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Cryonic Preservation of Human Bodies — A Call For Legislative Action

I. Introduction

Cryonics is the practice of freezing, at extremely low temperatures, the body or head of a person who has just legally died in order to preserve it for possible resuscitation at a future time when physical repair and treatment are available.¹ Cryonics is an offshoot of cryogenics² and cryobiology,³ which are two accepted scientific fields. Many scientists in these fields, however, view cryonics as little more than science fiction, despite significant scientific research and theory supporting the hypotheses behind cryonics.⁴

The question of whether cryonics is the practice of an experimental science⁵ or the practice of a cultist fad⁶ is of no import to the point of this Comment, which is concerned with the lack of any public oversight of the practice of cryonics.⁷ This is an especially poignant point as the number of people becoming interested in and practicing cryonics is growing each year due to media attention and technological advances.⁸ In addition, cryonics is not merely a fad that is soon to fade: cryonics has been practiced for over 25 years;⁹ the field is more financially

1. See WEBSTER'S NEW UNIVERSAL UNABRIDGED DICTIONARY 440 (2d ed. 1979); BRIAN WOKW & MICHAEL DARWIN, CRYONICS[.] REACHING FOR TOMORROW 57 (1991).

2. "Cryogenics" is "[t]he science of producing and maintaining very low temperatures, particularly temperatures in the range of liquid helium." STEDMAN'S MEDICAL DICTIONARY 338 (23d ed. 1976).

3. "Cryobiology" is "[t]he study of the effects of low temperatures on living organisms." *Id.*

4. WOKW & DARWIN, *supra* note 1, at A-39; see Marc Fisher, *In California, They Have Seen the Future ... And It Is Cold*, WASH. POST, Jan. 24, 1988, at W20.

5. See Matt Schudel, *Putting Fate on Ice[.] It Costs a Cool \$100,000, But Cryonicists Say You'll Be Forever Grateful*, CHI. TRIB., Dec. 11, 1988, § Tempo, at 1; see also, Corinne C. Hawkins, *The Cryonic Suspension of Alcor Patient A: Reanimation*, WHOLE EARTH REV., Sept. 22, 1988, at 118 (providing a chronological history of a human body undergoing cryonic suspension).

6. Fisher, *supra* note 4, at W20.

7. Elizabeth Sanger, *It's Called Cryonics — Plus a Lot of Derogatory Things by Skeptics, But Advocates of the Generation-Old Process of Chilling the Newly Dead See It As a Way to Achieve an Afterlife Right Here on Earth*, NEWSDAY, Jan. 31, 1988, at 7.

8. See Mary E. Barrett, *Waging War on Aging: 6 Ways to Stop the Clock*, USA WEEKEND, Sept. 2, 1990, at 4; Michael Cieply, *They Freeze Death If Not Taxes; Cryonics: Freezing Bodies for Later, Uh, Reanimation Gains Popularity. But Resurrection Is Not Without Complications*, L.A. TIMES, Sept. 9, 1990, § Business, at D1.

9. The first human to be cryonically suspended was Dr. James H. Bedford on January 12, 1967. ROBERT W. PREHODA, *SUSPENDED ANIMATION* 111-20 (1969); Nick Nuttall, *Heading for Immortality*, THE TIMES, Apr. 4, 1992, § Home News.

sound than it was in the past;¹⁰ and it has expanded as both a national and an international movement.¹¹

Despite the progressive growth of cryonics, the majority of governments have not regulated this activity.¹² It has become all too common for legislatures to take the do-nothing or wait-and-see approach to any sort of new technology or science, and cryonics appears to be no exception.¹³ Unfortunately, neither society nor cryonics advocates have had the same ability to avoid the issues confronted with cryonics, which has already resulted in avoidable litigation¹⁴ and promises a considerable amount of future litigation. Even with the current case law,¹⁵ cryonicists¹⁶ face repetitive litigation as each jurisdiction grapples with the difficult issues raised by cryonics. Due to a lack of relevant case law and legislative inaction, the public is without any regulatory protection.

This Comment explores the issues surrounding cryonics and proposes a legislative response to those issues.¹⁷ Part II of this Comment begins with an overview of the cryonics movement to demonstrate the need for legislative action. Part III of this Comment investigates the rebirth of the movement within the past decade and analyzes the issues raised in recent litigation. Part IV reviews the limited government action taken to date and demonstrates the ineffectiveness of those resolution attempts. Part V examines the problems and concerns with continued legislative inaction. Part VI

10. See Cieply, *supra* note 8, at D1.

11. Sanger, *supra* note 7, at 7; Telephone Interview with Derek Ryan, Administrator, Alcor Life Extension Foundation (Sept. 15, 1992).

12. See GEORGE P. SMITH, II, MEDICAL-LEGAL ASPECTS OF CRYONICS: PROSPECTS FOR IMMORTALITY 59 (1983) [hereinafter ASPECTS]; Sanger, *supra* note 7, at 7.

13. See George P. Smith, II, *The Medicolegal Challenge of Preparing For a Brave, Yet Somewhat Frightening New World*, J. LEGAL MED., Apr. 1977, at 9, 10-11 [hereinafter *Challenge*].

14. See *Roe v. Mitchell*, No. C697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992) (involving California's denial of death certificates and disposition permits for cryonically suspended bodies).

15. See *id.*

16. "[C]ryonicist: someone who advocates cryonic suspension." WOWK & DARWIN, *supra* note 1, at 57.

17. This exploration will not delve into the issues surrounding suspended animation or permanent cryogenic suspension because these areas of preservation involve live human beings. The purpose of this Comment is solely to explore the legal issues arising from the practice of cryonics. "Suspended animation" is the "state of greatly slowed or stopped metabolism from which organisms can reliably be restored to healthy function." WOWK & DARWIN, *supra* note 1, at 58. "Premortem cryogenic suspension" is the use of freezing techniques prior to legal death to achieve a state of suspended animation. See *Donaldson v. Lundgren*, 4 Cal. Rptr. 2d. 59, 60 (Cal. Ct. App. 1992); Curtis Henderson & Robert C.W. Ettinger, *Cryonic Suspension and The Law*, 15 *UCLA L. Rev.* 414 (1968).

confronts this inaction by proposing a new uniform act, based on similar but distinct statutes and analysis of the problems and concerns. The proposed legislation seeks to alleviate the current concerns of the public and cryonicists, and attempts to provide a road map for future legislation in this area.

II. History of Cryonics

A. Cryonics' Start and Accelerated Growth

When Robert Ettinger published *The Prospect of Immortality* in 1964,¹⁸ the world of the 1950s and 1960s was realizing ideas that previously had only existed in the realm of science fiction. Based on the advent of cryobiology in the 1950s and significant medical advances, Ettinger proposed the use of extremely low temperatures to preserve legally dead bodies until a future time when resuscitation and cure would be possible.¹⁹

During the late 1960s and early 1970s, the cryonics movement flourished. The movement experienced the coining of its own terminology²⁰ and the establishment of its first society.²¹ Within a decade and a half of Ettinger's book, sixteen cryonics organizations and several cryotoriums existed in the United States.²² In addition, cryonics societies were established in at least seven foreign countries,²³ and at least several people were frozen in liquid nitrogen.²⁴

18. ROBERT C.W. ETTINGER, *THE PROSPECT OF IMMORTALITY* (1964) [hereinafter *PROSPECT*]. Mr. Ettinger privately published a preliminary version of *THE PROSPECT OF IMMORTALITY* in 1962; however, the expanded edition was publicly published in 1964. ROBERT C.W. ETTINGER, *MAN INTO SUPERMAN* 255 (1972) [hereinafter *SUPERMAN*]. With its publication, Robert Ettinger became known as the "father" of the modern cryonics movement. *ASPECTS*, *supra* note 12, at 16; Sanger, *supra* note 7, at 7.

19. See *PROSPECT*, *supra* note 18 at 1-2. The idea of preserving dead lifeforms with the hope of future resuscitation is actually centuries old. As early as 1663, an English scientist experimented by freezing eels in a salt and ice mixture, then reviving them the next day. See *ASPECTS*, *supra* note 12, at 8. Benjamin Franklin wrote of being preserved in Madeira wine after death and later being recalled by solar warmth. *PREHODA*, *supra* note 9, at 4-5.

20. The term "cryonics" was first developed in 1965. *WOWK & DARWIN*, *supra* note 1, at 6.

21. *ASPECTS*, *supra* note 12, at 16.

22. *ASPECTS*, *supra* note 12, at 16-17, 20-21; see James S. Granelli, *Steamy Lawsuit Over Frozen Bodies*, *NAT'L L.J.*, June 1, 1981, at 6. A "cryotorium" is a structure to house cryonically suspended human remains. *ASPECTS*, *supra* note 12, at 12.

23. As of November 1971, there were cryonics societies in Australia, Austria, Canada, Colombia, France, Spain and West Germany. *SUPERMAN*, *supra* note 18, at 300-01.

24. The exact number of individuals frozen at any one time is difficult to determine due to differing accounts. Compare *SUPERMAN*, *supra* note 18, at 256 (claiming 14 people had been frozen by 1971) with Granelli, *supra* note 22, at 6 (claiming 13 people by 1981) and Katherine

B. *The Near-Death of the Cryonics Movement*

From 1967 to 1979, only two states, Alabama and Wisconsin, made any effort to address cryonics.²⁵ The total lack of governmental oversight in most states,²⁶ the less than ethical motives of a few individuals,²⁷ and the usual problems with fledgling businesses²⁸ almost brought the cryonics movement to its demise during the early 1980s.²⁹ The financial problems that resulted in many cryatorium closings in the late 1970s and which led to litigation in the early 1980s³⁰ probably could have been avoided by legislators, even without a detailed knowledge of cryonics.

1. *Financial Crises.*—Like many new ventures, the cryonics industry started off poorly capitalized and usually operated at a loss.³¹ Initially, most customers came in without any advanced planning, particularly without any financial planning.³² Most cryonic suspensions were done based on an initial payment followed by monthly or annual maintenance payments paid by the decedent's relatives.³³ Trust funds to cover the maintenance payments could not be established without violating the rule against perpetuities,³⁴ since those choosing

Bishop, *Chilling Answer to Life After Death*, N.Y. TIMES, Jan. 20, 1989, at A8 (claiming about 40 people had been frozen by the 1970s).

25. Alabama's legislature included "cryogenic storage" within its statutory definition of cemetery. ALA. CODE § 34-13-1(a)(5) (1991). Wisconsin's Attorney General issued five opinions directing that cryogenic procedures had to be performed by a licensed embalmer; that cryogenic interment agreements fell under burial agreement and trust fund statutes; and that cryogenic interment structures had to be in cemeteries and meet the applicable structural standards. WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991) (quoting Op. Att'y Gen. (Oct. 15, 1968)); WIS. STAT. ANN. §§ 157.12, 445.01 (West 1991) (quoting Op. Att'y Gen. (Nov. 1, 1967)).

26. "[N]o state agency has authority to regulate body-freezing societies." Robert Lindsey, *Abstract*, N.Y. TIMES, May 12, 1980, § 2, at 9. A deputy coroner stated that the cryonics business falls through all the regulatory cracks and has no watchdog agency. Sanger, *supra* note 7, at 7.

27. See *\$800,000 Awarded in Cryonics Suit*, FACTS ON FILE WORLD NEWS DIG., June 19, 1981, § U.S. Affairs, at 422 [hereinafter *\$800,000*] (describing a civil fraud trial against a cryonics society).

28. See *Thaw*, UPI, Dec. 4, 1982, § Regional News, available in LEXIS, Nexis Library (describing a civil suit against an heir seeking the payment of cryonics maintenance fees).

29. See Schudel, *supra* note 5, at 1.

30. See *supra* notes 27-28 and accompanying text.

31. See Sanger, *supra* note 7, at 7.

32. Sanger, *supra* note 7, at 7.

33. *Thaw*, *supra* note 28, at § Regional News.

34. The "rule against perpetuities" is defined as the "[p]rinciple that no interest in property is good unless it must vest, if at all, not later than 21 years, plus period of gestation, after some life or lives in being at time of creation of interest." BLACK'S LAW DICTIONARY 1331 (6th ed. 1990).

cryonic preservation planned on being frozen for a hundred years or more.³⁵ When maintenance payments were not made, the frozen corpses were returned to their families for alternative disposition.³⁶ In addition, poorly capitalized cryotoriums and cryonics societies went broke and closed.³⁷

These poor financial relationships also resulted in litigation.³⁸ Two California cryonics organizations, Trans Time, Inc. and Bay Area Cryonic Society, sued the heir of a frozen couple's estate for cryonic suspension maintenance fees.³⁹ Litigation of this type is a serious public interest dilemma because it places the last wishes of the deceased at the whim of an heir, who may have contrary financial incentives.

These financial problems could have been avoided had the California Legislature simply included cryonics facilities in its endowment and special care fund statutes covering cemeteries, which render the rule against perpetuities inapplicable in such situations.⁴⁰ If the legislature had acted, then cryonics maintenance trust funds,⁴¹ not barred by the rule against perpetuities,⁴² would have been available to enable proper financial planning, producing more solvent cryonics organizations and preventing suits against heirs for fees.⁴³ In addition, the fraudulent use of such funds may have been prevented, since cryonics maintenance fund trustees would have had to abide by the same reporting requirements as endowment fund trustees under California's endowment fund statutes.⁴⁴

35. \$800,000, *supra* note 27, at 422.

36. \$800,000, *supra* note 27, at 422.

37. \$800,000, *supra* note 27, at 422. The experience of one cryotorium, Trans Time, Inc., is representative of this situation as it had eleven frozen bodies at one time; however, because of nonpayment and return of the bodies, it was only caring for five by 1988. Sanger, *supra* note 7, at 7.

38. *E.g.*, Trans Time, Inc. v. Workman, No. HM823400 (D. Md. 1984).

39. *Id.*; see also Sanger, *supra* note 7, at 7.

40. CAL. [HEALTH & SAFETY] CODE §§ 8725-8776 (West 1990).

41. A cryonics maintenance trust fund would be a perpetual trust created for the purpose of paying the costs of preparing and maintaining a body in a frozen state for an indefinite period of time. See CAL. [HEALTH & SAFETY] CODE § 8776 (West 1990) (describing a cemetery endowment care fund); BLACK'S LAW DICTIONARY 1512 (6th ed. 1990) (defining perpetual trust).

42. See CAL. [HEALTH & SAFETY] CODE § 8776 (West 1992) (barring the rule against perpetuities from invalidating endowment care funds).

43. *E.g.*, Trans Time, Inc. v. Workman, No. HM823400 (D. Md. 1984); see Granelli, *supra* note 22, at 6.

44. See CAL. [HEALTH & SAFETY] CODE § 8747.5 (West 1992) (delineating the recordkeeping requirements for cemetery endowment and special care funds).

2. *Fraud*.—The lack of cryonics regulation also caused other problems. As with most unregulated endeavors, it is not uncommon to have fly-by-night operators move in for a quick profit by introducing the element of fraud into an otherwise benevolent endeavor.⁴⁵ Regardless of the motive, the Cryonics Society of California (CSC), and its for-profit arm Cryonics Interment Inc. (both now defunct), were involved in a civil fraud case which tarnished the credibility of all cryonics organizations for years.⁴⁶ The principals of these two entities took tens of thousands of dollars and allowed the nine bodies in their care to decompose by shutting off the liquid nitrogen, claiming they had run out of money.⁴⁷ In fact, one of CSC's clients had never been frozen.⁴⁸ As a result, some of the decedents' relatives received a combined award of \$928,594 in a successful civil fraud suit in 1981.⁴⁹

Unfortunately, the State of California learned little from the experiences with CSC and Cryonics Interment Inc. and took minimal action to protect the public or the cryonicists, responding only with two diluted measures.⁵⁰ First, in May 1980, California officials, including the Secretary of the State Cemetery Board, warned consumers against organizations practicing cryonics, calling the practice "gross consumer fraud."⁵¹ In the warnings, state officials admitted that "no state agency has authority to regulate body-freezing societies."⁵² However, California's legislature took no action to remedy this deficiency. Second, in December of 1980, California's Attorney General released an opinion stating that the storage of bodies in cryonic suspension did not constitute a cemetery, and cryonics did not meet the requirements of California's Uniform Anatomical Gift Act (CUAGA).⁵³ This

45. See Sanger, *supra* note 7, at 7.

46. Halpert v. Nelson, No. 161229 (Cal. L.A. County Super. Ct. 1981); see George P. Smith, II, *Intimations of Immortality: Clones, Cyrons [sic] And The Law*, 6 U.N.S.W. LAW J. 119, 131 (1983) [hereinafter *Intimations*]; Thaw, *supra* note 28, at § Regional News.

47. *Intimations*, *supra* note 46, at 131; Thaw, *supra* note 28, at § Regional News.

48. *Cryonics*, UPI, June 7, 1981, available in LEXIS, Nexis Library, § Regional News.

49. Halpert v. Nelson, No. 161229 (Cal. L.A. County Super. Ct. 1981); *The Rip Van Winkle Wrinkle*, TIME, June 22, 1981, § Law, at 71.

50. 63 Cal. Op. Att'y Gen. 879 (1980) (removing cryonics from the realm of possibly applicable statutory law); Lindsey, *supra* note 26, at 9 (describing government officials' warning to the public that cryonics is a fraud).

51. Lindsey, *supra* note 26, at 9.

52. Lindsey, *supra* note 26, at 9.

53. The attorney general reasoned: (1) that a cryatorium was not a cemetery in the traditional sense and (2) that having one's body frozen in exchange for a fee did not meet the definition of an anatomical donation for scientific use. 63 Cal. Op. Att'y Gen. 879 (1980); see also CAL. [HEALTH & SAFETY] CODE §§ 7003, 8100 (West 1990) (defining cemetery); CAL. [HEALTH &

opinion effectively prevented cryonics societies from forming endowment trust funds,⁵⁴ and at the same time prevented the state from examining and regulating the societies' funds.⁵⁵ In addition, this opinion removed cryonics societies from possible regulation by the California Department of Health Services under CUAGA as a procurement agency.⁵⁶ In effect, California told its consumers that fraud was rampant while at the same time removing any regulation that might have resulted in detection of the fraud.

3. *Results.*—The incidents described above caused the cryonics movement to dwindle. Of the thirty bodies that had been frozen before 1973, only one remained in cryonic suspension by 1988.⁵⁷ By 1981, there were only four cryonics groups left of at least sixteen that had existed in the United States.⁵⁸ Membership in the organizations dropped and stagnated, totalling less than three hundred by the late 1980s.⁵⁹

III. Cryonics' Reanimation — A New Life With New Litigation

Three phenomena occurring in the late 1980s and early 1990s have given the cryonics movement a second chance at life and simultaneously resounded the call for legislative action. First, advances in the fields of cryobiology and cryogenics have resulted in the commonplace use of liquid nitrogen freezing techniques in medicine and other industries.⁶⁰ Second, media attention has increased

SAFETY] CODE §§ 7150-7157 (West 1990) (comprising California's Uniform Anatomical Gift Act in 1980), *repealed by* CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992).

54. See CAL. [HEALTH & SAFETY] CODE § 8725 (West 1990) (allowing cemeteries to form endowment care trust funds).

55. See CAL. [HEALTH & SAFETY] CODE § 8747.5 (West 1990) (specifying the recordkeeping requirements, and the inspection and examination of records of cemetery endowment care trust funds).

56. Since this code is within the California's Health and Safety Code, regulation, promulgation, and oversight supervision falls to the Department of Health Services. See CAL. [HEALTH & SAFETY] CODE §§ 7150-7157 (West 1990) (comprising California's Uniform Anatomical Gift Act in 1980), *repealed by* CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992).

57. Sanger, *supra* note 7, at 7.

58. ASPECTS, *supra* note 12, at 16-17, 20-21; Granelli, *supra* note 22, at 6.

59. Sanger, *supra* note 7, at 7.

60. See Hugh McCann, *Unlocking Secrets of Hibernation*, Gannett News Service, Jan. 21, 1992, available in LEXIS, Nexis Library (describing research in organ storage for transplantation and new agricultural products resistant to freezing); Avi Ben-Abraham, *Putting Death on Ice: New Hope for those Dying from Incurable Diseases May Come From Cryonics Research*, SATURDAY EVENING POST, Apr. 1989, at 60 (describing current freezing of many human cell types and tissues); Linda G. Caleca, *Zoo Curator's 'Mission From God' Is Saving Species From Extinction*,

dramatically in the last five years.⁶¹ Third, cryonics has again been involved in civil and criminal litigation, which has resulted in landmark cases and big headlines.⁶²

A. *The Advance of Technology*

Most cryobiologists continue to view cryonics with disdain, regarding it at best as a branch of mortuary science and at worst pure science fiction.⁶³ Yet with each advance in cryobiology, cryonicists claim another step toward making their dream a reality.⁶⁴ The last three decades have seen significant advances in scientific technology.⁶⁵ The use of liquid nitrogen freezing techniques in modern medicine is now an everyday practice.⁶⁶ Furthermore, the following human cells or structures have been successfully frozen and thawed for medical uses: skin,⁶⁷ bone,⁶⁸ heart valves,⁶⁹ pre-embryos,⁷⁰ ova,⁷¹ semen,⁷² blood products,⁷³ bone marrow⁷⁴ and corneas.⁷⁵ In

UPI, Aug. 19, 1983, available in LEXIS, Nexis Library (describing "frozen zoos" for the storage of animals' frozen embryos and sperm for use in future artificial insemination).

61. Schudel, *supra* note 5, at 1.

62. See, e.g., *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992) (involving death certificates and disposition permits); *Louis Sahagun & Mark Arax, Coroner Says It Was Homicide By Drug in Frozen Head Case*, L.A. TIMES, Feb. 24, 1988, § 1, at 3.

63. WOWK & DARWIN, *supra* note 1, at A-39 to A-40; Schudel, *supra* note 5, at 1.

64. See, e.g., SUPERMAN, *supra* note 18, at 259-60; Ben-Abraham, *supra* note 60, at 60.

65. See, e.g., *Challenge*, *supra* note 13, at 9-10; *Intimations*, *supra* note 46, at 119-26.

66. E.g., Andrew A. Skolnick, *Tissue Bank Expands Facilities, Efforts*, 266 JAMA 1329, 1329 (1991) (describing tissue bank that uses liquid nitrogen for cryogenic storage of harvested human tissues). It is common practice for medical laboratories to use liquid nitrogen freezing in the preservation and preparation of specimens. See, e.g., Masaaki Ito et al., *Epidermolysis Bullosa Simplex (Koebner) Is a Keratin Disorder: Ultrastructural and Immunohistochemical Study*, 127 ARCHIVES DERMATOLOGY 367, 368 (1991).

67. See, e.g., Michele De Luca et al., *Treatment of Leg Ulcers With Cryopreserved Allogeneic Culture Epithelium: A Multicenter Study*, 128 ARCHIVES DERMATOLOGY 633 (1992) (describing use of frozen skin for promoting wound healing).

68. Skolnick, *supra*, note 66, at 1329 (describing the harvesting of bone for freezing and later use).

69. See, e.g., Skolnick, *supra* note 66 (describing the harvesting of human heart valves for frozen storage and later transplantation).

70. See, e.g., Board of Trustees Report, *Frozen Pre-embryos*, 263 JAMA 2484 (1990) (discussing the use of frozen pre-embryos for future fertilization procedures). A pre-embryo is a fertilized ovum. *Id.*

71. See, e.g., *id.* (discussing the survival of ova compared to pre-embryos after freezing).

72. See, e.g., Kamran S. Moghissi & Richard Leach, *Future Directions in Reproductive Medicine*, 116 ARCHIVES PATHOLOGY LAB. MED. 436 (1992) (discussing pregnancy rates using frozen semen).

73. See, e.g., Gary K. Shen & William Rappaport, *Control of Nonhepatic Intra-abdominal Hemorrhage With Temporary Packing*, 174 SURGERY, GYNECOLOGY AND OBSTETRICS 411 (1992)

addition, a branch of surgery known as cryosurgery⁷⁶ has developed which involves the use of low temperatures either locally or generally.⁷⁷

Additionally, research being done on freezing whole organs, like the heart,⁷⁸ pancreas⁷⁹ and kidney,⁸⁰ and on freezing techniques such as vitrification⁸¹ stimulates growth in the cryonics movement by creating credibility in the underlying hypotheses. Cryonicists are now aware that a human body frozen to -196°C. cannot be resuscitated.⁸² Their hope lies with research and the technology of tomorrow to reanimate the current legally dead they have frozen.⁸³ Even Trans-Time, Inc., one of the three U.S. cryotoriums,⁸⁴ created a research entity with the hope of producing cryonics research by-products that are commercially marketable for other uses.⁸⁵ Innovative research may not just give cryonics some credibility; it may also become a source of revenue for the organizations.

(discussing medical use of fresh frozen plasma and cryoprecipitate).

74. See, e.g., Larry C. Lasky, *The Role of the Laboratory in Marrow Manipulation*, 115 ARCHIVES PATHOLOGY LAB. MED. 293 (1991) (discussing techniques of storing bone marrow in liquid nitrogen).

75. See, e.g., Chi-Wang Yau & Herbert E. Kaufman, *A Medium-Term Corneal Preserving Medium (K-Sol)*, 104 ARCHIVES OPHTHALMOLOGY 598 (1986) (discussing cryopreservation of corneas for later transplantation use).

76. E.g., Andrew A. Gage, *Cryosurgery in the Treatment of Cancer*, 174 SURGERY, GYNECOLOGY AND OBSTETRICS 73 (1992); T.S. Ravikumar et al., *A 5-Year Study of Cryosurgery in the Treatment of Liver Tumors*, 126 ARCHIVES SURGERY 1520 (1991).

77. STEDMAN'S MEDICAL DICTIONARY 339 (23d ed. 1976).

78. E.g., M. Shlafer et al., *Effects of Dimethylsulfoxide on the Globally Ischemic Heart: Possible General Relevance to Hypothermic Organ Preservation*, 19 CRYOBIOLOGY 61 (1982).

79. E.g., N.H.P.M. Jutte et al., *Cryopreservation of Mouse, Monkey and Human Islets of Langerhans for Transplantation Purposes*, 39 NETH. J. SURG. 15 (1987); J.A. Wahlberg et al., *Development of a Cold Storage Solution for Pancreas Preservation*, 23 CRYOBIOLOGY 477 (1986).

80. E.g., J.H. Southard & F.O. Belzer, *The Future of Kidney Preservation*, 30 TRANSPLANTATION 161 (1980).

81. Vitrification is the use of high concentrations of cryoprotective agents such that no ice forms within the tissue. Sanger, *supra* note 7, at 7.

82. E.g., Schudel, *supra* note 5, at 1.

83. See PROSPECT, *supra* note 18, at 1.

84. The three cryotoriums in the U.S. are: (1) Alcor Life Extension Foundation (Alcor), a not-for-profit corporation, in Scottsdale, Arizona; (2) the Cryonics Institute, founded by Robert C.W. Ettinger, in Oakside, Michigan; and (3) Trans Time, a for-profit corporation that performs the cryonic suspensions for the American Cryonics Society (ACS), in Oakland, California. Haya El Nasser, *For California Cryonics Firm, New Head (and Body) Quarters*, USA TODAY, Apr. 6, 1994, at 8A; Cieply, *supra* note 8, at D1; *People Just Not Dying to Be Frozen Any More*, TORONTO STAR, Aug. 9, 1990, at F8 [hereinafter *People*].

85. Cieply, *supra* note 8, at D1; Sanger, *supra* note 7, at 7.

B. *The Attention of the Media*

The second big boost to the cryonics movement in recent years has been the significant amount of media attention it has received. First, the idea of cryonics has become a popular theme in numerous forms of entertainment media: books,⁸⁶ plays,⁸⁷ cartoons,⁸⁸ video games⁸⁹, television⁹⁰ and film.⁹¹ Second, cryonics has received press attention for the individuals it has attracted or interested, such as writer-producer Dick Clair,⁹² Saddam Hussein,⁹³ Walt Disney⁹⁴ and a United States Marine captain.⁹⁵ Third, cryonics has become a topic of discussion for informational lectures,⁹⁶ conferences,⁹⁷ conventions,⁹⁸ international

86. *THE DEATH OF SLEEP*, by Anne McCaffrey and Jody Nye, deals with a doctor in space who undergoes cryogenic sleep three times and relates what happens upon thawing out, having survived both relatives, friends and culture. Judith Kreiner, *New Series Rocket Toward Galactic Tedium*, WASH. TIMES, Dec. 24, 1990, at F2.

87. *Frozen Futures* is about two Santa Monicans that have their heads frozen, in the hope of a better future, and are revived in a future involving a totalitarian state. Robert Koehler, *Chilling Out Over Today's Urban Decay; A Couple Seeking to Escape Into a Better World Lose Their Heads in the Musical 'Frozen Futures'*, L.A. TIMES, July 7, 1991, § Calendar, at 79.

88. *Akbar and Jeff* involves two entrepreneurs who peddle various attractions, including the "Cryonics Hut." James Kindall, *Drawn to Weirdness; Unlike Their Predecessors, Today's Hot New Cartoonists Criticize and Often Mock, the Values of Contemporary Society. Why? Says One Successful Cartoonist, "People Take Their Comics Seriously."*, NEWSDAY MAG., Dec. 11, 1988, at 8.

89. *Colony* is a Macintosh computer game involving the rescue of six children placed in cryogenic storage by their parents. William Harwood, *3-D Game; Computer Comment 'Colony' a Macintosh Tour De Force*, UPI, Nov. 22, 1988, available in LEXIS, Nexis Library.

90. A number of television shows have addressed cryonics. *L.A. Law* recently had a story line about a woman with incurable cancer who wanted to be frozen prior to death. Janis D. Froelich, *Roxanne Keeps 'L.A. Law' In Order*, NORTH SPORTS, Sept. 13, 1990, Tempo, at 12A.

91. A number of popular films have dealt with cryonics' themes. Examples include *SLEEPER* (1973), *UNIVERSAL SOLDIER* (1992), *LATE FOR DINNER* (1992), and *FOREVER YOUNG* (1992).

92. Dick Clair, whose real name was Richard (or Dick) Jones, was an Emmy Award-winning writer and producer who was frozen by Alcor after his death. Ted Appel, *TV Writer's Body Frozen*, UPI, Dec. 15, 1988, available in LEXIS, Nexis Library; Gail D. Cox, *Writer of 'Facts of Life' Disputes Facts of Death*, NAT'L L.J., Mar. 13, 1989, at 8.

93. Representatives of Saddam approached the American Cryonics Society in California, regarding freezing samples of his cell tissue, two months prior to Iraq's invasion of Kuwait. *Body Talk*, DAILY TELEGRAPH (Los Angeles), Sept. 11, 1990, at 17.

94. It has been rumored for years that Walt Disney had himself frozen. Chris Chase, *The Man Who Wished Upon a Star; "Disney's World"*, WASH. POST, Dec. 29, 1985, § Book World, at 3.

95. Michael Cieply, *Marine Fighting in the Gulf Takes Out an Afterlife Policy*, L.A. TIMES, Feb. 27, 1991, at D5.

96. Nona Yates, *Science Calendar: Trips to Joshua Tree Monument Planned*, L.A. TIMES, Apr. 7, 1992, at B2 (reporting that a lecture entitled "Frozen Bodies, Eternal Minds: Can Science Cheat Death?" was scheduled to be presented at Caltech).

97. A three day "Reanimation Conference" was held at the Clarion Hotel in Ontario by Alcor. Bill Rogers, *Freezing for 'Reanimation' Defended at Conference*, Gannett News Service, May 5, 1990, available in LEXIS, Nexis Library.

meetings⁹⁹ and television documentaries.¹⁰⁰ And lastly, media attention focused on the desire of Thomas Donaldson, who has an incurable brain tumor, to be frozen prior to his death.¹⁰¹ The effects of Mr. Donaldson's¹⁰² association with cryonics¹⁰³ have been two-fold: a popular television show episode based on similar facts¹⁰⁴ and an immense outpouring of popular press coverage.¹⁰⁵ Publicity on this scale undoubtedly results in more public acceptance of both the theory and the practice of cryonics, especially when it is related on a personal level like Mr. Donaldson's case.¹⁰⁶

The initial result of such publicity is popularity, but the less obvious result is the gradual public acceptance of cryonics as a reality. For example, the producers of the film *LATE FOR DINNER* called in a representative from Alcor Life Extension Foundation (Alcor) as a consultant.¹⁰⁷ Further, the occupation of cryonics technician has been

98. Cryonics programs are presented at funeral industry gatherings. Roy Rivenburg, *The Last Laugh; Those in Funeral Industry Cope with Gloom, Grief Using Own Brand of Humor*, L.A. TIMES, Aug. 21, 1992, at E1.

99. The European Cryonics Conference attracted experts from the United States, Britain, France and Hungary. Tim Burt, *Freeze Your Assets and Buy a Second Life*, FIN. TIMES, Oct. 20, 1990, at VII; Liz Hunt, *Doctor Condemns 'Wonder-drug' Claims*, THE INDEPENDENT, Oct. 29, 1990, at 3.

100. A TV show dealing with aging or its avoidance looked into cryonic suspension. Walter Goodman, *Review/Television: On Aging, or Rather Avoidance of It*, N.Y. TIMES, Aug. 17, 1992, at C18. *On Ice* was a TV film that looked at the state of the cryonics industry. *People*, *supra* note 84, at F8.

101. The suit for declaratory and injunctive relief was dismissed at trial and affirmed on appeal. *Donaldson v. Van De Kamp*, No. 181830 (Cal. Santa Barbara County Super. Ct. 1990), *aff'd*, 4 Cal. Rptr. 2d 59 (Cal. Ct. App. 1992).

102. Thomas Donaldson is a current member of Alcor, with whom he has arranged for a neurosuspension. United Press International, *Man Sues to Allow Freezing of Head Before He Dies*, L.A. TIMES, May 2, 1990, at A3 [hereinafter UPI]. Mr. Donaldson is an advocate of cryonics as demonstrated by the articles he has written, e.g., Thomas Donaldson, *What You Can Do — Part I*, CRYONICS, Aug. 1982, at 14, and his long association with cryonics as he was the president of the Cryonics Society of Australia for several years. See Mike Darwin, *What You Can Do-Part III*, CRYONICS, Mar. 1984, at 12.

103. Most of the press referred to the process that Mr. Donaldson desires as cryonic preservation, despite that he wishes to be frozen before he is declared dead. E.g., Cynthia Gorney, *Frozen Dreams: A Matter of Death and Life; Californian Thomas Donaldson, Asking the Courts to Allow Him One Last, Long Shot at a Future*, WASH. POST, May 1, 1990, at D1.

104. Alcor obliged *L.A. Law's* producer with information about cryonics and a little more, as evidenced by the January 4, 1990 episode's similarity to Donaldson's case. Gorney, *supra* note 103, at D1; UPI, *supra* note 102, at A3.

105. See David Ansley, *Tumor Victim's Suit: Freeze Me To Death Before Brain Is Ruined*, CHI. TRIB., May 2, 1990, § News, at 3; *Going Concern*, FIN. TIMES, Aug. 14, 1990, § I, at 14.

106. Most of the press referred to the sad plight of Mr. Donaldson, dying of a brain tumor and attempting his last wish — to be frozen premortem. See, e.g., John Hiscock, *California Keeps Ahead of Death*, SUNDAY TELEGRAPH (Los Angeles), June 3, 1990, § International, at 16.

107. Rick Vanderknyff, *'Green Tomatoes': This Week's Special*, L.A. TIMES, Mar. 14, 1992,

listed as an emerging career for the next century.¹⁰⁸ A cryonics society has formed in Britain, and there have been discussions with interested parties in Italy, Germany and France.¹⁰⁹ With public acceptance could also come a loss of public wariness and a mistaken impression of government regulation. Without the needed legislation, the practice of cryonics could return to the days of fly-by-night operators and fraudulent transactions with unwary clients.

C. *The New Litigation*

Unlike the earlier litigation that almost killed the movement, a new wave of litigation has resulted in more favorable publicity and financial rewards for cryonic organizations. Consisting of three situations, this new litigation has been the "call to arms" and vindication of a revived cryonics movement.

1. *Dora Kent and Alcor*.—The first series of new litigation began with Alcor's cryonic suspension of 83-year-old Dora Kent's head shortly after her death on December 11, 1987.¹¹⁰ The freezing of a head is a common cryonics procedure, termed a neurosuspension by cryonicists, after which the remaining body is usually cremated.¹¹¹ Because the doctor who signed the death certificate was not present at Kent's death and her body at the mortuary was without a head, the Riverside County Coroner began an investigation.¹¹² Although a deputy coroner signed a death certificate on December 23, 1987 citing pneumonia as the cause of death, the case became embroiled in controversy when the coroner claimed the next day that Kent's death was a homicide.¹¹³ Two weeks later, while attempting to obtain Kent's head for an autopsy, deputy coroners obtained a search warrant and searched the Alcor facility in vain.¹¹⁴ One week after the

at F3.

108. Julia Lawlor, *Prime Companies, Places, Fields; Paralegal, Health Care*, USA TODAY, May 13, 1991, at 10B.

109. Nick Nuttall, *Life-after-death Freezing Service Gets a British Offshoot*, THE TIMES, Jan. 15, 1990, § Home News.

110. See *Henson v. Carillo*, No. SAC 90-021JSL (Cal. Riverside County Super. Ct. 1990); *Kent v. Carillo*, No. 191277 (Cal. Riverside County Super. Ct. 1988); Sahagun & Arax, *supra* note 62, at 3. See also, ED REGIS, GREAT MAMBO CHICKEN AND THE TRANSHUMAN CONDITION 77 (1990); T.W. McGarry & Louis Sahagun, *Burning Passion Drives Devotees of Cryonics Idea*, L.A. TIMES, Jan. 17, 1988, § 1, at 3.

111. Cieply, *supra* note 8, at D1.

112. REGIS, *supra* note 110, at 78; McGarry & Sahagun, *supra* note 110, at 3.

113. The Coroner claimed homicide due to the finding of high barbiturate levels in the body. REGIS, *supra* note 110, at 78-9; Sahagun & Arax, *supra* note 62, at 3.

114. Dora Kent's head had mysteriously disappeared, so everyone found within Alcor's facility

coroner's search, a SWAT team and UCLA campus police returned to the Alcor facility with another search warrant and seized all of the removable equipment, claiming that it was stolen UCLA property.¹¹⁵

As the case progressed, things began to change in favor of Alcor. First, Alcor successfully obtained an injunction which prevented the coroner from autopsying any heads or bodies in Alcor's possession until the close of the case.¹¹⁶ During the course of this suit, Alcor's attorney filed eight declarations from scientists and doctors attesting that cryonic disposition of one's body is a rational gamble to make.¹¹⁷ Second, in late November 1990, the prosecutors in the alleged Dora Kent homicide quietly closed their investigation without filing charges, claiming insufficient evidence.¹¹⁸ Third, Alcor obtained a settlement from the Riverside County Coroner in a federal suit for the police seizure of its computer equipment.¹¹⁹ The end results of this first series of litigation were a landmark decision preventing autopsy of a cryonics subject, nationwide publicity about cryonics, and some testimonial vindication of the practice.

2. *Is Cryonics a Legal Disposition Method?*—The second series of litigation had its beginning in May 1988, when the Riverside County Registrar refused to issue Alcor a permit for disposition of human remains.¹²⁰ Alcor had just completed its first whole body suspension,¹²¹ and without the permit was storing the body illegally.¹²² In addition, the Registrar informed Alcor that she would have refused to issue a death certificate, had they not had one from

was arrested. REGIS, *supra* note 110, at 83.

115. REGIS, *supra* note 110, at 83-84.

116. The court granted the injunction holding that the state must show a compelling interest in order to interfere with the right to dispose of one's own remains as one desires. *Kent v. Carillo*, No. 191277 (Cal. Riverside County Super. Ct. 1988). See also Elizabeth Sanger, *No Autopsy on Frozen Head*, NEWSDAY, Feb. 3, 1988, at 9.

117. Sanger, *supra* note 116, at 9.

118. Jennifer Warren, *Investigation Closed in Case of Frozen Head*, L.A. TIMES, Nov. 29, 1990, at A3.

119. The case involved the invasion of Alcor members' privacy rights in their electronic mail caused by the government seizure of Alcor's computer equipment. *Henson v. Carillo*, No. SAC 90-021JSL (Cal. Riverside County Super. Ct. 1990); Victoria Slind-Flor, *What Is E-Mail Exactly?*, NAT'L L.J., Nov. 25, 1991, at 3.

120. A permit for disposition of human remains is required by California law in order to handle, transfer or inter a human body or its parts. CAL. [HEALTH & SAFETY] CODE § 7051 (West 1992).

121. Carlos Mondragon, *A Stunning Legal Victory for Alcor*, CRYONICS, Nov. 1990, at 3-4.

122. Without a permit for disposition of human remains, one in possession of human remains is in violation of law punishable by imprisonment. CAL. [HEALTH & SAFETY] CODE § 7051 (West 1992).

another state.¹²³ Negotiations with California's Chief Registrar were fruitless, as according to him no law existed permitting cryonic suspension.¹²⁴

Reviewing its options, Alcor decided to file suit seeking injunctive relief in the name of Dick Jones, a dying AIDS sufferer, against California's Chief Registrar, the Director of the Department of Health Services, and the State Department of Health Services (DHS).¹²⁵ The Los Angeles County Superior Court denied DHS's motion for summary judgment and awarded summary judgment to Alcor, granting injunctive relief.¹²⁶ The court ordered the DHS to desist from prohibiting death certificates and disposition permits for cryonically suspended people, and stated that if DHS wanted to regulate cryonics, it should promulgate regulations regarding procurement organizations under California's Uniform Anatomical Gift Act (CUAGA).¹²⁷ DHS appealed the decision, but the California Court of Appeal unanimously affirmed the judgment.¹²⁸ The appellate court agreed that DHS's denial of permits to Alcor could not be premised upon Alcor's inability to obtain a procurement organization license under CUAGA, since the DHS did not have regulations with which to issue one to cryotoriums.¹²⁹

This was a landmark win for the California cryotoriums, because it granted them legal status to continue performing cryonic suspensions.¹³⁰ However, that legal status was gained at an extravagant cost¹³¹ and may be fleeting, since the California Legislature or the DHS could still enact a limiting statute or promulgate restrictive regulations regarding cryonics procurement organizations.¹³² The courts granted the injunction against DHS only because they had

123. Mondragon, *supra* note 121, at 4.

124. Mondragon, *supra* note 121, at 4.

125. Mondragon, *supra* note 121, at 5. Dick Jones, named as John Roe in the suit, was listed as the plaintiff for two reasons: (1) he had standing since he was suffering from AIDS and desired to be cryonically suspended upon his death and (2) by listing a plaintiff with a terminal illness, Alcor gained California's fast-track trial schedule. Mondragon, *supra* note 121, at 5.

126. *Roe v. Mitchell*, No. C697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992); Mondragon, *supra* note 121, at 7.

127. *Roe v. Mitchell*, No. C697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992). California's Uniform Anatomical Gift Act is found at CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992).

128. *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992).

129. *Id.* at 575.

130. See Mondragon, *supra* note 121, at 7; Carol McGraw, *Legal Limbo Thawing for Those Who Back Cryonics*, L.A. TIMES, Oct. 3, 1990, at B5.

131. Alcor incurred over \$100,000 in legal fees just to complete the superior court action. Mondragon, *supra* note 121, at 3.

132. See, e.g., WOKW & DARWIN, *supra* note 1, at 29; Sanger, *supra* note 7, at 7.

no statutory or regulatory basis upon which to deny death documents to cryonics societies, particularly since they had issued the documents previously.¹³³

3. *Will Contest.*—The third litigation series began shortly after the second series and once again involved Dick Jones and Alcor.¹³⁴ This litigation was the contesting of Mr. Jones' last will¹³⁵ and revolved around incidents that occurred just prior to his death on December 12, 1988.¹³⁶ The original will and trust, written in 1987, listed Alcor as the major beneficiary, while the second will and trust, drawn up by his relatives, divided his estate between Alcor and his relatives.¹³⁷ The main issue in the will contest was Mr. Jones' competency at the time of the signing of the second document, just fifty-six hours before his death.¹³⁸ Despite strong evidence that Mr. Jones was incompetent, the judge decided that Mr. Jones had been competent long enough on December 9th to read and understand the forty-six page will and trust document.¹³⁹

Arguments used by Alcor's opponent¹⁴⁰ and statements made by the court¹⁴¹ suggest that Alcor lost because of the court's disdain for

133. *Mitchell*, 9 Cal. Rptr. 2d at 574.

134. See *Cox*, *supra* note 92, at 8.

135. *In re the Trust of Richard C. Jones*, No. P730905 (Cal. L.A. County Super. Ct. 1989).

136. Saul Kent, *How Relatives Stole \$Millions From Dick Jones*, CRYONICS, Sept. 1989, at 12, 18-21. Mr. Jones desired to be cryonically suspended upon his death and for Alcor to have research funds to increase his chance of reanimation. *Id.* Mr. Jones' second will and trust, drawn up by his sister's attorneys and signed by him on December 9, 1988, listed Jenna McMahon (Mr. Jones' business partner) as trustee of his estate and evenly split the estate between Alcor and his relatives. *Cox*, *supra* note 92, at 8.

137. *Cox*, *supra* note 92, at 8.

138. *Cox*, *supra* note 92, at 8; *Kent*, *supra* note 136, at 18. Neither side contested that Mr. Jones was suffering from AIDS dementia and other mentally incapacitating problems. Just weeks prior to his death at a hearing to appoint a conservator, Ms. McMahon and Ms. Martin (Jones' sister) both testified that Mr. Jones was mentally incompetent, a position supported by a physician's declaration. Ms. McMahon was subsequently declared the temporary conservator for Mr. Jones. Then, in preparation for the permanent conservatorship hearing, a state probate investigator visited with Mr. Jones on December 7th and determined that he was unable to complete a voter registration form, which is the standard test of competency in California. *Kent*, *supra* note 136, at 16-19.

139. This decision was based largely on the testimony of nonmedical witnesses present at the will signing. See *In re the Trust of Richard C. Jones*, No. P730905 (Cal. L.A. County Super. Ct. 1989); *Kent*, *supra* note 147, at 20-21.

140. For example, the attorney for Ms. McMahon called Saul Kent a "'fanatic' of questionable sanity and moral character" in his court papers. *Cox*, *supra* note 92, at 8.

141. At a February 24th hearing, the judge described Kent's standing as a "legal technicality" and "a subterfuge" for Alcor, despite his status as trustee under Mr. Jones' first will. *Cox*, *supra* note 92, at 8. Also, he stated that Kent faced "an uphill battle" to show why Ms. McMahon should not administer the will. *Cox*, *supra* note 92, at 8.

the practice of cryonics and the court's desire to give money to the family instead. This case was a classic example of how a court's perception of cryonics could impact unfavorably on the outcome of litigation.¹⁴² Despite these perceptions, the final results of this litigation were more publicity¹⁴³ and a hefty financial settlement for Alcor.¹⁴⁴ However, it left the cryonics societies with the realization that future litigation could be jeopardized by a court's perception of the unregulated practice.¹⁴⁵

D. The Result on the Cryonics Movement

The recent litigation, media attention and technological advances have pushed the cryonics movement into a definite growth cycle,¹⁴⁶ and cryonics societies admit that interest has not been at the current level since the mid-1960s.¹⁴⁷ This trend will probably continue as the public's acceptance of the practice grows with each technological advancement. Unfortunately, the problems of the past may revisit cryonics, as unscrupulous entrepreneurs see the vast sums of money involved¹⁴⁸ and the lack of governmental oversight.¹⁴⁹

IV. Review of Government Actions Taken

A review of the action that has been taken by a few governments demonstrates the problems left unaddressed and the need for a comprehensive legislative proposal. To date, action has been taken by Alabama,¹⁵⁰ California,¹⁵¹ Wisconsin¹⁵² and British Columbia.¹⁵³

142. See Kent, *supra* note 136, at 24.

143. See, e.g., Cox, *supra* note 92, at 8; Sahagun, *supra* note 110, at 2.

144. Estimates of Alcor's settlement range from about \$3.15 million to \$5 million. Compare Cieply, *supra* note 8, at D1 (citing \$3.15 million) with Sahagun, *supra* note 110, at 2 (citing \$5 million).

145. See Kent, *supra* note 136, at 24-25.

146. Alcor claims its business doubled from 1986 to 1990, its membership tripled from 1987 to 1990, and 1990 was its best year yet. Barrett, *supra* note 8, at 4; Cieply, *supra* note 8, at D1.

147. *Cryoevangelism*, CRYONICS, Jan. 1989, at 18-19.

148. In 1988, the American Cryonics Society charged \$125,000 for a whole body suspension and \$50,000 for a neurosuspension, Alcor charged \$100,000 for a whole body suspension and \$35,000 for a neurosuspension, and the Cryonics Institute charged \$28,000 for a whole body suspension. Sanger, *supra* note 7, at 7.

149. Riverside County deputy coroner Bogan was reported to admit that no governmental agency regulates cryonics. Sanger, *supra* note 7, at 7.

150. ALA. CODE § 34-13-1 (1991); see *supra* note 25.

151. Alcor Life Extension Found., Inc. v. Mitchell, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992); see second litigation series discussion *supra* part III.C.2.

152. WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991)(quoting Op. Att'y Gen. (Oct. 15, 1968)); WIS. STAT. ANN. §§ 157.12, 445.01 (West 1991)(quoting Op. Att'y Gen. (Nov. 1, 1967)); see *supra* note 25.

Since the action taken has come in various forms,¹⁵⁴ this Comment will review both the legislative and the non-legislative steps that have been taken to date.

A. California's Use of the Uniform Anatomical Gift Act

According to California's Uniform Anatomical Gift Act (CUAGA), California views cryotoriums and the respective societies as procurement agencies of human body donations.¹⁵⁵ California therefore considers those who request cryonic suspension posthumously as donors of anatomical gifts for research.¹⁵⁶ This may seem a bizarre way in which to characterize the practice of cryonics, but it was the result of legislative inaction,¹⁵⁷ bureaucratic opposition,¹⁵⁸ legal ingenuity¹⁵⁹ and judicial order.¹⁶⁰ Regulating the practice of cryonics under CUAGA has solved some of the dilemmas facing cryonicists temporarily, but it has left unaddressed the concerns of the public.

153. WOKW & DARWIN, *supra* note 1, at 29-30 (citing British Columbia Cemetery and Funeral Services Act, ¶ 57 (1990)) (outlawing the sale or offer of cryonics).

154. Compare ALA. CODE § 34-13-1 (1991) (wording in a statute) and WOKW & DARWIN, *supra* note 1, at 29-30 (citing British Columbia Cemetery and Funeral Services Act, ¶ 57 (1990)) (outlawing cryonics) with Mitchell v. Roe, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992) (ordering injunctive relief) and WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991) (quoting Op. Att'y Gen. (Oct. 15, 1968)); WIS. STAT. ANN. §§ 157.12, 445.01 (West 1991) (quoting Op. Att'y Gen. (Nov. 1, 1967)).

155. CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992) (comprising California's Uniform Anatomical Gift Act (CUAGA)); see second litigation series discussion *supra* part III.C.2.

156. See Alcor Life Extension Found., Inc. v. Mitchell, 9 Cal. Rptr. 2d 572, 575 (Cal. Ct. App. 1992).

157. California's legislature has not passed any human remains disposition legislation that addresses cryonics. Cf. CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992) (comprising CUAGA, which does not address cryonics); CAL. [HEALTH & SAFETY] CODE §§ 10375-10384 (West 1990) (comprising chapter on permits for disposition of human remains, which does not address cryonics).

158. The California Cemetery Board requested opinions from the California Attorney General in 1980 as to whether a cryotorium is a cemetery and whether cryonics meets the requirements of the CUAGA. 63 Op. Cal. Att'y Gen. 879; see discussion *supra* notes 53-56 and accompanying text (discussing the attorney general's negative opinions towards cryonics).

The California Department of Health Services informed all of the state's local registrars that a cryotorium is not a cemetery, cryonics does not meet CUAGA requirements and accordingly, cryonics is not a legal disposition method for human remains. See Alcor Life Extension Found., Inc. v. Mitchell, 9 Cal. Rptr. 2d 572, 574 (Cal. Ct. App. 1992).

159. It is unknown who devised the practice of considering cryonically suspended patients as body donors under the CUAGA, but it has been done since the 1970s. See 63 Op. Cal. Att'y Gen. 879 (1980) (attempting to disclaim use of CUAGA for cryonic suspensions).

160. See second litigation series discussion *supra*, part III.C.2.

Cryonicists rejoiced over their judicial victory which granted them official recognition, as it solved several of their more pressing problems.¹⁶¹ First, being named as a procurement agency under CUAGA has given cryonicists the legal standing they desire,¹⁶² granted them the right to handle dead bodies,¹⁶³ and granted them rights over a dead body superior to all except a coroner.¹⁶⁴ Second, the cryonics groups may have access to a donor's body immediately upon declaration of death.¹⁶⁵ Third, the designation as a procurement agency has enabled one cryonics society to finally obtain the zoning variance it needed to operate.¹⁶⁶ The solution of these problems, by the use of CUAGA, shows that legislation can work.

Unfortunately, because the Uniform Anatomical Gift Act (UAGA)¹⁶⁷ was not adopted by the California Legislature to cover the practice of cryonics,¹⁶⁸ California's legislation does not have the scope necessary to solve all of the issues related to cryonics.¹⁶⁹ First, CUAGA does not address two of the cryonicists' dilemmas concerning maintenance trust funds and cryonics standards of care.¹⁷⁰ Because CUAGA does not address cryonics directly,¹⁷¹ the legislation did not address having to pay to maintain one's own donated body. For the same reason, CUAGA does not address any of the public's concerns regarding cryonics.¹⁷² This is because the California Legislature did not envision cryonics as part of CUAGA¹⁷³ and adopted the UAGA with the premise that the involved professions or occupations were already state regulated.¹⁷⁴

161. Mondragon, *supra* note 121, at 7.

162. Mondragon, *supra* note 121, at 7.

163. CAL. [HEALTH & SAFETY] CODE § 7151.5 (West Supp. 1992) (specifying that bodies may be released to procurement organizations).

164. CAL. [HEALTH & SAFETY] CODE § 7154 (West Supp. 1992) (specifying donee's rights under CUAGA).

165. CAL. [HEALTH & SAFETY] CODE § 7154(c) (West Supp. 1992).

166. See discussion *infra* note 236.

167. UNIF. ANATOMICAL GIFT ACT § 1-17 (1987).

168. 63 Op. Cal. Att'y Gen. 879 (1980) (stating the legislative intent of adopting the UAGA was to satisfy the need for law uniformity regarding tissue and organ transplantation).

169. See, e.g., discussion *infra* part IV.B.

170. See CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992); discussion *infra* part V.A.

171. See CAL. [HEALTH & SAFETY] CODE §§ 7150-7156.5 (West Supp. 1992).

172. See discussion *infra supra* part V.B.

173. 63 Op. Cal. Att'y Gen. 879 (1980).

174. For example, CUAGA defined "physician" as an individual licensed or authorized "under the laws of any state." CAL. [HEALTH & SAFETY] CODE § 7150.1(i) (West Supp. 1992).

The most critical concern that cryonicists should have with the use of the UAGA's provisions is that such oversight may be short-lived or limited.¹⁷⁵ The status of cryonics groups as donees under CUAGA could be disrupted by severely restrictive or prohibitive regulations,¹⁷⁶ by legislative amendments to CUAGA restricting its application,¹⁷⁷ or by legislative changes in the determination of death resulting in nonviable remains.¹⁷⁸ Outside of California, the use of other states' UAGAs¹⁷⁹ for cryonics may not be as productive. Most states have not previously allowed the use of the UAGA by cryonicists because their courts do not view bureaucratic denial of its use by cryonicists as a "sudden and unexplained about-face."¹⁸⁰ In addition, other states' courts may not agree that the paid cryonic disposition of an individual's own remains is an anatomical gift for scientific use.¹⁸¹ In the end, cryonicists may find that using the UAGA is a short-term fix and their resources may have been better spent on lobbying for more specific legislation.

B. The Wisconsin Attorney General's Opinions

Wisconsin's attempt to address cryonics involved two sets of attorney general opinions interpreting existing statutes, rather than new or amended law.¹⁸² The Wisconsin Attorney General's opinions,¹⁸³

175. Cryonicists are concerned that they may be regulated out of existence by California's Department of Health Services (DHS). *E.g.*, Sanger, *supra* note 7, at 7.

176. The DHS could promulgate restrictive procurement agency regulations like the posting of a large cash bond, the payment of a considerable licensing fee or the requirement of a full-time physician staff. Sanger, *supra* note 7, at 7.

177. The legislature could amend the CUAGA so that its definitions of a procurement organization and a donee exclude cryonics groups. *See* CAL. [HEALTH & SAFETY] CODE §§ 7150.1(j), 7153 (West Supp. 1992); *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 575 (Cal. Ct. App. 1992).

178. If the determination of brain death was conditioned on the absence of electrical brain activity for twenty-four hours, the result would be nonviable brain tissue unsuitable for cryonics. Sanger, *supra* note 7, at 7.

179. All fifty states and the District of Columbia have adopted the UAGA; however, there are two versions: UNIF. ANATOMICAL GIFT ACT (1987); UNIF. ANATOMICAL GIFT ACT (1968). Thirty-six states and the District of Columbia still hold to the 1968 version, while fourteen states (including California) adopted the 1987 version. *See* UNIF. ANATOMICAL GIFT ACT § Table, Prefatory Note (1987). In addition to the differences between the versions, each state could or did amend the UAGA when it was adopted. *See* UNIF. ANATOMICAL GIFT ACT §§ 1-17 (1987), available in WESTLAW, U.L.A. Database.

180. *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 572, 575 (Cal. Ct. App. 1992); *see* second litigation series discussion *supra* part III.C.2.

181. *See* UNIF. ANATOMICAL GIFT ACT § 6 (1987) (describing purposes for which gifts may be made).

182. *See* WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991)(quoting Op. Att'y Gen. (Oct. 15, 1968)); WIS. STAT. ANN. §§ 157.12, 445.01 (quoting Op. Att'y Gen. (Nov. 1, 1967)).

issued in the late 1960s, do not address all of the dilemmas associated with cryonics.¹⁸⁴ Since the opinions have not been updated to current cryonics practices, they do not address the use of other professionals or technicians,¹⁸⁵ nor do they address the current methodology. For example, since a state licensed individual only needs to be involved if a dimethylsulfoxide solution is perfused into the body,¹⁸⁶ the public is left with the possibility of unknown providers. In addition, since the opinions do not address the other drugs used in the cryonic process,¹⁸⁷ there is no regulation regarding their procurement, storage or inspection.¹⁸⁸

The Wisconsin Attorney General attempted a comprehensive approach¹⁸⁹ and successfully covered many of cryonics' problem areas.¹⁹⁰ With a few additions or updates, the approach could be more complete in solving the existing dilemmas.¹⁹¹ However, the

The judicial value of these opinions has not been tested, as there has not been a cryonic suspension or a cryatorium established in Wisconsin. However, judicial review of these opinions will show any effectiveness they possess and provide a glimpse of Wisconsin's attitude towards cryonics.

The attorney general's opinions, as quoted in the statutes, covered several statutes in an attempt to address the diverse problems associated with cryonics. *See* WIS. STAT. ANN. § 157.12 (West 1991)(dealing with mausoleums and cemetery vaults); WIS. STAT. ANN. § 157.125 (West 1991)(dealing with perpetual trust funds and trustees); WIS. STAT. ANN. § 445.01 (West 1991)(dealing with definitions under the Funeral Directors Chapter); WIS. STAT. ANN. § 445.125 (West 1991)(dealing with burial agreements). The opinions granted state recognition to cryonic suspensions, allowed the creation of cryonic maintenance trust funds, established the location of cryatoriums for zoning purposes, and formulated standards for cryonics based on those of an embalmer. For the public, the opinions provided for the regulation of some of the practitioners and required environmental and health approvals for cryatoriums.

183. WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991)(quoting Op. Att'y Gen. (Oct. 15, 1968)); WIS. STAT. ANN. §§ 157.12, 445.01 (quoting Op. Att'y Gen. (Nov. 1, 1967)).

184. *See* discussion *infra* part V.A.

185. A cryonic suspension team, which will infuse medical solutions, use medical equipment, perform open-chest manipulations and possibly amputate the head, may or may not consist of a physician, a researcher, a paramedic, an emergency medical technician, or trained volunteers. *See* WOVK & DARWIN, *supra* note 1, at 31; Steve Bridge, *Becoming An Emergency Medical Technician*, CRYONICS, Apr. 1988, at 27; Sanger, *supra* note 7, at 7.

186. These opinions required an embalmer, licensed by the state, to perform the perfusion of a dimethylsulfoxide (DMSO) solution. WIS. STAT. ANN. § 445.01 (West 1991) (quoting Op. Att'y Gen. (Nov. 1, 1967)).

187. *Cf.* WIS. STAT. ANN. §§ 157.12, 157.125, 445.125 (West 1991)(quoting Op. Att'y Gen. (Oct. 15, 1968)) (mentioning no drugs); WIS. STAT. ANN. §§ 157.12, 445.01 (West 1991)(quoting Op. Att'y Gen. (Nov. 1, 1967)) (mentioning only DMSO).

188. *See* third concern discussion *infra* part V.B.

189. *See supra* notes 182-187 and accompanying text.

190. *See* discussion *infra* part V.A-B.

191. *See supra* notes 188-90 and accompanying text.

legislative route would be more effective, as the opinions of an attorney general can be easily ignored by the judiciary.¹⁹²

C. Alabama's Two Word Inclusion

Alabama's legislative action consisted of the inclusion of the two words "cryogenic storage" in its definition of a cemetery within its Funeral Services Chapter.¹⁹³ By having done so, one might assume that Alabama relegated cryonics to the realm of embalmers and funeral directors,¹⁹⁴ solving the problems associated with cryonics. Actually, this amendment did satisfy some of the problems or concerns with cryonics by recognizing the practice,¹⁹⁵ by making perpetual trust funds possible,¹⁹⁶ by solving the zoning identity issue,¹⁹⁷ and by quelling initially the environmental impact concerns.¹⁹⁸

However, Alabama's two words are not broad enough to solve all the problems and may even have created more. First, Alabama's legislature did not define the term "cryogenic storage",¹⁹⁹ thereby creating vagueness as to what the legislature meant by the term. For example, cryogenic storage could include the storage of bodies in refrigerators, the storage of bodies in conventional freezers, or the storage of bodies in liquid nitrogen, depending on the definition adopted.²⁰⁰ In addition, since Alabama's cemetery definition requires

192. A California court held that an attorney general's opinion stating that cryonics did not meet the requirements of the UAGA was incorrect. *Roe v. Mitchell*, 9 Cal. Rptr. 2d 572, 574 (Cal.Ct.App. 1992).

193. "Cemetery. A place dedicated to and used or intended to be used for the permanent interment of human remains. It may be either land or earth interment; a mausoleum for vault or crypt entombment; a structure or place used or intended to be used for the interment of cremated remains; cryogenic storage; or any combination of one or more thereof." ALA. CODE § 34-13-1(a)(5) (1991).

194. This assumption is based simply on that the words "cryogenic storage" appears in the Funeral Services Chapter which is the statutory compilation of Alabama's laws concerning funeral directors, embalmers and funeral establishments. ALA. CODE §§ 34-13-1 to 34-13-152 (1991).

195. See first problem area discussion *infra* part V.A.

196. See third problem area discussion *infra* part V.A. A cemetery's perpetual care funds may be transferred to another cemetery if a body is removed and reinterred at the other cemetery. ALA. CODE §§ 11-47-69, 11-47-73 (1992).

197. See fourth problem area discussion *infra* part V.A. Designation of a cryogenic storage area, or cryatorium, as a cemetery identifies it for zoning purposes. See ALA. CODE § 34-13-1(a)(5) (1991).

198. See third public concern discussion *infra* part V.B. Alabama has a statute regarding the initial location and further extension of a cemetery which requires the review of health and environmental factors. See ALA. CODE § 22-20-4 (1992).

199. No definition for "cryogenic storage" appears within the act. See ALA. CODE §§ 34-13-1 to 34-13-152 (1991).

200. The difficulty with the definition of "cryogenic" is that it does not indicate a specific temperature or temperature range. *E.g.*, 1 BRITANNICA WORLD LANGUAGE DICTIONARY 323

"permanent interment",²⁰¹ the question remains whether a cryotorium would meet this definition since cryonicists freeze themselves now with the hope of being thawed later.²⁰² This vagueness could result in anti-cryonics regulation or the expense of interpretative litigation.²⁰³

Second, Alabama did not address cryogenic storage in any other pertinent sections of its Funeral Services Chapter,²⁰⁴ which leaves large statutory gaps through which the practice of cryonics could fall. For example, the definition of embalming does not include cryogenic storage as a disposition method or as a preparation technique,²⁰⁵ but the definition of funeral directing could be construed to include cryonics preparation and storage.²⁰⁶ The result could be unlicensed and untrained individuals preparing bodies for cryonic suspension under only the managerial supervision of a funeral director.

Finally, Alabama did not address cryogenic storage in any other pertinent statutes of its code,²⁰⁷ resulting in additional potential conflict for cryonicists. Alabama law allows the cryogenic storage of bodies within the state,²⁰⁸ but does not allow it as a method of transportation out of the state.²⁰⁹ Assuming that cryonicists maintain their practice of transferring bodies to California for interment,²¹⁰ they could incur legal trouble in Alabama due to its law regarding the removal of bodies from Alabama.²¹¹ If Alabama wants to recognize the practice of cryonics, broader and more encompassing legislation

(1956) (defining cryogenic as "[p]ertaining to the study of, or experiments in, low temperatures"); THE NEW AMERICAN MEDICAL DICTIONARY AND HEALTH MANUAL 77 (1968) (defining cryogenics as "[t]he science of cold and its uses in treating human ills").

201. See cemetery definition *supra* note 193.

202. See Sanger, *supra* note 7, at 7.

203. California's DHS attempted to make cryonic suspensions illegal due to a lack of definitive statutory law. See Alcor Life Extension Found., Inc. v. Mitchell, 9 Cal. Rptr. 2d 572, 573 (Cal. Ct. App. 1992). Alcor had to incur the expense of a trial and an appeal to overcome this attempt. See litigation cost *supra* note 131.

204. See ALA. CODE §§ 34-13-1 to 34-13-152 (1991).

205. "Embalming" is defined as "[t]he practice, science or profession, as commonly practiced, of preserving, disinfecting and preparing by application of chemicals or other effectual methods human dead for burial, cremation or transportation." ALA. CODE § 34-13-1(a)(2) (1991).

206. "Funeral directing. The practice of directing or supervising funerals or the practice of preparing dead human bodies for burial by means other than embalming, or the preparation for the disposition of dead human bodies;..." ALA. CODE § 34-13-1(a)(16) (1991).

207. See definition of "cemetery" *supra* note 193.

208. ALA. CODE § 34-13-1(a)(5) (1991).

209. See discussion *infra* note 211.

210. See, e.g., Bridge, *supra* note 185, at 19-20; Schudel, *supra* note 5, at 1.

211. It is unlawful to remove a body from Alabama unless it is embalmed, cremated or designated for the advancement of medical science or organ replacement. ALA. CODE § 22-19-2 (1992). This type of regulation is also in existence in other states. Bridge, *supra* note 185, at 20.

must be enacted to solve the cryonicists' dilemmas and quell the public's concerns.

D. British Columbia's Ban of Cryonics

British Columbia's prohibition of the offering or sale of cryonic suspension is undoubtedly the most direct legislative response of any government to date.²¹² British Columbia's legislature must have had vigorous opposition to cryonics in order to: (1) consider the practice in light of the fact that it probably has not yet been practiced in British Columbia and (2) outlaw its sale or offer.²¹³ Regardless of the intent behind or the directness of the prohibition, the question remains as to its effectiveness in solving the problems of cryonics.²¹⁴

By outlawing cryonics, a legislature could claim to have removed the cause of any concern by the public.²¹⁵ However, this is short-sighted thinking as the public's desire for cryonics, albeit currently small but growing,²¹⁶ may not be satisfied by its prohibition. Even absent any regulation, the practice of cryonics is not conceptually any different than other legally held practices; although the reasons for the practices may differ.²¹⁷ In light of this, a legislature's stature may be greatly diminished for outlawing a viable disposition method for human remains.²¹⁸

212. WOKK & DARWIN, *supra* note 1, at 29-30 (citing British Columbia Cemetery and Funeral Services Act, ¶ 57 (1990)).

213. See WOKK & DARWIN, *supra* note 1, at 29 (predicting such restrictive legislation due to the existence of vigorous opposition by ill-informed people).

214. See discussion *infra* part V.A-B.

215. By banning cryonics within the province, the legislature might believe that the public should not have concerns over its regulation, safety or use of drugs since it is not allowed. *But see* discussion *infra* part V.B.

216. See *supra* note 146 and accompanying text.

217. The practice of cryonics is conceptually similar to the practice of embalming in that both treat a dead body in order to preserve it, although each uses a different method and does it for different reasons. Compare WEBSTER'S NEW UNIVERSAL UNABRIDGED DICTIONARY 440 (2d ed. 1979) (defining "cryonics" as "the practice of freezing the body of a person who has just died in order to preserve it for possible resuscitation in the future ...") with STEDMAN'S MEDICAL DICTIONARY 451 (23d ed. 1976) (defining "embalm" as "[t]o treat a dead body with balsams or antiseptics to preserve it from decay"). The practice of embalming is an allowable and regulated practice in most states and countries. See, e.g., ALA. CODE §§ 34-13-1 to 34-13-152 (1991) (comprising the Funeral Services Act); PA. STAT. ANN. tit. 63, §§ 479.1-479.20 (1968 & Supp. 1992) (comprising the Funeral Director Law).

218. In an analogous situation, California's DHS was chastised by its own judiciary for "DHS' sudden and unexplained about-face" position, attempting to make criminal the practice of cryonics. *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 575 (1992). California's Court of Appeal held this to be "inconsistent with DHS' basic duty." *Id.*

As for the cryonicists' dilemmas, the prohibition is clearly counterproductive. The only way an individual residing in British Columbia could be cryonically suspended legally would be to leave the province prior to his death.²¹⁹ Any other alternative, like starting the cryonics procedures in British Columbia and then transporting the body outside the province, would involve the responsible cryonics group in possible criminal liability.²²⁰ The prohibition will likely increase the cryonicists' problems and if cryonics is still practiced despite the ban, will not silence the public's concerns. A better approach would be to address both the cryonicists' dilemmas and the public's concerns with comprehensive regulating legislation.

V. Problems with Continued Legislative Inaction

A. Cryonicists' Dilemmas

The previous discussion of cryonics is helpful in identifying some of the current dilemmas facing cryonicists in their endeavors. With continued legislative inaction, it can be postulated that these problems will continue to reoccur. For the purpose of discussion, these dilemmas can be divided into five areas.

The first problem area is the lack of state recognition of cryonics as a viable disposition method. As was seen in the *Mitchell*²²¹ case, California law did not recognize cryonics as a disposition method.²²² The result of this nonrecognition was two-fold: (1) California's death forms did not mention cryonics and (2) cryonicists had no legal standing to handle or store human bodies.²²³ This same situation is still in existence in forty-eight other states.²²⁴ It seems unjust to require the cryonics movement to litigate its standing or defend itself against criminal liability in each state in which the movement enters.

219. See WOKW & DARWIN, *supra* note 1, at 29-30 (citing British Columbia Cemetery and Funeral Services Act, § 57 (1990)).

220. WOKW & DARWIN, *supra* note 1, at 29-30 (citing British Columbia Cemetery and Funeral Services Act, § 57 (1990)). Alcor has risked criminal liability previously, in order to further the practice of cryonics. See first and second litigation series discussion *supra* part III.C.1-2.

221. *Roe v. Mitchell*, No. C697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992). See *supra*, notes 126-133 and accompanying text for a discussion of this case.

222. Mondragon, *supra* note 121, at 4. Even with the *Mitchell* ruling, California still does not recognize cryonics as a separate disposition method; instead, it views cryonics societies as procurement organizations receiving anatomical gifts. Alcor Life Extension Found., Inc. v. *Mitchell*, 9 Cal. Rptr. 2d 572, 574 (Cal. Ct. App. 1992).

223. WOKW & DARWIN, *supra* note 1, at 29.

224. *Cf.* ALA. CODE § 34-13-1 (1991) (recognizing cryogenic interment).

The second problem area has to do with the possibilities of delay in starting cryonic procedures or autopsy of the body, as either delay or autopsy can result in the destruction of the body's viability for cryonics.²²⁵ This is a major concern of cryonicists, as they believe the best way to save tissue that is capable of resuscitation is to start cryonic procedures immediately upon declaration of death.²²⁶ For this reason, cryonicists need the cooperation of attending physicians and local authorities to declare death without delay, to not require an autopsy, and to allow the start of cryonic suspension procedures immediately after death.²²⁷

The third problem area has to do with the enforceability of cryonics agreements and trust funds.²²⁸ With the recognition of cryonics as a legal disposition method, cryonics would gain status in front of most courts. However, that recognition will not solve the cryonicists' trust fund problem with the rule against perpetuities.²²⁹ Currently, the cryonics societies fund their operations by either requiring an up-front payment that becomes the property of the society²³⁰ or by establishing a charitable trust fund for cryonic research.²³¹ The first method is unsatisfactory because all of the money immediately becomes the sole property of the society.²³² The second method stands on untested and shaky legal ground by establishing a charitable trust for research only for the purpose of maintaining one's own human remains cryonically.²³³ There is a need to allow the establishment of perpetual trust funds, similar to cemetery care funds,²³⁴ in order to maintain the cryonicists' frozen state and the

225. See Fisher, *supra* note 4, at W20 (citing case of Althea Flynt, wife of Larry Flynt, who was not cryonically suspended, possibly because of autopsy); Arel Lucas, *Your Friendly Neighborhood Coroner*, CRYONICS, July 1989, at 23 (discussing methods of coroners and medical examiners that may result in destructive delays or autopsies).

226. A delay of minutes is considered critical; the delay and damage caused by an autopsy is considered determinative of unsuitability for cryonic suspension. See, e.g., WOKW & DARWIN, *supra* note 1, at 27-8, 31.

227. See WOKW & DARWIN, *supra* note 1, at 27.

228. See, e.g., Cieply, *supra* note 8, at D1.

229. See Cieply, *supra* note 8, at D1.

230. Cieply, *supra* note 8, at D1; See Contract from Alcor Life Extension Foundation entitled *Cryonic Suspension Agreement*, at 5 (on file with Alcor Life Extension Foundation).

231. See Contract from American Cryonics Society entitled *Will and Charitable Trust*, at 1 (on file with the American Cryonics Society).

232. Cieply, *supra* note 8, at D1.

233. ASPECTS, *supra* note 12, at 45; Cieply, *supra* note 8, at D1.

234. See CAL. [HEALTH & SAFETY] CODE § 8776 (West 1992).

cryotoriums' financial stability if states wish to allow cryonics as a viable alternative to current practices.²³⁵

The fourth problem facing future cryotoriums is the lack of legal standing for zoning classification or zoning violations.²³⁶ The recognition given to cryotoriums by legislation is very important, as it will undoubtedly be used in determining the zoning classification of cryotoriums.²³⁷ Once the classification is established, the cryotoriums will have to locate and abide accordingly.

The fifth and final problem facing cryonics is the issue of civil liability.²³⁸ By creating legislation and subsequently promulgating regulations, the states will be establishing legal standards for the practice.²³⁹ This will not prevent liability suits, but it is unrealistic to believe that the legislatures would do so anyway. However, with the establishment of some standards, the cryonics industry will have a better idea of potential liability, which would allow them to plan and possibly to insure appropriately.

B. Public Concerns

With the resurgence of the cryonics movement, the concerns of the public need to be addressed by the legislatures, before the acts of new or unscrupulous operators return to damage the practice and the unwary public.²⁴⁰ Therefore, the public's concerns are for oversight legislation designed to protect the public from unauthorized or

235. It is very unlikely that any legislature would enact a law allowing the establishment of a perpetual trust for the future use of a frozen decedent upon his reanimation, even though this is a desire of many cryonicists. See Cieply, *supra* note 8, at D1. To do so would require a legislature to believe that the resuscitation and repair of the frozen dead is an absolute certainty. Until reanimation goes from the realm of conjecture to the realm of reality, a legislature is very unlikely to recognize property rights in a legally dead body. See ASPECTS, *supra* note 12, at 51.

236. Alcor was denied a conditional-use permit by its local zoning authority for two years until resolution of its legal status by the *Mitchell* case. *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 574 (Cal. Ct. App. 1992); Barbara Metzler, *Alcor Allowed to Get Bodies*, RIVERSIDE PRESS ENTERPRISE., Oct. 3, 1990.

237. See *Roe v. Mitchell*, No. 697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992); see also discussion *supra* notes 126-133 and accompanying text.

238. *E.g.*, *Halpert v. Nelson*, No. 161229 (Cal. L.A. County Super. Ct. 1981); see *supra* notes 45-49 and accompanying text.

239. Currently, there are no national or state standards for cryonics, nor is there a national unifying organization to create them. Telephone Interview with Derek Ryan, Administrator, Alcor Life Extension Foundation (Sept. 15, 1992).

240. See, *e.g.*, *supra* notes 45-49 and accompanying text.

unscrupulous cryonics practitioners,²⁴¹ especially considering the large sums of money involved.²⁴²

Probably the largest concern can be summarized as the buying public's need for regulation of both the practice and its practitioners to avoid fraud, poor practice and financial instability. None of the current cryonics societies guarantee future reanimation.²⁴³ Unless the individual does extensive research, a potential customer still has no assurance that a cryonics society has skilled staff,²⁴⁴ the necessary equipment,²⁴⁵ or financial stability.²⁴⁶

A second public concern is the safety of the cryotoriums. Cryonics involves the handling of dead human bodies. Funeral directors and embalmers are regulated to assure sanitary conditions and adequate public health education.²⁴⁷ Without any governmental inspection, highly unsanitary conditions are likely to result in cryotoriums.²⁴⁸ Furthermore, cryonics organizations use large quantities of drugs, chemicals and medical supplies in the process of freezing a body.²⁴⁹ An obvious environmental concern is the disposal of any chemical waste generated, including any body parts and liquids not frozen.²⁵⁰

241. See, e.g., *supra* notes 45-49 and accompanying text.

242. See cryonic fees discussion *supra* note 148.

243. See Schudel, *supra* note 5, at 1; cryonic fees discussion *supra* note 148.

244. Most cryonic suspension teams that perform the cryonic suspension procedures are self-taught; few are practicing physicians. Sanger, *supra* note 7, at 7.

245. One cryonic organization's suspension equipment, including an old surgical gurney and an old heart-lung machine, is stored under a plastic sheet in a warehouse. Fisher, *supra* note 4, at W20; Sanger, *supra* note 7, at 7.

246. As of 1988, Trans Time had shown a profit only once in 16 years of business. Fisher, *supra* note 4, at W20.

247. See CAL. [BUS. & PROF.] CODE § 7606(c) (West 1992) (authorizing the state's Board of Funeral Directors and Embalmers to promulgate regulations regarding the sanitary conditions of embalmers' places of business); PA. STAT. ANN. tit. 63, § 479.5 (1968) (specifying the education requirements for funeral directors).

248. The Cryonics Institute is cheaper than others because it uses simpler and unsterile procedures. Sanger, *supra* note 7, at 7. Trans Time, which is located in a warehouse with flies circling about, claims that it creates a sterile field when performing a cryonic suspension. Sanger, *supra* note 7, at 7.

249. WOKK & DARWIN, *supra* note 1, at A-31 to A-34 (listing drugs such as sodium pentobarbital, Solu-Medrol, potassium chloride and chlorpromazine, and equipment including hypodermic syringes, intravenous administration sets and a heart-lung resuscitator); Hawkins, *supra* note 5, at 118 (mentioning drugs like sodium pentobarbital, Narcan and metocurine, and equipment like a portable blood pump and a bubble oxygenator).

250. Alcor requires those members seeking only a neurosuspension to have the remainder of their bodies cremated. Agreement from Alcor Life Extension Foundation entitled *Attachment 1 Decisions Concerning The Member's Cryonic Suspension*, at 1-2 (on file with the Alcor Life Extension Foundation).

A third public concern involves the purchase and storage of medical supplies and prescription drugs, including controlled substances, at cryonics facilities.²⁵¹ The state should regulate how these drugs are procured, how the drugs are stored and maintained, and who controls their distribution, just as the state does in similar situations in order to prevent their misuse or abuse.²⁵²

VI. A Proposed Uniform Cryonic Disposition Act

The following text is a proposed uniform cryonic disposition act that could be adopted by any state, whether or not cryonics is currently practiced within the state, to address the above-mentioned problems and concerns.

A. Title; Rule of Construction; Purposes

(1) This act may be cited as the Uniform Cryonic Disposition Act.²⁵³

(2) This act shall be liberally construed and applied to promote its underlying purposes.²⁵⁴

(3) The underlying purposes of this act are:

(a) to recognize and qualify the practice of cryonics as a legal disposition method for human remains;

(b) to develop a system to provide regulatory standards for the training, licensing and conduct of practitioners and facilities;

(c) to ensure the environmental and public health safety of the practice of cryonics;

(d) to promote a cooperative system between health care providers, state agencies and cryonics organizations;

251. In the cryonics suspension process, several drugs are used, including sodium pentobarbital, chlorpromazine, methylprednisolone, heparin and gentamicin. See WOVK & DARWIN, *supra* note 1, at A-31 to A-34; Sahagun & Arax, *supra* note 62, at 3. Sodium pentobarbital is a Schedule II Controlled Substance. CAL. [HEALTH & SAFETY] CODE § 11055(e)(2) (West 1990). The other drugs listed above are available only by prescription. FACTS AND COMPARISONS 88c, 126, 266a, 347d (Bernie R. Olin et al. eds., looseleaf ed. Nov. 1992).

252. *E.g.*, CAL. [HEALTH & SAFETY] CODE §§ 11000-11333 (West 1990) (comprising the general provisions and definitions, standards and schedules, regulation and control, prescriptions, use of controlled substances, and offenses and penalties sections of California's Uniform Controlled Substances Act).

253. Paragraph (1) is stylized like California's short title paragraphs. See CAL. [HEALTH & SAFETY] CODE § 7180 (c) (West Supp. 1992) (titling article as the Uniform Determination of Death Act). This is similar to other acts or codes designed for possible adoption by multiple states. *E.g.*, UNIF. ANATOMICAL GIFT ACT (1987); UNIF. DETERMINATION OF DEATH ACT (1980).

254. Paragraph (2) is stylized after text in the UNIF. PROBATE CODE § 1-102(a) (1969). Paragraph (2) allows for liberal judicial interpretation of the act, so as to promote cooperation between cryonicists and state governments, unlike the current situation.

- (e) to facilitate the use and enforcement of certain trusts; and
- (f) to make uniform the law among the various jurisdictions.²⁵⁵

B. Definitions²⁵⁶

- (1) "Board" means the State Board of Cryonics.²⁵⁷
- (2) "Charitable cryonics trust" means a perpetual trust created for charitable purposes and designed for the benefit of scientific research in cryonics.²⁵⁸
- (3) "Cryonics maintenance trust" means a perpetual trust created for the purpose of providing funds to maintain suspended remains in cryonic suspension.²⁵⁹
- (4) "Cryonics" means the practice or the study of freezing legally dead human bodies or parts at temperatures below -120°C. for indefinite periods of time.²⁶⁰
- (5) "Cryonic suspension" means the disposition method for human remains involving the freezing and frozen storage of legally dead human bodies or parts at temperatures below -120°C. for possible interment in excess of 100 years.²⁶¹
- (6) "Cryonics technician" means an individual licensed by the state to perform and supervise cryonic suspensions.²⁶²

255. Paragraph (3) is formatted like the UNIF. PROBATE CODE § 1-102(b) (1969) and proposes the act's purposes, demonstrating its comprehensive approach to the problems and issues surrounding the practice of cryonics. See discussion *supra* part V.A-B.

256. The second section is formatted like other uniform acts' definitions sections and provides all of the definitions necessary for proper understanding. See, e.g., UNIF. ANATOMICAL GIFT ACT § 1 (1987). These definitions are derived from several sources; however, they have been modified to satisfy the needs of cryonicists and the public. See discussion *supra* part V.A. In addition, these definitions are designed to appease states unwilling to recognize the cryonic hypothesis of reanimation, as "authorities have been reluctant to put an implied stamp of approval on what may prove to be just a silly attempt to cheat death." Cieply, *supra* note 8, at D1.

257. The definition "board" is derived from PA. STAT. ANN. tit. 63 § 479.2(2) (West 1993).

258. "Charitable cryonics trust" is derived from BLACK'S LAW DICTIONARY 1508-14 (6th ed. 1990) (defining the many variations of "trust").

259. "Cryonics maintenance trust" is derived from BLACK'S LAW DICTIONARY 1508-14 (6th ed. 1990) (defining the many variations of "trust").

260. "Cryonics" is derived from WEBSTER'S NEW UNIVERSAL UNABRIDGED DICTIONARY 440 (2d ed. 1979) and WOVK & DARWIN, *supra* note 1, at 57.

261. "Cryonic suspension" is derived from WOVK & DARWIN, *supra* note 1, at 57.

262. "Cryonics technician" is derived from WOVK & DARWIN, *supra* note 1, at 57 (defining "emergency response technician") and Lawlor, *supra* note 108, at 10B (suggesting cryonics technician as a career).

(7) "Cryotorium" means a facility that is the site of cryonic suspension preparatory work and houses the cryogenic chambers in which suspended remains are stored.²⁶³

(8) "Decedent" means a person declared legally dead, according to the state's death determination act.²⁶⁴

(9) "Embalmer" means an individual licensed by the state for the practice of preserving, disinfecting and preparing dead human bodies for burial, cremation or transportation.²⁶⁵

(10) "Excess remains" means parts of a legally dead body not cryonically suspended.²⁶⁶

(11) "Funeral director" means an individual licensed by the state to practice the occupation of directing or supervising funerals and related services.²⁶⁷

(12) "Health care facility" means a facility licensed, accredited, or approved as a facility for the provision of health care under the law of any state or a facility operated by any government to provide health care.²⁶⁸

(13) "Medical examiner" or "coroner" means a public officer charged with the duty to investigate all sudden, unexplained, unnatural or suspicious deaths reported, according to state law.²⁶⁹

(14) "Pharmacist" means an individual licensed by the state to engage in the practice of pharmacy.²⁷⁰

(15) "Physician" or "surgeon" means an individual licensed by the state to practice allopathic medicine and surgery or osteopathic medicine and surgery.²⁷¹

(16) "State" means a state, territory, or possession of the United States.²⁷²

263. "Cryotorium" is derived from ASPECTS, *supra* note 12, at 12.

264. "Decedent" is derived from UNIF. ANATOMICAL GIFT ACT § 1(2) (1987).

265. "Embalmer" is derived from ALA. CODE § 34-13-1(a)(3) (1991).

266. "Excess remains" is derived from 2 BRITANNICA WORLD LANGUAGE DICTIONARY 1106 (1956) (defining "remains") and Hawkins, *supra* note 5, at 118 (describing severed body remains).

267. "Funeral director" is derived from ALA. CODE §§ 34-13-1(a)(15)-(16) (1991) (defining "funeral director" and "funeral directing") and PA. STAT. ANN. tit. 63, § 479.2(1) (West Supp. 1992) (defining "funeral director").

268. "Health care facility" is derived from UNIF. ANATOMICAL GIFT ACT § 1(6) (1987) (defining "hospital").

269. "Medical examiner" or "coroner" is derived from BLACK'S LAW DICTIONARY 338, 982 (6th ed. 1990).

270. "Pharmacist" is derived from PA. STAT. ANN. tit. 63, §§ 390-2(10) (West Supp. 1992).

271. "Physician" or "surgeon" is derived from UNIF. ANATOMICAL GIFT ACT § 1(9) (1987).

272. "State" is derived from *id.* at § 1(11).

(17) "Suspended remains" means the portion of a legally dead human body placed into cryonic suspension.²⁷³

C. Board of Cryonics

(1) There shall be a State Board of Cryonics, as an administrative board with standing equal to that of other state professional or occupational boards.²⁷⁴

(2) The board shall consist of five persons.

(a) Prior to the establishment of any cryotorium within the state, these five persons shall be: a physician serving on the State Medical Board, a funeral director serving on the State Funeral Board, a pharmacist serving on the State Pharmacy Board, a state licensed embalmer and a member of the public at large.²⁷⁵

(b) Subsequent to the establishment of a cryotorium within the state, these five persons shall be: a state licensed physician or surgeon, a state licensed embalmer, two state licensed cryonics technicians, and a member of the public at large.²⁷⁶

(3) A majority of the members of the board shall constitute a quorum for purposes of conducting the business of the board. The board shall meet at least four times per year and as may be necessary to conduct the business of the board.²⁷⁷

(4) The board shall have the power, and it shall be its duty:²⁷⁸

273. "Suspended remains" is derived from 2 BRITANNICA WORLD LANGUAGE DICTIONARY 1106 (1956) (defining "remains") and Hawkins, *supra* note 5, at 118 (describing a cryonically suspended head).

274. Paragraph (1) is stylized after PA. STAT. ANN. tit. 63, § 479.19 (1968) (establishing the State Board of Funeral Directors) and establishes that cryonics is not to be placed under another state board with dissimilar interests or adverse motives. In California, the State Cemetery Board showed considerable disdain for the practice of cryonics. See *supra* notes 51, 158 and accompanying text.

275. This initial board's purpose is two-fold: (1) to provide a representative cross-section of the involved fields or parties and (2) to establish sound and reasonable cryonics regulations, hopefully avoiding preference for any one field. By utilizing individuals already appointed to other boards, there would not be an immediate need to create a thorough appointment process. The cross-section should possess the knowledge and skill to be able to address all of the problems surrounding cryonics.

276. This subsequent board's make-up is different due to the supply of cryonics technicians from the established cryotoriums; however, a physician and an embalmer are maintained to promote cooperation between the practices. This cooperation may result in regulations beneficial to cryonicists, like preventing delays due to slow death determinations or providing for autopsy simultaneously with cryonics procedures.

277. Paragraph (3) is stylized after PA. STAT. ANN. tit. 63, § 212.1(c), (j) (Supp. 1993) (describing a quorum and the necessity of meetings for the Pennsylvania Board of Nursing).

278. Paragraph (4) is formatted after PA. STAT. ANN. tit. 63, § 390-6(k) (Supp. 1992) (describing the powers and duties of the Pennsylvania Pharmacy Board).

- (a) to regulate the practice of cryonics;
- (b) to determine the educational qualifications and the nature of examinations for all applicants seeking licensure as a cryonics technician;
- (c) to examine, inspect and investigate all applications and all applicants for licensure as cryonics technicians or cryotoriums, and to grant licensure to all whom it shall judge to be qualified;
- (d) to employ inspectors and appropriate consultants to assist the board for any purposes which it may deem necessary;
- (e) to make or order inspections of all cryotoriums on at least an annual basis;
- (f) to investigate all violations of the provisions of this act and its regulations, and to cause prosecutions to be instituted in the courts upon advice from the state attorney general;
- (g) to conduct hearings for the revocation or suspension of licenses of cryonics technicians or cryotoriums, for which hearings the board shall have subpoena power;
- (h) to assist state enforcement agencies in enforcing all laws pertaining to the practice of cryonics; and
- (i) to promulgate rules and regulations to effectuate the purposes of this act and to regulate the practice of cryonics for the protection and promotion of the public health, safety and welfare.²⁷⁹

D. Rules and Regulations²⁸⁰

The board shall adopt and enforce, within two years of adoption of this act, reasonable rules and regulations relating to:²⁸¹

- (1) The educational requirements for a cryonics technician and the scope of examinations for licensure;

279. The list of board powers and duties provides the means whereby the state can alleviate the legal, safety and security concerns of the public. See discussion *supra* part V.B. In addition, the board's licensure powers and duties will demonstrate the state's recognition of the cryonics and cryotoriums, and establish standards for both the practice and the practitioners.

280. This section is similar to CAL. [BUS. & PROF.] CODE § 7606 (West 1990) (detailing reasonably necessary rules and regulations for the California Board of Funeral Directors and Embalmers).

281. By placing a time limit on the promulgation of these key rules and regulations, the board is deterred from waiting until something harmful happens before acting. See *supra* notes 45049 and accompanying text. The time limit and the requirement of "reasonable" rules and regulations guarantees that the state's recognition of cryonics cannot be thwarted by board or bureaucratic delay or interference. See first problem area discussion *supra* part V.A.; second litigation series discussion *supra* part III.C.2.

(2) The sanitary conditions of cryotoriums with particular regard to plumbing, sewage, waste disposal, ventilation and equipment;

(3) The proper cryonics preparation and storage of suspended remains, and the proper disposition of excess remains; and

(4) The procurement, storage, recordkeeping and inspection of any prescription or controlled drugs or any medical supplies, according to state and federal law.²⁸²

*E. Trust Funds*²⁸³

(1) The sums paid in or contributed to the funds authorized by this section are hereby expressly permitted as and for a charitable and eleemosynary purpose. No payment, gift, grant, bequest or other contribution to these funds is invalid due to any uncertainty of the persons designated as beneficiaries in the instruments creating the funds. Neither the funds nor any contributions to them are invalid due to violation of the rule against perpetuities or the suspension of the power of alienation of title to property.²⁸⁴

(2) Every cryotorium authority which now or hereafter maintains a cryotorium may establish, maintain and operate a cryonics maintenance trust for the perpetual upkeep of the cryotorium and the maintenance of the interred decedents' frozen state. The trust funds may be held in the name of the cryotorium authority, its directors, or the trustees appointed by the cryotorium authority. Other than as provided for in this act, a cryonics maintenance trust shall abide all law regarding a cemetery endowment fund or the like.²⁸⁵

(3) Any individual, group or legal entity may create a charitable cryonics trust for the purpose of supporting cryonics research. The trust funds may be held in the name of a cryonics research group or corporation, or the trustees appointed by the donor. Other than as provided for in this act, a charitable cryonics trust shall abide all law regarding a charitable gift trust or the like.

282. Each of this section's paragraphs requires the state, through the board, to address specific concerns of the public regarding the practice of cryonics.

283. The trust funds section should solve the current dilemmas facing cryonicists, allowing funds to be held in a legal and sound manner, providing for future financial security.

284. This subsection is derived from CAL. [HEALTH & SAFETY] CODE § 8776 (West 1990) (covering the nature and exclusion of cemetery endowment and special care funds). Subsection (1)'s purpose is to allow the creation of trusts for cryonic suspensions and cryonics research that are not barred by the rule against perpetuities.

285. Subsection (2) is similar to CAL. [HEALTH & SAFETY] CODE § 8725 (West 1990) (describing the establishment of endowment and special care funds).

(4) The funds from a charitable cryonics trust may not be commingled with the funds from a cryonics maintenance trust for any reason.²⁸⁶

F. Cryonic Suspension Agreements

Any arrangement or agreement providing funds for the future preparation of human remains for cryonic suspension shall be held in trust according to the laws of the state regarding preneed funeral arrangements or burial agreements.²⁸⁷

G. Transport of Unembalmed Human Remains

Every state licensed cryotorium or foreign cryotorium recognized by its resident state may transport unembalmed human remains into, within or out of the state, in accordance with regulations promulgated by the board.²⁸⁸

VII. Conclusion

The problems and concerns surrounding the practice of cryonics calls for legislative action. For twenty-five years, all but a handful of governments have remained quiet regarding cryonics.²⁸⁹ This cannot continue, as the cryonics movement has been rekindled by scientific advances, media advances, and recent positive litigation.²⁹⁰ The time for legislative action is now, before fraud and suffering returns to blacken the image of cryonics.²⁹¹

The continued lack of legislative action will only result in continued problems for both cryonics advocates (cryonicists) and the general public. The *Mitchell*²⁹² decision may solve some of California's problems,²⁹³ but it will do little to solve the inevitable

286. The purpose of subsection (4) is to prevent fraudulent conversion of funds by cryonics organizations that hold both fund types. See *supra* notes 45-49 and accompanying text.

287. This section is based on the concept of preneed funeral arrangements, CAL. [BUS. & PROF.] CODE § 7735 (West 1990), and burial agreements, WIS. STAT. ANN. § 445.125 (West 1991). Cryonic suspension agreements and trusts will give cryonicists the opportunity to plan for the costs involved.

288. Section G. should avoid conflicts between states regarding the transport of unembalmed remains by cryonics organizations. But see discussion *supra* note 211.

289. See *supra* note 154 and accompanying text; Alabama and British Columbia discussion *supra* part IV.C-D.

290. See discussion *supra* part III.

291. E.g., discussion *supra* notes 45-49 and accompanying text.

292. *Roe v. Mitchell*, No. C697147 (Cal. L.A. County Super. Ct. 1990), *aff'd*, 9 Cal. Rptr. 2d 572 (Cal. Ct. App. 1992).

293. See second litigation series discussion *supra* part III.C.2.

situations that will occur outside California due to the growth of the cryonics movement.²⁹⁴ All of the states should adopt a uniform legislative approach, not by requiring state acceptance of the experimental hypothesis of cryonics, but by addressing the current problems of cryonics and establishing a legislative base for future problem resolution.

The minimal government action to date has been unjustly harsh, ineffective or insufficient.²⁹⁵ The twin goals of addressing the public concerns and solving the cryonicists' dilemmas, regarding the practice of cryonics, can best be met through state adoption of a uniform and comprehensive act.

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294. For example, Alcor has moved its crytorium out of California and into Arizona to avoid the risk of earthquakes, which could have toppled the liquid nitrogen tanks. Nasser, *supra*, note 84, 8A.

295. See discussion *supra* part V.A-B.

