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Fetal Tissue Research: Legal Regulation Of Human Fetal Tissue Transplantation

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FETAL TISSUE RESEARCH: LEGAL REGULATION OF HUMAN FETAL TISSUE TRANSPLANTATION

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[A]bortion is legal in this country. By this veto the President will not stop women from having abortions. But he will prevent researchers from finding cures for deadly diseases.¹

[Fetal research is] neither pro-choice nor pro-life—it is pro-science.²

—Congressman Porter, commenting on President Bush using the veto to maintain the recent ban on federal funding of fetal tissue research.

I. INTRODUCTION

In the United States, over one and a half million elective abortions occur annually.³ The fetal remains, often a macerated mass of tissue, are usually incinerated or thrown into a dumpster.⁴ Recent medical research suggests that implantation of tissue from aborted fetuses may benefit the victims of Parkinson's disease, diabetes, Alzheimer's disease, and other debilitating diseases, which together disable and kill millions of Americans.⁵ Thus, the technology of fetal tissue transplantation prevents some of the fetal tissue from being disposed of as organic trash and enables the tissue to be used for valuable life-saving techniques.

The technology of fetal tissue transplants, however, stands threatened by the debate on the morality and legality of abortion.⁶ In addition to the moral and ethical concerns raised by the fact that fetal tissue is derived from aborted fetuses, the novelty of fetal tissue transplantation has renewed

1. 138 CONG. REC. H5090-91 (daily ed. June 24, 1992) (statement of Rep. Porter).

2. *Id.* at H5090.

3. John A. Robertson, *Fetal Tissue Transplants*, 66 WASH. U. L.Q. 443, 448 (1988). Approximately 95% of elective abortions occur in the first trimester of pregnancy. *Id.*

4. *Id.* at 449; see also *Margaret S. v. Edwards*, 794 F.2d 994, 1003 (5th Cir. 1986) (Williams, J., concurring) (“[a] common method for disposing of fetal remains in many abortion clinics is through the local sewer system”). Some jurisdictions, however, have enacted fetal disposal laws designed to protect human health or demonstrate respect for aborted fetuses. See *infra* notes 270-93 and accompanying text (discussing state cadaver and fetal disposal statutes).

5. See Dick Thompson, *When Abortions Save Lives*, TIME, Apr. 6, 1992, at 52-53. See generally Kathleen McAuliffe, *Cures From Aborted Fetal Tissue; A Startling Fount of Healing*, U.S. NEWS & WORLD REP., Nov. 3, 1986, at 68 (discussing prospects of use of fetal tissue to cure diabetes, Parkinson's disease, Alzheimer's disease, spinal cord injuries, and cancer).

Thompson quotes a 65-year old Alabama woman whose severe Parkinson's disease is about “80%” relieved due to an experimental fetal tissue transplant. Despite her lack of formal training in law or ethics, her statement is perhaps the most insightful in the literature: “If everyone involved in the debate could have Parkinson's for one month, they'd change their minds.” Thompson, *supra*, at 53.

6. Thompson, *supra* note 5, at 53; see also Robertson, *supra* note 3, at 443; Beverly R. Burlingame, Note, *Commercialization in Fetal-Tissue Transplantation: Steering Medical Progress to Ethical Cures*, 68 TEX. L. REV. 213, 214 (1989). Prior to abortion becoming legalized in the 1970s, minimal opposition existed to the use of fetal tissue in medical research. Angela M. Skerrett, Comment, *Fetal Tissue Research and Abortion: Do They Have a Future Together?*, 13 CAMPBELL L. REV. 81, 82-83 (1990).

the debate over the protection to which a fetus may be entitled.⁷ Some feel the crux of the controversy over experimentation with aborted fetuses is the conflict between the competing interests of protecting the unborn and advancing medical science.⁸ Others, however, feel that once the fetus is aborted, it has no interest to protect. Even though the transplantation of fetal tissue is experimental, the subject of the experiment is not the fetus, but rather the recipient of the transplant.⁹

The debate about abortion must be separated from the subsequent use of fetal tissue if scientists are to make progress in a technology that can offer hope and relief to several million Americans.¹⁰ Although both of the authors support the right of reproductive choice and therefore the right to abortion, this Article will address its arguments to those who oppose abortion. It will be demonstrated that even those who oppose abortion have no plausible, logical basis for opposing fetal tissue research. The recent federal "pro-life" moratorium¹¹ on fetal research, for example, was a victory of blind emotion over logic.

If fetal tissue research on electively aborted fetuses is to continue, further controversy exists over who should decide whether to donate fetal remains. There are some reasons to challenge the placing of decision-making power solely with the mother. Yet, no alternative exists which is more feasible and which would not unduly burden the mother's right to choose abortion for reasons unrelated to the use of fetal tissue. Further, the major objections to a maternal power of disposition—that doctors in need of tissue will encourage women to have abortions and that some women will conceive solely to abort and gain tissue for themselves or relatives—can be easily overcome by narrowly tailored restrictions.

7. See generally Robertson, *supra* note 3, at 447-63. Bioethical issues arise in obtaining tissue from a cadaver that is clearly dead because the resulting tissue contains cells that have the potential to survive for a short time following the death of the cadaver. Tamar Lewin, *Medical Use of Fetal Tissue Spurs New Abortion Debate*, N.Y. TIMES, Aug. 16, 1987, at 1.

8. Albert R. Jonsen, *Transplantation of Fetal Tissue: An Ethicist's Viewpoint*, 36 CLINICAL RES. 215 (1988).

9. *Id.* at 218.

10. On a world-wide basis, the potential becomes astronomical.

11. *But see infra* note 92 and accompanying text (arguing that true motivation for moratorium may not be sanctity of life). A particularly insightful student commentator notes, [t]ragically, the interest which the ban on federal funding sought to protect most of all, that of the fetus, suffers most greatly for it. Without the force of the federal regulations protecting human subjects of research, human fetuses involved in transplantation research could conceivably be artificially kept alive . . . until such time as their tissues can be harvested for use.

Theodore M. Hess-Mahan, Note, *Human Fetal Tissue Transplantation Research: Entering a Brave New World*, 23 SUFFOLK U. L. REV. 789, 823 (1989). The Clinton administration promptly lifted the ban, provoking a debate about funding. See Federal Funding of Fetal Tissue Transplantation Research, 58 Fed. Reg. 7457 (1993) (memorandum from President Clinton to Secretary of Health and Human Services lifting moratorium on federal funding of fetal tissue research); see also Steven Greehouse, *Settling In: Abortion Policy; Protest and Praise Over Clinton's Orders*, N.Y. TIMES, Jan. 24, 1993, § 1, at 21.

Finally, there are discreet areas in which the state may justifiably limit the mother's decisional authority in order to protect the public health or to protect the dignity of the fetus, itself, as a dead body. These areas will be identified and carefully limited. It is important to keep in mind in evaluating such limitations, however, that the abortion question is unrelated to the mother's right to choose whether to donate fetal remains and legitimate state regulation should not be used surreptitiously as a means to strike out at abortion.

Part II of this Article discusses technological developments and explains certain aspects of the medical background, an understanding of which is crucial to the discussion that follows. Part III discusses the debate over using legal and governmental institutions to encourage fetal tissue transplantation research. Part IV outlines the law regulating the use of fetal tissue. Part V discusses the question of who should decide whether or not to donate fetal remains and concludes that this decisional authority should rest with the mother. Part VI discusses those restrictions on this decisional authority which the state may and may not rightfully impose. Part VII offers a conclusion and summarizes the trends in the law in relation to the fetal tissue transplantation issue.

II. BACKGROUND

Although fetal tissue transplantation is still highly experimental, recent medical studies involving tissue from aborted fetuses suggest that it may be an effective therapy for diseases in which degenerative processes or traumatic injuries have destroyed vital tissue.¹² Scientists estimate that fetal tissue transplants could help approximately "one million Parkinson's patients; 2.5 to 3 million persons affected with Alzheimer's disease; 25,000 persons suffering from Huntington's disease; 600,000 Type I diabetics; 400,000 stroke victims; and several hundred thousand persons who have suffered a spinal cord injury."¹³ In total nearly five million lives might be saved in the United States alone. Currently, fetal transplantation experiments are underway for the treatment of many other diseases including sickle cell anemia, leukemia, and Acquired Immune Deficiency Syndrome (AIDS).¹⁴ Success of this research could vastly raise the number of persons whose lives could be saved.

Fetal tissue transplantation involves injecting electively aborted fetal tissue into another human being.¹⁵ Many chronic illnesses, such as diabetes and Parkinson's disease, destroy cells that normally produce hormones,

12. See, e.g., Burlingame, *supra* note 6, at 217.

13. Emanuel D. Thorne, *Regulating Commerce in Fetal Tissue*, Soc'y, Nov.-Dec. 1988, at 61.

14. Rachel B. Gold & Dorothy Lehrman, *Fetal Research Under Fire: The Influence of Abortion Politics*, 21 FAM. PLAN. PERSP. 6, 7 (1989).

15. Mark W. Danis, Note, *Fetal Tissue Transplants: Restricting Recipient Designation*, 39 HASTINGS L.J. 1079, 1083 (1988).

enzymes, and other chemicals essential to healthy bodily function.¹⁶ Because drug therapy treats only the symptoms, most cellular malfunctions are incurable except through transplantation.¹⁷ Scientists maintain that fetal cells from induced abortions are the best option for such transplants.¹⁸

Although alternatives to using fetal tissue for transplant purposes are presently available, these alternatives have proven to be less successful than fetal implants. Fetal tissue is vastly superior to adult tissue for transplant purposes. The most common problems for adult tissue transplants are the lack of compatible donors and the risk of rejection by the recipient's immune system.¹⁹ These two obstacles are enormous. The scarcity of donors is extreme.²⁰ Immunosuppressive drugs decrease the likelihood of rejection, but those drugs lower the patient's resistance to disease and the patient frequently succumbs to some random infection (as do AIDS patients) even though the transplant might have been successful.²¹

Fetal cells are immunologically naive. A cell is considered to be immunologically naive when the distinctive antigens particular to that cell and its specialized function have yet to develop.²² To optimize this effect, fetal tissue is generally obtained from fetuses aborted during or near the first

16. Burlingame, *supra* note 6, at 217. Fetal neural tissue transplantation has been successful in lessening the symptoms of chemically induced Parkinson's disease in primates. See generally John R. Sladek, Jr., et al., *Transplantation of Fetal Neurons in Primates*, 36 CLINICAL RES. 200 (1988). Initial trials in humans have had great success in treating Parkinson's disease. "Nearly all of the handful of transplants performed for Parkinson's have produced dramatic results . . ." Thompson, *supra* note 5, at 52. Transplants have cured diabetes and restored some sight in animal experiments, and have repaired some spinal cord injuries in animals. *Id.* To date only about 600 people have received fetal cell transplants that have effectively treated Di George Syndrome, a rare and fatal genetic disease, and Parkinson's disease. *Id.* at 52-53. Success has also been achieved with Hurler's syndrome, a rare and fatal genetic disease. *Id.* at 53. Attempts to treat the victims of Chernobyl have failed to regenerate bone marrow. *Id.* This was, of course, only the first trial, and further experimentation might prove successful. Dramatic success with animals in treating diabetes has not yet been duplicated in humans. Some improvement has been noted but no case to date has improved enough to eliminate the need for insulin completely. *Id.* Only two centers in the United States perform fetal cell transplants, and at least one American surgeon flies his patients to China to perform the transplants because of the current moratorium. *Id.*

17. Burlingame, *supra* note 6, at 217.

18. *Id.* at 217-18.

19. *Id.* at 217; Danis, *supra* note 15, at 1082.

20. Theodore Silver, *The Case for a Post-Mortem Organ Draft and a Proposed Model Organ Draft Act*, 68 B.U. L. REV. 681 (1988); Note, *The Sale of Human Body Parts*, 72 MICH. L. REV. 1182 (1974). This scarcity is the reason for the 1987 amendments to section 4 of the Uniform Anatomical Gift Act (UAGA). See UNIF. ANATOMICAL GIFT ACT § 4 cmt.; *infra* notes 164-68 and accompanying text (discussing section 4 of UAGA).

One student commentator argues that the main reason for the shortage of adult-cadaver tissue is the failure of the medical profession to accept donations in cases when the decedent agreed to donate. See Daniel G. Jardine, Comment, *Liability Issues Arising Out of Hospitals' and Organ Procurement Organizations' Rejection of Valid Anatomical Gifts: The Truth and Consequences*, 1990 WIS. L. REV. 1655.

21. RUSSELL SCOTT, *THE BODY AS PROPERTY* 48, 50 (1981).

22. Danis, *supra* note 15, at 1083-84.

trimester of pregnancy.²³ Since fetal cells are immunologically naive, transplanted fetal tissue is highly unlikely to cause compatibility problems. Tissue typing need not be as specific as with adult tissue, and the likelihood of rejection is quite low.²⁴ Additionally, and most importantly, fetal cells, because of their immaturity, have the capacity to regenerate and grow once transplanted into a recipient's body, thereby taking over the functions of the unhealthy cells and making the new nerve connections that are necessary to render the transplant effective.²⁵

Theoretically, the tissue used for a fetal tissue transplant can come from either a spontaneous abortion (miscarriage) or an elective abortion.²⁶ In practice, however, the tissue comes from electively aborted fetuses.²⁷ Spontaneous abortions are not a suitable source of tissue due to the increased probability that defective fetal pathology may have triggered the miscarriage and the uncertain delay between fetal tissue death and subsequent expulsion from the uterus.²⁸

Several factors, such as the timing of the transplantation and the maturity of the fetal tissue, affect the success of the transplantation procedure. The timing of transplantation is crucial because fetal cells cease to function and develop a few hours after the abortion procedure.²⁹ The maturity of the fetus also affects the quality of the tissue. For example, the optimal tissue for treatment of Parkinson's disease comes from a fetus gestated no longer than nine weeks, while the best time to obtain fetal islet cells from the pancreas for treatment of diabetes is during the fourteenth week of gestation.³⁰

23. *Id.* at 1084. The earlier cells are retrieved, the less the chance of rejection and, correspondingly, the lower the needed doses of immunosuppressive drugs. This benefit, however, must be counterbalanced against the advantage of greater cell identity and organ development needed for treating certain diseases. See *infra* note 30 and accompanying text (noting that optimal maturity of fetal tissue varies for different diseases).

24. Danis, *supra* note 15, at 1084. When the recipient's immune system attacks the transplanted tissue, this is called rejection, or rejecting the transplant. On the other hand, when transplanted tissue attacks the host tissue in the recipient's body, this is often referred to as the graft-versus-host reaction. Both of these problems are greatly reduced by using fetal tissue. See generally Joe Levine, *Help from the Unborn: Fetal-Cell Surgery Raises Hopes—and Issues*, TIME, Jan. 12, 1987, at 62. Since the likelihood of rejection is not a significant factor, no need exists for relatives to act as donors. See *supra* note 22 and accompanying text (noting that fetal tissue is immunologically naive).

25. Ania M. Frankowska, Note, *Fetal Tissue Transplants: A Proposal to Amend the Uniform Anatomical Gift Act*, 1989 U. ILL. L. REV. 1095, 1097.

26. Alan Fine, *The Ethics of Fetal Tissue Transplants*, HASTINGS CTR. REP., June/July 1988, at 6. In addition, some abortions are required by the medical condition of the mother or the fetus, including ectopic pregnancies. Thompson, *supra* note 5, at 52-53.

27. Fine, *supra* note 26, at 6; Thompson, *supra* note 5, at 53.

28. Fine, *supra* note 26, at 6; Thompson, *supra* note 5, at 53.

29. Mary B. Mahowald et al., *The Ethical Options in Transplanting Fetal Tissue*, HASTINGS CTR. REP., Feb. 1987, at 10.

30. Thomas H. Maugh, II, *Use of Fetal Tissue Spurs Hot Debate*, L.A. TIMES, Apr. 16, 1988, at 28. The appropriate stage of fetal development for treating all diseases, however, remains unclear. Leon Jaroff, *Steps Toward A Brave New World*, TIME, July 13, 1987, at 57.

Further, the type of abortion procedure employed will affect the quality of the tissue. A hysterotomy provides superior tissue because the fetus is damaged least. This technique, however, presents the greatest danger to the pregnant woman. A hysterotomy is similar to a caesarian section delivery; the woman's abdomen and uterus are surgically opened to allow removal of the fetus.³¹ In contrast, dilation and evacuation procedures, which affect the pregnant woman the least,³² are the most destructive to the fetus. Dilation and evacuation may not produce intact organs. However, even in those circumstances, scientists have been able to collect cells from the tissue fragments and successfully use them for transplantation.³³

Accordingly, the primary source of fetal tissue will be electively aborted, nonviable³⁴ fetuses, aborted most often by means of dilation and evacuation. Currently, the amount of fetal tissue retrievable from routinely performed legal abortions greatly exceeds the anticipated demand for transplantable tissue.³⁵ Many details about the technology of fetal tissue transplant are unknown. Because the technology is relatively new, scientists have not had a chance to study the long-term effectiveness of fetal tissue in the treatment of degenerative diseases.³⁶ Additionally, scientists do not yet know the exact amount of tissue required to effectively treat Parkinson's disease, diabetes, or other specific disorders.³⁷ It remains undisputed, however, that the readily available supply of usable fetal tissue from voluntary legal abortions and fetal tissue's adaptability for transplantation without careful donor matching make its use an attractive option to medical researchers.³⁸

At the time of this writing, a federal moratorium on fetal tissue research has only recently ended.³⁹ The reach of this moratorium and of the federal regulations relating to fetal tissue research seems to have confused the legal scholars. Some authors characterize the federal ban as limited to research

31. Frankowska, *supra* note 25, at 1099 n.36.

32. *Id.* at 1098. Notably, the dilation and evacuation procedure is considerably safer for the woman than giving birth. See *Roe v. Wade*, 410 U.S. 113, 149 (1973).

33. Fine, *supra* note 26, at 6.

34. See *infra* notes 131-32 and accompanying text (discussing definition of "nonviable").

35. Fine, *supra* note 26, at 6; see also *infra* notes 53, 63 and accompanying text. Professor Nicholas Terry, on the other hand, believes the demand will exceed the supply, basing this assertion on the unreasonable assumption that all of the five to ten million people who might be treated will have to be supplied with fetal tissue in one year. Nicholas Terry, *Politics and Privacy: Refining the Ethical and Legal Issues in Fetal Tissue Transplantation*, 66 WASH. U. L.Q. 523, 528 (1988). He also notes the progress toward laboratory grown cells reducing the shortage in any event. *Id.* at 529. Further, he fails to take into account the fact that each fetus has as many as 10 relevant organs. Cf. Jardine, *supra* note 20, at 1656 (noting that adult cadavers typically supply seven recipients: two kidneys, two lungs, one heart, liver, and pancreas).

36. Danis, *supra* note 15, at 1085.

37. Thompson, *supra* note 5, at 53.

38. Fine, *supra* note 26, at 6.

39. See *supra* note 11 (noting that Clinton administration has lifted ban on federal funding of fetal tissue research).

by federal agencies and specific research projects using federal funds,⁴⁰ while others portray the ban as stopping fetal tissue research at institutions which receive any federal funds.⁴¹ The latter interpretation, obviously, created a much broader moratorium because, under it, an institution receiving any federal funds could not perform privately funded fetal tissue research.

In truth, however, the federal regulations are limited to federal agencies and the use of federal funds to support specific research projects.⁴² However, many nongovernmental entities such as universities, hospitals, private laboratories, and medical schools blindly follow such federal regulations by virtue of bureaucratic inertia and a lack of understanding of the limits of the federal government's power.⁴³ Thus, federal regulations and the recent moratorium have had an effect on private conduct that is not constitutionally within the federal government's reach.

Further adding to the confusion, there have been unsubstantiated hints that the federal government might invoke 45 C.F.R. § 46.123(b), a regulation unrelated to fetal research. This regulation permits the Secretary of Health and Human Services to terminate all funding to any institution if the Secretary determines that researchers have "materially failed to discharge [their] responsibility for the protection of the rights and welfare of human subjects."⁴⁴ This section is applicable to all research involving human subjects, whether or not federal funds are involved, and is claimed to be effective pursuant to the spending power⁴⁵ because the sanction is the withholding of federal funds for any research. Thus, even privately funded research must conform to federal guidelines unless the institution is prepared to risk losing all other federal funding.

This use of this regulation, however, depends on the assertion that nonviable or, most often, dead fetuses are "human subjects" for the purposes of the law. This characterization is not consistent with the purpose of the federal regulation, protecting human subjects,⁴⁶ as adopted during

40. See Jenn S. Bregman, Comment, *Conceiving to Abort and Donate Fetal Tissue: New Ethical Strains in the Transplantation Field—A Survey of Existing Law and a Proposal For Change*, 36 UCLA L. Rev. 1167, 1177 (1989).

41. See Chryso B. Sarkos, Note, *The Fetal Tissue Transplant Debate in the United States: Where is King Solomon When You Need Him?*, 7 J.L. & Pol. 379, 399 n.112 (1991); *infra* note 44 and accompanying text; *infra* note 74.

42. See 45 C.F.R. § 46.201(a) (1987).

43. See Sarkos, *supra* note 41, at 403-04 nn.134-38 and accompanying text; *infra* note 74.

44. 45 C.F.R. § 46.123(b) (1989) (emphasis added).

45. The authority of the federal government to regulate conduct otherwise beyond its reach through the spending power is too well established to require citation. It rests, however, on an entirely unsound analytical basis. The states, for example, can regulate (or allow freedom in) research on human subjects. The federal government claims this power, at the expense of the states' authority, when it funds research. Yet the taxes which create the federal funds come from the people in the states. If federal taxes were lower, states could tax at higher rates to support such research. So, the federal government really only *returns* the money to the states from which it came.

46. For example, applying the requirements for human subjects as they are currently

the 1970s, and it runs afoul of the Supreme Court's holding in *Roe v. Wade*⁴⁷ that a fetus is not a person; otherwise it could not be aborted.⁴⁸ For example, when state statutes have attempted to define nonviable fetuses as persons in an effort to support a state interest in their protection from the time of conception, courts have held that such definitions are prohibited by *Roe*.⁴⁹

III. FETAL TISSUE TRANSPLANTS AND ABORTION

Since the principal source of fetal tissue for transplants is elective abortions, those who oppose abortion have opposed fetal tissue transplant research.⁵⁰ Both authors support the right of reproductive choice, and it is assumed that those readers holding a similar view will need little persuasion to accept fetal tissue research in view of its significant benefits. However, even those who support the "right to life" movement have no plausible basis for opposing fetal tissue research. Accordingly, the arguments that follow are directed to those who oppose abortion and are framed from that perspective.

At the outset, it must be conceded that abortion will remain legal for the foreseeable future in at least some states.⁵¹ Thus, legally aborted tissue will be available and abortion for family planning reasons will continue to occur. If elective abortions were to somehow become illegal in all states, the question of fetal tissue research would become largely moot since virtually no supply of tissue would exist. Tissue from spontaneous abortions might be used at that point, despite its lower quality.⁵² Perhaps, tissue from

written would mean that nonviable or dead fetuses must be told about the risks of the experiment, asked to give consent, and told that they may withdraw from the experiment at any time. See 45 C.F.R. § 116 (1987). See generally George J. Annas, *Mengele's Birthmark: The Nuremberg Code in United States Courts*, 7 J. CONTEMP. HEALTH L. & POL. 'Y 17 (1991).

47. 410 U.S. 113 (1973).

48. *Roe v. Wade*, 410 U.S. 113, 163-64 (1973); see *infra* note 203.

49. See, e.g., *Charles v. Carey*, 579 F. Supp. 377, 379-80 (N.D. Ill. 1983) (state statute defining "human being" as "the individual from fertilization until death" violates *Roe*'s contrary holding).

50. Gold & Lehrman, *supra* note 14, at 7-8; Jonsen, *supra* note 8, at 215-19; Robertson, *supra* note 3, at 443; Skerrett, *supra* note 6, at 82; Thompson, *supra* note 5, at 52-53.

51. See *infra* notes 106-17 and accompanying text. If abortion is legal in any reasonably nearby state, the decision of any given state to make abortion illegal is unlikely to significantly reduce the overall number of abortions because women from that state will travel to the nearby state where abortion is legal. See also Lea Brilmayer, *Interstate Preemption: The Right to Travel, the Right to Life, and the Right to Die*, 91 MICH. L. REV. 873 (1993); Seth F. Kreimer, "But Whoever Treasures Freedom . . .": *The Right to Travel and Extraterritorial Abortions*, 91 MICH. L. REV. 907 (1993); Seth F. Kreimer, *The Law of Choice and Choice of Law: Abortion, the Right to Travel, and Extraterritorial Regulation in American Federalism*, 67 N.Y.U. L. REV. 451 (1992); Andrew J. Ries, Note, *Extraterritoriality of Restrictive State Abortion Laws: States Can Abort Plans to Abort at Home but not Abroad*, 70 WASH. U. L.Q. 1205 (1992). But see Gerald L. Neuman, *Conflict of Constitutions? No Thanks: A Response to Professors Brilmayer and Kreimer*, 91 MICH. L. REV. 939 (1993).

52. See *supra* notes 26-28 and accompanying text.

foreign abortions might also be used if it can be preserved for transportation,⁵³ but this would again mean a legal source of aborted tissue.⁵⁴

A. *The Success of Fetal Tissue Transplant Research
Will Not Encourage Abortions*

Obviously, the major reason for elective abortions is family planning. Nonetheless, fetal tissue transplant research is, according to its opponents, likely to increase the number of abortions.⁵⁵ Clear statements of this argument are lacking.⁵⁶ Yet four related subarguments are being made, and they will be discussed here in turn.

In the first variant, opponents of fetal tissue research assert that the successful use of fetal tissue will cause some women to conceive solely for the purpose of aborting to supply themselves or relatives with fetal tissue.⁵⁷ For example, a California woman recently expressed her desire to become pregnant and abort the fetus for the sole purpose of supplying fetal tissue to her father, a Parkinson's disease victim.⁵⁸ Because several other cases have been reported of women desiring to conceive for the sole purpose of

53. Fetal tissue can be frozen. See Danis, *supra* note 15, at 1084. It is not known for certain if frozen tissue can be used for all purposes, because successful use for most purposes has not yet been achieved. Also, human tissue can survive, divide, and even grow in a tissue culture medium. *Id.* at 1085; Kenneth Ryan, *Tissue Transplantation From Aborted Fetuses, Organ Transplantation From Anencephalic Infants and Keeping Brain-Dead Pregnant Women Alive Until Fetal Viability*, 65 S. CAL. L. REV. 683 (1991).

The New York Times reports that the importation of foreign fetal tissue has begun. See *Clinic to Import Fetal Tissue From Russia*, N.Y. TIMES, Apr. 11, 1993, § 1, at 19.

54. Further, American women would be likely to travel to foreign countries and continue to have abortions, especially if it remained possible to do so in Canada where the quality of health care is high and the distance is not great.

55. See, e.g., Burlingame, *supra* note 6, at 214 n.5; Thompson, *supra* note 5, at 52-53 (quoting Assistant Secretary for Health James Mason, Bush administration). Notably, at least one state has actually enacted a statute specifically prohibiting medical transplantation of fetal tissue known to have been procured by abortions done for the purpose of supplying fetal tissue. See Susan Frelich Appleton, *More Thoughts on the Physician's Constitutional Role in Abortion and Related Choices*, 66 WASH. U. L.Q. 499, 512-13 (1988). Massachusetts has enacted a somewhat similar statute. See Arthur Bauer, *Fetal Tissue Transplantation*, TRIAL, July 1990, at 24.

56. See, e.g., Thompson, *supra* note 5, at 52-53, quoting Mason, "[The research] cannot help tilting some already vulnerable women toward a decision to have an abortion." The suggestion that individual women who are considering abortion would be swayed by such a tangential factor is utterly unrealistic, and is certainly his weakest argument.

57. *Id.*; Emanuel Thorne, *Trade in Human Tissue Needs Regulation*, WALL ST. J., Aug. 19, 1987, at 16 (discussing woman attempting to aid ailing father who considered artificial insemination with father's sperm to produce fetus for abortion); *Express: Fetal Cell Transplants* (KQED television broadcast, Mar. 1, 1988) (woman suffering from diabetes expressed interest in becoming pregnant to supply herself with fetal pancreatic tissue). Notably, the UAGA permits the donor to specify the recipient of donated tissue. This provision, while advisable in the case of adult tissue donations is unwise in the context of fetal tissue, and should be amended. See *infra* notes 155-56 and accompanying text.

58. Christine Gorman, *A Balancing Act of Life and Death*, TIME, Feb. 1, 1988, at 49.

aborting the fetus,⁵⁹ the opponents of fetal tissue transplantation maintain that beneficial use of fetal tissue would result in an increase in abortions.⁶⁰

59. See *supra* note 57.

60. Professor John A. Robertson argues that if it were necessary to do so, conceiving to abort or aborting a pregnancy which would not otherwise have been aborted is ethically defensible. See Robertson, *supra* note 3, at 456-63. His arguments certainly will not persuade persons opposed to abortion, and had only a modest effect on the pro-choice authors of this Article.

His analysis is essentially a greatest-benefit-type rational analysis. It uses as a basis a situation where a loved one will die if not cured of a degenerative disease. Although Robertson does not use such a system, let us show the false rationality of his analysis by assigning numerical values to the losses and gains. Assume that saving the loved one's life is valued at (+)100 points. What, then, is the negative value of the loss of the fetus needed to gain 100 points? First, he argues that previability fetuses "are insufficiently developed to experience harm," and thus count for *no* harm (0) ("It does not harm or wrong them"). *Id.* at 458. Alternatively, he argues that most of society values early stage fetuses less than fully developed persons and, so, they must be worth less than (-)100 points; say (-)50 points. *Id.* Therefore, a net gain of 50 points would still occur.

He concedes that "some people think that fetuses . . . have the full value of persons." *Id.* Yet he never explores the effect of this premise—obviously the premise of the anti-abortion portion of society. Also, for those who count fetuses as less than persons, but not nothing, Robertson's relative value argument (which we have accentuated by the use of our point system) is itself socially unacceptable. We are unwilling to be so coldly rational. Such logic would mean that we, as lawyers and scholars (+150), could murder any janitor (-80) who has an organ we need to survive (a net gain of 70 points). Also, the assertion that a fetus is not harmed because it cannot *experience* harm is a non-sequitur which suggests that we should murder the janitor while he is asleep (0).

Also, since a single body can supply the organs to save several people, no one would be safe. We could easily justify the benefit of saving five lives (+500) simply by killing the first healthy person we see (-100) after we have located five people in need of the right combination of organs.

Further, Robertson argues that, if abortion is acceptable when the only gain will be family-planning (perhaps 30), then abortion to obtain tissue to save another person's life certainly is (100). *Id.* at 459-60. Presumably, if people are rational, the value of the fetus must be less than the value of family planning (30), so the value of the fetus is clearly less than the life of a loved one (100). Following this rational comparison logic, members of the armed forces are at great risk. Since our society is willing to see our soldiers die for security in the Persian Gulf (perhaps 30), if a loved one (100) needs a heart transplant, we should kill any soldier to obtain his heart (net gain of +70). The fact that people do not make judgments on such a basis is highlighted by a hypothetical conundrum presented when the loved one (100) is a soldier (30).

While the argument appears persuasive that saving a loved one's life is more important than family planning, the simplistic syllogistic step to the conclusion that aborting to save a loved one is more acceptable than aborting for family planning is unpersuasive because the mechanical calculus necessary to make it robs us of what we value as our humanity.

Professor Robertson employs his greatest-benefit analysis only in the case of a fetus, and he undoubtedly would not endorse the logical extreme to which we have taken his argument. His other writings make clear that the logical fulcrum of his position is that personhood has not yet attached to the fetus. See, e.g., John A. Robertson, *In the Beginning: The Legal Status of Early Embryos*, 76 VA. L. REV. 437 (1990). Therefore, the fetus has only symbolic or emotional value, which cannot exceed the value of the life or lives of person(s) it can be used to save. That symbolic value cannot be more valuable than human life is debatable; the United States has fought many wars over symbolic values, and many people have willingly

On the other hand, no reported instances exist of women actually conceiving and aborting to supply such tissue.⁶¹

More importantly, simply no reason exists for women to do so. Because fetal tissue is immunologically naive,⁶² tissue matching is not needed. While having a blood relative make the donation greatly increases the chances of success in adult tissue transplants, only ignorance of the medical facts causes people to assume that the same benefit would inure to the use of relative's tissue in fetal tissue transplants.

Also, unlike adult tissue transplants, there is no shortage of donated tissue. This is due to two factors. First, one and a half million elective family planning abortions already are performed annually.⁶³ Even if changes in law⁶⁴ reduced this number, the supply still would exceed the demand. Second, unlike adult tissue transplants, in which whole organs or large grafts are often needed, fetal tissue transplants involve injecting, rather than surgically attaching, a small cluster of cells. Accordingly, a single donated organ may serve many recipients.⁶⁵ Also, a single aborted fetus obviously has many organs. Even a dramatic decrease in the current family planning abortion rate would not endanger the needed supply of fetal tissue.

died to defend symbolic values.

In assessing Professor Robertson's argument, a question of first principles is presented. Views on abortion tend to fall into three groups: (1) those who believe fetuses are not yet persons and therefore may be aborted; (2) those who believe fetuses are persons and therefore may not be aborted; and (3) those who believe fetuses are persons (or something less than persons but of significant value) but may be aborted anyway. Judith Thomson's classic statement of the third analytical group, which includes the present authors, is that even if a fetus has the value of a person (she employs a talented violinist to heighten her point), it has no right to enslave another for its survival. Judith Jarvis Thomson, *A Defense of Abortion*, 1 PHIL. & PUB. AFFAIRS 47 (1971). Dean Calabresi elevates this concept to a broader view of legal analysis in which even the right to life is candidly balanced against basic social ideals, such as the basic social ideal of equal participation in essential societal activities. GUIDO CALABRESI, IDEALS, BELIEFS, ATTITUDES AND THE LAW 99-108 (1985). In the case of abortion, involuntary childbearing deprives women of equal participation in life's activities (sexual and non-sexual). *Id.* at 94-114.

Naturally, Robertson's argument will persuade the first of these three groups because the first group comprises people who already believe a fetus has little or no value. Members of the latter two groups must also be persuaded, however. While we have argued that even those who oppose abortion should be willing to benefit from abortions which will take place anyway, we do not feel that an argument can be made in support of pregnancy for the sole purpose of aborting to obtain fetal tissue which will persuade anyone who is not already of the opinion that fetuses have little or no value.

61. Danis, *supra* note 15, at 1080.

62. See *supra* note 22 and accompanying text.

63. See *supra* note 3 and accompanying text.

64. If states merely place restrictions on abortion, such as waiting periods, the number of abortions will not be significantly reduced, although women may find the process more upsetting and stressful. If *Roe v. Wade*, 410 U.S. 113 (1974), were to be overruled and some states outlawed abortion entirely, this would have some effect, but most women would simply travel to other states or into Canada to have abortions. See *supra* note 51.

65. For example, a procedure has been developed to produce enough cells from one fetal pancreas to treat 20 adult diabetics. See Danis, *supra* note 15, at 1085.

One reason that some of the more desperate advocates will assert is that by having a specific donor a recipient can avoid the transmission of AIDS. The risk of such transmission is extremely low, and the fear that seems to surround AIDS is entirely out of proportion to reality.⁶⁶ Tissue can be tested for AIDS,⁶⁷ as can aborting mothers, and the risk of AIDS can be reduced to absurdly low levels. In such cases the risk from pregnancy and abortion to the woman who becomes pregnant and aborts just to create AIDS-free tissue is far greater than risk of AIDS, and no reasonable person could possibly pursue such a course.⁶⁸

Ironically, the recent, supposedly anti-abortion, moratorium on fetal tissue research creates the only plausible incentive to conceive for the purpose of aborting to obtain fetal tissue, and that moratorium may cause such additional abortions. Because of the moratorium no well-coordinated research network has been set up. Some patients in need of fetal tissue, and able to arrange a privately funded treatment, may only be able to have the treatment if they can find an ad hoc supply of fetal tissue.

The second possible variant of the argument that the use of fetal tissue will increase the number of abortions is the assertion that individual doctors interested in using fetal tissue will exert undue influence on patients who are seeking their medical advice in deciding whether or not to abort. Very few if any doctors actually play these two incompatible roles of gynecologist and Alzheimer's disease researcher, so the argument is most likely only a makeweight. Further, the "Chinese wall" technique, discussed below,⁶⁹ required by federal regulations and the Uniform Anatomical Gift Act (UAGA), makes the argument even more tenuous. In the end, however, this second variant, like the first, is based on the unfounded assumption that a shortage of supply exists. With an excess of supply, there is no reason to pressure any uncertain mother to abort.

66. For example, many concerns have been expressed about sending children to school when a child in the class has AIDS. Clearly, the risk of dying in an accident while riding to school on the school bus is far greater than the danger of contracting AIDS, yet it does not arouse the same intensity of fear.

67. For example, some states have enacted as part of their version of the UAGA a requirement that all transplant tissue be tested for the HIV virus. See, e.g., Section 23-18.6-12 of the Rhode Island Act, added in 1989:

23-18.6-12 Acquired Immune Deficiency Syndrome Testing. Prior to any organ, tissue, or part of a human body being transplanted in any human being, the donor shall be tested for the presence of antibodies to the probable causative agent for acquired immune deficiency syndrome (AIDS), provided that this condition shall not apply if there is a bona fide documentable medical emergency which endangers the life of any person. If the test [sic] for the presence of the antibodies is positive, the organ, tissue, or body part shall not be used.

R.I. GEN. LAWS § 23-18.6-12 (1989); see also N.D. CENT. CODE § 23-06.2-11.1 (1991).

68. Of course, some unreasonable people might choose to become pregnant and abort just to create AIDS-free tissue. Even this possibility is further reduced because the patient in need of a transplant would obviously be under the care of, and receiving advice from, a physician. Further, the risk of getting AIDS by having sex or artificial insemination to get pregnant must be taken into account.

69. See *infra* notes 135, 157-59 and accompanying text.

The third possible variant envisions a monetary incentive—aborting mothers being paid to deliver transplantable fetuses. Again, the excess of supply makes this unlikely. Further, the sale of such body parts is already a crime,⁷⁰ further reducing the likelihood that such a fetal tissue market will emerge and cause indigent mothers to abort.

The fourth possible variant of the argument that beneficial use of fetal tissue will result in more abortions is directed to the legality of abortion itself.⁷¹ Individual women do not alter their decision whether or not to abort because of so tangential a factor as the possibility of beneficial use of the fetal tissue. This is so even when the decision is an agonizing one.⁷² Yet, our society as a whole is agonizing over abortion in the legislative and judicial arenas. Here, it may be justifiably asserted that the presence of a lifesaving use for fetal tissue might tip the balance in the minds of some voters, legislators, or judges. Also, the excess of supply is somewhat less relevant as courts and legislators may take action which could reduce the supply dramatically—at least within the United States or regions of the United States.⁷³

70. Many states prohibit the sale of fetal tissue. See *infra* note 170 and accompanying text. In 1984 Congress enacted the National Organ Transplant Act to prohibit the sale of human organs in interstate commerce, 42 U.S.C. § 274e(a) (1988). In 1988 the Act was amended to specifically cover fetal tissue and organs. See Frankowska, *supra* note 25, at 1104. The National Organ Transplant Act does not apply to the use of human organs or fetal tissue for research purposes. The meaning of “research,” however, is extremely unclear. Cf. Margaret S. v. Edwards, 794 F.2d 994 (5th Cir. 1986) (“experiment” in fetal transplant context unconstitutionally vague). It would probably be best to amend the statute to prohibit the sale of fetal tissue for all purposes.

Two student commentators interestingly argue that allowing the sale of fetal tissue will reduce the supply, rather than increase it. Paul A. Gerike, Comment, *Human Biological Material: A Proprietary Interest or Part of the Monistic Being?*, 17 OHIO N.U. L. REV. 805, 823-24 (1991); Jennifer Lavoie, Note, *Ownership of Human Tissue: Life After Moore v. Regents of the University of California*, 75 VA. L. REV. 1363, 1384 (1989). The former summarizes,

The supply of donor organs would also be adversely affected by the recognition of a property right in human tissue. Creating a market for organs “would constrain patients’ willingness to donate freely organs or tissue.” A donor would lose the altruistic motive because of the potential monetary rewards. The perception of the donor card would be transformed from an expression of generosity to a legally binding contract. This would deter many who fear they would be making an irrevocable obligation. Even if donors were not discouraged, the already low supply of organs would dwindle because health care organizations would not be able to afford to pay prospective donors in order to increase the amount available. Furthermore, if payment could be made, it would induce those with diseased organs to donate. This has been evidenced in the payment for blood predicament.

Gerike, *supra*, at 823-24 (footnotes omitted). See generally Thomas H. Murray, *On the Human Body as Property: The Meaning of Embodiment, Markets, and the Meaning of Strangers*, 20 U. MICH. J.L. REF. 1055 (1987).

71. See, e.g., Robertson, *supra* note 3, at 447, 453.

72. Further, the tissue is not badly needed due to the already ample supply. Therefore possible beneficial use of fetal tissue should not factor into a woman’s decision.

73. But see *infra* notes 106-17 and accompanying text.

Yet this argument is the same as that of the Luddites, who smashed machines hoping to stop the coming of automation. If it is true that fetal tissue can be used to save lives, there is no way to stop this medical fact from coming forward. At present, research is taking place in the United States at a more limited rate due to the lack of government funding. Even if such research were made illegal,⁷⁴ it would continue outside the United States.⁷⁵ Thus, the time ultimately will come when the opponents of abortion will have to argue against abortion despite the added fact that fetal tissue from abortions can save lives.

If fetal tissue transplants are as successful as one may hope, abortions could indirectly save lives—possibly almost as many per year as are lost through abortions—and this fact may be a significant arrow in the pro-choice quiver. Those who oppose abortion will simply have to face this fact. Galileo's forced recantations⁷⁶ did not stop the knowledge of how our solar system operates, although no doubt some delay was caused.⁷⁷ The Luddites did not stop automation, and hardly achieved even a delay. If it were possible to stop knowledge of the benefits of fetal tissue transplants from coming forward, then those who oppose abortion would have a somewhat perverse, but plausible, argument for stopping fetal tissue research. In reality, such an obstruction can be no more than temporary. The knowledge will ultimately come out. In view of the benefits, delaying the inevitable effect on the abortion debate for a decade or two hardly seems

74. This Article assumes *arguendo* that such research can be made illegal. *But see* James R. Ferguson, *Scientific Inquiry and The First Amendment*, 64 CORNELL L. REV. 639 (1979); Gary L. Francione, *Experimentation and the Marketplace Theory of the First Amendment*, 136 U. PA. L. REV. 417 (1987); Al Gore, *Federal Biotechnology Policy: The Perils of Progress and the Risks of Uncertainty*, 20 U. MICH. J.L. REF. 965 (1987); Harold P. Green, *Constitutional Implications of Federal Restrictions on Scientific Research and Communication*, 60 UMKC L. REV. 619 (1992); John A. Robertson, *The Scientist's Right to Research: A Constitutional Analysis*, 51 S. CAL. L. REV. 1203 (1978); Michael D. Fricklas, Note, *Executive Order 12,356: The First Amendment Rights of Government Grantees*, 64 B.U. L. REV. 447 (1984). Also, restrictions on the use of fetal tissue that are not applicable to adult cadaver tissue are suspect on equal protection grounds. *See infra* notes 203-15 and accompanying text. Further, the matter would not be under any area of federal control, probably escaping even the reach of the ubiquitous interstate commerce clause. U.S. CONST. art. I, § 8, cl. 3. The present federal moratorium is limited to research supported by federal funds. Therefore, all 50 states would have to make the research illegal concurrently, a highly unlikely event.

75. For example, the Pope banned astronomical research after the trial of Galileo, but the ban was ineffective because research continued outside of Italy. "No more such hypotheses were to be permitted in Italy or anywhere else under Rome's authority. It was in the north, where the Roman writ ran less effectively, that the work continued, thanks to one of Galileo's German contemporaries [Kepler] . . ." JAMES BURKE, *THE DAY THE UNIVERSE CHANGED* 149 (1985).

76. *See* JACOB BRONOWSKI, *THE ASCENT OF MAN* 214 (1973); GIORGIO DE SANTILLANA, *THE CRIME OF GALILEO* (1955). In addition to forcing Galileo to recant his assertion that the earth revolved around the sun, the Pope placed his book, *The Dialogue on the Two Chief Systems of the World*, on the Index of Prohibited Books, where it remained until 1835. BURKE, *supra* note 75, at 149.

77. *See* BURKE, *supra* note 75, at 149.

a plausible reason to oppose fetal tissue transplants on ethical grounds.

B. Even Those Who Believe Abortion to Be a Wrongful Act Should Be Willing to Benefit from Abortions They Cannot Stop

In the eyes of some, it is wrong to accept a benefit from a wrongful act.⁷⁸ Many of those who oppose abortion feel that abortion is murder. It is said that to accept a benefit from abortions is to endorse and perhaps even become a participant in murder.

Such a view is entirely unreasonable. Accepting *arguendo* that abortion should be considered murder, let us consider and compare the obviously analogous case of an organ transplant from a deceased adult who was murdered.⁷⁹ Hypothetically, then, assume that I am in need of a heart transplant and I will die soon if no heart is found. Some amoral thug, intent on robbery, hits John Doe over the head with a pipe and robs him. The blow proves fatal and John Doe is pronounced dead on arrival at a nearby hospital. His family is willing to donate his heart. If I save my life by accepting the heart, am I praising murder?

The missing link is causation. We all agree that "[a] wrongdoer shall not be permitted to profit through his own wrongdoing."⁸⁰ But the wrongdoer was the robber, and he had killed John Doe whether I accept the heart or not.⁸¹ I have, if anything, undone some of the murderer's evil act by finding some good in the sadness.

One other analogy needs to be considered and distinguished. While vegetarians refuse meat for many reasons, at least some do so to resist the killing of animals. Because, by the time meat is in the grocery store the animal has long since been killed, our previous argument might be taken as showing the illogic of the vegetarian. To a degree, this is true, but not for the most part. Because the amount of meat sold in the grocery store today dictates how much will be ordered, and therefore killed, for tomorrow, refusing to buy meat today will cause fewer animals to be killed in the future. However, because family planning and not the demand for fetal tissue dictates the number of abortions, the vegetarian's reasoning has no application. Refusal to accept fetal tissue will not alter the number of abortions, past, present or future.

78. See, e.g., James T. Burtchaell, *Case Study: University Policy on Experimental Use of Aborted Fetal Tissue*, IRB: A REVIEW OF HUMAN SUBJECTS RESEARCH, July-Aug. 1988, at 7; Robertson, *supra* note 3, at 449-53.

79. See Robertson, *supra* note 3, at 451.

80. See, e.g., *Perma Life Mufflers, Inc. v. International Parts Corp.*, 392 U.S. 134, 151 (1968) (Marshall, J., concurring).

81. Taking this philosophy to its logical extreme, Professor Robertson argues that we should feel no compulsion about making positive use of the data generated by Nazi doctors while they were engaged in horrendous experiments on humans. Robertson, *supra* note 3, at 452-53; see also L. TUSHNET, *THE VICES OF ADVERSITY: STUDIES OF STARVATION IN THE WARSAW GHETTO* (1966). Robertson concedes that the point is controversial, citing contrary conclusions. Robertson, *supra* note 3, at 452 n.34.

C. *Respect for the Integrity of the Bodies of Deceased Persons Does Not Require Foregoing the Use of Fetal Tissue*

Those opposed to abortion may argue that fetuses are, themselves, persons.⁸² Thus, their bodies are entitled to the respect and dignity ordinarily paid to the bodies of the dead. This would, it is assumed, include prohibition of mutilation of those dead bodies. Yet, it also must be admitted that, with the prior consent of the deceased, or of relatives after death,⁸³ the bodies of deceased adults and children are damaged to the degree necessary to remove organs for transplants. Society values saving the lives of the living above the absolute dignity of the dead body. Further, state laws requiring embalming or other health and safety measures⁸⁴ and state autopsy laws⁸⁵ routinely overrule the decedent's or his family's wishes⁸⁶ as to bodily integrity

82. Determination of the precise point of onset of personhood is inherently problematic. The moment of birth is a logical stopping point on the slippery slope. The point of viability, emphasized in *Roe v. Wade*, 410 U.S. 113 (1973), is less obvious and logical, but it has, for the moment, the force of law. Since viability means the time when the fetus can survive outside the womb with artificial assistance, technological progress will, obviously, move this date closer and closer to the date of conception, making *Roe's* reliance on viability *Roe's* undoing.

Recently, in *Webster v. Reproductive Health Servs.*, 492 U.S. 490 (1989), Justice Blackmun defended his opinion in *Roe*. In particular, he asserted that the threshold of fetal viability remains the same today as it was when *Roe* was decided. *Id.* at 554 n.9. Incredibly, he even predicted that no medical progress would ever occur in the future, saying, "[p]redictions to the contrary are pure science fiction." *Id.* But see Nancy K. Rhoden, *The New Neonatal Dilemma: Live Births From Late Abortions*, 72 *Geo. L.J.* 1451, 1461-62 (1984).

The moment of conception, the uniting of sperm and egg, is an equally logical, or more logical, time to which to assign personhood. *Roe* selected viability because of its legal consequences, rather than its logical consequences. Indeed, some argue that personhood, or something like it, should attach to the separate sperm and egg, thereby justifying opposition to contraception. See Letter from C. Everett Koop, Surgeon General, to President Ronald Reagan (Jan. 9, 1989) (reprinted in *Medical and Psychological Impact of Abortion: Hearings Before the Subcomm. on Human Resources and Intergovernmental Relations of the House Comm. on Government Operations*, 101st Cong., 1st Sess. 68-69 (1989) [hereinafter *Abortion Hearings*] (noting that some in pro-life camp equate contraception with abortion). Curiously, this same logic would make those who abstain from constant and promiscuous sex into murderers.

83. See *infra* notes 138-70 and accompanying text. The 1987 revision of the UAGA reflects a significant trend toward disregarding the need for the consent of the decedent or his family in favor of presumed donation. See *infra* notes 164-69 and accompanying text.

84. Indeed, one insightful author has pointed out,

Many violations [of the corpse] occur, for example, in preparing the body for burial; arteries are cut, blood is removed, and formaldehyde is pumped into the vessels. Similarly, eyelids may be sewn closed, and faces may be restored. Practices such as these are accepted largely because people do not think about them; they are performed behind the closed doors of the undertaking establishment.

Steven M. Cooper, *Consent and Organ Donation*, 11 *RUTGERS COMPUTER & TECH. L.J.* 559, 581 (1985).

85. See, e.g., PA. STAT. ANN. tit. 16, § 1238 (1992).

86. Some have argued that the decedent's wishes or his family's wishes should be routinely overruled in order to allow cadaveric transplants, because saving lives is the highest social value. See Cooper, *supra* note 84, at 570; Silver, *supra* note 20, at 681; see also *supra* note 20 and *infra* notes 164-69.

for what are perceived to be important societal purposes. Indeed, even simple economic concerns, such as protecting employers, insurance companies and defendants from liability, have been held sufficient to justify an autopsy over the objections of the decedent or his family⁸⁷ when, for example, evidence may be obtained for civil litigation. If these economic concerns are sufficient to override the dignity of nonfetal cadavers, urging greater protection for fetuses is likely a subconscious and irrational attempt to strike out at abortion.

Requiring that no tissue or organs be taken from fetuses will not end abortion or restore the fetus to life. Fetal transplants will no more mutilate or deface the corpse of a fetus than adult cadaveric transplants and autopsies do.

D. Respect for Human Life Is Better Served by Saving Lives Through Fetal Tissue Transplants

Those who oppose abortion assert that they do so out of respect for human life.⁸⁸ Yet the sanctity of life cuts two ways in the fetal tissue transplant debate. It is difficult to believe that anyone who feels so strongly about saving human life could willingly ignore the lives that fetal tissue research could save. Depending on the degree of success achieved by fetal tissue transplant techniques,⁸⁹ it is possible that *more* lives could be saved every year than are aborted.⁹⁰ Additionally, because abortions will occur anyway, opposition to fetal tissue research is difficult to justify.

It must also be noted that success with fetal tissue transplants may—rather than increasing the number of abortions—actually decrease the number of abortions. Most abortions are for family planning purposes, but a number of abortions are performed every year to terminate pregnancies in which the fetus is known to be damaged or defective.⁹¹ To the extent that

87. See Cooper, *supra* note 84, at 580-81.

88. *But see infra* note 92 and accompanying text (giving alternate explanation for anti-abortion attitudes). Since saving lives may not be the reason for opposing abortion, the countervailing saving of lives by fetal transplants also may be irrelevant.

89. For example, treatment of AIDS is a fair probability. The worldwide epidemic which could thereby be prevented could otherwise exceed the absolute and relative damage of the Bubonic Plague of the fourteenth century which, in two decades, killed half the population of Europe. See BURKE, *supra* note 75, at 55-57. The plague ultimately was overcome by a coincidence of nature in the form of one competing type of rat (brown) overtaking and destroying the population of another (black). Only the latter type carried and spread the plague. *Id.* at 164. Such an easy end to the AIDS crisis is inherently improbable.

90. This greater numbers analysis cannot be taken too far, however. See *supra* note 60 (critiquing Professor Robertson's similar analysis in another context). Taken literally, the argument could be used to kill healthy adults for their organs. The death of one adult could save several lives because the various organs would not all be needed by one patient. Nonetheless, the saving of lives is an offsetting factor against the harm of abortion, even if we refuse to quantify it so simplistically.

91. See, e.g., Skerrett, *supra* note 6, at 82 (fetal tissue shows promise in treating congenital deformities and effects of maternally ingested drugs).

some of these defects can be cured, before or after birth, by fetal tissue transplants, some parents who want to have a baby would then be able to cure the defect and not abort. In the final balance, those who feel that life is a sacred right should, at least as long as they are unable to eliminate elective abortions entirely, be the strongest supporters of fetal tissue research.

It is also possible that those who oppose abortion do so out of a desire to punish or deter premarital sex. Especially in the case of those who are opposed to abortion and yet in favor of the death penalty—a surprisingly common combination—a preoccupation with sex is a more plausible explanation than a concern for the absolute sanctity of life. Further, those who truly wish to reduce abortions could do so far more effectively by improving sex education, instead of opposing it, and by increasing access to contraception.⁹² Pro-choice commentators too often concede the moral high ground to anti-abortionists simply because the anti-abortionists claim to act in the name of the “right to life.”

IV. THE LAW REGULATING FETAL TISSUE RESEARCH

A. Constitutional Principles

In *Roe v. Wade*, the United States Supreme Court held that a woman has a fundamental right of privacy in deciding whether to terminate a pregnancy.⁹³ Although the woman's right to terminate a pregnancy is fundamental, the state may regulate or even proscribe abortion when the state acquires a compelling interest. To determine the point when the state's interest becomes compelling and to what extent a state may regulate abortion, the Court adopted a trimester analysis.⁹⁴ Within the first trimester a woman may abort for any reason.⁹⁵ In the second trimester the state acquires a compelling interest in maternal health and may regulate abortion.⁹⁶ This is because abortion procedures after the first trimester pose more risk to the mother than those used during the first trimester.⁹⁷ Finally, in the third trimester the state may protect the life of the fetus, itself, due to its degree of development.⁹⁸

Roe's constitutional right to an abortion, however, does not limit the “state's authority to make a value judgment favoring childbirth over abor-

92. See Burlingame, *supra* note 6, at 238-39.

93. *Roe v. Wade*, 410 U.S. 113, 163-65 (1973). Notably, other nations have widely accepted the concept of reproductive privacy or autonomy as a basic human right. See, e.g., The European Convention for the Protection of Human Rights and Fundamental Freedoms, 213 U.N.T.S. 221, art. 12; see also *Morgentaler v. The Queen*, 1 S.C.R. 30 (1988) (Canadian Supreme Court follows *Roe* in striking down anti-abortion statute).

94. *Roe*, 410 U.S. at 155-56, 163-65.

95. *Id.* at 163-64.

96. *Id.*

97. *Id.*

98. *Id.* at 165. But see *supra* note 82 (criticizing third trimester aspect of *Roe*).

tion."⁹⁹ In *Webster v. Reproductive Health Services*,¹⁰⁰ the Court upheld a state statute requiring viability testing on fetuses gestated twenty or more weeks prior to performing an abortion.¹⁰¹ Although the Court sent clear signals that it may soon reject *Roe's* trimester approach to the constitutional right of abortion,¹⁰² the Court did not suggest an alternative to viability as the test for determining when a state acquires the compelling interest needed in order to regulate abortion.¹⁰³

Because courts are more likely to uphold regulations protecting human fetal rights after *Webster*, the technology of fetal tissue transplantation may be subject to greater regulation but not prohibited entirely.¹⁰⁴ There currently are no significant legal barriers to the use of fetal tissue.¹⁰⁵ Thus, the use of first trimester tissue from aborted fetuses should not pose a problem unless *Roe* is overruled outright.

Rumors of the impending death of *Roe* keep proving premature. In *Cruzan v. Director, Missouri Department of Health*,¹⁰⁶ the pro-life members of the Court only achieved a decision that permitted the states to require, if they choose, clear and convincing evidence of the patient's actual wishes before terminating medical treatment based on the patient's wishes.¹⁰⁷ In so

99. Hess-Mahan, *supra* note 11, at 811.

100. 492 U.S. 490 (1989).

101. *Webster v. Reproductive Health Servs.*, 492 U.S. 490, 521 (1989).

102. *Id.* at 518-19. Justices Rehnquist, Kennedy and White criticized the trimester approach. *Id.* at 518. Justice Rehnquist thought "the *Roe* trimester framework should be abandoned" because he saw no reason why the State's compelling interest in protecting potential life should not extend throughout the pregnancy rather than coming into existence only at the point of viability. *Id.* at 518-19. Justice Scalia, concurring, favored overruling *Roe* outright. *Id.* at 532; *see also infra* note 111.

103. *Webster*, 492 U.S. at 519. In *Webster*, the Court narrowly interpreted *Roe v. Wade* and upheld a Missouri statute that imposed significant restrictions on the right of a pregnant woman to obtain an abortion. *Id.* at 522. With regard to the fetal viability testing provision at issue in the Missouri statute, the Court endorsed the use of fetal viability as the point when the state acquires a compelling interest to regulate abortion. *Id.* at 518-21.

104. Frankowska, *supra* note 25, at 1103. The question of "just what is fundamental is undercut by recent restrictive interpretations of *Roe v. Wade* and by the possibility of its being narrowed or overturned in the imminent future." Stephen C. Hicks, *Law, Policy and Personhood In The Context of the Techniques of Human Experimentation in Modern Medicine*, 19 *CAP. U. L. REV.* 255, 276 (1990).

105. *But see infra* notes 203-15 and accompanying text (state statutes restricting use of fetal tissue are most likely unconstitutional on equal protection or due process grounds).

106. 497 U.S. 261 (1990).

107. *Cruzan v. Director, Mo. Dep't of Health*, 497 U.S. 261 (1990). *Cruzan* was even less of a victory for the pro-life faction, because it is unclear whether the Court really affirmed the Missouri Supreme Court's decision to keep Nancy Cruzan alive. In order to so hold, the Missouri Supreme Court had to reach two separate anti-euthanasia holdings. First, the court had to hold that clear and convincing evidence of Nancy Cruzan's actual wishes was required before she could be euthanatized based on her own wishes. This the court held, and found that the evidence before the trial court was not clear and convincing. *Id.* at 285-87. Second, the court held that no substituted judgment could be made for Nancy Cruzan. *Id.* at 286. Otherwise the family could have received the requested authority on that basis. *Id.* Curiously, the United States Supreme Court's decision was a four to four decision, with Justice O'Connor

doing, the Court conceded a liberty interest in personal medical choices,¹⁰⁸ and *Roe*, itself, was left, astonishingly, unmentioned in the decision. Finally, *Planned Parenthood v. Casey*,¹⁰⁹ while approving of conditions such as waiting periods and parental notification by minors seeking abortions, *if* a state chooses to impose them,¹¹⁰ hardly destroyed *Roe*¹¹¹ and will not alter the supply of fetal tissue.¹¹²

At least one distinguished scholar was not surprised by *Roe*'s continuing vitality.¹¹³ Arguing that the law reacts to realities that are the product of social trends, Professor Larry Barnett sees societal needs and values as the basis for the occurrence and outcome of the Court's decisions.¹¹⁴ Court

casting the swing vote in what was called a "concurrence." *Id.* at 263-64. She did join the plurality in upholding Missouri's right to require clear and convincing evidence for the effectuation of Nancy Cruzan's actual wishes. *Id.* at 282. However, Justice O'Connor then stressed, inaccurately, that the Court was not deciding whether Nancy Cruzan's federal constitutional privacy right required Missouri to appoint her family to make a substituted judgment for her. *Id.* By way of what she thought was dicta, Justice O'Connor opined that Nancy's privacy rights probably included such a right. *Id.* at 287-88. Thus, Justice O'Connor should have voted, on that latter basis alone, to join by concurrence with the four dissenting votes, who would then be the new plurality, in reversing the Missouri Supreme Court. Therefore, it appears that the wrong party was identified by the Court itself as having won the *Cruzan* decision.

108. *Id.* at 278.

109. 112 S. Ct. 2791 (1992); see Anita L. Allen, *Autonomy's Magic Wand: Abortion and Constitutional Interpretation*, 72 B.U. L. REV. 683 (1992); Earl M. Maltz, *Abortion, Precedent, and the Constitution: A Comment on Planned Parenthood of Southeastern Pennsylvania v. Casey*, 68 NOTRE DAME L. REV. 11 (1992).

110. *Planned Parenthood v. Casey*, 112 S. Ct. 2791, 2804 (1992). This is a common point in all of the cases in which states are trying to chip away at *Roe* and even the attempt to overrule *Roe* itself. All that can logically be hoped for is to permit states to undermine *Roe*; not to require them to do so. Social changes which have taken place in this country would not permit the Court to go farther, and will not result in all 50 states making abortion legal if the Court overrules *Roe*. See LARRY D. BARNETT, *LEGAL CONSTRUCT, SOCIAL CONCEPT: A MACROSOCIOLOGICAL PERSPECTIVE ON LAW* (1993) [hereinafter BARNETT, *LEGAL CONSTRUCT*]; LARRY D. BARNETT, *POPULATION, POLICY, AND THE UNITED STATES CONSTITUTION* 156-59 (1982) [hereinafter BARNETT, *POPULATION*].

111. *Casey*, 112 S. Ct. at 2855, 2859-66, 2873-85. There were, of course, four votes in *Casey* for overruling *Roe* outright.

112. See *supra* notes 53, 72 and accompanying text (excess of tissue currently available).

113. BARNETT, *LEGAL CONSTRUCT*, *supra* note 110; BARNETT, *POPULATION*, *supra* note 110, at 161; see also LARRY D. BARNETT & EMILY F. REED, *LAW, SOCIETY, AND POPULATION: ISSUES IN A NEW FIELD* (1985).

114. BARNETT, *LEGAL CONSTRUCT*, *supra* note 110; BARNETT, *POPULATION*, *supra* note 110, at 161 (discussing interrelationship of demographic trends and constitutional trends). Professor Barnett's position is clearly illustrated by *Planned Parenthood v. Casey*, 112 S. Ct. 2791 (1992). In that case, Justices O'Connor, Kennedy, and Souter took the extraordinary step of writing a joint opinion, presumably to enhance the opinion's legitimacy. *Id.* at 2803-33. The opinion explicitly concedes that overruling *Roe* in the existing sociopolitical context would destroy the Court's legitimacy. *Id.* at 2814-16. Thus, while allowing state restrictions, the Court explicitly, albeit quite reluctantly, re-affirmed *Roe* in what can only be described as yielding to public attitudes that the majority of the Court did not share. To create a majority, Justice Stevens and Justice Blackmun, the author of *Roe*, concurred separately. Blackmun's concurrence even noted that Justices O'Connor and Kennedy previously had seemed about to overrule *Roe*. *Id.* at 2844.

cases dealing with the constitutionality of government action generally are not accepted for review by the Court unless the Court feels that American society is prepared to accept the decision the Court is likely to render.¹¹⁵ Indeed, the public fear that the Court might overrule *Roe* undoubtedly played a significant role in the recent presidential election, with a resulting shift in the likely orientation of potential future justices.¹¹⁶

Even if *Roe* should be overruled, this would only mean that the states may—but do not have to—make abortion illegal. Notably, New York had legalized abortion by statute shortly before the *Roe* decision.¹¹⁷ The likelihood that more than a fraction of the states would utterly prohibit abortions, if the Court overruled *Roe*, is minute or nonexistent. Thus, it must be accepted even by those opposed to abortion that abortion will remain legal. There may continue to be restrictions which will not greatly reduce the number of abortions, and it is barely possible that some states may make abortion entirely illegal, but more than enough elective, family planning abortions to oversupply the need for fetal tissue will continue to take place.

B. Federal Regulation of Fetal Tissue Research

Fetal tissue use is regulated by laws concerning fetal research as well as laws governing organ and tissue donations. The laws regarding fetal tissue research were enacted primarily due to concerns about exploitation and commercialization of fetuses expected to be available following the *Roe v. Wade* decision legalizing abortion during the first two trimesters of pregnancy.¹¹⁸ The laws that regulate organ and tissue donation, as well as

115. BARNETT & REED, *supra* note 113, at xiii-iv.

116. For example, it is widely known to be possible that Mr. Justice Blackmun, the elderly author of the *Roe v. Wade* decision, will retire in the next presidential term. There are four votes already on the Court in favor of overruling *Roe*, outright. See *supra* note 111. The replacement of Blackmun with a vastly more conservative justice that President Bush would likely have nominated, might have meant the temporary end of *Roe*. The election of Clinton forecloses this possibility, as he has already made clear. See Thomas Friedman, *Aides Say Clinton Will Swiftly Void G.O.P. Initiative*, N.Y. TIMES, Nov. 6, 1992, at A1.

117. See *Roe v. Wade*, 410 U.S. 113, 147 n.41 (1973).

118. See Mahowald et al., *supra* note 29, at 11 (noting that Congress passed moratorium on fetal research one year after *Roe v. Wade*). Fetal tissue research is not a novelty. Research using animal tissue began early in the 1900s. Ryan, *supra* note 53, at 683. Animal tissue research was soon followed by research on treatments using tissue from recently deceased adult cadavers. *Id.* at 684. During the 1930s these developments led to the first fetal tissue research and, as an example, the 1954 Nobel Prize For Medicine was awarded to researchers who developed part of the material needed for the polio vaccine from cell lines of human fetal kidney cells. Burlingame, *supra* note 6, at 223.

Federal funding was being used to finance fetal tissue research for decades before *Roe v. Wade*, without attracting much attention. Hess-Mahan, *supra* note 11, at 801. Just prior to *Roe*, an unrelated controversy broke over reports of abuse of live aborted fetuses by Scandinavian researchers. *Id.* A National Institute of Child Health and Development examination of the issue uncovered instances of abuse of live fetuses in the United States. For example, in March 1972, the public learned that a hospital in Pittsburgh packed aborted fetuses

fetal research laws, were enacted before the technology of fetal tissue transplants became medically feasible.¹¹⁹

Currently, fetal tissue use is regulated at both the federal and state level by an assortment of laws. At the federal level, regulations cover only research funded through the Department of Health and Human Services (DHHS).¹²⁰ However, the Bush administration, in November of 1989, indefinitely extended a 1974 congressional ban on federal financing of research using fetal tissue.¹²¹ More recently, Congress attempted to overcome that rule, but was met with a veto by President Bush.¹²² Finally, with President Bush's defeat in the 1992 election, the new administration ended the moratorium.¹²³ Although the federal moratorium was often spoken of as prohibiting fetal research, it must be emphasized that the moratorium only prohibited federally funded research. Those who favor the research have fallen astoundingly short in not seeking state and private foundation funds.

Notwithstanding the recent moratorium, and perhaps because it was originally intended to be temporary, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research published guidelines applicable to research conducted or funded by the DHHS.¹²⁴ These guidelines recommended federal support of certain categories of fetal research, conditioned on the approval of local institutional review boards, the informed consent of the mother, and the nonobjection of the father.¹²⁵ These research regulations will, now that the moratorium is over, govern federally funded fetal tissue transplants.¹²⁶

in ice for shipment to laboratories while they still showed signs of movement and, in 1973, that an experiment at Yale Medical School involved dissecting a living male fetus without anesthesia. Bregman, *supra* note 40, at 1175. Consequently, in 1973 The National Institutes of Health (N.I.H.) declared a temporary moratorium on all federally funded research on live fetuses, intending only to delay such research until rules to avoid abuse could be promulgated. Hess-Mahan, *supra* note 11, at 801. While such rules were under consideration, *Roe* was decided, and the controversy took on an entirely new dimension and magnitude.

119. Mahowald et al., *supra* note 29, at 11. Notably, the UAGA was initially promulgated in 1968, prior even to the pre-*Roe* fetal abuse controversy. See *supra* note 118. The 1987 revision was enacted well after *Roe*, but during the Reagan-Bush moratorium, so fetal transplants were not a significant issue. Most of the UAGA's revisions were directed toward increasing the supply of organs from adult cadavers by disregarding the lack of consent of the decedent or his family. See *infra* notes 164-69.

120. See *supra* notes 39-49 and accompanying text.

121. Mahowald et al., *supra* note 29, at 11; Frankowska, *supra* note 25, at 1096; Sarkos, *supra* note 41, at 407-08; Jacquelyn F. Sedlak, Note, *Fetal Tissue Transplantation: Regulating the Medical Hope for the Future*, 4 J.L. & HEALTH 57, 65 (1989-90).

122. Maria Puente, *Bush's Perfect Veto Record Preserved*, U.S.A. TODAY, June 25, 1992, at 4A; see also *supra* notes 1-2 and accompanying text.

123. See *supra* note 11 (noting that Clinton administration has lifted ban on federal funding of fetal tissue research).

124. NATIONAL COMM'N FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND BEHAVIORAL RESEARCH, RESEARCH ON THE FETUS, REPORT AND RECOMMENDATIONS (1975); see also *supra* note 118.

125. See NATIONAL COMM'N FOR THE PROTECTION OF HUMAN SUBJECTS OF BIOMEDICAL AND

In 1975 the DHHS adopted a set of regulations and Congress subsequently enacted two statutes concerning different aspects of federally funded fetal research.¹²⁷ The DHHS regulations apply to research on fetuses *in* and *ex utero*.¹²⁸ However, before any activity covered in the DHHS regulations can be commenced, a physician not involved in the research must determine whether the fetus is viable.¹²⁹ Obviously, the removal of organs that would end the life of the fetus can only be done to dead or nonviable fetuses.¹³⁰

For purposes of this Article, it is important to understand the difference between a viable, a nonviable, and a dead fetus. A viable fetus is a fetus that is "able, after either spontaneous or induced delivery, to survive (given the benefit of available medical therapy) to the point of independently maintaining heartbeat and respiration."¹³¹ A nonviable fetus is a fetus "ex utero which, although living, is not viable."¹³² A dead fetus is a fetus "ex utero which exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cords (if still attached)."¹³³

The DHHS regulations modestly limit the activities that may be carried out on a nonviable fetus *ex utero*.¹³⁴ First, to avoid any manipulation of the abortion procedure, the DHHS regulations set up what is often called a "Chinese wall" between the individuals engaged in the abortion procedure and the individuals engaged in fetal research.¹³⁵ Second, both parents must

BEHAVIORAL RESEARCH, *supra* note 124, at 61-88. No specific provision exists, however, for notifying the father. *See also infra* note 150 and accompanying text.

126. Danis, *supra* note 15, at 1086. "Undoubtedly, the inadequacies of these guidelines as applied to fetal-tissue transplants influenced the decision to effect a temporary ban." *Id.* at 1087.

127. *See* 42 U.S.C. § 274e(a) (1990) (National Organ Transplant Act) (amended by Organ Transplants Amendment Act of 1988, 102 Stat. 3114 (1990)) (prohibiting transfer of any fetal tissue or organs in interstate commerce for valuable consideration); 42 U.S.C. § 289g(a) (West Supp. 1990) (Health Research Extension Act of 1985) (prohibiting Secretary of Health and Human Services from supporting any research involving live fetuses for whom viability has not been determined); 45 C.F.R. §§ 46.201-.211 (1992) (DHHS regulations).

128. 45 C.F.R. § 46.209 (1992); *see also* Frankowska, *supra* note 25, at 1005.

129. *Id.* § 46.209(a) (1992).

130. *Roe v. Wade*, 410 U.S. 113 (1973), permits the states to treat the fetus as a person after viability. Thus, killing a viable fetus would appear to be homicide under state law, and the removal of organs for transplant when death would not occur would be governed by state law on substituted consent. *See infra* note 143.

131. 45 C.F.R. § 46.203(d) (1992).

132. *Id.* § 46.203(e).

133. *Id.* § 46.203(f).

134. Section 46.209(b) provides in pertinent part that a nonviable *ex utero* fetus cannot be the subject of a research activity unless: (1) "[v]ital functions of the fetus will not be artificially maintained," (2) "[e]xperimental activities which of themselves would terminate the heartbeat or respiration of the fetus will not be employed," and (3) the purpose is "the development of important biomedical knowledge which cannot be obtained by other means." *Id.* § 46.209(b).

135. *Id.* § 46.206(a)(3) ("Individuals engaged in [fetal research] will have no part in: (i) [a]ny decision as to the timing, method, and procedure used to terminate the pregnancy. . . .").

be legally competent and give their informed consent before research may be done on the fetus, unless the father cannot be located.¹³⁶ And finally, the regulations require that research involving dead fetuses, fetal tissue, or fetal cells must comply with applicable state or local laws relating to fetal research.¹³⁷

C. *The Uniform Anatomical Gift Act*

State laws applicable to fetal research apply whether or not the research is federally funded. The UAGA of 1968, or the 1987 revision of it, regulates tissue and organ donations in all fifty states.¹³⁸ Designed to encourage anatomical gifts within and among states, the UAGA provides a number of guidelines that an individual can follow to effectuate an organ donation.¹³⁹ However, because the original UAGA was promulgated before the technology of fetal tissue transplantation became medically feasible and the 1987 version was enacted during the federal moratorium, strict application of the UAGA gives rise to unique issues when applied to organ donation from electively aborted fetuses. This section will focus on the provisions of the UAGA and how the UAGA can be applied effectively to fetal tissue transplants.

The UAGA governs tissue donation for therapeutic and research purposes from all dead humans, including dead fetuses.¹⁴⁰ Although a great number of authors have assumed that the UAGA, in either its 1968 or 1987 version, is applicable to all fetal tissue transplants, a minor problem is presented because some fetal tissue is taken from fetuses which, while nonviable, are not dead.¹⁴¹ The UAGA does not apply to tissue donations from live persons, such as blood donations, skin donations, bone marrow, or kidney donations,¹⁴² so there may be no applicable law for fetal donations in such cases.¹⁴³ The UAGA is probably best applied by analogy until an amendment can resolve this point.

136. *Id.* §§ 46.208(b) (*in utero*), 209(d) (*ex utero*). For the purposes of the regulations, informed consent is defined at 45 C.F.R. § 46.116 (1992).

137. *Id.* § 46.210.

138. UNIF. ANATOMICAL GIFT ACT §§ 1-11 (1968); UAGA §§ 1-17 (1987). The 1968 version was adopted in all 50 states and the District of Columbia. *See* 8A U.L.A. 15-16 (1983) (providing table of jurisdictions where 1968 Act was adopted). The 1987 version has been enacted in 14 jurisdictions in place of the original. *See* 8A U.L.A. 3 (Supp. 1992) (providing table of jurisdictions where 1987 Act has been adopted).

139. *Danis*, *supra* note 15, at 1088-89.

140. *See* UAGA § 1(2) (1987) ("decendent" includes fetus).

141. *See supra* note 132 and accompanying text.

142. *See* 8A U.L.A. 16 (1983) (providing that all that is needed for transplantation is informed consent).

143. *Cf. Bonner v. Moran*, 126 F.2d 121 (D.C. Cir. 1941); *Hart v. Brown*, 289 A.2d 386 (Conn. Super. Ct. 1972); *Curran v. Bosze*, 566 N.E.2d 1319 (Ill. 1990); *Head v. Colloton*, 331 N.W.2d 870 (Iowa 1983); *Strunk v. Strunk*, 445 S.W.2d 145 (Ky. 1969); *Little v. Little*, 576 S.W.2d 493 (Tex. Civ. App. 1979).

Under the UAGA an anatomical gift may be made by the donor himself.¹⁴⁴ This provision obviously was intended for and is restricted to, adult donors who may make provision for donation to take place upon their death.¹⁴⁵ Thus, the provision has no bearing on fetuses. If the donor has made no provision, the decisional authority passes to the next of kin. The next of kin are given priority under a hierarchy that effectively gives the fetus' parents the highest priority.¹⁴⁶

Because the UAGA is not oriented to the context of elective abortions, it assumes that both parents will be known and equally available.¹⁴⁷ If one parent objects to the donation, that parent may block the other from donating the fetal tissue.¹⁴⁸ Section 2(b) provides that a person in the highest priority class available may make a gift "in the absence of actual notice of . . . opposition by a member of the same . . . class."¹⁴⁹ Therefore, if either parent is opposed to the donation, that parent may prevent the other from donating the fetal tissue. Alternatively stated, the consent of one parent and the nonobjection or nonnotification of the other is needed to effectuate donation of fetal tissue. Although the father can hardly be expected to state his views if he is not notified, there does not appear to be any notification requirement in the UAGA. As a result, the practice is that the aborting mother makes the decision.¹⁵⁰

Since 1987 the UAGA has required informed consent to effectuate an anatomical gift.¹⁵¹ Informed consent is derived from the permission of either

144. UAGA § 2(a) (1968); UAGA § 2(a) (1987).

145. See *supra* note 144. The UAGA defines an adult as a person "at least [18] years of age." See UAGA § 2(a) (1987). The use of brackets in the original is intended to suggest that states may vary this term. Nevada, for example, permits children who are 12 or older to make donations. See 8A U.L.A. 15-16 (Supp. 1992) (noting variations from official text of UAGA).

146. UAGA § 3(a) (1987) (similar list in UAGA § 2(b) (1968)) provides the following priority:

- (1) the spouse of the decedent;
- (2) an adult son or daughter of the decedent;
- (3) either parent of the decedent;
- (4) an adult brother or sister of the decedents;
- (5) a grandparent of the decedent; and
- (6) a guardian of the person of the decedent at the time of death.

Obviously, a fetus will have neither a spouse nor any adult children. Therefore, for fetal donations, the hierarchy begins with (3) and continues down the list in the highly unlikely case that the mother is not able to give her consent. The mother might, for example, be incompetent because she might be retarded or she may be unconscious due to an injury. In such cases, assuming that the father is unknown or cannot be located, responsibility would pass to the mother's adult children, if any, and then to the mother's parents.

147. UAGA § 2(b) (1968) ("either parent") (emphasis added); see also UAGA § 3(a)(3) (1987).

148. UAGA § 2(b) (1968); UAGA § 3(b)(3) (1987).

149. UAGA § 2(b) (1968).

150. *Fetal Tissue Transplantation Research: Hearings Before the Subcomm. on Health and the Environment of the House Comm. on Energy and Commerce*, 101st Cong., 2d Sess. 27-28 (1988) (insertion from National Institutes of Health, Report of the Human Fetal Tissue Transplantation Research Panel, Vol. 1, Dec. 1988).

151. UAGA § 5 (1987).

the person whose tissue is to be transplanted prior to his death or from the decedent's next of kin. Because the fetus is incapable of giving consent and the UAGA treats the fetus as a decedent,¹⁵² the parents' informed consent will always be at issue in fetal tissue transplantation.¹⁵³

One problem in applying the UAGA to fetal tissue transplants is that the Act allows a donor or vicarious decisionmaker to specify the recipient.¹⁵⁴ This specification must be followed unless the specified recipient is no longer alive, available, willing to receive, or in need of the donation.¹⁵⁵ Because there is no danger of homicides or suicides occurring for the purpose of making organs available, this provision makes sense. Also, for blood relatives, tissue rejection can be minimized. Yet, in the context of fetal tissue neither reason applies. In view of the fear that women will have abortions for the purpose of making tissue available to a specific relative, the UAGA should be amended to prohibit specifying the recipient of fetal tissue.¹⁵⁶

Section 7(b) of the 1968 UAGA, and section 8(b) of the 1987 UAGA create a "Chinese wall" separating the doctors treating the patient from the doctors involved in the donation. The 1968 Act provides, "[t]he physician [determining death] shall not participate in the procedures for removing or transplanting a [body] part."¹⁵⁷ The 1987 Act improves this provision, stating that "[n]either the physician or surgeon who attends the donor at death nor the physician or surgeon who determines the time of death may participate in the procedures for removing or transplanting a [body] part unless the document of gift designates a particular physician [to do so]."¹⁵⁸ Both of these provisions obviously speak to adult cadaveric donations, but they fit the fetal context fairly well. The 1968 version, however, does not create a firm "Chinese wall," because the physician determining the death¹⁵⁹ might not be the physician advising or performing the abortion. Thus, the latter physician, if not the one who determines fetal death, still may be involved in the use of the fetal tissue. The 1987 Act cures this defect, but the added exception for a "designated" physician

152. UAGA § 1(b) (1968); UAGA § 1(2) (1987).

153. See *supra* note 146 and accompanying text (discussing UAGA's next of kin hierarchy).

154. UAGA § 3(4) (1968); UAGA § 6(3) (1987).

155. UAGA § 7(a) (1968); UAGA § 8(a) (1987).

156. The fear of women having abortions in order to make tissue available is irrational. See *supra* notes 62, 22 and accompanying text. However, nothing is lost by including a restriction against specifying the recipient, because fetal tissue matching is unnecessary.

157. UAGA § 7(B) (1968).

158. UAGA § 8(b) (1987). Notably, both versions of the Act allow the donor to designate the physician to remove the organs or the physician to receive the organs. In the 1968 Act, this authority is simply inconsistent with § 7(b), and the inconsistency remains unresolved. The 1987 Act resolves the inconsistency, but, arguably, the wrong way, making the Chinese wall protection give way.

159. Actually, in the case of a fetus, the physician would be determining the nonviability of the fetus, rather than its death. See *supra* notes 131-32 and accompanying text; see also Bauer, *supra* note 55, at 25-26. This is another minor example of the UAGA's not being designed to deal with the peculiar aspects of fetal tissue donation. The problem is not serious because most fetuses are aborted early and by evacuation, which kills the fetus.

unfortunately allows the aborting mother to, by designating the physician performing the abortion, determining fetal death, or both, waive the "Chinese wall." As applied to fetal tissue, therefore, both Acts need revision.

The original UAGA, promulgated in 1968, was adopted, with some variations,¹⁶⁰ in all fifty states and the District of Columbia.¹⁶¹ In 1987 a revised, drastically changed UAGA was promulgated.¹⁶² Fourteen states have since adopted the revised UAGA.¹⁶³ Two provisions of the 1987 Act, not found in the 1968 Act, are of relevance to fetal tissue transplants.

Section 4, perhaps the centerpiece of the new Act, allows medical personnel to proceed with the donation of organs from a cadaver in the absence of knowledge of an objection by the decedent or the next of kin.¹⁶⁴ This has the effect of *presuming* an intent to donate, rather than permitting and facilitating its expression as the 1968 Act did. To verify the absence of a known objection by the decedent, medical personnel must make a reasonable effort to check the decedent's medical records¹⁶⁵ and to verify a lack of objection by next of kin, medical personnel should make a reasonable effort to notify them.¹⁶⁶ However, these two efforts need only be reasonable, "taking into account the useful life of the [body] part."¹⁶⁷ This means that in many cases no one will be notified and no medical records will be checked.¹⁶⁸ The wisdom and constitutionality of presuming the improbable and employing a procedure which may make that presumption irrebuttable¹⁶⁹ is beyond the scope of this Article. This provision clearly is not applicable in the case of elective abortions when no excuse is available for not

160. For example, the California Act makes special provision for negating the power of relatives to make donations on behalf of any decedent who was a member of a religious sect opposed to anatomical gifts. 8A U.L.A. 6 (Supp. 1992) (citing CAL. HEALTH & SAFETY CODE § 7152 (West Supp. 1993)).

161. See 8A U.L.A. 15-16 (1983) (providing table of jurisdictions that adopted 1968 Act).

162. 8A U.L.A. 3-32 (Supp. 1992).

163. *Id.* at 3 (providing table of jurisdictions that have adopted 1987 Act).

164. UAGA § 4 (1987).

165. *Id.* § 4(a)(2).

166. *Id.*

167. *Id.*

168. As the official comment to section 4, euphemistically speaking in terms of "balance," lamely admits,

Subsection (a)(2) seeks to balance societal and family interests, that is, to increase the size of the donor pool and to give the family the opportunity to make or refuse to make an anatomical gift. The balance in this subsection is on the side of increasing the size of the donor pool If removal must be immediate and there is no medical or other record and no [relative] is present, the requirement of subsection (a)(2) is satisfied.

UAGA § 4 cmt. (1987).

169. Cf. *Cleveland Bd. of Educ. v. LaFleur*, 414 U.S. 632 (1974); *United States Dep't of Agriculture v. Murry*, 413 U.S. 508, 514 (1973); *Vlandis v. Kline*, 412 U.S. 441 (1973); *Stanley v. Illinois*, 405 U.S. 645 (1972); *Carrington v. Rash*, 380 U.S. 89 (1965). See generally 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 (1990).

consulting the mother prior to the abortion. The "rush" associated with, for example, traffic accident victims or crime victims would not be involved in elective abortions.

Finally, a notable addition found only in the 1987 Act and worthy of adoption in all fifty states, including those reluctant to adopt all of the new Act, is section 10. Section 10 prohibits the sale or purchase of body parts.¹⁷⁰ The Act makes the sale or purchase of body parts a felony. This prohibition is a welcome addition in the area of fetal transplants, and it is surprising that no such prohibition was included in the 1968 Act.

V. ALLOCATING DECISIONAL AUTHORITY

A. *The Mother*

The UAGA's provision placing decisional authority with both parents has proven unworkable in the context of the donation of fetal tissue. Its practical effect—placing decisional authority solely with the aborting mother—has produced considerable criticism. Yet, no preferable alternative has been proposed.

While the fetus is still within the womb, the proper locus of decisional authority is clear. Because the pregnant woman's bodily interests are directly implicated,¹⁷¹ decisional authority regarding the fetus's fate clearly should rest with the pregnant woman.¹⁷² In fact, during the first trimester of pregnancy, *Roe v. Wade* gives the pregnant woman a fundamental right of

170. UAGA § 10 (1987). Some states had modified the 1968 Act to include a similar prohibition. See 8A U.L.A. 44 (Supp. 1992) (listing, for example, § 4307 of New York Act and § 24-6-11 of New Mexico Act); see also Robertson, *supra* note 3, at 474 n.94 (listing 17 states whose statutes prohibit sale of tissue).

Professor Robertson boldly faces the more controversial issues and defends, if needed as a source of supply, the ethics of conceiving in order to abort to obtain tissue. See *supra* note 60. However, Robertson gives the ethical status of paying women to abort to supply tissue only the suggestion that it "may also be defensible." Robertson, *supra* note 3, at 474. He, surprisingly tamely, concludes, "[r]esolution of this difficult issue, however, should await the actual occurrence of the need to pay to obtain fetal tissue for transplants." *Id.* at 478.

171. The pregnant woman's bodily interests are directly implicated because "[t]he physical and functional alterations of pregnancy involve all the body systems, displacing [of] body parts, depleting the body of its necessary elements and changing its chemical balance . . ." Christyne L. Neff, *Woman, Womb, and Bodily Integrity*, 3 YALE J.L. & FEMINISM 327, 348 (1991) (quoting amici brief for California Committee to Legalize Abortion et al. at 657-59, *Roe v. Wade*, 410 U.S. 113 (1973) (No. 70-18)).

172. Robertson, *supra* note 60, at 454. Although the father helps to effectuate the conception of the fetus, the decision of whether or not to bring the fetus to term is inherent in the mother's right of privacy. *Roe v. Wade*, 410 U.S. 113, 153 (1973). The father's consent cannot be required and his objection cannot override the mother's decision during the first trimester. *Planned Parenthood v. Danforth*, 428 U.S. 52, 69 (1976).

privacy in deciding whether or not to terminate a pregnancy.¹⁷³ The best locus of authority over the disposition of the fetus *ex utero* is less clear, however.¹⁷⁴ In cases of spontaneous abortions, it is relatively clear that the parents retain joint decisional authority over the disposition of the fetus.¹⁷⁵ However, in the case of elective abortions, controversial informal practices have grown up. In an elective abortion setting, the fetal remains often are left with the hospital or clinic where the abortion was performed. Although parents who desire burial or cremation of the fetal remains may request such disposal if they choose, most parents who electively abort their fetus wish to leave the experience behind them¹⁷⁶ and the fetal remains typically are discarded under the state's fetal disposal statute.

Allowing a woman who has decided to abort her fetus to consent to organ retrieval from the fetus is one of the most problematic areas of fetal tissue research.¹⁷⁷ The mother's consent to organ retrieval from the dead fetus is said to be questionable because the mother is the one choosing the death of the fetus.¹⁷⁸ Those who oppose abortion would condemn the use of tissue from an aborted fetus because it despoils the corpse of the person one has intentionally killed.¹⁷⁹ Therefore, one might criticize the salvaging of fetal tissue on grounds of lack of valid consent.¹⁸⁰ Thus, while the use of cadaver tissue is morally acceptable, it is said that the use of fetal tissue is tainted by the woman's deliberate decision to abort.¹⁸¹ However, it may

173. *Roe*, 410 U.S. at 163-65. In the event the Supreme Court overrules *Roe*, some jurisdictions undoubtedly will continue to have abortions available. See *supra* note 117 and accompanying text.

174. See generally Nicolas Terry, "Alas! Poor Yorick," *I Knew Him ex Utero: The Regulation of Embryo and Fetal Experimentation and Disposal in England and the United States*, 39 VAND. L. REV. 419 (1986).

175. Even in such cases Professor Robertson presumably would deny the father any role because no later obligations on the part of the father would be created. Robertson, *supra* note 3, at 465 n.66.

176. See *Abortion Hearings*, *supra* note 82, at 47 (accompanying testimony of Dr. Jaroslav Hulka, M.D., Prof. of Obstetrics and Gynecology, University of North Carolina School of Medicine), 125 (testimony of Psychologist Wanda Franze, Ph.D.), 130-31 (testimony of Nancy Adler, Ph.D., Prof. of Psychology, University of California-San Francisco).

177. Robertson, *supra* note 3, at 463.

178. See, e.g., Hicks, *supra* note 104, at 263; see also *supra* notes 57-59 and accompanying text (noting reports of women proposing to become pregnant for purpose of supplying tissue).

179. Jonsen, *supra* note 8, at 218. The UAGA has no such exception in the case of actual homicide, undoubtedly because the question never was considered. Thus, the relative of highest priority could donate organs of a person he had killed. See *supra* note 146. Professor Robertson notes in response to this argument, "In an analogous situation, a woman who aborts does not automatically lose custody of an infant born alive as the result of an abortion procedure that attempted to kill the fetus See *Keith v. Daley*, 764 F.2d 1265, 1271 (7th Cir. 1986), *Wynn v. Carey*, 599 F.2d 193, 195 (7th Cir. 1979)." Robertson, *supra* note 3, at 464 n.63.

180. Mary B. Mahowald, *Placing Wedges Along a Slippery Slope: Use of Fetal Neural Tissue for Transplantation*, 36 CLINICAL RES. 220, 222 (1988); Burtchaell, *supra* note 78, at 8. A plausible alternate decisionmaker never is proposed. The hidden goal of those making this argument is to stop the research due to the lack of any decisionmaker capable of making the donation decision.

181. Burtchaell, *supra* note 78, at 8.

be argued that the suspect permission of the woman is morally acceptable because the decision to abort and the abortion procedure are separate from and not logically related to the disposition of the fetal remains.¹⁸²

In the well accepted case of cadaveric transplants, tissue procurement practice in the United States is based upon family consent.¹⁸³ Some ethicists, however, would deny the woman dispositional authority over the fetal remains on the ground that the woman intentionally aborted her fetus. This argument assumes that a person who disposes of cadaveric remains acts as a "guardian" for the deceased.¹⁸⁴ Therefore, a mother who chooses to abort her fetus is not qualified to act as a guardian of the fetus she previously aborted because a conflict of interest is said to exist. This argument, however, is without merit because relatives who acquire the dispositional authority to consent to tissue and organ donations under the UAGA do not act as a guardian for the deceased person or fetus.¹⁸⁵ The family's traditional right to decide on burial of the deceased is based on assuring that the remains are treated with respect during burial or cremation.¹⁸⁶ Although relatives may honor the prior wishes of the deceased person concerning disposal of the cadaver, the relatives may violate the expressed desires of the deceased and instead effectuate the relatives' own decision as to the type of interment.¹⁸⁷

More importantly, the suspect feature of the consent of the woman is incidental rather than essential to the morality of salvaging cadaver tissue.¹⁸⁸ The woman's consent to the abortion procedure is separate from and unrelated to her consent to the donation of fetal tissue or organs. The so-called conflict of interest that exists between the fetus and the mother is over the fetus' life. It is not automatically true, nor is it even probable, that this conflict continues to exist after the fetus' death. The mother, now free of the obligation to bear the fetus, no longer has anything to gain at its expense. The effort to deprive the mother of dispositional control over the fetus' cadaver may really be one more disguised effort to punish her for aborting. Also, some would argue that dead bodies, and therefore dead fetuses, do not have any interest that requires protection; the primary ethical purpose of consent plays no role when dealing with a cadaver.¹⁸⁹ Denying dispositional control of fetal remains to the woman who aborts would lead to either procuring fetal tissue without parental consent or to a total ban

182. Robertson, *supra* note 3, at 465.

183. *Id.* at 466 n.68 and accompanying text. *But see supra* notes 20, 164-69 and accompanying text (arguing that 1987 revision of UAGA is built on specious presumed consent).

184. Robertson, *supra* note 3, at 464.

185. *Id.*

186. *Id.* at 464-65.

187. *Id.*

188. Jonsen, *supra* note 8, at 219. For example, many women who lose a fetus to an undesired miscarriage, as well as many parents who lose a child to a death they did not cause, are willing to make an anatomical donation. The decision to make such an anatomical donation is not correlated with abortion.

189. *Id.* Of the present authors, Professor Gelfand does not endorse this argument.

on fetal transplants. This goes against the grain of the current tissue procurement practice of the United States and does nothing to help the fetus' stature. "Such a radical change in tissue procurement practice is not necessary to satisfy the need for fetal tissue and would serve only to punish women who [decide to] abort."¹⁹⁰ As previously demonstrated, the abortion morality debate must be kept separate and apart from the dispositional alternatives for fetal remains.

Although not explicitly stated as such, one major reason for allocating the right and duty to dispose of the deceased body to the next of kin is the need to allocate that power to *someone*. High-minded assumptions about the family following the wishes of the decedent—which have never been enforced by the law—have never been as important as having someone to take charge of the cadaver. The father of the aborted fetus aside,¹⁹¹ no other logical decisionmaker is available.

B. The Father

The proper role of the father of the aborted fetus in the decision whether to donate fetal tissue is highly problematic. Traditional abortion-related analysis and paternity-related analysis helps little in the novel context of fetal tissue donation. In an abortion, only the woman's bodily interests are affected directly. The abortion procedure is a significant and highly personal intrusion on the woman's body and does not effect the father.¹⁹² As to paternity-related concerns, the donation of fetal tissue or organs will not create later obligations in the father. Transplanted fetal tissue or fetal tissue used in research will never develop to a state of "personhood" leading to later responsibility for the father. In any event, potential fathers never have interests in avoiding paternity so great as to allow them to require a woman to abort. Biology, and therefore law, makes the father a lesser partner.

However, present law provides theoretical but uneffectuated and impractical rights to the father. The UAGA makes the mother's consent determinative unless the father objects, and then does not provide for notice to the father.¹⁹³ The federal regulations require the father's consent, unless

190. Robertson, *supra* note 3, at 466; *see supra* note 92 and accompanying text.

191. In any event, a preference for the father would have to be limited to fathers who opposed the abortion; otherwise, the same objections would exist. This would be impossible to police effectively because fathers could easily claim to have opposed the abortion. Since the father cannot stop the abortion, the genuineness of his opposition could not be known.

In addition to the father, the UAGA provides a hierarchy of lower priority decisionmakers. *See supra* note 146. Routine reliance on these lower priority decisionmakers—primarily the mother's, or the father's, parents would probably create sufficient embarrassment and vexation to cause aborting mothers to forego donation for reasons plainly unrelated to the donation question.

192. Although the father may suffer through the emotional aspect of going through an abortion procedure with the woman who is bearing his child, the father does not experience the physical intrusion of the abortion procedure itself.

193. *See supra* notes 147-50 and accompanying text.

he is "unavailable" to consent.¹⁹⁴ These are provisions which are designed not to be given much effect.

It is at times suggested that the father's authority should be retained, or even made more effective, when (1) the father was opposed to the abortion procedure¹⁹⁵ and, therefore, lacks the supposed conflict of interest, or (2) the father's religious convictions prohibit the donation of body parts for research or transplantation. However, administering these two exceptions to the mother's dispositional authority outside a marriage relationship would prove to be an administrative nightmare. The mother might be put in the embarrassing position of being asked questions about which she might have no knowledge, or might not have any way of finding out the answer.

The relations between women having elective abortions and the fathers vary from case to case. It may be helpful to think of the possible relationships as being represented by a continuum:

rape—casual—ongoing—live-in—married

Obviously, in the case of rape the woman is unlikely to be willing to have any discussions with the father. Curiously, although the federal regulations contain a specific exception from paternal consent in cases of rape,¹⁹⁶ the UAGA makes no mention of it.¹⁹⁷ Undoubtedly, this is because the federal regulations were intended specifically for fetal tissue research, while the UAGA was drafted before fetal transplants were a significant factor.¹⁹⁸

Casual relationships with unintended pregnancies are undoubtedly the most common source of elective abortions. In such cases notifying the father will be difficult for at least four reasons. First, there may be more than one possible father and the nightmare of identifying the father by testing will simply cause women to forego donating rather than undergo the testing process. Second, it may not be possible to locate the father even if his identity is known. Third, the father may not want to be identified and may not be willing to cooperate in testing.

Finally, and most importantly, the time delay in such a process will make the question moot. For reasons of maternal health¹⁹⁹ and most useful fetal tissue quality,²⁰⁰ the ideal time to abort is in the first trimester. Also, anti-abortion state regulations may compel an early abortion.²⁰¹ Given the time it takes to ascertain that the woman is pregnant and make the decision

194. 45 C.F.R. § 46.208(b)(2) (1992).

195. Robertson, *supra* note 3, at 464 n.61 (discussing Mahowald, *supra* note 180, and Burtchaeil, *supra* note 78). The argument is that if the father was willing to take responsibility of a family and the woman decides to abort, the father should maintain his decisional authority regarding the fetus's disposition. *Id.*

196. 45 C.F.R. § 46.208(b)(3) (1992).

197. UAGA § 3(a)(3) (1987).

198. See *supra* note 119 and accompanying text.

199. See *supra* note 96 and accompanying text.

200. See *supra* note 23 and accompanying text.

201. See *supra* note 96 and accompanying text.

to abort, little of the first trimester will typically remain before the date of the abortion. The decision to donate must be made contemporaneously with the abortion if the tissue is to be useful.

In the case of an ongoing relationship, live-in relationship, or a married relationship, problems notifying the father usually are reduced. However, at times even these relationships may present problems. Some of these relationships are abusive and the woman may have reasons which are unrelated to the donation decision to fear telling the father. Administering an exception for situations involving abuse is even more fraught with problems than locating and consulting fathers in casual relationships would be. Abortions are not as common in stable relationships, and many women in such situations will include the father in both abortion and donation decisions without any legal requirement. While a case can be made for a legal requirement of paternal consent, at least in cases in which the parents are married,²⁰² little is gained by such a requirement. On balance such a requirement is not worth the problems it can create since most married women will include their husbands in such decisions anyway. Thus, the only practical solution is to give decisional authority, as nature has, to the mother.

VI. RESTRICTIONS ON, AND OTHER ASPECTS OF, DECISIONAL AUTHORITY

A. *State Statutes Prohibiting Fetal Research*

About half of the states have enacted legislation placing special restrictions on experimentation involving aborted fetuses.²⁰³ Each of these states, however, has enacted the UAGA, and therefore has a policy in favor of transplantation²⁰⁴ and experimentation with donated human tissue from a person whose death cannot be prevented. Since these states cannot prevent abortion, statutes preventing the use of fetal tissue are inherently suspect.

202. Of course, a husband and wife who are in the process of seeking a divorce are considered married until the divorce decree dissolves the marriage. This adds another minor obstacle to involving the father whenever he is "married" to the mother.

203. Terry, *supra* note 174, at 446 n.195; Charles H. Baron, *Fetal Research: The Question in the States*, 15 HASTINGS CTR. REP., Apr. 1985, at 12, 14-15.

At least one commentator feels that "[s]tate homicide laws can also restrict tissue retrieved from nonviable ex utero fetuses Removal of tissue or organs before death would constitute murder, if the removal were the immediate cause of death." Frankowska, *supra* note 25, at 1110. Since the nonviable fetus cannot be a person after *Roe v. Wade*, it is not likely that this statement is true. See Charles v. Carey, 627 F.2d 772, 790-91 (7th Cir. 1980); Patricia A. King, *The Juridical Status of the Fetus: A Proposal for Legal Protection of the Unborn*, 77 MICH. L. REV. 1647 (1979); Hess-Mahan, *supra* note 11, at 810 n.154 (noting that viability is required for homicide prosecution in most states while live birth is required in others and giving extensive citations).

204. Indeed, those states which have enacted the 1987 version have so strong an interest in transplantation that they are prepared to ignore the wishes of the decedent or his family. See *supra* notes 20, 164-69 and accompanying text.

Many amount to little more than legislative temper tantrums, hurled at *Roe v. Wade*. Like most temper tantrums, the pain they cause is unrelated to the wrong they are protesting. In this case, innocent victims of degenerative diseases suffer.

The nature of the use of fetal tissue that these statutes prohibit varies widely. Some states prohibit only "experimentation" with aborted fetuses.²⁰⁵ Once the use of fetal tissue becomes an accepted way of treating a particular disease, that use will obviously no longer be an "experiment." Further, even while the use of fetal tissue is experimental, the fetus is not the subject of the experiment. The subject of the experiment is the person receiving the fetal cells. Statutes in some states resolve the latter uncertainty by prohibiting the use of fetal tissue in experimental transplants.²⁰⁶ In these states the question of whether, and for how long, the treatment is experimental remains.

Louisiana's statute bars any experimentation on a dead or live fetus unless the experimentation is therapeutic for the fetus.²⁰⁷ It is not clear how anything could be therapeutic for a dead fetus. This statute's constitutionality was challenged in *Margaret S. v. Treen*.²⁰⁸ The trial court held that the statute violated a woman's right to reproductive choice.²⁰⁹ Obviously, the statute was enacted as a way of railing against that right, but it is ineffective in violating the right. On appeal, the United States Court of Appeals for the Fifth Circuit declined to approve or disapprove the trial court's reasoning, holding instead that the statute's crucial operative terms were unconstitutionally vague.²¹⁰

Assuming that a redrafted statute can cure the vagueness of terms like "experiment," the ultimate question would have to be faced. While this statute hardly interferes with the rights of aborting mothers, it interferes with the rights of physicians interested in doing fetal tissue research and patients with degenerative diseases who might be cured. An equal protection or due process²¹¹ challenge made by either of these groups must be evaluated.

Ordinarily, such analysis begins with the selection of an appropriate level of scrutiny.²¹² The patients with degenerative diseases might well have

205. Frankowska, *supra* note 25, at 1109.

206. *Id.* The Arkansas statute, however, goes even further, prohibiting the possession of an aborted fetus or any part thereof. ARK. CODE ANN. § 20-17-802(d) (Michie 1991). Intended to preclude all debate about the meaning of experimentation or other such terms, this statute actually makes abortion illegal since, no matter how quickly the fetus is disposed of, it will be "possessed" for at least a short time. Also, the statute may be applied to convict a woman who has a miscarriage.

207. LA. REV. STAT. ANN. § 40:1299.35.13 (West 1992).

208. 597 F. Supp. 636 (E.D. La. 1984).

209. *Margaret S. v. Treen*, 597 F. Supp. 636, 673-76 (E.D. La. 1984), *aff'd sub nom. Margaret S. v. Edwards*, 794 F.2d 994 (5th Cir. 1986); *see also Margaret S. v. Edwards*, 488 F. Supp. 181 (E.D. La. 1980) (declaring portions of Louisiana abortion law unconstitutional) (related case).

210. *Margaret S. v. Edwards*, 794 F.2d 994, 998-99 (5th Cir. 1986).

211. U.S. CONST. amend. XIV, § 1.

212. JOHN E. NOWAK ET AL., CONSTITUTIONAL LAW 696-711 (3d. ed. 1986).

a more obvious fundamental right than the physicians,²¹³ thereby raising the scrutiny, but the statute will not survive even minimal scrutiny. As applied to aborted fetuses, the statute lacks even a rational basis. In *Margaret S.*, the trial court and a concurring member of the appellate court agreed that the state had no legitimate interest in providing "greater protection to the dead fetus than to the deceased [adult] human being."²¹⁴ Both judges noted that "Louisiana law specifically provides for the use of human corpses for the purposes of research, La. R.S.A. § 17:2353."²¹⁵ Depending on one's view of the more profound questions raised by *Roe v. Wade*, a pre-viability fetus is either less than a regular corpse or the same as a regular corpse. There is no plausible argument for valuing a pre-viability fetus more than a regular corpse.

Thus, it seems doubtful that state laws designed to prohibit aborted fetal tissue research, if they can be drafted to avoid vagueness problems, will be constitutional under any level of scrutiny. These state laws also have no effect on the number of abortions, although they may be irrationally intended to do so.

B. Common Law "Quasi-Property" Possessory Rights

In the case of fetal tissue transplants, some of the fetus is not buried, but is transplanted into a recipient. Given the anticipated demand for fetal cells for transplantation, the question arises as to who has property rights in fetal tissue and the amount of entitlement they possess in authorizing the disposition of their "property." Of specific concern in the fetal tissue transplantation field is the right which resides at the very core of a property

213. Robertson, *supra* note 3, at 484-86; Danis, *supra* note 15, at 1103.

214. *Margaret S. v. Treen*, 597 F. Supp. 636, 674-75 (E.D. La. 1984), *aff'd sub nom. Margaret S. v. Edwards*, 794 F.2d 994 (5th Cir. 1986).

215. *Margaret S. v. Edwards*, 794 F.2d 994, 1002 (5th Cir. 1986). *But see* *Wynn v. Scott*, 449 F. Supp. 1302 (N.D. Ill.) (three-judge court), *appeal dismissed*, 439 U.S. 8 (1978), *aff'd sub nom. Wynn v. Carey*, 599 F.2d 193 (7th Cir. 1979). *Wynn* involved a slightly different statute prohibiting research or experimentation on any "live" fetus. The same statute raised a vast number of other abortion-related questions, and no party was held to have standing to raise the fetal experimentation issue. By way of brief dicta in a lengthy opinion, the trial court never distinguished between viable and nonviable "live" fetuses, applied minimal scrutiny without clear justification, and found the statute "rationally related" to a state interest which the court did not identify. *Id.* at 1322. Thus, although one student commentator has made a dubious attempt to distinguish *Wynn* from *Margaret S.* based on the difference in the statute, it is perhaps more accurate to say that *Wynn* reflects no reasoned analysis of the point. *See* Danis, *supra* note 15, at 1103. On appeal, the Seventh Circuit did not discuss the issue because it was not raised on appeal. *Wynn*, 599 F.2d at 194 (listing sections of statute received on appeal; list does not include § 6).

See also *Charles v. Carey II*, 579 F. Supp. 377, 383 (N.D. Ill. 1983) ("alive" unconstitutionally vague because it could mean "only the most minimal of life signs in a nonviable fetus or it could be limited to the capacity of sustained survival"); *Charles v. Carey I*, 627 F.2d 772, 790-91 (7th Cir. 1980) (earlier appeal involving same litigants). The district court in *Charles v. Carey II* distinguished *Wynn* in a footnote saying that *Wynn* "did not address the argument relied upon here." *Charles*, 579 F. Supp. at 383 n.10.

interest: the right to possess.²¹⁶ It is therefore important to determine the extent and nature of the right the surviving custodian has in the body of the deceased.

Early American cases adopted the English common law rule that no property right existed in a dead body.²¹⁷ However, in the absence of any testamentary disposition, common law courts began to recognize a quasi-property right in the dead body for the limited purpose of determining who shall have custody for burial.²¹⁸ This quasi-property, possessory right in the corpse is usually imposed upon the decedent's next of kin.²¹⁹

Two reasons are generally given for imposing a quasi-property, possessory interest in a corpse upon the decedent's next of kin. First, public health necessitates the speedy burial of a corpse.²²⁰ Because the decedent's relatives usually have an emotional stake in assuring the remains are treated respectfully by burial or cremation, burial of the corpse is generally expedited by allowing the relatives to have quasi-property rights in the corpse.²²¹ Second, because relatives generally derive some benefit from the decedent's estate, distributional reasons favor allocating responsibility for burial of the remains to the relatives.²²²

216. See *Brotherton v. Cleveland*, 923 F.2d 477, 481 (6th Cir. 1991). The concept of "property" in the law has been conceptualized as a "bundle of rights." *Id.* This "bundle of rights" includes the "rights to possess, to use, to exclude, to profit, and to dispose." *Id.* When the UAGA was originally promulgated, the issue of compensation for body parts, including tissue, was left to the states. UAGA § 3 cmt. (1968). However, amended in 1987, the UAGA now prohibits the sale and purchase of body parts. UAGA § 10 (1987).

217. See generally 22A AM. JUR. 2D *Dead Bodies* (1988). Early decisions involving property rights in dead bodies were concerned with whether the disposition of human remains could be controlled by will. *Brotherton*, 923 F.2d at 481. Because English common law held that no property right could exist in a dead body, it follows that the dead body cannot be disposed of by will. *Id.*

The common law treatment of dead bodies may be said to have its unfortunate beginnings with Lord Coke's oft-cited passage:

In every sepulchre that hath a monument, two things are to be considered, viz., the monument and the sepulture, or burial of the dead. The burial of the cadaver, that is *caro data vermibus* [flesh given to the worms] is *nullius in bonis* [among the property of no person] and belongs to the ecclesiastical cognizance. . . .

3 EDUARDO COKE, *INSTITUTES OF THE LAWS OF ENGLAND* 203 (1817), quoted in Cooper, *supra* note 84, at 577 (citations omitted). But even the English common law, in a way now unfortunately overlooked, created a fiction allowing property-like protection for the dead body. Blackstone states: "Stealing the corpse itself, which has no owner (though a matter of great indecency) is no felony *unless some of the grave cloths be stolen with it.*" 4 WILLIAM BLACKSTONE, *COMMENTARIES* *236, quoted in Cooper, *supra*, at 577; see also Roy Hardiman, Note, *Toward the Right of Commerciality: Recognizing Property Rights in the Commercial Value of Human Tissue*, 34 UCLA L. REV. 207 (1986).

218. Terry, *supra* note 174, at 432-33.

219. *Id.* at 433. It is interesting that the property right is accurately described as being imposed on relatives.

220. *Id.*

221. *Id.* at 434.

222. *Id.*

The common law doctrinal expression of a quasi-property, possessory right in the decedent's next of kin, however, was delineated before the decriminalization of abortion, the growth of fetal experimentation, and the fear of creating a fetus market.²²³ The contemporary common law expression of this entitlement, therefore, lacks any functional limitation requiring that the possession of a dead fetus be for the purposes of burial or donation, but not sale.²²⁴

C. *Property Rights in Your Own Body: The Moore Case*

Property law generally is not used as a basis to protect against unauthorized invasions of an individual's body, but a recent, somewhat unusual case presented exactly that question. Accordingly, the case will be explored here in some detail. In *Moore v. Regents of the University of California*,²²⁵ the defendants developed a cell line of enormous therapeutic and commercial value through genetic engineering of the plaintiff's own unique cells without his consent or knowledge.²²⁶ After learning of the development of the cell line, Moore brought suit alleging thirteen different causes of action; the most notable ones being for conversion of his spleen, breach of fiduciary duty, and lack of informed consent.²²⁷

The trial court dismissed Moore's complaint for failure to state a claim.²²⁸ In a divided opinion the court of appeals reversed, holding that the conversion claim stated a cause of action.²²⁹ The California Supreme Court, with two justices dissenting, reversed the appellate court's ruling that individuals have a general property right in their bodies²³⁰ and instead held Moore stated a cause of action for breach of a fiduciary duty to disclose

223. *Id.*

224. *Id.*

225. 793 P.2d 479 (Cal. 1990). See generally Laura K. Rebbe, Note, *Misrepresentation, Conversion, and Commercial Human Tissue Research*, 66 WASH. U. L.Q. 643 (1988) (discussing *Moore* decision). But see *York v. Jones*, 717 F. Supp. 421, 427 (E.D. Va. 1989) (childless couple has sufficient property interest in cryogenically preserved human embryo to state cause of action against fertility institute for breach of contract and in detinue).

226. *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 481-82 (Cal. 1990). Originally, Moore had his spleen removed for the treatment of a condition called hairy cell leukemia. *Id.* at 480. In advance of the removal of the spleen, however, defendants were aware that Moore's spleen was unique and that access to the spleen would provide "competitive, commercial, and scientific advantages." *Id.* at 481. After the spleen was removed, the defendants developed and patented a cell line from Moore's cells that produced lymphokines, a genetic product of considerable commercial value. *Id.* at 482. Without informing Moore of their research efforts, the defendants continued to monitor Moore for nontherapeutic reasons for seven years, at considerable traveling expense for Moore. *Id.* at 481. Although the clinical potential of each lymphokine is difficult to predict, the defendants entered into a contract worth over \$330,000 for the development of commercial products from the patented cell line over a three year period. *Id.* at 482.

227. *Id.* at 482 & n.4.

228. *Id.* at 482.

229. *Id.* at 483.

230. *Id.* at 490.

facts material to the patient's consent.²³¹ Analysis of the three main causes of action follows.

1. The Conversion Claim

Application of the theory of conversion to biological materials from excised cells would not only create uncertainty about the rights and duties of specimen sources and users, but also might ultimately deter potentially beneficial medical research. Recognizing these potential implications of allowing a conversion claim in biological materials from excised cells, the California Supreme Court rejected Moore's conversion claim. The court found that in order to sue for conversion of his spleen, Moore needed to show that he retained an ownership interest in the cells following their removal from his body and not just that the cells came from his body.²³² Although the majority avoided the issue of characterizing an individual's bodily interests, the majority relied on three disparate areas of law in concluding Moore did not retain a sufficient ownership interest in his cells following their removal from his body to stake a claim for conversion.²³³ These were (1) decisional law; (2) non-patent statutory law; and (3) patent law.

a. Decisional Law

Looking first at decisional law, the court noted that no reported judicial decision recognized that a person had a common law property interest in their excised cells to support a cause of action for conversion.²³⁴ The court first examined specialized statutes governing such things as "human tissues, transplantable organs, blood, fetuses, pituitary glands, corneal tissue, and dead bodies."²³⁵ The court held that these specialized statutes only regulate the disposition of human biological materials to achieve societal policy goals; the statutes are not evidence of a general law of property.²³⁶

Next, the court analyzed decisions concerning privacy rights because no direct authority existed for importing the law of conversion into the regulation of human biological materials.²³⁷ The privacy right cases analyzed concerned decisions which involved wrongful publicity and the patient's right to refuse medical treatment. Wrongful publicity cases involve opinions holding that every person has a proprietary interest in his own likeness. In regard to situations involving the nature of genetic materials and disposition of human biological materials, the court found the wrongful publicity cases not relevant because the genetic material used to make a specialized organ

231. *Id.* at 484-85.

232. *Id.* at 488-89.

233. *Id.* at 489.

234. *Id.*

235. *Id.* (footnotes omitted).

236. *Id.*

237. *Id.*

is the same in every person and is not specialized to a particular individual.²³⁸ Similarly, the court found in cases involving the patient's right to refuse medical treatment, that the fiduciary duty and informed consent theories could protect the marginal privacy and dignity of excised cells because full disclosure would be required regarding proposed use of excised cells.

Application of *Moore's* decisional law analysis to the fetal tissue transplant issue yields the following. First, the fetal tissue or organs derived from an elective abortion procedure should be used to achieve the public policy goal of benefiting victims of debilitating diseases, rather than serving individual desires to aid a particular individual. Substantive rules in this emerging area of law should be fashioned to achieve, rather than restrict, this policy. Second, because the fetal tissue or organs derived for the transplant procedure would not be unique to the mother or the father, no fear of imposition on privacy rights would arise from the subsequent use of the fetal material. Finally, the ethicists' concerns regarding proper disposition of the fetus would still be satisfied because the mother must consent to the manner in which the fetal cadaver will be disposed.

b. Non-Patent Statutory Law

Next, applying non-patent statutory law to *Moore's* conversion claim, the court found that California statutory law drastically limits a patient's control over excised cells.²³⁹ "By restricting how excised cells may be used and requiring their eventual destruction, the statute eliminates so many of the rights ordinarily attached to property . . ."²⁴⁰ Therefore, one cannot simply assume that what is left amounts to "property" or "ownership" for purposes of conversion law. Utilizing this rationale in the fetal tissue context, it appears that only the remains of the fetus which are not donated might be considered to be within the mother's control, and then only for the purpose of disposal. If burial of an intact aborted fetus is desired, a fully informed woman undergoing the abortion procedure and aware of the opportunity to donate fetal tissue or organs may always withhold consent to the subsequent donation of the fetal cadaver.

c. Patent Statutory Law

In finalizing its analysis of the conversion claim, the court analyzed patent statutory law. The court found that federal law permits the patenting of organisms that represent the product of "human ingenuity," but not

238. *Id.* at 490. Biologically, this statement that genetic material used to make a specialized organ is the same in every person is not accurate, but in the sense in which the court used it, it is debatable. Obviously, *Moore's* spleen was genetically unique, although not in appearance or "likeness." The degree to which the court's biological error affects the point depends on how one interprets the admittedly imprecise analogy the court is employing.

239. *Id.* at 491.

240. *Id.* at 492.

naturally occurring organisms.²⁴¹ Therefore, cell lines are patentable due to the inventive efforts involved and not because of the discovery of naturally occurring materials. Thus, any claim to ownership of the transplanted tissue or the products derived from fetal tissue or organs by a parent in the fetal tissue transplantation context would be inconsistent with a patent. The patent is an authoritative determination that the tissue or product derived from the tissue is the product of an invention and not nature.

Liability for conversion is predicated on a continuing ownership interest. In deciding whether to create new tort duties in a given area, the court considered the impact expanded liability would have on the societal function of biotechnology research.²⁴² In this case, the application of conversion liability for ownership in one's own cells would have too broad an impact on medical research. The uncertainty over whether clear title in the cells exists would restrict access to necessary raw materials thereby hindering research.²⁴³ Further, the uncertainty might serve as a deterrent to medical research because fear of liability would reduce the economic incentive to conduct important medical research.²⁴⁴ Thus, no conversion ownership exists in one's biological materials.

2. The Breach of Fiduciary Duty and Informed Consent Claim

The court held that "a physician who is seeking a patient's consent for a medical procedure must, in order to satisfy his fiduciary duty and to obtain the patient's informed consent, disclose personal interests unrelated to the patient's health, whether research or economic, that may affect [the physician's] medical judgment."²⁴⁵ This holding was based on the rationale that disclosure of the physician's extraneous motivation was material to the patient's consent.²⁴⁶ The court then described two scenarios for determining when the scientific use of cells that have already been removed from the patient's body no longer affect the patient's interest.²⁴⁷ The court held that if the physician has a pre-existing interest in the patient's cells at the time he recommends a medical procedure, this interest must be disclosed to the patient because it might show a conflict of interest affecting the physician's advice. Therefore it is "material to the patient's decision and, thus, a prerequisite to informed consent."²⁴⁸ However, in the situation where a

241. *Id.* at 492 n.35. See *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) (holding that creation of nonnaturally occurring organism through human ingenuity is patentable).

242. *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 495 (Cal. 1990).

243. *Id.* at 494.

244. *Id.* at 495.

245. *Id.* at 485 (footnote omitted).

246. *Id.* at 484; see also Sharon N. Perley, Note, *From Control Over One's Body to Control Over One's Body Parts: Extending the Doctrine of Informed Consent*, 67 N.Y.U. L. REV. 335 (1992).

247. *Moore v. Regents of the Univ. of Cal.*, 793 P.2d 479, 484 (Cal. 1990).

248. *Id.* "The possibility that an interest extraneous to the patient's health has affected the physician's judgment is something that a reasonable patient would want to know in deciding whether to consent to a proposed course of treatment." *Id.*

treating physician has "no plans to conduct research on a patient's cells at the time he recommends the medical procedure by which they are taken, then the patient's medical interests have not been impaired"²⁴⁹ and later scientific use of the removed cells is acceptable.

3. Application of the *Moore* Decision to Fetal Transplantation

The unauthorized use of fetal tissue in scientific research or transplantation has two effects under the *Moore* decision. First, medical researchers or physicians who perform the abortion with a pre-existing interest in acquiring the fetal tissue may be indirectly liable for subsequent research or transplantation from aborted fetuses in the absence of maternal consent.²⁵⁰ Second, if the fetal tissue ends up in a research facility, the subsequent scientific use of the cells would be permissible regardless of the mother's consent because the mother's medical interests will no longer be directly affected.²⁵¹

D. *The Decedent's Family's Property Right in the Corpse in Non-Burial Situations*

Recently, a court held that the procedural requisites for dealing with "non-property" human remains in organ donation statutes may change the characterization of non-property into a special form of property in order to be allowed protection by the Fourteenth Amendment.²⁵² In *Brotherton*

249. *Id.*

250. In order to prove damages, however, the mother would have to persuade the trier of fact that she would not have had the abortion if she had known of her doctor's pre-existing interest in fetal tissue. This certainly will be a rare case.

251. A woman has an important interest in protecting her health; therefore, the type of abortion procedure used to minimize her risk may affect the desirability of fetal tissue for transplant purposes and may directly conflict with the beneficiaries' interest for transplant purposes. See *supra* notes 31-33 and accompanying text. A few cases arguably disagree with *Moore*, and allow damages for unauthorized research, itself, rather than the conflict of interest in advising the mother. See *McCoy v. Georgia Baptist Hosp.*, 306 S.E.2d 746, 749 (Ga. App. 1983) (denying summary judgment on intentional infliction of emotional distress claim when woman, believing hospital had disposed of her stillborn child, was informed that child's body was in frozen storage and she could pick it up); *Johnson v. Woman's Hosp.*, 527 S.W.2d 133, 140-43 (Tenn. Ct. App. 1975) (allowing recovery for breach of contract and punitive damages when, six weeks after believing hospital had properly disposed of her premature baby, woman was shown child floating in jar of formaldehyde).

252. See Gregory Gelfand, "Taking" Informational Property Through Discovery, 66 WASH. U. L.Q. 703, 714-18 (1988). Essentially, Professor Gelfand's thesis in this regard is that there are two sources of "property" for the purposes of takings analysis. First, a core of "general" property exists, such as the ownership of land, because of the great consensus among the states and, therefore, in the minds of the drafters of the Fifth and Fourteenth Amendments. Second, a state may, by virtue of its own law create property rights, termed "special" property, which the state was not obligated to create or protect in the first place. Nonetheless, when the law creates a special property right for all of the citizens of the state, the state may not then confiscate that property without compensation. *Id.*

v. Cleveland,²⁵³ the United States Court of Appeals for the Sixth Circuit held that a widow had a protected property interest in her husband's corneas under the Due Process Clause of the Fourteenth Amendment when the removal of corneas was caused by established state procedures.²⁵⁴ In *Brotherton* the coroner's office, consistent with its established policy of not reviewing medical records for the purposes of determining whether consent was acquired for anatomical gifts, permitted the deceased's corneas to be removed and used as anatomical gifts despite the widow's refusal to make an anatomical gift.²⁵⁵ Although the court did not determine how to categorize the interest in a dead body, the court stated that the state's interest in implementing the organ/tissue donation program was not substantial enough to allow the state to consciously disregard those property rights that it had otherwise granted.²⁵⁶ The court found that the policy of the coroner's office not to review medical records or paperwork pertaining to a corpse for removal of anatomical parts constituted intentional ignorance and amounted to a state procedure necessitating predeprivation process.²⁵⁷

The dissent took issue with the majority's opinion that the coroner's actions, in accordance with the procedures established by state law, constituted a taking of "property" of the decedent's wife that was protected under the Fourteenth Amendment.²⁵⁸ The dissent argued that Ohio law²⁵⁹ was very clear that no "property" right exists in another person's remains.²⁶⁰ Organ donation statutes do not speak in terms of "giving property rights to a surviving relative;"²⁶¹ the statutes "make no effort to reexamine underlying property rights in the body of the decedent,"²⁶² and they merely give the custodial relative the right to consent to organ donation.²⁶³

253. 923 F.2d 477 (6th Cir. 1991).

254. *Brotherton v. Cleveland*, 923 F.2d 477, 482 (6th Cir. 1991); *see also In Re Moyer*, 577 P.2d 108 (Utah 1978).

255. *Brotherton*, 923 F.2d at 482.

256. *Id.*; *see supra* note 252 (detailing creation of property rights by states).

257. *Brotherton*, 923 F.2d at 482. *See generally* Jaffe, *supra* note 169.

258. *Brotherton*, 923 F.2d at 483 (Joiner, J., dissenting).

259. In the context of creating "special" property, Ohio law would be the source of the property right. *See supra* note 252 (describing creation of "special" property by state). For general property, on the other hand, Ohio law would only be relevant as evidence of the consensus of law on the point. The proposition that Ohio law, in this case the 1968 version of the UAGA, did not create such "special property" rights is difficult to support, however. *See infra* note 263 (noting that UAGA § 2 implicitly creates right to refuse consent).

260. *Brotherton*, 923 F.2d at 483 (Joiner, J., dissenting).

261. *Id.* (Joiner, J., dissenting).

262. *Id.* (Joiner, J., dissenting).

263. *Id.* (Joiner, J., dissenting). Yet, if the right to "consent" is given, is not the right to refuse consent inherently given as well? Indeed, the UAGA does not leave the point open to speculation. If any member of the highest available class of relatives objects, the UAGA treats this as a refusal such that the other relatives of the same class cannot make a gift, and the gift cannot be accepted. UAGA § 2(b)-(c) (1968). Further, if the decedent objected during his lifetime no gift can be made. *Id.* § 2(b). Ironically, it is arguable that the 1987 version, by giving the same rights in section 3, but purposely ignoring them procedurally in section 4, is, itself, an unconstitutional taking of the property it creates. *See supra* notes 164-69 and accompanying text (describing UAGA § 4).

Although most courts recognize that the family has a substantial quasi-property right to dispose of a corpse, the state legislature may, arguably, modify or abrogate the right of action existing at common law.²⁶⁴ Thus, perhaps, the family's right of possession and disposition of a corpse can be modified if the state has an overriding interest in obtaining organ donations. For example, in *State v. Powell*²⁶⁵ the court held that the state interest in providing sight to blind citizens was great enough to allow removal of corneal tissue from a corpse without notice to next of kin.²⁶⁶ In *Georgia Lions Eye Bank, Inc. v. Lavant*,²⁶⁷ the court held that the removal of corneal tissue from decedents for transplant is constitutional when no objection is made by the decedent during his life or by his next of kin, who do not get notice to enable them to object, after death.²⁶⁸ Therefore it would seem that the state may, in the interest of public welfare, require the subsequent donation of the aborted fetus absent—or possibly even in the face of—explicit directions or notification of the decedent's next of kin.²⁶⁹ Given the resistance to fetal tissue transplants, however irrational, it is unlikely that states will enact such laws.

E. State Cadaver and Fetus Disposal Statutes

Until the possible uses of fetuses in medical transplants became known, fetal remains had little value. At common law, cadaver disposal was limited by the state's inherent power to regulate matters of public health.²⁷⁰ This generally required the disposition of the corpse to be done in such a manner that it would not "be regarded as creating a nuisance, be offensive to the sense of decency, or be injurious to the health of the community."²⁷¹ However, once abortion was legalized, the states started to specifically regulate the mode of fetal disposal.²⁷² Specific disposal statutes generally place a duty on the physician-abortionist to require a sanitary removal of aborted fetal remains.²⁷³ For the most part, disposal requirements have been

264. *Georgia Lions Eye Bank, Inc. v. Lavant*, 335 S.E.2d 127 (Ga. 1985). Because Georgia has the UAGA in effect, considerable doubt is cast upon this decision by *Brotherton v. Cleveland*, 923 F.2d 477 (6th Cir. 1991).

265. 497 So. 2d 1118 (Fla. 1986).

266. *State v. Powell*, 497 So. 2d 1118, 1191 (Fla. 1986). *But see Brotherton*, 923 F.2d at 477.

267. 335 S.E.2d 127 (Ga. 1985).

268. *Georgia Lion's Eye Bank, Inc. v. Lavant*, 335 S.E.2d 127, 128 (Ga. 1985). *But see supra* note 263 (criticizing similar provision in 1987 version of UAGA as unconstitutional).

269. This view is not endorsed by either of the authors.

270. *See, e.g., Terry, supra* note 174, at 426.

271. *Seaton v. Commonwealth*, 149 S.W. 871, 873 (1912).

272. *Terry, supra* note 174, at 428.

273. *See, e.g., ARK. CODE ANN. § 20-17-802(a)* (Michie 1991) (stating that fetal remains and all parts thereof must be disposed of in manner similar to that in which other human tissue is disposed); *CAL. HEALTH & SAFETY CODE § 25957(a)* (West 1984) ("[F]etal remains shall be promptly interred or disposed of by incineration."); *FLA. STAT. ANN. § 390.001(7)* (West Supp. 1993) ("Fetal remains shall be disposed of in a sanitary and appropriate manner

upheld under the state's public health and safety power in exercising control of the burials of the dead.²⁷⁴ However, some of these disposal statutes have been successfully challenged for vagueness or for unduly burdening a woman's decision to abort.

In *City of Akron v. Akron Center for Reproductive Health, Inc.*,²⁷⁵ the Court found the disposal statute to be impermissively vague.²⁷⁶ In that case, the Court struck down an ordinance which provided, "[a]ny physician who shall perform or induce an abortion upon a pregnant woman shall insure that the remains of the unborn child are disposed of in a humane and sanitary manner."²⁷⁷ Although the Court recognized that the city had a "legitimate interest in proper disposal of fetal remains,"²⁷⁸ the ordinance was fatally unclear as to whether the provision mandated a "'decent burial' of [the] embryo at the earliest stages of formation."²⁷⁹

In *Thornburgh v. American College of Obstetricians and Gynecologists*,²⁸⁰ a majority of the Court denounced the practice of requiring that women considering abortion be provided with intentionally inflammatory information through a mandatory "informed consent" recital.²⁸¹ The Court said, "[t]he states are not free, under the guise of protecting maternal health . . . to intimidate women into continuing pregnancies[,] . . . wholly subordinat[ing] constitutional privacy interests . . . in an effort to deter a woman from making a decision that, with her physician, is hers to make."²⁸²

Disposal statutes also may be found unconstitutional under *Thornburgh* if they impermissibly interfere with the woman's decision to have an abortion. In *Margaret S. v. Treen*,²⁸³ the district court held Louisiana's fetal

and in accordance with standard health practices.").

If, however, the sole concern of these statutes is the public health and safety, it is surprising that no similar provisions are made in the statutes for the sanitary disposal of other surgically removed body parts. A leg amputated from an adult, for example, would have more potentially dangerous tissue than a fetus. It would appear, therefore, that these statutes are, as a group, constitutionally suspect attempts to strike out at abortion. *Cf. Margaret S. v. Edwards*, 794 F.2d 994, 1002 (5th Cir. 1986) (Williams, J., concurring) (holding that Louisiana law that prohibited research on fetal tissue, but not on other human remains, was state action undertaken to discourage constitutionally privileged abortions).

274. See generally Terry, *supra* note 174, at 428.

275. 462 U.S. 416 (1983).

276. *City of Akron v. Akron Ctr. for Reprod. Health*, 462 U.S. 416, 424 n.7 (1983).

277. *Id.* at 424 n.7 (quoting AKRON, OHIO, CODIFIED ORDINANCES, ch. 1870, § 1870.16 (1978)); see also *supra* note 273.

278. *Akron Ctr. for Reprod. Health*, 462 U.S. at 452 n.45.

279. *Id.* at 451 (quoting *City of Akron v. Akron Ctr. for Reprod. Health*, 651 F.2d 1198, 1211 (6th Cir. 1981)) (Sixth Circuit's opinion in same case); see also *Planned Parenthood Ass'n v. City of Cincinnati*, 822 F.2d 1390, 1392 (6th Cir. 1987).

280. 476 U.S. 747 (1986).

281. *Thornburgh v. American College of Obstetricians and Gynecologists*, 476 U.S. 747, 760-71 (1986).

282. *Id.* at 759.

283. 597 F. Supp. 636 (E.D. La. 1984), *aff'd on other grounds sub nom. Margaret S. v. Edwards*, 794 F.2d 994 (5th Cir. 1986). The Fifth Circuit did not reverse on the ground for

disposal provisions, enacted along with the previously discussed restrictions on fetal research, unconstitutional because they placed impermissible psychological burdens on the woman's decision to abort. The district court found the statute placed an impermissible psychological burden on the pregnant woman because the statute forced her to consider whether her aborted fetus should be cremated or buried.²⁸⁴ In addition, the court found that the statute placed an impermissible burden upon a pregnant woman because the statute equated the disposal of a fetus with the disposal of a person.²⁸⁵ In later proceedings concerning the same statute,²⁸⁶ the court again was asked to consider the validity of the Louisiana state disposal statute. In Louisiana the provision required the doctor-abortionist personally to inform the woman about options for disposal of fetal remains within twenty-four hours of the abortion.²⁸⁷ The court held that the provision constituted a direct burden on pregnant women's abortion rights because information regarding how the fetus would be disposed of was intended to place a psychological burden on the woman as in *Thornburgh*.²⁸⁸

How much remains of this prohibition against placing a psychological burden on the right to abortion is unclear. Recent Supreme Court decisions make it clear that the state and federal governments may take a stand against abortion, even though it remains a constitutional right.²⁸⁹ This creates somewhat of a contradiction the Court has yet to resolve—that of the government in opposition to its own constitution. The contradiction is not absolute. It is possible, although problematic, for the government to say, “you have the right, but it is wrong for you to exercise it.” It is, however, a house divided against itself; it undermines the right and undermines the greater idea of countermajoritarian rights. One need only apply the Court's logic to other constitutional rights to see the difficulties more clearly. Would we allow the government to take the position that, while it cannot stop you from being a Catholic, Hindu, or Democrat,²⁹⁰ it is *wrong* for you to do so?

the trial court's decision, but held the statute impermissibly vague, saying, “[b]ecause there are clearer and narrower grounds on which this statutory provision must be declared unconstitutional, we need not approve or disapprove the rationales relied on by the district court.” *Margaret S. v. Edwards*, 794 F.2d 944, 998 (5th Cir. 1986).

284. *Margaret S. v. Edwards*, 488 F. Supp. 181, 222-23 (E.D. La. 1980) (prior ruling concerning predecessor statute); see also *Leigh v. Olson*, 497 F. Supp. 1340, 1351-52 (D.N.D. 1980).

285. *Edwards*, 488 F. Supp. at 222.

286. *Margaret S. v. Treen*, 597 F. Supp. 636, 636 (E.D. La. 1984).

287. LA. REV. STAT. ANN. § 40:1299.35.14(C) (West Supp. 1992). The provision in pertinent part reads: “The attending physician shall inform each woman upon whom he performs or induces an abortion of the provisions of this Subsection within twenty-four hours after the abortion is performed or induced.” *Id.*

288. *Treen*, 597 F. Supp. at 670-71.

289. See, e.g., *Planned Parenthood v. Casey*, 112 S. Ct. 2791 (1992); *Maher v. Roe*, 432 U.S. 464 (1977).

290. We might have included the term “Atheist” in the text as well. However, the Court,

If anything remains of the "psychological burden" argument, then, ironically, the government probably may not take too strong a stance in favor of the donation of fetal tissue for transplants and research. A legal requirement that doctors press the issue on aborting mothers, or a requirement or presumption that fetuses be donated may well place a significant psychological burden on mothers choosing abortion.²⁹¹ This is so because it would force them to think about the fetus used in such a way, or force them to accept its use for transplant rather than leaving it intact, as part of the price of having an abortion. The matter is best left in private hands, with doctors presenting the request if they wish to.²⁹² Private conduct does not pose the constitutional problems.²⁹³

VII. CONCLUSION

Today, it is generally accepted that tissue or organs may be removed from a cadaver for pathologic analysis, research, or for transplantation. A new technique called fetal tissue transplantation has the potential of treating approximately five million American patients who suffer from degenerative diseases merely by salvaging the tissue from electively aborted fetuses.²⁹⁴

Indeed, if the technique were to be successful in the treatment of AIDS, the number of saved lives could be astronomical. The number of lives that could be saved each year might exceed the loss of life through abortions. Salvaging tissue from an aborted nonviable fetus is consistent with, and medically preferable to, organ donation from an adult human cadaver and should be used to benefit the millions of victims who suffer from degenerative diseases.

The controversy surrounding abortion has no real bearing on the use of fetal tissue. A few uncritical reports to the contrary notwithstanding, no increase in abortions will occur even if use of fetal tissue transplants becomes widespread. The success of fetal transplantation techniques might

itself, incessantly disregards the rights of Atheists because it opens its sessions every day with the crier's call, "God save this Honorable Court" See *Marsh v. Chambers*, 463 U.S. 783 (1983) (upholding similar official state legislature prayer as "non-sectarian;" apparently Atheists are not "sect" for purposes of First Amendment).

291. Ironically, this is one more reason why those who oppose abortion should favor fetal transplant research. Prohibiting the research does not discourage abortions. Forcing aborting mothers to consider donating the fetal tissue may discourage a few such mothers from aborting. Cf. *Leigh v. Olson*, 497 F. Supp. 1340, 1351-52 (D.N.D. 1980).

292. Notably, doctors would not be required to request the mother's permission and might not do so in every case, depending on a number of factors such as the wisdom of doing so in view of the emotional situation of the aborting patient.

293. *But see supra* note 290. A private individual can, of course, tell anyone he wishes, "Don't be a Catholic (Hindu, Democrat, Atheist)." Private individuals may be subjected to constitutional restrictions not relevant here. See, e.g., *Jones v. Alfred H. Mayer Co.*, 392 U.S. 409 (1968).

294. See *supra* notes 12-13 and accompanying text (discussing potential of fetal tissue research for curing many diseases). These figures are for the United States alone. On a world-wide scale, far more than five million people could be treated if the research proves successful.

be seen as tipping the balance in favor of keeping abortion legal. If this is so, it is inevitable. As long as the use of human cadavers does not contradict commonly held and legally enforced convictions about respect for the dead, it is irrelevant whether the tissue is acquired from a deceased fetus, a deceased child, or a deceased adult. The key is that the death would have occurred anyway. Decisions to abort are made to stop unwanted pregnancies; the later decision to donate fetal tissue is a logically separate act. The choice to donate fetal tissue should and, as a practical matter must, remain solely with the mother. So long as ethical guidelines separate, as much as possible, a woman's decision to abort from her decision to donate fetal tissue for transplantation, salvaging tissue from an aborted nonviable fetus is consistent with organ donation from any human cadaver. The availability of fetal tissue and the potential for relief that the technology offers to the five million victims of degenerative diseases outweighs the illogical but perceived ethical and moral dilemmas this technology presents.