transplant Act, PUB. L. NO. 98-507 (codified at 42 U.S.C. § 274 (2014)).

74. 42 U.S.C. § 1320(b-8)(a)(i-iii) (2014).

75. *Id.*

76. *See id.*

77. Neergaard, *supra* note 7.

Part II

A. Benefits of Whole-Body Donation

It is widely accepted that organ donations destined for transplantation save lives.⁷⁸ Many, however, are unaware of the varied uses of whole-bodies donated to science.⁷⁹ Predominantly, cadavers are studied by first-year medical students for anatomical training.⁸⁰ Akin to a “rite of passage,”⁸¹ medical schools around the country incorporate cadaver dissection in their gross anatomy classes.⁸² Per the American Association of Anatomists, students spend approximately 150 hours on gross anatomy with one hundred of those hours dedicated to dissection.⁸³

Medical schools are not the only end-users of cadavers.⁸⁴ Pharmaceutical companies routinely conduct research on corpses to advance medical treatments.⁸⁵ Physicians and other healthcare providers need cadavers for continuing medical education after medical school.⁸⁶ One of the premier health systems in the nation, the Mayo Clinic, hosts continuing medical education programs for physicians around the world using such cadavers.⁸⁷ These programs provide a forum for physicians to learn innovative surgical techniques that ultimately save more lives.⁸⁸

78. See, e.g., Amanda Bernocco, *Organ Donors Saved More Than 2 Million Lives Of Terminally Ill Patients*, HNGN (Jan. 30, 2015, 4:25 PM), <http://www.hngn.com/articles/65357/20150130/organ-donors-saved-more-than-2-million-lives-of-terminally-ill-patients.htm>.

79. See generally R. MCS, *The Economist Explains: Why there is a shortage of cadavers*, THE ECONOMIST BLOG (Jan. 19, 2014, 11:50 PM), <http://www.economist.com/blogs/economist-explains/2014/01/economist-explains-10>; John Broder, *In Science's Name, Lucrative Trade in Body Parts*, N.Y. TIMES (Mar. 12, 2004), <http://www.nytimes.com/2004/03/12/us/in-science-s-name-lucrative-trade-in-body-parts.html>.

80. Neergaard, *supra* note 7.

81. Bushey, *supra* note 56.

82. *Gross Anatomy*, THE FREE DICTIONARY, <http://medical-dictionary.thefreedictionary.com/gross+anatomy> (last visited Mar. 8, 2016) (defining gross anatomy as “[t]he study of the structures of the body that can be seen with the naked eye”).

83. Neergaard, *supra* note 7.

84. R. MCS, *supra* note 79.

85. *Id.*

86. Michel Anteby & Mikell Hyman, *Entrepreneurial Ventures and Whole-Body Donations: A Regional Perspective from the United States*, 66 SOC. SCI. & MED. 963, 963 (2008).

87. *Body donation at Mayo Clinic*, MAYO CLINIC, <http://www.mayoclinic.org/body-donation/overview> (last visited Mar. 8, 2016).

88. See *id.*

Some bodies are used to train police canine units in identifying victims of a disaster while “a lucky few cadavers get to drive cars into walls to test safety.”⁸⁹ Researchers at Wayne State University have been using human cadavers as crash-test dummies for over sixty years.⁹⁰ The National Highway Traffic Safety Administration and car companies have used donated bodies to test safety features of air bags, seat belts, and even windshields.⁹¹ Knoxville, Tennessee hosts a “body farm” where decaying cadavers are studied by forensic researchers.⁹² A University of Tennessee graduate student used the human remains to develop “aroma scan technology.”⁹³ Such technology would assist forensic investigators in determining a victim’s time of death.⁹⁴ Interestingly, the National Aeronautics and Space Administration (NASA) also uses cadavers when mannequins are inadequate for testing spacecraft protocols like acceleration and radiation exposure.⁹⁵ Cadavers benefitted NASA’s most recent Orion project⁹⁶—a space vehicle destined for Mars.⁹⁷ Moreover, the United States Army has conducted land-mine testing with cadavers.⁹⁸ Although lengthy, these examples certainly do not provide an exhaustive list.⁹⁹

In addition to these societal benefits, whole-body donations have economic advantages. According to the National Funeral Directors Association, the average cost of a funeral in 2012 rose to \$7045.¹⁰⁰ Not surprisingly, some families experience financial difficulty when con-

89. R. MCS, *supra* note 79.

90. MARY ROACH, *STIFF: THE CURIOUS LIVES OF HUMAN CADAVERS* 87 (W.W. Norton & Co., 2003) [hereinafter ROACH].

91. *Id.*

92. Julie M., *Technology After Death*, MED. SCI., <http://bloodlesscadavers.weebly.com/technology-after-death.html> (last visited Mar. 8, 2016).

93. *Id.*

94. *Id.*

95. Keith Cowing, *NASA’s Use of Human Cadavers in Testing the Design of the Orion Spacecraft*, SPACEREF (July 17, 2008), <http://www.spaceref.com/news/viewnews.html?id=1296>.

96. Julie M., *supra* note 92.

97. *NASAs Journey to Mars*, NASA (Dec. 1, 2015), <http://www.nasa.gov/content/nasas-human-path-to-mars/#.VRK9nuGhuwg>.

98. Amy Ling, Column, *Recent Developments in Health Law: UCLA Willed Body Program Comes Under Scrutiny as Companies Sued for the Purchase of Body Parts*, 32 J. L. MED. & ETHICS 532, 533 (2004).

99. See ROACH, *supra* note 90, at 9-10 (describing numerous ways cadavers are used).

100. *NFDA 2013 General Price List Survey*, NAT’L FUNERAL DIRS. ASS’N, <http://nfda.org/about-funeral-service-/trends-and-statistics.html#CAF> (last visited Mar. 8, 2016).

fronted with the high costs of burials.¹⁰¹ Whole-body donation provides an alternative for funeral expenses. Most donation programs cover the costs associated with a donation.¹⁰² Harvard Medical School, for example, provides a stipend for a funeral home to transport a donated body to the school.¹⁰³ Harvard also pays for the cremation and returns the ashes to the family.¹⁰⁴ Alternatively, Stanford Medical School covers the entire cost of transporting a body within a certain radius of the school.¹⁰⁵ Upon completion of the student's coursework, some programs even invite the donors' families to attend memorial services to honor their loved ones.¹⁰⁶ Recently, Georgetown University School of Medicine experienced a much-needed increase in donors.¹⁰⁷ The school's anatomy professor asserted that the economy was partly responsible for the increase.¹⁰⁸ Many families have donated loved ones to Georgetown in lieu of paying for funerals.¹⁰⁹

Psychological benefits are often cited as a reason individuals choose whole-body donations.¹¹⁰ Research suggests that altruism may be the overriding factor in donor decision-making when compared to other benefits.¹¹¹ A Netherlands study surveyed donors' reasons for bequeathing their body due to a substantial rise in whole-body donations in the country.¹¹² Altruistic motivations were examined, but researchers conducting the study concluded that those are not the sole reasons for donations.¹¹³ Some research participants noted that negative attitudes toward funerals influenced their decision to donate.¹¹⁴

101. Elizabeth H. Boldt, Note, *Nail in the Coffin: Can Elderly Americans Afford to Die*, 21 ELDER L.J. 149, 150 (2013).

102. See, e.g., *FAQ: Anatomical Gift Program at Harvard Medical School*, HARV. MED. SCH., <http://hms.harvard.edu/departments/medical-education/anatomical-gift-program/faq> (last visited Mar. 8, 2016).

103. *Id.*

104. *Id.*

105. See *Stanford Willed Body Program—Information for Donors, FAQs*, STAN. SCH. OF MED., DIV. OF CLINICAL ANATOMY, <http://anatomy.stanford.edu/donate/faqs.html> (last visited Mar. 8, 2016) [hereinafter *Willed Body Donation Program*].

106. See *Willed Body Program: Whole Body Donation*, UNIV. OF ARIZ., <http://bodydonation.med.arizona.edu> (last visited Mar. 8, 2016).

107. Neergard, *supra* note 7.

108. *Id.*

109. *Id.*

110. See Sophie Bolt et al., *Motivation for Body Donation to Science: More Than an Altruistic Act*, 192 ANNALS OF ANATOMY 70, 73 (2010).

111. *Id.*

112. *Id.* at 70-74.

113. *Id.* at 73.

114. *Id.* at 72.

To that end, one participant's willingness to donate was because he did not want a funeral home making money with his dead body.¹¹⁵

Unlike these current benefits, future uses of whole-body donations may redefine the cadaver's role. An Italian surgeon proposed an innovative, albeit radical, idea regarding full-body transplants.¹¹⁶ Dr. Sergio Canavero claims that grafting a living head onto a donor's body may be possible by 2017.¹¹⁷ He discussed his plans with fellow colleagues at the American Academy of Neurological and Orthopedic Surgeons in June of 2015, but his idea was met with grave skepticism.¹¹⁸ Many attendees questioned his technique, the survivability of a human brain without blood flow, and the ethics involved.¹¹⁹ Despite the naysayers, Dr. Canavero contends that he will either attempt the surgery in America or China and already has a volunteer willing to undergo the procedure.¹²⁰ Should this idea come to fruition, whole-body donations may yield very different benefits in the future.

B. Donor Challenges

The United States Department of Health and Human Services published a list identifying broad religious support for organ donation.¹²¹ Robert Lewis, a theologian, also conducted research on policy statements regarding anatomical donations embraced by different religious sects.¹²² Of those statements, including the Presbyterian views adopted by the General Assembly in 1983 and the Disciples of Christ's opinions adopted by the General Assembly in 1985, none prohibit or-

115. *Id.* at 73.

116. Ian Sample, *First Full Body Transplant is Two Years Away, Surgeon Claims*, THE GUARDIAN (Feb. 25, 2015, 1:50 PM), <http://www.theguardian.com/society/2015/feb/25/first-full-body-transplant-two-years-away-surgeon-claim>.

117. *Id.*

118. Maggie Fox, *Surgeon Promising Head Transplant Now Asks America for Help*, NBC NEWS (June 12, 2015, 6:10 PM), <http://www.nbcnews.com/health/health-news/head-transplant-surgeon-us-you-do-it-youre-americans-n374721>.

119. Sam Thielman, *Surgeon Promising First Human Head Transplant Makes Pitch to US Doctors*, THE GUARDIAN (June 13, 2015, 8:38 PM), <http://www.theguardian.com/science/2015/jun/13/neurosurgeon-first-head-transplant-america-sergio-canavero>.

120. *Id.*

121. *Religious Views on Donation*, U.S. DEP'T OF HEALTH & HUM. SERVS., <http://organdonor.gov/about/religiousviews.html> (last visited Mar. 8, 2016).

122. Robert Lewis Jr., *Don't Bring Your Organs to Heaven, Because Heaven Knows We Need Them Here!: Theological Issues Surrounding Cadaver Organ Donation* (Dec. 10, 2003), http://people.bu.edu/wwildman/courses/thth/projects/thth_projects_2003_lewis/organ_donation.htm.

gan donation.¹²³ Lewis identified only two religious groups that forbid donation: followers of Shinto and traditional Romani.¹²⁴ The Shinto faith, originating in Japan, believes that interference with a corpse results in bad luck.¹²⁵ The National Kidney Foundation attributes Roma reluctance to donate to their beliefs surrounding the afterlife.¹²⁶

Some religions condone donations, but stipulate certain requirements expected of both the donor and donee.¹²⁷ Roman Catholics are taught to respect the body through life until death believing that all will be resurrected upon the world's end.¹²⁸ Although the church supports organ donations and considers them to be "meritorious," there are guidelines to follow should a Catholic donate their body to science.¹²⁹ They require the following: the body be treated respectfully, the body or remaining ashes receive a Christian burial, and the donation be accompanied by proper consent.¹³⁰ Despite these theological views in support of organ donation, individuals continue to identify religion as a source of refusal to donate.¹³¹ One study suggested that individuals affiliated with a religious faith were sixty to seventy percent less willing to donate their body to science.¹³² In the same context, donors reveal a willingness to donate organs, but "considerably more people object to the donation of their whole body for dissection."¹³³

Another issue impacting supply includes the lack of unconditional acceptance.¹³⁴ Many interested donors and laypeople are unfamiliar with the restrictions placed on whole-body donations.¹³⁵ Although the criteria for whole bodies are less strict compared to

123. *Id.*

124. *Id.*

125. *Organ Donation in Shinto*, BBC (Sept. 16, 2009), <http://www.bbc.co.uk/religion/religions/shinto/shintoethics/organs.shtml>.

126. *Religion and Organ Donation*, NAT'L KIDNEY FOUND., <https://www.kidney.org/atoz/content/Religion-Organ-Donation> (last visited Mar. 8, 2016).

127. *The Catholic Teaching on Donating Your Body to Science*, AGGIE CATHOLICS BLOG (Sept. 13, 2012, 4:21 PM), <http://marysaggies.blogspot.com/2010/08/catholic-teaching-on-donating-your-body.html>.

128. *Id.*

129. *Id.*

130. *Id.*

131. Ebony Boulware et al., *Whole Body Donation for Medical Science: A Population-Based Study*, 17 *CLINICAL ANATOMY* 570, 573 (2004).

132. *Id.*

133. David Price, *From Cosmos and Damian to Van Velzen: The Human Tissue Saga Continues*, 11 *MED. L. REV.* 1, 45 (2003) (citing M. Sanner, *A Comparison of Public Attitudes Toward Autopsy, Organ Donation, and Anatomical Dissection*, 271 *JAMA* 284 (1994)).

134. See generally *MEDCURE BLOG*, *supra* note 5.

135. *MEDCURE BLOG*, *supra* note 5; see also *Span*, *supra* note 3.

transplantable organs, whole-bodies are not universally accepted.¹³⁶ If a donor has certain infectious diseases, such as AIDS, HIV, or hepatitis, few body donation programs will accept the gift.¹³⁷

Disease is not the only factor for refusal.¹³⁸ Donor obesity has proven to be problematic from an educational and practical perspective.¹³⁹ The body donation program affiliated with the Cleveland Clinic was forced to refuse a six-foot, 350-pound body solely due to its size.¹⁴⁰ Complications with storage, suboptimal teaching opportunities, transportation issues, and weight limits of research equipment provide additional challenges with accepting obese donors.¹⁴¹ Conversely, some programs deny donors failing minimum weight requirements.¹⁴² For example, the Oregon Health and Science University refuses bodies weighing less than one hundred pounds.¹⁴³

The condition of the corpse also impacts the denial or acceptance of a gifted body.¹⁴⁴ If the body is severely decomposed, exposed to extreme trauma, or exhibits excessive swelling, it is likely the donation will be declined by some programs.¹⁴⁵ Likewise, academic programs refuse bodies that have had organs extracted or that have undergone an autopsy.¹⁴⁶

Lastly, inconsistent program policies affect whole-body donations.¹⁴⁷ Recalling the donation process of her late husband's body, Maureen Arrigo described the various obstacles she encountered in California.¹⁴⁸ The University of Southern California denied the body because it was not "within an hour's drive or a certain number of miles."¹⁴⁹ She then contacted Loma Linda University, but they re-

136. *Frequently Asked Questions About Full Body Donation*, BIOGIFT, <http://www.biogift.org/body-donation-faq.php> (last visited Mar. 8, 2016).

137. See, e.g., *Willed Body Donation Program*, *supra* note 106; Anteby & Hyman, *supra* note 86, at 968.

138. Jonel Aleccia, *Donating your body to science? Nobody wants a chubby corpse*, NBC NEWS (Jan. 9, 2012), <http://www.nbcnews.com/health/health-news/donating-your-body-science-nobody-wants-chubby-corpse-f1C6436539>.

139. *Id.*

140. *Id.*

141. *Id.*

142. *Body Donation Program*, OR. HEALTH & SCI. U., www.ohsu.edu/body-donation (last visited Mar. 8, 2016).

143. *Id.*

144. BIOGIFT, *supra* note 136.

145. *Id.*

146. Bushey, *supra* note 56.

147. Span, *supra* note 3.

148. *Id.*

149. *Id.*

quired the donor's own consent.¹⁵⁰ They also claimed a power of attorney was insufficient¹⁵¹ even though state law provided otherwise.¹⁵² Western University of Health Sciences finally accepted the donation by having Ms. Arrigo sign a simple document that was sent to her via email.¹⁵³ This example provides a glimpse into the radical policy variations among institutions governed by the same state laws.

C. Whole-Body Donation Process

Two types of whole-body procurement organizations exist in the United States: academic-housed and entrepreneurial ventures.¹⁵⁴ The fundamental difference between the two types of programs is how they allocate the donated bodies.¹⁵⁵ As the name implies, academic-housed programs are affiliated with schools that train medical professionals.¹⁵⁶ Most medical schools have dedicated programs that coordinate bequeathed bodies to their institutions.¹⁵⁷ The University of Florida State Anatomical Board maintains a comprehensive list of such programs and, to date, there are over 130.¹⁵⁸ When a body is accepted for donation to an academic-housed program, either post-mortem or via a will, the school is notified of the donor's death.¹⁵⁹ The school arranges for transportation of the body and the body is usually dissected by students in an anatomy lab.¹⁶⁰ Entrepreneurial ventures, on the other hand, typically distribute bodies or body parts to research facilities.¹⁶¹ Unique to the United States, these commercial ventures charge the research facilities fees associated with procurement of the corpse.¹⁶² According to the Oregon Health and Science University,

150. *Id.*

151. *Id.*

152. CAL. HEALTH & SAFETY CODE § 7150.15 (2014).

153. Span, *supra* note 3.

154. Anteby & Hyman, *supra* note 86.

155. *Id.* at 968.

156. *Id.*

157. *Body Donation Programs in the United States*, U. OF FLA. STATE ANATOMICAL BD., <http://old.med.ufl.edu/anatbd/usprograms.html> (last visited Mar. 8, 2016).

158. *Id.*

159. *Whole Body Anatomical Gift Program: Donation Process*, HOFSTRA NORTH SHORE LIJ SCH. OF MED., http://medicine.hofstra.edu/agp/agp_donation_process.html (last visited Mar. 8, 2016).

160. *Id.*

161. Anteby & Hyman, *supra* note 86, at 968.

162. *Id.*

each body donated to these commercial entities may yield a conservative \$15,000 to \$34,000.¹⁶³

D. Donor Demographics

Michel Anteby, a professor at Harvard University, conducted a comparison study of donors who bequeathed bodies to an academic-based program versus donations to an entrepreneurial venture.¹⁶⁴ The elderly provided the greatest number of donations with the average age of donors to both programs being seventy years old.¹⁶⁵ Forty-three percent of donors were married, twenty-seven percent were widowed, and twenty-one percent were divorced.¹⁶⁶ According to the donors' death certificates, ninety-three percent were categorized as "white."¹⁶⁷ Perhaps more relevant to this Note, the study discovered that ninety-one percent of donors to academia pre-registered their intent to donate, while only forty-nine percent of donors pre-registered with the entrepreneurial program.¹⁶⁸ To the latter, most often, the donor's relatives chose post-mortem donations.¹⁶⁹ Furthermore, the researchers noted that donors registered with academic-housed programs almost a decade before they died,¹⁷⁰ whereas donors to the entrepreneurial ventures gave voluntary consent only within two months or less prior to their death.¹⁷¹

163. OR. HEALTH & SCI. U., *supra* note 142.

164. Anteby & Hyman, *supra* note 86.

165. *Id.* at 965.

166. *Id.*

167. *Id.*

168. *Id.* at 964.

169. *Id.*

170. *Id.*

171. *Id.*

Part III

A. The Problem With Supply And Demand

The supply fails to meet the continued demand for whole-body donations.¹⁷² Due to the current shortage of donations, medical schools are forced to seek alternatives for anatomical instruction.¹⁷³ Some anatomy departments of undergraduate and medical schools resort to computer simulations and robotics as substitutes for human specimens.¹⁷⁴ A recent report published in *Anatomical Sciences Education* compared traditional cadaver dissection with training using digital multimedia.¹⁷⁵ The co-author of the study, Cary Roseth, suggested that “educational technology can enhance anatomy instruction but is unlikely to fully replace cadavers.”¹⁷⁶ The study concluded that the demand for cadaver donations remains high because digital means for research and training do not provide an adequate substitute.¹⁷⁷ Schools that do not rely on multimedia to supplement training simply assign more students to one cadaver.¹⁷⁸ Columbia University’s medical program claims such a practice threatens the quality of a student’s anatomy instruction.¹⁷⁹ Representatives of distinguished medical programs, such as Harvard, consider whole-body donations as an “invaluable and indispensable part of medical and dental education.”¹⁸⁰ The University of Rochester’s School of Medicine and Dentistry program states that cadavers are “essential to instructing medical students in human anatomy and are invaluable for the training of future physi-

172. Anteby & Hyman, *supra* note 86, at 963; *see also* Broder, *supra* note 79.

173. *Cadavers beat computers for learning anatomy*, PHYS.ORG (Oct. 16, 2014), <http://phys.org/news/2014-10-cadavers-anatomy.html>.

174. *Id.*

175. *Id.*

176. *Id.*

177. *Id.*

178. *Cadaver Shortage Jeopardizes Teaching*, 15 P&S J. (Fall 1995), http://www.cumc.columbia.edu/psjournal/archive/archives/jour_v15n3_0035.html.

179. *Id.*

180. *Anatomical Gift Program: Donating Your Body*, HARVARD MED. SCH., <http://hms.harvard.edu/departments/medical-education/anatomical-gift-program> (last visited Mar. 8, 2016).

cians and medical specialists.”¹⁸¹ Furthermore, they contend that “without such gifts, medical education would suffer immeasurably.”¹⁸²

Likewise, other end-users of whole-body donations experience shortages.¹⁸³ Medical advancements of the past were made possible through whole-body donations.¹⁸⁴ Without them, society would not be benefitting from pacemakers, cancer therapies, and joint replacements, just to name a few.¹⁸⁵ Medical research that depends on cadavers will likely suffer from future shortages.¹⁸⁶ However, an increased supply “for medical science could accelerate the rate of discovery, and improve the quality of medical training and procedures.”¹⁸⁷

B. Supply Is Not The Only Problem

Whole-body donation programs are certainly not free from scrutiny.¹⁸⁸ They are plagued with problems. In Phoenix, Arizona, families donated their relatives’ remains to the Biological Resource Center (BRC) in hopes that they would be used in scientific research.¹⁸⁹ In January 2014, the BRC was at the center of a three-state investigation conducted by the Federal Bureau of Investigations (FBI) and the Arizona Attorney General’s office.¹⁹⁰ The criminal investigation sought to determine whether human remains were misused and improperly screened for communicable diseases.¹⁹¹

In September 2014, although FBI agents are silent regarding the details, documents were subpoenaed from another donation center, Legacy Health, located in Portland, Oregon.¹⁹² Legacy Health operates

181. *Anatomical Gift Program*, UNIV. OF ROCHESTER SCH. OF MED. & DENTISTRY, <https://www.urmc.rochester.edu/MediaLibraries/URMCMedia/center-experiential-learning/anatomical-gift-program/documents/informational-brochure2015.pdf> (last visited Mar. 8, 2016).

182. *Id.*

183. Boulware et al., *supra* note 131, at 571.

184. *How Body Donors Help Medical Science*, MEDCURE BLOG, <http://medcure.org/how-body-donors-help-medical-science> (last visited Mar. 8, 2016).

185. *Id.*

186. Ling, *supra* note 98, at 533.

187. Anteby & Hyman, *supra* note 86, at 968.

188. Ling, *supra* note 98, at 532-33.

189. Yvonne Sanchez, *Officials Investigate Body Donations*, THE ARIZ. REPUB. (Oct. 6, 2015), <http://www.azcentral.com/story/news/politics/2014/04/26/officials-investigate-body-donations/8189495>.

190. *Id.*

191. *Feds Investigating Body Donation Programs in Three States*, FOX NEWS (Sept. 10, 2014), <http://www.foxnews.com/us/2014/09/10/feds-investigating-body-donation-programs-in-three-states> [hereinafter *Feds Investigating Body Donation*].

192. *Id.*

a body donation program that uses cadavers for medical research and surgical advancement.¹⁹³ One of the program's other facilities, located in Michigan, was also under a federal grand jury investigation.¹⁹⁴ The complete details surrounding the investigations remain unclear.¹⁹⁵ Some contend that the recent surge of investigations was due in part to the guilty plea of Ernest V. Nelson, who was sentenced to over two years in prison for grand theft, embezzlement, and tax fraud in 2009 for reselling body parts he purchased from UCLA's Willed-Body Program.¹⁹⁶

What is clear, however, is the effect of the negative publicity on future donors.¹⁹⁷ Corrina Patzer of Lions VisionGift, a well-respected ocular tissue donation program, was interviewed for an article regarding the Legacy Health investigation.¹⁹⁸ As a result of the investigation, she had to field calls from future donors questioning the validity of her program.¹⁹⁹ Those calling her office sought assurance that Lions VisionGift was not one of the organizations they had read about in the news.²⁰⁰ Future donors may be discouraged from bequeathing their bodies, and those that have already pre-registered their intent to donate may "rescind their contracts."²⁰¹

Past donors are equally worried.²⁰² Those that have donated their relative's remains are concerned that the bodies are not being used for their intended purposes.²⁰³ Joyce Gingrich's mother, Adelyne Douglass, had hoped that one day her body would be used to advance research of Alzheimer's disease.²⁰⁴ To fulfill her wishes, Douglass's body was destined for BRC mere hours after her death.²⁰⁵ The facility

193. *Body Donation Program*, LEGACY HEALTH, <http://www.legacyhealth.org/for-health-professionals/legacy-research-institute/lisei-surgical-education/body-donation-program.aspx> (last visited Mar. 8, 2016).

194. *Feds Investigating Body Donation*, *supra* note 191.

195. Nick Budnick, *FBI Investigates Legacy Health Body Donation Program, But Details Are Hazy*, THE OREGONIAN (Sept. 8, 2014, 6:43 PM), http://www.oregonlive.com/health/index.ssf/2014/09/fbi_investigates_legacy_health.html.

196. Aaron Mesh, *Posthumous Legacy: The FBI is Investigating How Legacy Health Obtained Cadavers for Scientific Research*, WILLAMETTE WEEK (Aug. 26, 2014, 6:43 PM), http://www.wweek.com/portland/article-22994-posthumous_legacy.html; *see also* Ling, *supra* note 98.

197. Budnick, *supra* note 195.

198. *Id.*

199. *Id.*

200. *Id.*

201. Ling, *supra* note 98, at 533.

202. *See* Sanchez, *supra* note 189.

203. *Id.*

204. *Id.*

205. *Id.*

was raided within four days of Douglass's donation.²⁰⁶ When Douglass's remains were returned to her daughter four weeks following the donation, Joyce Gingrich questioned BRC about the usefulness of her mother's body.²⁰⁷ Gingrich was told that most of the tissues had rotted.²⁰⁸ Gingrich's obvious disappointment was expressed in her statement: "[o]ur sadness is that on top of all this, now we do not believe anything from our mom was able to be used, because if it wasn't destroyed, it obviously . . . wasn't kept the way it should've been."²⁰⁹ As a result of the BRC investigation, the Arizona Attorney General's office received over 600 phone calls from families that donated loved ones.²¹⁰

This negative publicity did not only raise concerns with past and future donors, it raised awareness among lawmakers.²¹¹ A recent federal bill proposed by an Arizona Representative, titled the "Label and Transport Tissues Safely Act (LT TSA) of 2014," would require that *all* human tissue transported in interstate commerce for purposes of research or education be performed by a licensed tissue bank.²¹² The bill was introduced just six months after the raid on the Arizona BRC facility mentioned above.²¹³ Although the bill is unlikely to pass, such quick action by the general assembly shows that lawmakers are not sitting idle amidst these reports.²¹⁴

C. Current State of Affairs

Healthcare is one of the most highly regulated industries in the nation.²¹⁵ Transplantable organs are no exception; however, whole-body donations are largely immune from similar oversight. Revisiting the legal framework introduced in Part I, the laws governing whole-body donations for research and medical education first sur-

206. *Id.*

207. *Id.*

208. *Id.*

209. *Id.*

210. *Id.*

211. Label and Transport Tissues Safely Act of 2014, H.R. 5318, 113th Cong. § 2 (2014).

212. *Id.*

213. *Id.*

214. *Bill Prognosis Analysis*, GOVTRAK, <https://www.govtrack.us/about/analysis#prognosis> (last visited Mar. 8, 2016).

215. Michael A. Morrissey, *Healthcare*, THE CONCISE ENCYCLOPEDIA OF ECONOMICS, <http://econlib.org/library/Enc/HealthCare.html> (last visited Mar. 8, 2016).

faced in 1968 with the UAGA.²¹⁶ Technological advancements, the changing legal environment, and state modifications to the 1968 version, prompted reforms.²¹⁷ The Uniform Law Commission developed another version to address those needs.²¹⁸ More specifically, the updated version attempted to streamline anatomical donations via simplification of donor consent forms and prohibition of post-mortem revocation of donors' intentions,²¹⁹ but only twenty states enacted it.²²⁰ Due to the lackluster, inconsistent adoption, the revised Act was virtually ineffective.²²¹

Acknowledging the shortcomings of the 1987 version, the National Conference of Commissioners developed another version of the Act in 2006. It proved to be a more promising, influential guide than its predecessor.²²² The most recent changes focused on improving allocation and access to organs on behalf of transplant recipients, though some updates affected whole-body donations as well.²²³ More specifically, whole-body donations were strengthened in the following ways: prohibiting post-mortem revocation of donor intent, broadening the list of legal decision-makers on behalf of the deceased, authorizing a class majority's decision to override a single individual's refusal, and encouraging state-wide donor registries.²²⁴ Forty-six states had already adopted the Act, or some form of it, by 2014.²²⁵ Pennsylvania is the latest state to have introduced the UAGA of 2006 in its legislature in January 2013.²²⁶

Even though there are laws in place addressing an individual's right to donate, whole-body donations are largely unregulated thereafter.²²⁷ Unlike organ donations destined for transplantation, there are no comprehensive federal or state laws dictating how whole-body donation programs must operate. New York has the strictest laws

216. UNIF. ANATOMICAL GIFT ACT (1968) (amended 2006).

217. Kurtz et al., *supra* note 65, at 44.

218. *Id.*

219. *Id.*

220. *Id.*

221. *Id.*

222. *Id.*

223. *Id.*

224. UNIF. ANATOMICAL GIFT ACT §§ 7-10, 20 (1968) (amended 2006).

225. *Legislative Fact Sheet—Anatomical Gift Act (2006)*, UNIF. LAW COMM'N, <http://www.uniformlaws.org/LegislativeFactSheet.aspx?title=Anatomical%20Gift%20Act%20%282006%29> (last visited Mar. 8, 2016).

226. *Id.*

227. *See, e.g.*, UNIF. ANATOMICAL GIFT ACT (1968) (amended 2006); National Organ Transplant Act, 42 U.S.C. § 273 et seq. (2012).

governing non-transplantable organs and tissues, requiring state licensure to operate such facilities.²²⁸ In contrast, Oregon recently passed a law to regulate the industry, but exempted hospitals and medical schools from regulatory oversight.²²⁹

The closest oversight of whole-body donation programs comes by way of voluntary accreditation.²³⁰ The American Medical Education and Research Association (AMERA) provides two different levels of certification to whole-body or non-transplantable facilities.²³¹ AMERA's mission is focused on improving both the facility's standards and the industry's credibility.²³² The organization has been a formidable force in lobbying efforts at the state level for regulation of non-transplantable donations.²³³ Lobbying efforts were performed in Oregon and Florida as recently as 2013,²³⁴ with substantial efforts in Texas, Arizona, New Jersey, and Minnesota.²³⁵

The closest federal regulatory effort addressing whole-body donation was the previously mentioned LTTSA bill.²³⁶ Even if the law was to pass, the federal regulation would be limited to only those bodies that would qualify as interstate commerce.²³⁷ Moreover, the proposed Act suggests narrow oversight regarding the appropriate labeling and transportation of the corpses.²³⁸ Absent from the proposed legislation are issues such as processing, payment, procurement and organization standards.²³⁹

Part IV

228. N.Y. PUB. HEALTH L. § 4362 (2015).

229. UNIF. ANATOMICAL GIFT ACT c.681 §1 (West 2015).

230. *Guidance for Industry*, AM. MED. EDU. & RESEARCH ASS'N, http://www.ameraus.org/AMERA_Guidance_for_Industry_NAT_ULTRIO_PLUS_Public_Release.pdf (last visited Mar. 8, 2016).

231. *Accreditation*, AM. MED. EDU. & RESEARCH ASS'N, <http://www.ameraus.org/accreditation> (last visited Mar. 8, 2016).

232. *Id.*

233. Quinn Morrison, *Important Work: Promote Citizen's Rights*, AM. MED. EDU. & RESEARCH ASS'N (Oct. 22, 2013), <http://www.ameraus.org/about/important-work>.

234. *Id.*

235. *Id.*

236. Label and Transport Tissues Safely Act of 2014, H.R. 5318, 113th Cong. (2014).

237. *Id.* at § 2.

238. *Id.*

239. *Id.*

A Glimpse Into The Current Debate

From presumed consent laws to commercialization, scholars have theorized possible solutions to end the donation crisis.²⁴⁰ The majority of debates have focused on transplantable-organ donation addressing the diminishing supply.²⁴¹ But, the same considerations can be applied to whole-body donations as well.

Over twenty years ago, Linda Fentiman viewed organ donation as “an act of community service” similar to joining the Peace Corps.²⁴² She suggested that organ donors be compensated with health and education benefits similar to those in the military.²⁴³ The basis of her model statute was presumed consent,²⁴⁴ i.e., the presumption being that, at the time of an individual’s death, they are willing organ donors.²⁴⁵ She suggested that physicians would no longer be compelled to approach a grieving family to discuss donation resulting in a more efficient organ procurement process.²⁴⁶ To support her argument, Fentiman suggested that many states already have some version of presumed consent laws allowing medical examiners or coroners to harvest corneas from individuals subjected to mandatory autopsies.²⁴⁷ In anticipation of autonomy and self-determination objections to her model statute, Fentiman noted six ways an individual could opt out of the presumed consent—application or renewal of a driver’s license, filing a tax return, applying for government benefits such as disability, doctor visits, explicit refusal if asked by a healthcare provider, and through living wills or proxies.²⁴⁸ Furthermore, she supported her compensation structure, noting that everyone benefits from the donated organ except the donor.²⁴⁹

240. Banks, *supra* note 2, at 46; Linda Fentiman, *Legislative Model: Organ Donation as National Service: A Proposed Federal Organ Donation Law*, 27 SUFFOLK U. L. REV. 1593, 1598 (1993); see also Maryellen Liddy, Note, *The “New Body Snatchers:” Analyzing the Effect of Presumed Consent Organ Donation Laws on Privacy, Autonomy, and Liberty*, 28 FORDHAM URB. L.J. 815, 818 (2001).

241. Liddy, *supra* note 240.

242. Fentiman, *supra* note 240, at 1598.

243. *Id.*

244. *Id.*

245. *Id.* (defining a qualified individual as one that is mentally competent and over the age of eighteen).

246. *Id.* at 1598-99.

247. *Id.* at 1599.

248. *Id.* at 1600.

249. Fentiman, *supra* note 240, at 1601; see also Kristy L. Williams, *Just Say No to NOTA: Why the Prohibition of Compensation for Human Transplant Organs in NOTA Should be Repealed and a Regulated Market for Cadaver Organs Instituted*, 40 AM. J. L. MED. 275, 301-17 (2014).

As expected, current presumed-consent laws allowing cornea, eye and pituitary gland extractions by coroners have been criticized.²⁵⁰ Michele Goodwin identified some opponents' concerns, namely: issues with transmission of disease, transplantation of low-quality organs, and the fundamental "failure to obtain consent."²⁵¹ Goodwin notes that there is a heightened risk of communicable disease in cases subject to mandatory autopsies.²⁵² Medical histories are often unobtainable for these individuals, especially in circumstances involving the homeless.²⁵³ Corneas infected with hepatitis B, for example, can be transmitted to the donee.²⁵⁴ Goodwin further suggests that the lack of medical histories may lead to transplantation of low-quality materials.²⁵⁵ Arguably, the cadavers could be tested for diseases prior to extracting the organs and the organs themselves can be examined for quality prior to transplantation.

Lastly, opponents of presumed-consent laws struggle with legal and ethical problems resulting from the failure to obtain consent.²⁵⁶ Maryellen Liddy equates the practice to "body snatching."²⁵⁷ For further support, such opponents cite state and federal cases recognizing privacy, autonomy, and liberty interests in one's body.²⁵⁸ The legality of presumed consent has been tested in both state and federal courts.²⁵⁹ State courts in the 1980s and early 1990s consistently found that presumed consent laws were constitutional.²⁶⁰ However, in 1999, the Sixth Circuit decided a case involving the nonconsensual removal of corneas from a woman's dead husband over her explicit objection.²⁶¹ The donation refusal was noted by the hospital in the man's medical record and the body was sent to the county coroner for a mandatory

250. Goodwin, *supra* note 1, at 268.

251. *Id.*

252. *Id.*

253. *Id.*

254. *Id.* at 283.

255. *Id.* at 268.

256. Goodwin, *supra* note 1, at 268-78; *see also* Liddy, *supra* note 240.

257. Liddy, *supra* note 240, at 821.

258. *See id.*

259. Williams, *supra* note 249, at 275; *see* Whaley v. Tuscola, 58 F.3d 1111, 1112 (6th Cir. 1995); Brotherton v. Cleveland, 923 F. 2d 477, 477 (6th Cir. 1991); State v. Powell, 497 So. 2d 1188, 1189 (Fla. 1986); Georgia Lion Eye Bank, Inc. v. Lavant, 335 S.E. 2d 127, 127-28 (Ga. 1985); Tillman v. Detroit Receiving Hosp., 360 N.W. 2d 276, 277 (Mich. Ct. App. 1984).

260. Alexander Powhida, Note, *Forced Organ Donation: The Presumed Consent to Organ Donation Laws of the Various States and the United States Constitution*, 9 ALB. L. J. SCI. & TECH. 349, 361 (1999).

261. Brotherton v. Cleveland, 173 F.3d 552, 556 (6th Cir. 1999).

autopsy to rule out suicide.²⁶² The court noted that the county coroner “established a policy of intentional ignorance” when he directed staff to virtually ignore any paperwork that may contain objections to cornea donations.²⁶³ The court ultimately held that “a surviving spouse’s right to control the disposal of her husband’s body formed a constitutionally protected interest in the body” under the Fourteenth Amendment.²⁶⁴ The Supreme Court has not ruled on the issue as of the date of this Note.

In support of presumed consent laws, one scholar compared them to state intestate statutes.²⁶⁵ Samantha Wilcox identified a number of similarities between Pennsylvania’s intestacy statutes and presumed consent.²⁶⁶ Pennsylvania’s default intestacy statute provides for property distribution if an individual does not “opt-out” by delegating distribution via a will.²⁶⁷ The idea is to maintain usefulness of the deceased’s property.²⁶⁸ Wilcox compared this notion with the usefulness of one’s body upon death, highlighting that there is a particular need at a time when organs are in such short supply.²⁶⁹ She also noted other parallels with respect to intestate default rules in that both types of laws provide for an opportunity for the individual to “opt-out.”²⁷⁰

Another solution advanced by scholars to cure the donation crisis is the commercialization of organs.²⁷¹ Kristy Williams suggests that the National Organ Transplantation Act (NOTA) should be revoked to allow for a regulated organ donation market.²⁷² The Act currently prohibits “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.”²⁷³ Williams sought support for her proposal by comparing the modern commercialization of body parts, fluids, and tissues in the United

262. *Id.*

263. *Brotherton v. Cleveland*, 923 F.2d 477, 478-82 (6th Cir. 1991).

264. Williams, *supra* note 249, at 284-85.

265. Samantha A. Wilcox, Comment, *Presumed Consent Organ Donation in Pennsylvania: One Small Step for Pennsylvania, One Giant Leap for Organ Donation*, 107 DICK. L. REV. 935, 940 (2003).

266. *Id.* at 941.

267. *Id.*

268. *Id.*

269. *Id.*

270. *Id.*

271. Williams, *supra* note 249, at 301-17.

272. *Id.* at 314.

273. 42 U.S.C. § 274e (2014).

States.²⁷⁴ The commercial exchange of products such as blood, reproductive material, breast milk, and hair comprise a billion-dollar industry.²⁷⁵

It is important to mention that NOTA currently exempts commercialization of whole bodies.²⁷⁶ Namely, the law distinguishes between those body organs destined for transplantation and those used for dissection.²⁷⁷ Cadavers used for non-transplantable purposes, such as those mentioned in Part II, are absent from this federal mandate.²⁷⁸ Likewise, most state laws have identical provisions prohibiting the selling of only body parts.²⁷⁹ Whole bodies are once again excluded from most states' regulation.²⁸⁰ Thus, this leads to an alternate legal question considered by many in modern discussions:²⁸¹ can we sell our own bodies upon our death? Notwithstanding property, contract, and public policy arguments, individuals can seemingly sell their bodies in those states that do not prohibit it.²⁸²

In a state survey conducted by Kristy Williams, Marissa Finley and James Rohack in 2014, only two states specifically prohibit both the selling of body parts and whole bodies—Delaware and Georgia.²⁸³ In the remaining forty-eight states, statutes either prohibit the selling of only body parts by distinguishing between parts and whole bodies, or simply exclude whole bodies in their lists of forbidden post-mortem sales.²⁸⁴ Thus, in those remaining forty-eight states, neither statutory regulation nor federal governance specifically prohibit an

274. Williams, *supra* note 249, at 304-05.

275. *Id.* at 305.

276. 42 U.S.C. § 274e.

277. *Id.*

278. *Id.*

279. Williams, *supra* note 249, at 323-29 (comparing state laws prohibiting the sale of bodies or body parts in Table 2 with only a handful of states prohibiting the sale of both body parts and one's entire body).

280. *Id.*

281. See *Why shouldn't we be able to sell our body parts to the medical industrial complex to be used after death?*, YAHOO ANSWERS BLOG, https://answers.yahoo.com/question/index;_ylt=A0LEVj42ecjVuXMATOUnnlIQ;_ylu=X3oDMTE0bWVrNjVlBGNvbG8DYmYxBHBvcwMyBHZ0aWQDRkZYVUkzNV8xBHNlYwNzYw-?qid=20120407122836AAfBuZL (last visited Mar. 8, 2016); see also Donna Freedman, *How to Donate Your Body to Science*, GET RICH SLOWLY BLOG (Jan. 30, 2012), <http://www.getrichslowly.org/blog/2012/01/30/how-to-donate-your-body-to-science/#comments> (saying it is a double standard that someone else can profit from a body and/or parts but the actual donor).

282. Williams, *supra* note 249, at 323-29.

283. *Id.*

284. *Id.*

individual from selling their whole body upon death.²⁸⁵ However, the next logical questions remain: who would buy it, and for what price?

As to the first question, medical schools and other research facilities currently obtain their specimens through a donation process.²⁸⁶ It would seem illogical for them to start paying for bodies when they can get them donated. As to price, the first inclination of some may be to turn to the life insurance industry for analysis. The inherent problem with using life insurance is that pricing is based on the loss of life, as opposed to life already lost.²⁸⁷ Another method may be to set a price based on market rates or an industry standard, but none truly exist. The only market or industry standard is reflected in the processing, transportation, and handling costs—the costs currently allowed to be charged for donated bodies and body parts—affiliated with donations.²⁸⁸

In reality, there may not even be a market for a dead body, but an individual opting to sell theirs would likely garner support from Fentiman cited above.²⁸⁹ More specifically, if people were able to sell their bodies upon death, the donee would no longer be the only one benefitting from another's death.

Part V

Recommendation

The following recommendation is twofold. The first section suggests procedural adoptions while the second section offers substantive proposals.

When NOTA was passed in 1984, the legislation established a nationwide network called the Organ Procurement and Transplantation Network (OPTN).²⁹⁰ The network is a computerized database that operates as a matching system.²⁹¹ The network is wholly operated by a

285. *Id.*

286. *Anatomical Gift Program: Donating Your Body*, HARVARD MED. SCH., <http://hms.harvard.edu/departments/medical-education/anatomical-gift-program> (last visited Mar. 8, 2016); Anteby & Hyman, *supra* note 86.

287. *How The Cost of Life Insurance is Determined*, NEW YORK STATE DEP'T OF FIN. SERVS., http://www.dfs.ny.gov/consumer/cli_h_cost.htm (last visited Mar. 8, 2016).

288. OR. HEALTH & SCI. U., *supra* note 142.

289. Fentiman, *supra* note 240, at 1601.

290. 42 U.S.C. § 274 (2014).

291. *Id.*

private, non-profit organization known as the United Network for Organ Sharing (UNOS).²⁹² The UNOS maintains a national list of patients in need of organ transplants, and provides matching services between available donors and recipients.²⁹³ Unlike this national registry for transplantable organs, whole-body donation programs do not have such a system at the national level.²⁹⁴ The effectiveness and success of OPTN should be expanded to include whole-body donations.²⁹⁵

Since the network is already in place, and has been for almost thirty years,²⁹⁶ there would be no need to reinvent the proverbial wheel. Whole-body donors would register with the national database. When the donor dies, UNOS subsequently matches the donor with the institutional recipient.²⁹⁷ This system would also alleviate issues related to donation refusals by various procurement agencies. In this proposal, UNOS would maintain a comprehensive guide regarding program acceptance policies. For those programs that do not accept obese donors or those missing organs, the network could pair the donor with a program that would welcome such a donation. Additionally, since UNOS already operates the national organ system, they are uniquely aware of specific organs that have been donated by a certain donor.²⁹⁸ They could leverage the remaining usefulness of the body by identifying another end-user that would benefit from partial-body donations. Lastly, since some facilities conduct experiments on diseased organs that would otherwise be unsuitable for transplantation, UNOS would be capable of matching diseased organs with institutions willing to take them as well. The transition of incorporating donated whole bodies into this national registry framework would presumptively pose a small, short-term burden on the efficient system currently in place.

292. *About: Who we are*, UNITED NETWORK FOR ORGAN SHARING, <http://www.unos.org/about/> (last visited Mar. 8, 2016).

293. *Id.*

294. *See* 42 U.S.C. § 274.

295. *Id.*

296. *Id.*

297. *How organs are matched*, UNITED NETWORK FOR ORGAN SHARING, <https://www.unos.org/transplantation/matching-organs/> (last visited Mar. 8, 2016); *see Facts about organ donation*, UNITED NETWORK FOR ORGAN SHARING, <https://www.unos.org/donation/facts/>.

298. *How organs are matched*, *supra* note 297 (When an organ procurement organization gets consent for an organ donor, it also enters medical data information -such as the donor's blood type and body size and the location of the donor hospital- into UNOS' network.).

If a national system for whole-body donations is not feasible, then individual state allocation systems should be established. Some states already have such allocation systems regarding bodies destined for medical schools.²⁹⁹ For example, the Anatomical Gift Association of Illinois, founded in 1913, represents medical schools in Illinois and acts as a liaison between donors and donees.³⁰⁰ The association “receives, prepares, preserves and distributes human remains for the purpose of medical education and research at institutions throughout Illinois.”³⁰¹ Illinois is not the only state with a centralized system.³⁰² A few states have State Anatomy Boards that coordinate body donation programs.³⁰³ Maryland’s Anatomy Board accepts anatomical donations on behalf of medical schools, dental schools, and physician residency and training programs.³⁰⁴ These state-run agencies provide ample examples of how efficient systems could potentially operate. Each medical or research facility vying for the cadavers is placed in a pool, and the available, donated corpses are allocated based on need.³⁰⁵ Other states could, and should, replicate similar systems.

The third procedural recommendation involves public awareness campaigns for whole-body donations. Individual states have attempted to increase donations through regional campaigns;³⁰⁶ however, a centralized effort would seemingly produce better results. Individual “donor programs vary widely in efficacy and rigor” with respect to soliciting more donors.³⁰⁷ Many individuals that are interested in donating their body to science do not know the first steps in the process.³⁰⁸ Laypersons lack the knowledge of where to go and

299. See, e.g., *About us: What does the AGA do*, THE ANATOMICAL GIFT ASS’N OF ILL., <http://www.agaillinois.org/about.htm> (last visited Mar. 8, 2016).

300. *Id.*

301. *Id.*

302. See, e.g., *The Gift of Leaving Your Body to Science*, UNIV. OF COLO. SCH. OF MED., <http://www.ucdenver.edu/academics/colleges/medicalschoo/departments/CellDevelopmentalBiology/anatomicalboard/Pages/default.aspx> (last visited Mar. 8, 2016).

303. *Id.*

304. *Frequently Asked Questions*, MD. DEP’T OF HEALTH & MENTAL HYGIENE, <http://dnhm.maryland.gov/anatomy/SitePages/faqs.aspx> (last visited Mar. 8, 2016).

305. *How organs are matched*, *supra* note 297.

306. *Sign Up To Save Lives’ Campaign Launched To Increase Number of Organ Donors In New York*, GOOD SAMARITAN HOSP. MED. CTR., <http://gshlegacy.chsli.org/index.php/latest-news/389-organ-donors> (last visited Mar. 8, 2016).

307. Neela Dasgupta, *Unclaimed Bodies at the Anatomy Table*, 291 JAMA 122, 122 (Jan. 7, 2004).

308. See *FAQs About Body Donation*, MEDCURE, <http://medcure.org/how-body-donors-help-medical-science> (last visited Mar. 8, 2016).

what to do. Awareness campaigns have been advanced by the federal government through NOTA,³⁰⁹ and they could be conducted at both the federal and state levels with respect to whole-body donations. One particular initiative aimed at engaging the transplant community, called the Organ Donation Breakthrough Collaborative, experienced some success.³¹⁰ The goals of the initiative set out to identify barriers to the conversion of non-donor to donor, and to “encourage rapid adoption of measures to positively influence conversion rates.”³¹¹ The outcomes between 2003 and 2005 revealed a marked improvement.³¹² The donor conversion rate increased five percent in just two years.³¹³ Such initiatives should be expanded to include awareness efforts for *all* anatomical donations, not just individual organs.

The second half of the recommendation proposes substantive reforms. The first of these proposals focuses on donor awareness efforts, but from a legislative perspective. Recall the discussion in Part I regarding measures added to the Medicare participation requirements.³¹⁴ The law currently directs health professionals to engage in organ-donation discussions with patients and their families.³¹⁵ Furthermore, hospitals must notify organ procurement agencies when a potential donor is identified.³¹⁶ The Social Security Act should be revised to include mandatory discussions of whole-body donations as well. Presumably, health care providers are more equipped to handle such sensitive conversations with their patients. Similarly, they are in a better position to answer questions that the individual or family may have regarding the donation process. If the potential donor and family are knowledgeable about the options available for their dearly departed, their consent could adequately be informed.

Also, as previously mentioned, not all states have adopted the UAGA of 2006, or if they have codified the Act, many have modified versions.³¹⁷ If states do not maintain consistent donation frameworks, there is a strong likelihood that a donor’s intent to donate or refusal to donate may be overridden. Absent from prior versions of the UAGA

309. Jeffery D. Punch et al., *Organ Donation and Utilization in the United States, 1996-2005*, AM. J. OF TRANSPLANTATION 1327, 1327 (2007).

310. *Id.* at 1331-35.

311. *Id.* at 1331.

312. *Id.*

313. *Id.*

314. See discussion *supra* Part I.

315. 42 U.S.C.S. § 1320(b-8)(a)(1)(A)(i-iii) (2014).

316. *Id.*

317. See discussion *supra* Part III.

was prioritization of donations if the donor's wishes were ambiguous.³¹⁸ That changed with the introduction of a "decision-tree" included in the UAGA of 2006.³¹⁹ It essentially prioritizes the utilization of a corpse.³²⁰ The table provides that if a donor specifies a whole-body donation for purposes of education or research, the anatomical gift will be given to the named entity as instructed by the donor.³²¹ On the other hand, if a donor fails to specify a particular part of their body to be donated, yet identifies multiple purposes such as transplantation, therapy, and education, first priority is given to transplantation.³²² Second priority is afforded to research and education.³²³ Lastly, if a general gift is identified, without a specified purpose or donee, the UAGA states that the whole body may not be donated and any parts can solely be used for transplantation or therapy purposes.³²⁴ These clarifications provide consistency in a time of a family's despair. If all states adopt a common legal framework, the consistency will allow any discrepancies in a donor's wishes to be decided more quickly.

Additionally, and perhaps most importantly, is the recommendation for states to establish online, donor registries for whole-body donations. This would facilitate a simplified process for registration and subsequent enactment of a donor's wishes. These electronic registries could be made available to health care organizations, funeral homes, and organ procurement agencies for ease of access when handling the deceased. This process would also allow these organizations to ascertain the wishes of the donor at the click of a button. In addition to donor registries, states should implement an equally broad system to include non-donors who have made explicit refusals to donate. This too would simplify the process for determining the deceased's wishes.

318. See Kurtz et al., *supra* note 65, at 46 ("Anatomical gifts can be made for the purposes of transplantation, therapy, research, or education. Prior law, unlike the 2006 UAGA, made no attempt to prioritize these purposes, either when the donor authorized all four, when the donor authorized some, or when the donor failed to specify any.").

319. UNIF. ANATOMICAL GIFT ACT § 11 (NAT'L CONF. OF COMM'RS ON UNIF. STATE LAWS 2006).

320. *Id.*

321. *Id.*

322. *Id.* at (d).

323. *Id.*

324. *Id.* at (f).

Part VI**Conclusion**

Whole-body donations provide society with a means for the dead to teach the living. Today's advancements in medicine and training provide the innovations of tomorrow. If the supply of whole bodies continues to fall short of the demand, it is probable that medical training and advancements will be negatively impacted. Should this occur, a new debate would likely surface shifting focus from individual organ donation to whole-body acquisitions. If solutions are implemented now, our nation could avoid these detrimental effects. The supply of cadavers could keep pace with the demand and the deceased can continue to teach the living.