

REST IN FREEZE: THE NEED TO REGULATE THE U.S. CRYONICS INDUSTRY

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From the beginning of time, humans have sought to challenge the laws of nature and have dreamed of evading death. Modern technologies continue to evolve in ways that extend human lifespans through methods that were once inconceivable. Some individuals believe that cryonics is one of these technologies—offering people a chance to possibly be revived in the future—for a pretty penny, of course.

This Note explores the unregulated cryonics market and addresses the need to have a uniform regulation of the cryonics industry. It describes how the current regulatory framework, or lack thereof, is one that poses a threat to vulnerable consumers, many of whom are elderly or terminally ill. This Note will also explore the existing case law and regulations to better understand the areas which regulations can target. Finally, the Note will propose a flexible method of regulation that builds upon existing frameworks, while also leaving room to adapt to future developments.

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I. Introduction

Ted Williams, The Kid,¹ is well-known for accomplishments throughout his career as a left fielder for the Boston Red Sox.² He broke several records and was honored twice as the American League MVP.³ However, after his death in 2002, Williams gained notoriety for another accomplishment—becoming the most well-known person to be cryonically preserved.⁴

Williams was interested in the practice of cryonics.⁵ This interest led him to make a strange request—that he be frozen at the Alcor Life Extension Foundation following his death.⁶ There, he believed that he would be preserved until he could be revived again in the future.⁷ Williams' belief in cryonics and his post-death wishes were well publicized.⁸ Yet, this did not stop controversy and conflict from ensuing after his death.⁹ Williams' children were at odds with one another about their father's wishes.¹⁰ One of them claimed that Williams wanted to be cremated, while the others produced a small handwritten note with Williams' signature which stated his wishes to be cryonically preserved.¹¹ Ultimately, the latter won out, and Williams underwent cryopreservation at the Alcor facilities, where he remains today.¹² Since Williams' cryopreservation, there have been numerous allegations surrounding

1. David McCormack, 'We Did it Out of Love': Baseball Legend Ted Williams' Daughter Finally Speaks Out About Why She and Her Brother Spent \$100,000 to Have Their Father's Body Cryogenically Frozen, DAILYMAIL.COM (May 19, 2014, 2:35 PM), <https://www.dailymail.co.uk/news/article-2632809/We-did-love-Baseball-legend-Ted-Williams-daughter-finally-speaks-brother-spent-100-000-fathers-body-cryogenically-frozen.html> [<https://perma.cc/4RL7-WNLC>].

2. Samantha Burkett, *Ted Williams Elected to Hall of Fame*, NAT'L BASEBALL HALL OF FAME, <https://baseballhall.org/discover-more/stories/inside-pitch/ted-williams-inducted-to-baseball-hall-of-fame> (last visited Jan. 23, 2024) [<https://perma.cc/XEP9-CBM9>].

3. *Id.*

4. There is a common misconception that Walt Disney was cryogenically preserved, however this is untrue. See *Ted Williams Frozen in Two Pieces*, CBS NEWS (Dec. 20, 2002, 10:30 AM), <https://www.cbsnews.com/news/ted-williams-frozen-in-two-pieces> [hereinafter *Ted Williams Frozen*] [<https://perma.cc/9MDL-WDVA>].

5. See *id.*

6. *Id.*

7. *Id.*

8. *Id.*; see also McCormack, *supra* note 1.

9. See McCormack, *supra* note 1; *Book: Williams' Head Abused at Facility*, ESPN (Oct. 2, 2009, 7:21 AM), <https://www.espn.com/boston/mlb/news/story?id=4524957> [hereinafter *Head Abused*] [<https://perma.cc/KKH7-CQBV>].

10. See McCormack, *supra* note 1.

11. *Ted Williams Frozen*, *supra* note 4.

12. *Id.*

the mistreatment of his body, including one horrific account involving a tuna can, a monkey wrench, and pieces of Williams' frozen brain.¹³ Other allegations include disturbing statements from former employees that several of Williams' DNA samples went missing from the lab following his cryopreservation.¹⁴

Ted Williams' story illustrates just one of the many controversies and conflicts that continue to take place in relation to the practice of cryonics.¹⁵ Like most emerging technologies, cryonics has its fair share of believers and cynics.¹⁶ The field of cryonics and cryopreservation is a growing practice¹⁷ with several legal implications.¹⁸ However, rather surprisingly, there are no explicit laws on the state or federal level that impose regulations on the cryonics industry.¹⁹ The purpose of this Note is to provide insight into this growing practice and to highlight some of the legal concerns related to cryonics. Furthermore, this Note outlines some of the many dangers of having an unregulated cryonics industry, while setting out possible methods through which regulations may take place.

Part II of this Note will provide a brief background on the history of the cryonics industry in the United States, the process of cryonic

13. *Head Abused*, *supra* note 9.

14. *Id.*

15. See McCormack, *supra* note 1; see, e.g., Tyler Hayden, *In Cryonics Lawsuit, Son Fights for Father's Frozen Head*, SANTA BARBARA INDEP. (Apr. 24, 2019), <https://www.independent.com/2019/04/17/in-cryonics-lawsuit-son-fights-for-fathers-frozen-head/> (illustrating one of many cryonics-fulfillment related conflicts between cryonics providers and deceased client's family members) [<https://perma.cc/883H-VA9C>].

16. See Michael Hendricks, *The False Science of Cryonics*, MIT TECH. REV. (Sep. 15, 2015), <https://www.technologyreview.com/2015/09/15/109906/the-false-science-of-cryonics/> [<https://perma.cc/6CKV-CR25>]; see also *Success in Cryonics*, OSIRIS, <https://osirisryonics.com/success-in-cryonics.html> (last visited Jan. 23, 2024) [hereinafter *Success in Cryonics*] [<https://perma.cc/PN83-BNPP>].

17. See *Alcor Membership Statistics*, ALCOR, <https://www.alcor.org/library/alcor-membership-statistics/> (last visited Jan. 23, 2024) [<https://perma.cc/4B6Z-LD7L>]; see also Hannah Devlin, *The Cryonics Dilemma: Will Deep-Frozen Bodies Be Fit for New Life?*, GUARDIAN (Nov. 18, 2016, 4:56 PM), <https://www.theguardian.com/science/2016/nov/18/the-cryonics-dilemma-will-deep-frozen-bodies-be-fit-for-new-life> (stating that signups for a cryonics service have been steadily increasing despite cryonics not being mainstream) [<https://perma.cc/Z4VX-QQ4A>].

18. *Infra* Part IV.

19. An author-run search of the Westlaw database for ("cryonics" OR "cryopreservation") returned no statutes or laws on the state or federal level. An author-run search of the Westlaw database for ("cryonics" OR "cryopreservation") returned eight secondary sources, none of which addressed the cryonics industry through a regulatory lens. [hereinafter *Author-run Search*].

preservation, and an overview of why cryonics is a pressing legal issue. Part III will lay out the debates and minimal methods of regulation surrounding the practices that exist today, while further explaining the legal and ethical concerns surrounding the industry. Part IV of this Note will recommend possible state and federal actions that can help regulate the U.S. cryonics industry, with examples from international cryonics markets. Finally, Part V will end with a conclusion on the subject and the recommendations provided.

II. Background

The desire to achieve immortality or to live a longer life is not new. For as long as humans have existed, they have sought out ways to extend their lives and evade death, through offering alternative explanations for death or by chasing immortality.²⁰ History is riddled with such examples. The Ancient Egyptians believed that humans lived beyond their natural life on earth and would bury their dead with valuables to use when resurrected.²¹ Similarly, a well-known Mesopotamian legend, The Epic of Gilgamesh, details a warrior's quest to achieve immortality.²² In the present day, medical innovations have successfully extended the average human life expectancy from less than thirty years to over seventy-two years within the last two centuries.²³

A. Definition and Overview of Cryonics

Rapid scientific and technological advancements have led some individuals to believe that the idea of living past "natural human life" may actually be possible through cryonics.²⁴ Benjamin Best, former

20. Distillations Podcast, *Chasing Immortality*, SCI. HIST. INST. MUSEUM AND LIBR., at 2:08 (Aug 17, 2021), <https://sciencehistory.org/stories/distillations-pod/chasing-immortality/> [<https://perma.cc/XM6P-YZGG>].

21. Miral Fahmy, *Ancient Egypt Exhibit Gives Lessons in Immortality*, REUTERS (Dec 22, 2009, 12:53 AM), <https://www.reuters.com/article/us-exhibitions-egypt/ancient-egypt-exhibit-gives-lessons-in-immortality-idUSTRE5BL0MC20091222> [<https://perma.cc/XX4G-3YMD>].

22. See generally THE EPIC OF GILGAMESH, (Maureen Gallery Kovacs trans., Stanford Univ. Press 1989).

23. See Saloni Dattani, Lucas Rodés-Guirao, Hannah Ritchie, Esteban Ortiz-Ospina & Max Roser, *Life Expectancy*, OUR WORLD IN DATA (2023), <https://ourworldindata.org/life-expectancy> [<https://perma.cc/PHW4-FJRT>].

24. See Benjamin P. Best, *Scientific Justification of Cryogenics Practice*, 11 REJUVENATION RSCH. 493, 498 (2008) (describing death as a process that has potential to be reversible).

president of the Cryonics Institute, defined cryonics as “the practice of preserving humans and animals at cryogenic temperatures in the hope that future science can restore them to a healthy living condition as well as rejuvenate them.”²⁵ Cryonics does not guarantee future revival.²⁶ Rather, cryonics rests on the belief that scientific innovations will eventually be advanced enough to complete the procedure and revive the frozen individual in the future.²⁷

B. The Birth of Cryonics

Robert Ettinger, a physicist and science fiction writer, is credited as the pioneer of modern cryonics after his 1962 publication asserting that “future technological advances could be used to bring people back to life” caught the attention of a famous science-fiction writer Isaac Asimov.²⁸ The Cryonics Institute alleges that “all those active in cryonics today can trace their involvement, directly or indirectly, to the publication of . . . Ettinger’s books.”²⁹

C. The Principles of Cryonics

Cryonicists, those who believe in the concept of cryonics, have posited four essential justifications for the practice of cryopreservation:³⁰

1. Low temperatures slow down metabolism and stop chemical changes.
2. Ice is unlikely to form or can be eliminated in . . . mixtures; these mixtures can cool human remains at ultra-fast speeds.
3. A person who is “legally dead” is not necessarily “irreversibly dead.”

25. *Id.* at 493.

26. *See id.* at 500.

27. *Id.* at 501.

28. *Our History*, CRYONICS INST., <https://www.cryonics.org/ci-landing/history-timeline> (last visited Jan. 23, 2024) [<https://perma.cc/X5E3-B9VM>].

29. *Id.*

30. Adrien Johansen, *Here’s the Link Between Cryptocurrency Enthusiasts and Cryonics*, DEBRIEF (Oct. 17, 2022), <https://thedebrief.org/heres-the-link-between-cryptocurrency-enthusiasts-and-cryonics/> [<https://perma.cc/EPR5-7Z94>].

4. Damage that occurs due to low-temperature preservation and clinical death may not be reversible today but may be reversible in the future.³¹

D. The Cryopreservation Process

Cryonics is not considered a medical procedure, despite its extensive use of scientific procedures—for this reason, the process cannot begin before the person dies.³² In his article *Scientific Justification of Cryonics Practice*, Benjamin Best emphasized that the “[p]ronouncement of legal death is necessary” before the cryonics procedure can begin.³³ The cryonics preservation procedure is time-sensitive because it is “intended to protect the tissues” of the individual undergoing treatment.³⁴ For this reason, the process must begin immediately after natural death in order to prevent tissue decay or damage to the body.³⁵

The first stage of cryopreservation involves mechanically restoring the “circulation and respiration of the cryonics subject.”³⁶ In order to do so, the subject is “administered protective medicines and . . . rapidly cooled”³⁷ to about 50°F to 32°F.³⁸ In the next stage, the blood is washed out of the body, and the body’s water “is replaced with a cryoprotectant mixture to prevent ice formation.”³⁹ In the final stage, the body is further cooled down to –184°F, putting it into cryostasis.⁴⁰

In the future, should revival be possible as cryonicists believe, “the subject will be rewarmed, the cryoprotectant will be removed, the tissue will be repaired, diseases will be cured,”⁴¹ and the subject will be further rejuvenated.⁴²

31. *Id.* (alteration in original).

32. Best, *supra* note 24, at 493.

33. *Id.*

34. *Id.*

35. *See id.*

36. *Id.* at 494.

37. *Id.*

38. *See id.*

39. *Id.*

40. *Id.*

41. *Id.*

42. *Id.*

E. U.S. Cryonics Service Providers

The United States has the largest cryonics industry in the world,⁴³ the second largest being Russia.⁴⁴ Cryonic preservation services in the United States are offered by several companies,⁴⁵ the most prominent being The Alcor Life Extension Foundation⁴⁶ and The Cryonics Institute.⁴⁷ For the purposes of this Note, the former of the two will be discussed, as it is the oldest and largest cryonics service provider in the U.S.⁴⁸

The Alcor Life Extension Foundation is located in Scottsdale, Arizona.⁴⁹ This specific location was chosen because of its proximity to an airport, good weather, low crime rate, and low disaster risk.⁵⁰ Alcor states that its mission is to save and extend lives, by ensuring the long-term safety of current and future patients in cryopreservation.⁵¹

43. See generally Courtney Weaver, *Inside the Weird World of Cryonics*, FIN. TIMES (Dec. 18, 2015), <https://www.ft.com/content/d634e198-a435-11e5-873f-68411a84f346> [<https://perma.cc/7HKY-DNZ5?type=standard>] (explaining that Alcor in the United States is the largest cryonics provider in the world).

44. See *id.*

45. See Alessandra Gorla, *Which is the Best Cryonics Company for You?*, TOMORROW.BIO (Nov. 22, 2021), <https://www.tomorrow.bio/post/best-cryonics-company-for-you> [<https://perma.cc/6S9K-5JRD>]; see generally *About*, CRYOGENIC SOC'Y AM., INC., <https://www.cryogenicsociety.org/about> (last visited Jan. 23 2024) [<https://perma.cc/885M-RT4X>]; *Services*, OR. BRAIN PRES., <http://www.oregoncryo.com/services.html> (last visited Jan. 23, 2024) [<https://perma.cc/2KKE-ETJE>].

46. Weaver, *supra* note 43.

47. See Gorla, *supra* note 45 (recognizing that The Cryonics Institute is the second-oldest cryonics provider in the United States).

48. *Id.*; Weaver, *supra* note 43.

49. *About Alcor: The World Leader in Cryonics*, ALCOR, <https://www.alcor.org/about/> (last visited Jan. 23, 2024) [hereinafter *About Alcor*] [<https://perma.cc/CC42-96JH>].

50. *Id.*

51. *Id.*

F. Advertising and Marketing

The Alcor Life Extension Foundation markets its services broadly.⁵² Its website includes various phrases like “[w]e’re making cryonics accessible to everyone.”⁵³ Surprisingly, traditional means advertisement, such as media, does not play a role in the acquisition of new members.⁵⁴ In fact, Alcor has stated that it does not believe in flashy, expensive advertising.⁵⁵ It recognizes that “most people hear about cryonics from one of the usual sources . . . meeting a cryonicist.”⁵⁶ In this way, Alcor shifts the burden of advertising cryonic services onto its members, encouraging them to meet new people and “show them how friendly and interesting [the members] are.”⁵⁷

G. Service Payment Model

Like the service they provide, Alcor’s payment model is unique. In order to be eligible for any cryonics services, an individual must first become an Alcor member.⁵⁸ Membership rates range from as low as seventeen dollars a month to as high as one hundred dollars per month.⁵⁹ Alcor uses an “age-based” dues system.⁶⁰ In an age-based system, the cost of membership is determined based on the age at the time of sign-up—members who join at an earlier age pay less, whereas members who join at a later age pay more.⁶¹

Membership gives access to Alcor’s services, it does not automatically sign an individual up for the services—the services themselves must be separately funded.⁶² The cost of services vary based on the kind

52. See Stephen W. Bridge, *Selling Cryonics*, 15:4 CRYONICS 10, 13 (1994), <https://www.cryonicsarchive.org/docs/cryonics-magazine-1994-04.pdf> [<https://perma.cc/P5TK-RD68>]; see also *About Alcor*, *supra* note 49; see also *Marketing and Public Affairs*, ALCOR (Nov. 6, 2006), https://www.alcor.org/2006/11/marketing_and_public_affairs/ [<https://perma.cc/KA5T-WRJD>] (explaining how Alcor members should approach advertising cryonics).

53. *Membership*, ALCOR, <https://www.alcor.org/membership/> (last visited Jan. 23, 2024) [hereinafter *Alcor Membership*] [<https://perma.cc/S7XX-46E6>].

54. Bridge, *supra* note 52, at 13.

55. *Id.*

56. *Id.*

57. *Id.*

58. See *Alcor Membership*, *supra* note 53.

59. *Id.*

60. *Membership Dues*, ALCOR, <https://www.alcor.org/library/membership-dues/> (last visited Jan. 23, 2024) [<https://perma.cc/D6ZL-M943>].

61. See *id.* (illustrating that membership rates change based on the age of sign-up).

62. See *id.*; see also *Alcor Membership*, *supra* note 53.

of service an individual elects.⁶³ Under Alcor's model, an individual would pay, on average, \$200,000 for the cryopreservation of their full body.⁶⁴ Neuro cryopreservation, or preservation of only the head, costs around \$80,000.⁶⁵ Members are also eligible for other services, such as cryogenically preserving their pets, which typically ranges from \$5,100 to \$132,400.⁶⁶

These services are not cheap.⁶⁷ Alcor offers guidance for its members on how to obtain funding for their cryonic services.⁶⁸ While some do prepay for their cryopreservation,⁶⁹ Alcor believes that it "makes more financial sense to use life insurance."⁷⁰ About "90% of members fund their cryopreservation with a separate life insurance policy naming Alcor as the beneficiary."⁷¹ Alcor advises members that they "should consider a policy with a benefit amount that increases with inflation, or otherwise provide for higher future costs."⁷² Furthermore, while individuals "may purchase . . . [a] life insurance policy from any licensed agent,"⁷³ Alcor suggests "working with one of [its] recommended agents, because they have experience getting policies for cryonics."⁷⁴

H. Why Care About Cryonics?

The cryo-preservation process has not been proven to work.⁷⁵ No human has actually been revived post-mortem through the cryopreservation process.⁷⁶ Naturally then, the question is whether the United

63. *Alcor Membership*, *supra* note 53.

64. *Id.* (describing the method, coverage, and insurance agents in a funding module).

65. *Id.*

66. *Cryopreserving Pets*, ALCOR, <https://www.alcor.org/pets/> (last visited Jan. 23, 2024) [<https://perma.cc/D5HY-8R22>].

67. *See Alcor Membership*, *supra* note 53.

68. *Id.*

69. *Id.*

70. *Id.*

71. *Id.*

72. *Id.*

73. *Id.*

74. *Id.*; *see Insurance Agents*, ALCOR, <https://www.alcor.org/library/insurance-agents/> (last visited Jan. 23, 2024) [<https://perma.cc/2H2X-NS89>] (listing various Alcor-recommended insurance agents).

75. *See Best*, *supra* note 24, at 500–01.

76. *Id.*; *see also* Jacquelyne Germain, *200 Frozen Heads and Bodies Await Revival at This Arizona Cryonics Facility*, SMITHSONIAN MAG. (Oct. 21, 2022), <https://www>.

States should even bother regulating a practice that has not yet yielded the results it claims to achieve. The simple answer is that a lack of success today does not mean that the process will never succeed.⁷⁷ Most importantly, regardless of whether this process is actually viable, the fact of the matter is that there are Americans in the present day who are spending substantial amounts of money on cryopreservation.⁷⁸ Furthermore, recent financial⁷⁹ and social trends, along with events like the COVID-19 pandemic,⁸⁰ point to a continued growth in the interest and use of cryonic services.⁸¹

1. RECENT MARKET TRENDS

Cryonics service providers each have different ways of reporting their numbers of members and patients.⁸² For this reason, it is difficult to discern exactly how many cryonics patients and members there are worldwide.⁸³

Alcor defines members as “people who have completed full legal and financial arrangements for cryopreservation with Alcor.”⁸⁴ As of December 1, 2023, Alcor has 1,424⁸⁵ cryopreservation members, in

[smithsonianmag.com/smart-news/200-frozen-heads-and-bodies-await-revival-at-this-arizona-cryonics-facility-180980981/](https://www.smithsonianmag.com/smart-news/200-frozen-heads-and-bodies-await-revival-at-this-arizona-cryonics-facility-180980981/) [<https://perma.cc/EJH4-QAV3>] (explaining that there are a large number of individuals frozen in Alcor’s facilities over the last few decades and none have been revived yet).

77. See Germain, *supra* note 76.

78. *Alcor Membership*, *supra* note 53; see *Alcor Membership Statistics*, ALCOR, <https://www.alcor.org/library/alcor-membership-statistics/> (last visited Jan. 23, 2024) [hereinafter *Alcor Membership Statistics*] [<https://perma.cc/A8FN-KGNN>]; see generally Hannah Devlin, *The Cryonics Dilemma: Will Deep-Frozen Bodies Be Fit for New Life?*, *GUARDIAN* (Nov. 18, 2016, 4:56 PM), <https://www.theguardian.com/science/2016/nov/18/the-cryonics-dilemma-will-deep-frozen-bodies-be-fit-for-new-life> [<https://perma.cc/Z4VX-QQ4A>] (stating that signups for cryonic services have been steadily increasing).

79. See *Alcor Life Extension Foundation Inc: Tax Filings by Year*, PROPUBLICA: NONPROFIT EXPLORER, <https://projects.propublica.org/nonprofits/organizations/237154039> [hereinafter *Alcor Tax Filings*] (last visited Jan. 23, 2024) [<https://perma.cc/J4QR-VTUD>].

80. Peter Wilson, *The Cryonics Industry Would Like to Give You the Past Year, and Many More, Back*, *N. Y. TIMES* (June 26, 2021), <https://www.nytimes.com/2021/06/26/style/cryonics-freezing-bodies.html> [<https://perma.cc/569Y-Q3WA>].

81. See *Alcor Membership Statistics*, *supra* note 78.

82. Max More, *CEO Statement on Membership Statistics*, ALCOR (June 17, 2019), <https://www.alcor.org/2019/06/ceo-statement-on-membership-statistics/> [<https://perma.cc/EZ8V-VJKF>].

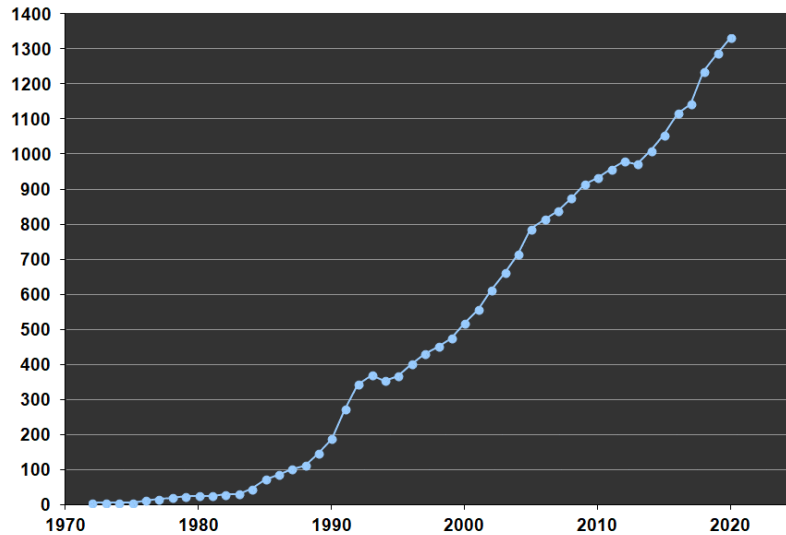
83. See *id.*

84. *Alcor Membership Statistics*, *supra* note 78.

85. *Id.*

addition to the 225⁸⁶ patients currently within its freezing chambers. Alcor also further distinguishes between basic members and applicants/associate members, whose numbers are estimated to be around 40 and 247, respectively.⁸⁷ Despite the inconsistencies between how service providers report numbers, every report is consistent in showing an upward trend and overall growth in the cryonics industry.⁸⁸

FIGURE 1: ILLUSTRATING THE NUMBER OF ALCOR MEMBERS SINCE 1970⁸⁹



As the graph illustrates, the demand for cryonics services was at an all-time low at the start of the 21st century, but in recent years the trend has shifted.⁹⁰

Alcor's finances tell a similar story.⁹¹ According to IRS records, Alcor's revenue numbers ranged, on average, between \$1,000,000 and \$3,000,000 in earlier part of the twenty-first century.⁹² Additionally,

86. *Id.*

87. *Id.*

88. *Id.*; see also *Member Statistics*, CRYONICS INST., <https://cryonics.org/member-statistics/> (last visited Jan. 23, 2024) [hereinafter CRYONICS, *Member Statistics*] [<https://perma.cc/KK5J-MHTQ>] (providing another estimate of the number of cryonics members globally and showing that membership has been increasing).

89. *Alcor Membership Statistics*, *supra* note 78 (illustrating a continued rise in Alcor membership in a graph).

90. *Id.*

91. *Alcor Tax Filings*, *supra* note 79.

92. *Id.* (containing IRS forms 990 starting in 2001).

according to the reports, Alcor was consistently losing around \$100,000 dollars each year in net profit.⁹³ However, Alcor's IRS report from 2020 shows a drastically different pattern.⁹⁴ In the 2020 fiscal year, Alcor reported their total revenue to be \$15,560,830.⁹⁵ Their net income was \$11,173,182.⁹⁶ Alcor's functional expenses remained the same, if not lower, than the year before.⁹⁷ This is a substantial jump in revenue, potentially indicating that there has been a renewed interest in cryonics.⁹⁸

2. COVID-19

During the COVID-19 pandemic, the cryonics industry, like many others, faced a lot of turbulence.⁹⁹ A nation-wide shortage of liquid nitrogen and other chemicals typically used to cryo-preserve bodies led to operational halts for the cryonic industry.¹⁰⁰ As mentioned earlier, Alcor's main method of advertising is through expanding others' knowledge about the practice of cryonics.¹⁰¹ The onset of the pandemic limited this ability, as they could no longer conduct tours of their facility to curious patrons.¹⁰² Furthermore, sudden and rapid deaths across the U.S. led several of Alcor's cryopreservation contracts to go unfulfilled.¹⁰³ Travel restrictions and strict hospital access policies led some Alcor clients to undergo cryopreservation in less-than-optimal conditions—leading to damage of the body during the preservation process.¹⁰⁴ Yet, even with these setbacks, the cryonic market grew rapidly in and after 2020.¹⁰⁵

93. *Id.*

94. *Id.*

95. *Id.*

96. *Id.*

97. *Id.*

98. *See generally id.*; *see also* ALCOR LIFE EXTENSION FOUND, ALCOR'S 50TH ANNIVERSARY BUSINESS MODEL RELAUNCH 7 (Feb. 23, 2022), <https://www.alcor.org/docs/50th-anniversary-business-model.pdf> [hereinafter ALCOR RELAUNCH] [<https://perma.cc/JJ3C-YXVM>] (illustrating a business model change that could also be attributed to increasing revenue and interest in cryonics).

99. *See Wilson, supra* note 80.

100. *See id.*

101. Bridge, *supra* note 52, at 13; *see discussion supra* Section II.F.

102. *See Wilson, supra* note 80.

103. *See id.*

104. *See id.* (explaining that delays and overall uncertainty caused by the pandemic led to problems for the cryonics industry).

105. *Alcor Membership Statistics, supra* note 78 (utilizing a graph to illustrate a continued rise in Alcor membership).

Individuals familiar with the cryonics industry attribute the rise to the fact that the pandemic created “a heightened awareness of mortality [that] seems to have led to more interest in signing up for cryo-preservation procedures.”¹⁰⁶ In fact, Jim Yount, a member of the American Cryonics Society for over fifty years, remarked that he “has often seen health crises or the death of a loved one bring cryonics to the front of people’s minds.”¹⁰⁷ There has also been some speculation that the pandemic may have actually facilitated access to scientific procedures such as cryonics through an overall interest in biotechnological development.¹⁰⁸

3. OTHER TRENDS

The widespread use of social media and the internet can also be credited in bringing attention to the cryonics industry.¹⁰⁹ With a click of a button, anyone can learn about cryonics and even sign up for the service.¹¹⁰ Several documentaries and videos on the subject are also available to the public on streaming services and popular video-sharing platforms such as Netflix¹¹¹ or YouTube.¹¹² Social media has also been used to influence, discuss, and exchange novel ideas.¹¹³ For example, Rapper 21 Savage recently sparked conversations about cryonics when he expressed his desire to be cryonically frozen and revived in the year 2121.¹¹⁴

106. Wilson, *supra* note 80.

107. *Id.*

108. *See generally id.* (illustrating that the pandemic may have created a growing interest in technologies that allow humans to overcome death).

109. *See generally* Thomas Aichner, Matthias Grünfelder, Owsin Maurer & Deni Jegeni, *Twenty-Five Years of Social Media: A Review of Social Media Applications and Definition from 1994 to 2019*, 24 *CYBERPSYCH., BEHAV. & SOC. NETWORKING* 215, 219 (2021) (describing the transition of social network sites into a “public forum that enables the exchange of digital information”); *see also* Bridge, *supra* note 52, at 13 (stating that cryonics information is spread through members and their personal information-sharing).

110. *See, e.g., About Alcor, supra* note 49.

111. *See, e.g.,* HOPE FROZEN, (2050 Productions 2019), <https://www.netflix.com/title/81072979> [<https://perma.cc/KRX5-J54K>] (documenting the journey of one family seeking to cryopreserve their daughter after her untimely death).

112. *See, e.g.,* CNET, *Where People Go to Wake Up in the Future: Inside a Cryonics Facility*, YOUTUBE (July 9, 2020), <https://www.youtube.com/watch?v=zw6qT2GN0Ao> [<https://perma.cc/RX9D-33XX>].

113. *See generally* Aichner et al., *supra* note 109, at 219.

114. Saint Laurent Don (@21savage), X (Dec. 31, 2022, 8:16 PM), <https://twitter.com/21savage/status/1609372909092626433> [<https://perma.cc/R6LP-YD7M>].

There is even some speculation that the joint rise in cryonics and cryptocurrency symbolizes a movement towards “resurrection technologies.”¹¹⁵ The belief is that U.S. populations, specifically the elderly, who are struggling with rising costs of living could invest in cryptocurrency and then elect to be cryopreserved.¹¹⁶ Then, when resurrected, “they can use their crypto to keep pace with rising living costs.”¹¹⁷ Given the uncertain nature of cryonics at this time, there is no way of assessing whether this logic will translate into reality.

Another possible explanation for the recent interest in cryonics includes general government assistance that was given to businesses throughout the course of the pandemic.¹¹⁸

III. A Lack of Regulation and Legislation

Despite being the largest cryonics market in the world,¹¹⁹ the United States has had little to no movement towards standardized regulations on the cryonics industry compared to other countries that employ the practice.¹²⁰

Comparatively, Russia has had a movement towards legislation of the cryonics market due to a growing cultural interest in the field.¹²¹ Russia hosts the second largest cryonics market in the world and is home to KrioRus, a cryonics organization that is known to rival the United States’ Alcor.¹²² In 2020, Russian civilian involvement in the field increased when human rights organizations in the country offered to help develop legislation on cryonics, as well as to amend the existing legislation to “regulate legal capacity of cryopreserved persons by

115. See Johansen, *supra* note 30.

116. *Id.*

117. *Id.*

118. See generally Stephen Fishman, *IRS Help for Nonprofits During COVID-19: New Deductions, Tax Credits, and Loan Programs*, NOLO, <https://www.nolo.com/covid-19/nonprofits-and-covid-19-new-tax-credits-and-loan-programs-offer-assistance.html> (last visited Jan. 23, 2024) [<https://perma.cc/HT7L-SWR2>] (explaining that nonprofits received several forms of relief from the government in response to the economic repercussions of the pandemic).

119. See CRYONICS, *Member Statistics*, *supra* note 88.

120. See Weaver, *supra* note 43.

121. See Vladimir Burnov, *Russian Human Rights Advocates Make Offer to Legislate*, RAPS: NEWS (Sept. 21, 2020), https://rapsinews.com/legislation_news/20200921/306293999.html [<https://perma.cc/2YPA-9ESU>].

122. *Id.*; Weaver, *supra* note 43.

withdrawing this notion from a dead one and solve problems with heritage of an individual subjected to cryonics until unfreezing.”¹²³

Similarly, Indian legal scholars have identified several legal issues relating to the practice of cryonics, even though India lacks a cryonics market.¹²⁴ Furthermore, they have contemplated legislative frameworks and policies that could be employed if India were to establish their cryonics market.¹²⁵ These proposals consider their current laws, as well as the social and religious implications of the cryopreservation industry.¹²⁶

No such steps have been taken in the United States, despite the size of the cryonics market and its rapidly growing prevalence.¹²⁷

IV. Analysis

The lack of legislation in the largest cryonics market in the world raises concerns in light of the increasing interest in the field.¹²⁸ This author could not find any federal laws that mention cryonics;¹²⁹ however, some state-based regulations impose checks on specific parts of the cryopreservation process.¹³⁰

Alcor, and presumably other cryonics agencies, are aware that “[e]ventually there WILL be laws which specifically regulate cryonic suspension and other forms of biostasis.”¹³¹ Alcor further speculates that “[w]hether these laws are permissive or prohibitive will depend very much on [the] understanding of current laws and on [Alcor’s] ability to cooperate with (or sometimes to out think) elected and appointed government officials.”¹³²

In recent years there have been several examples of the government struggling to regulate new technological developments. Take, for

123. Burnov, *supra* note 121.

124. See Athith Pradeep & Adithya Praveen, *Cryonics & the Law: Ascertaining Legal Implications on the Future of Life-After-Death*, 15 NUALS L. J. 1, 17 (2020).

125. See generally *id.* at 17–21.

126. *Id.* at 16–17.

127. See generally *Author-run search, supra* note 19 (showing that a search for any relevant U.S. laws or regulations on cryonics generated no results).

128. See *id.*; see also *Alcor Membership Statistics, supra* note 78.

129. *Author-run search, supra* note 19.

130. See *infra* Section IV.C.4.

131. Stephen Bridge, *The Legal Status of Cryonics Patients*, CRYONICS ARCHIVE, <https://www.alcor.org/library/the-legal-status-of-cryonics-patients/> (last visited Jan. 23, 2024) [hereinafter Bridge, *Legal Status*] [<https://perma.cc/9GGP-WUU5>].

132. *Id.*

example, the infamous Silk Road case from the early 2010s.¹³³ The United States government spent years tracking down the creator of the Silk Road,¹³⁴ a dark web community that hosted a number of criminal activities, ranging from the sale of illegal drugs to murder for hire.¹³⁵ Despite the government's awareness that the dark web existed and that it was used for many illegal purposes, the government was unable to prevent the crimes that were taking place on the platform due to restrictions resulting from outdated privacy laws and precedent developed before this technology existed.¹³⁶ When the case came before the court, it was clear that the government relied heavily on the retroactive application of laws—creating confusion and inconsistencies.¹³⁷ Many believe that this case highlights the need for legislation and regulation to adapt to changing technological landscapes in a timely manner to avoid retroactive application of laws—ultimately ensuring due process and transparency.¹³⁸

Evidently, new technologies, if not managed in a timely fashion, can lead to disastrous consequences.¹³⁹ Cryonics is a relatively new technological innovation,¹⁴⁰ and one that will likely continue to evolve as more research develops on the topic.¹⁴¹ The practice of cryonics raises several ethical and related legal concerns because of its nature in dealing with once living beings¹⁴² and large financial transactions.¹⁴³ It is imperative that the government engage in proactive measures to better understand and develop rules about the cryonics industry to avoid

133. See, e.g., *United States v. Ulbricht*, 31 F. Supp. 3d 540 (S.D.N.Y. 2014).

134. See *id.* at 547.

135. See *id.* at 546–47.

136. See Mike Elgan, *How the Silk Road Affair Changed Law Enforcement*, SecurityIntelligence (Jan. 30, 2023), <https://securityintelligence.com/articles/silk-road-dark-web-law-enforcement/> [<https://perma.cc/AU4Q-2E99>].

137. See generally Kate Vinton, *Alleged Silk Road Creator Ross Ulbricht's Fourth Amendment Rights Were Violated, Lawyers Say*, FORBES (Aug. 4, 2014, 5:18 PM), <https://www.forbes.com/sites/katevinton/2014/08/04/alleged-silk-road-creator-ross-ulbrichts-fourth-amendment-rights-were-violated-lawyers-say/?sh=554f70fb2339> [<https://perma.cc/QD3F-58EC>] (explaining that litigation continued because of a lack of clarity on the laws governing the case).

138. See *id.*

139. See generally *United States v. Ulbricht*, 31 F. Supp. 3d 540, 550 (S.D.N.Y. 2014) (showing that a lack of regulation led to a massive online marketplace for illicit goods and services).

140. See Best, *supra* note 24, at 498.

141. See *id.* at 498–501.

142. See David Shaw, *Cryoethics: Seeking Life After Death*, 23 *BIOETHICS* 515, 517–519 (2009).

143. See *Alcor Membership*, *supra* note 53.

misappropriation of funds, mistreatment of bodies, and predatory commercial practices.

A. Consumer Protection

The regulation of cryonics would be akin to engaging in consumer protection. The United States has several consumer protection agencies, each of which regulates commercial activities in various forms.¹⁴⁴ Examples include the Federal Trade Commission and the Food and Drug Administration, among others.¹⁴⁵ The purpose of such agencies is to “safeguard purchasers of goods and services against defective products and deceptive, fraudulent business practices.”¹⁴⁶

Given that there are generally no federal laws that explicitly regulate cryonics, it naturally follows that there are no consumer protection laws that explicitly regulate the cryonics industry.¹⁴⁷ It is possible that some regulation may take place through the Federal Trade Commission’s advertising controls which state that: “[c]laims in advertisements must be truthful, cannot be deceptive or unfair, and must be evidence-based.”¹⁴⁸ However, many cryonics agencies, like Alcor, do not engage in explicit advertising and thus, are unlikely to be subject to the FTC’s controls.¹⁴⁹

Consumer protection in the context of cryonics is necessary because cryonics is a new and expensive technology that has yet to be accepted by a vast majority of the scientific community,¹⁵⁰ and because

144. See *Consumer Protection Lawsaws*, CORNELL L. SCH.: LEGAL INFO. INST. (June, 2021), https://www.law.cornell.edu/wex/consumer_protection_laws [<https://perma.cc/F8WZ-WTGW>].

145. See *id.*

146. *Id.*

147. Miné Salkin, *The Only Anti-Cryonics Law in North America*, VICE (Apr. 16, 2015, 9:15 AM), <https://www.vice.com/en/article/bmjkq3/the-only-anti-cryonics-law-in-north-america> [<https://perma.cc/8DZD-TZL7>] (explaining that there are no restrictions in the U.S. for the advertisement or performance of cryonics); see also *Author-run Search*, *supra* note 19.

148. *Advertising and Marketing*, FED. TRADE COMM’N, <https://www.ftc.gov/business-guidance/advertising-marketing> (last visited Jan. 23, 2024) [<https://perma.cc/6WZ9-L4W6>].

149. See, e.g., *Bridge*, *supra* note 52, at 10.

150. See generally Laurie Clarke, *Why the Sci-Fi Dream of Cryonics Never Died*, MIT TECH. REV. (Oct. 14, 2022), <https://www.technologyreview.com/2022/10/14/1060951/cryonics-sci-fi-freezing-bodies/> [<https://perma.cc/7VY7-2LUU>] (reiterating that cryonics has and continues to be shunned by the scientific community).

cryonics services are targeted at vulnerable and easily-influenced populations.¹⁵¹

1. DEBATES ON SCIENTIFIC SOUNDNESS

Novel scientific advancements are often followed by both excitement and suspicion. Cryonics is not exempted from this trend.¹⁵² Though no statement exists regarding the U.S. Government's official stance on cryonics' scientific or medical legitimacy,¹⁵³ the scientific community has been vocal about their thoughts on cryonics.¹⁵⁴

Skeptics of the preservation procedure believe that cryonics instills a "false hope" into the minds of the vulnerable—those who are near death or have trouble with the idea of parting with a loved one.¹⁵⁵ These critics point out that the science behind cryonics has not been perfected and "[w]hile it might be theoretically possible to preserve . . . dead tissue, that certainly is not happening now."¹⁵⁶ In fact, they emphasize that "[t]he technology . . . does not yet exist even in principle."¹⁵⁷ They contend that the cryonics industry engages in a "purposeful conflation of what is theoretically conceivable with what is ever practically possible that exploits people's vulnerability."¹⁵⁸

Proponents of the procedure concede that though no attempt has been made to revive cryogenically frozen human beings, "[m]any biological specimens, including whole insects, many types of human tissue including brain tissue, and human embryos have been cryogenically preserved, stored at [-184°F] where all decay ceases, and revived."¹⁵⁹ They clarify that "[e]ven though a mammal has not been fully frozen at cryogenic temperatures and revived, similar tests have been done on monkeys and dogs."¹⁶⁰ A key argument that proponents of the

151. See *infra* Section IV.A.2.

152. *Cryogenic Sleep: Will We Finally Be Able to Cheat Death?*, INTERESTING ENGINEERING (Apr. 8, 2023 2:00 PM), <https://interestingengineering.com/ie-originals/ie-explainer/season-1/ep-11-cryogenic-sleep-will-we-finally-be-able-to-cheat-death> [https://perma.cc/D67M-LSMB].

153. See Salkin, *supra* note 147; see also generally *Author-Run Search*, *supra* note 19 (showing that no laws exist to shed light onto the government's position on cryonics).

154. See e.g., Clarke, *supra* note 150; see also Hendricks, *supra* note 16.

155. Hendricks, *supra* note 16.

156. *Id.*

157. *Id.*

158. *Id.*

159. *Success in Cryonics*, *supra* note 16.

160. *Id.*

procedure make is that future scientific advancements will have developed to the extent that humans can safely be released from their frozen state without any damage to the brain, which is a major concern of those who are skeptical about cryonics.¹⁶¹

These debates are important to consider because they highlight the experimental quality of the cryonics procedure.¹⁶² In turn, these uncertainties support the argument that cryonics should be regulated so that individuals who are curious about the procedure can be fully informed about its experimental nature before making the decision to be cryopreserved.¹⁶³

2. THE ELDERLY AS A TARGET MARKET

Technological innovations propel society forward.¹⁶⁴ In this day and age, these innovations progress quicker than ever.¹⁶⁵ These rapid changes, however, can cause confusions and may be used to target vulnerable populations, such as the elderly.¹⁶⁶

Cryonic services are marketed to all individuals.¹⁶⁷ However, the actual concept behind cryonics is specifically aimed at three major populations: the elderly,¹⁶⁸ the terminally ill,¹⁶⁹ and the rich.¹⁷⁰ In most circumstances, the latter two categories are also predominantly made up of elderly individuals.¹⁷¹ Alcor's patient profiles, though limited, support this conclusion.¹⁷²

161. *Id.*

162. *See* Hendricks, *supra* note 16.

163. *Id.*

164. Aqib Aslam, Johannes Eugster, Giang Ho, Florence Jaumotte & Robert Piazza, *Globalization Helps Spread Knowledge and Technology Across Borders*, IMF BLOG (Apr. 9, 2018), <https://www.imf.org/en/Blogs/Articles/2018/04/09/globalization-helps-spread-knowledge-and-technology-across-borders> [<https://perma.cc/8RVK-SCE8>].

165. *See id.*

166. *See id.*

167. Bridge, *supra* note 52, at 10.

168. *Cryonics*, FIGHT AGING! (Nov. 1, 2002), <https://www.fightaging.org/archives/2002/11/cryonics/> [hereinafter FIGHT AGING!] [<https://perma.cc/P6VZ-6WE2>].

169. *See* Amy Harmon, *A Dying Woman's Hope in Cryonics and a Future*, N.Y. TIMES (Sep. 12, 2015), <https://www.nytimes.com/2015/09/13/us/cancer-immortality-cryogenics.html> [perma.cc/26AC-VLBY].

170. *Asset Preservation Trust*, ALCOR, <https://www.alcor.org/library/asset-preservation-trust/> (last visited Jan. 23, 2024) [<https://perma.cc/JJ77-RVLE>].

171. *See, e.g., Alcor Patient Profiles*, ALCOR, <https://www.alcor.org/alcor-patient-profiles/> (last visited Jan. 23, 2024) [<https://perma.cc/BM3B-EUR4>].

172. *See id.*

The process of cryonics requires legal death.¹⁷³ As one cryonics blog post explains:

[i]n order to be cryopreserved you have to undergo a very unpleasant set of experiences; you have to age and you have to die, and do so naturally with little help, since our backwards legal systems don't allow for assisted euthanasia in a constructive way that can mesh with cryonics protocols and organizational procedures.¹⁷⁴

In this way, cryonics markets are dependent on the existence of the elderly.¹⁷⁵

Additionally, Alcor and most other cryonics service providers utilize age-based membership fees, meaning that individuals who elect to become members at an older age pay considerably more than those who become members at an earlier age.¹⁷⁶ Thus, in terms of profits generated from membership, elderly members make Alcor the most profit.¹⁷⁷

Some legal service providers have recognized cryonics as a possible growing trend.¹⁷⁸ One example is Durfee Law Group, PLLC, which has services specifically curated to help with estate planning.¹⁷⁹ It states that cryonics is a service to consider in place of traditional post-death proceedings.¹⁸⁰ The firm's website details how its lawyers can help individuals considering the cryonics procedure to have their affairs in order before and after their death.¹⁸¹ Common issues on which assistance is given include estate planning, trust creation, navigating life insurance policies and contracts.¹⁸²

173. Best, *supra* note 24, at 493.

174. FIGHT AGING!, *supra* note 168.

175. *See id.*

176. *See* ALCOR RELAUNCH, *supra* note 98, at 5–7 (showing that under the Alcor membership model, elderly members would pay more).

177. *See id.*

178. *See, e.g.*, Rick Durfee, *Cryonic Trust Blunders*, DURFEE L. GRP., <https://durfeelawgroup.com/cryonic-trust-blunders/> (last visited Jan. 23, 2024) [<https://perma.cc/95LH-R534>]; Inna Fershteyn, *Assets on Ice: Cryogenic Estate Planning*, L. OFF. INNA FERSHTEYN (Jan. 22, 2018), <https://brooklyntrustandwill.com/assets-ice-cryogenic-estate-planning/> [<https://perma.cc/GR3F-DAYZ>].

179. *See* Durfee, *supra* note 178.

180. *Id.*

181. *Id.*

182. *Id.*

B. Ethical Concerns

From its conception, cryonics companies have come under a great deal of scrutiny from a wide variety of communities. The scientific community has had significant debates about the validity of the practice and whether the promises made by cryonics could ever be fulfilled in the future.¹⁸³ On the other side, religious activists have also led their own war against the cryonics industry.¹⁸⁴ Some religious organizations have objected to cryonics because of a widely held belief that “cryonists [sic] intend to resurrect the dead, claiming power that only God holds.”¹⁸⁵

In addition to this existing hostility, cryonics has a history of scandals and alleged post-mortem mistreatment.¹⁸⁶ Therein lies an industry that is not only controversial, but also one that poses a significant threat to the practices and norms of U.S. social, political, and market practices. As the following sections will illustrate, balancing ethical considerations while maintaining the core functioning of the cryonics business is one of the biggest struggles of the industry.¹⁸⁷

1. THE DORA KENT CONTROVERSY

Alcor’s most publicized scandal concerned the death and subsequent cryopreservation of Dora Kent. At the age of 83, Dora Kent was the oldest person to be cryogenically frozen by the Alcor Life Extension in 1987.¹⁸⁸ She and her son, Saul Kent, who was her caretaker at the time,

183. See Hendricks, *supra* note 16.

184. *Cryonics and Religion*, ICYONIC WORLD LAB, <https://www.icryonic.com/en/library/cryonics-and-religion/> (last visited Jan. 23, 2024) [<https://perma.cc/6P69-BU23>].

185. *Id.*; see Syed Sujeel Ahmed, *Cryonics: Is Death No Longer Inescapable?*, ABOUTISLAM (Sept. 10, 2017), <https://aboutislam.net/science/health/cryonics-is-death-no-longer-inescapable/> [<https://perma.cc/GRC8-ESAH>] (quoting Professor Mohammed Salamah, “The Islamic principles and beliefs tell us that God is the only one able to resurrect the dead,” before the article defines cryonics as a means to treat illness, in line with Islamic principles to care for the living); see also Daniel Levy, *Does the Torah Allow You to be Cryogenically Frozen After Death?*, JEWISH CHRON. (Dec. 9, 2016, 1:15 PM), <https://www.thejc.com/judaism/does-the-torah-allow-you-to-be-cryogenically-frozen-after-death-i2xa6963> [<https://perma.cc/P8W5-VPPY>] (rejecting cryogenics under Jewish law as an alternative for in-ground burial).

186. See *infra* Section IV.B (illustrating the various ethical controversies that Alcor has been involved in).

187. See *infra* Section IV.B.

188. *Alcor’s Dora Kent Crisis and Legal Aftermath*, CRYONICSLLEGAL.ORG, <https://www.cryonicslegal.org/dorakent/DoraKent.html> (last visited Jan. 23, 2024) [herein-after *Dora Kent Crisis*] [<https://perma.cc/ESH4-2TRK>]; Michael Perry, *Our Finest*

were said to be avid believers in cryonics.¹⁸⁹ At some point Dora and Saul came to an agreement that when Dora passed, she would be cryogenically preserved at the Alcor facilities.¹⁹⁰ Her wishes were honored when she passed in 1987.¹⁹¹ Dora's body was taken into Alcor, her head detached from the body and processed for neuro-cryopreservation.¹⁹²

While Dora may have passed on, her story did not end. Dora's death led to a national outrage and a wave of public exposure to the cryonics industry.¹⁹³ Rumors circulated that Dora did not actually die of natural causes, as was required before the cryonic preservation could begin.¹⁹⁴ Adding to the rumors, the coroner who examined her body post-mortem released a statement that he believed that Dora may have actually still been alive when her head was severed from her body.¹⁹⁵ Alcor adamantly denied the allegations.¹⁹⁶ However, Alcor did admit that it failed at being completely transparent by delaying the filing of Dora's death certificate.¹⁹⁷ It is likely that this delay led to the miscommunication with the coroner's office.¹⁹⁸

Eventually the coroner retracted his initial statement, and instead admitted that he may have been mistaken in his assumption—quieting the allegations against Alcor.¹⁹⁹ However, this sensational story thrust Alcor to the front of an eager audience wanting to learn more about the bizarre and unnatural practice. In the days and months following the controversy, major news outlets aired stories covering the case and the Alcor Life Extension Foundation.²⁰⁰ Larry King, on his ever-popular

Hours: Notes On the Dora Kent Crisis, CRYONICS ARCHIVE (Nov. 1992), <https://www.cryonicsarchive.org/library/dora-kent-case/> [<https://perma.cc/72U2-BALE>].

189. *Dora Kent Crisis*, *supra* note 188; Perry, *supra* note 188.

190. *Dora Kent Crisis*, *supra* note 188.

191. *Id.*

192. *Id.*

193. See, e.g., Louis Sahagun & Mark Arax, *Coroner Says It Was Homicide by Drugs in Frozen Head Case*, L.A. TIMES (Feb. 24, 1988, 12:00 AM), <https://www.latimes.com/archives/la-xpm-1988-02-24-mn-11787-story.html> [<https://perma.cc/MH5R-WQ6C>].

194. *Id.*

195. *Id.*; see also *Removal of Woman's Head for Freezing Probed*, L.A. TIMES (Dec. 26, 1987, 12 PM), <https://www.latimes.com/archives/la-xpm-1987-12-26-mn-7464-story.html> [<https://perma.cc/5WJA-S9WQ>].

196. *Dora Kent Crisis*, *supra* note 188; see also Perry, *supra* note 188.

197. *Dora Kent Crisis*, *supra* note 188; Perry, *supra* note 188.

198. *Dora Kent Crisis*, *supra* note 188; Perry, *supra* note 188.

199. Perry, *supra* note 188.

200. See generally KathiAnn, *The Dora Kent Story—Parts 2-4*, YOUTUBE (Mar. 2, 2012), <https://www.youtube.com/watch?v=KHYZwPpKbSM> [hereinafter *Dora Kent Story 2*] [<https://perma.cc/NC4G-FRXA>]; see also KathiAnn, *The Dora Kent Story—*

talk show, invited Saul Kent to explain his interest in cryonics, his mother's death, and to even engage in a live debate with a religious leader on the topic of cryonics.²⁰¹ Following the segment, Larry King declared that he too, would like to be cryogenically preserved.²⁰² However, he later retracted his statement and opted for a traditional burial upon his death in 2021.²⁰³

Despite publicity and calls for "keeping a closer eye" on the cryonics industry, Dora's case did not change the functioning of the cryonics market. In fact, several cases in the years following Dora's death led to legal precedent in favor of Alcor and the entire cryonics industry.²⁰⁴

2. OTHER CONCERNS AND CONTROVERSY

Alcor has continued to be the subject of many controversies, including several allegations about the mishandling and misappropriation of cadavers.²⁰⁵ Former employees have criticized the company and its practices.²⁰⁶ One example includes a former employee, who spoke out about Alcor's treatment of Ted Williams' cryonically preserved head.²⁰⁷ In his lengthy allegation, which has since been published as a book, the employee mentions that Alcor used a tuna can as a pedestal to prop up Williams' head during the preservation process.²⁰⁸ At some point, the can became attached to Williams' head. In an attempt to loosen the tuna can from the head, Alcor employees allegedly swung a monkey wrench at the head until the tun can fell.²⁰⁹ One of the swings

Part 3, YOUTUBE (Mar. 2, 2012), <https://www.youtube.com/watch?v=BG09mEeH3fM&t=0s> [https://perma.cc/26BB-W99V]; see also KathiAnn, *The Dora Kent Story—Part 4*, YOUTUBE (Mar. 2, 2012), <https://www.youtube.com/watch?v=VbWd-aWolt8> [https://perma.cc/5TWA-2D2Y] (presenting various snippets of media outlets during and after the Dora Kent case).

201. See *Dora Kent Story 2*, *supra* note 200.

202. See *Was Larry King Cryogenically Frozen After His Death?*, INSIDE EDITION (Jan. 27, 2021, 9:46 AM), <https://www.insideedition.com/was-larry-king-cryogenically-frozen-after-his-death-64558> [https://perma.cc/95AB-FEBJ].

203. *Id.*

204. See Mike Perry, *Alcor's Legal Battles*, CRYONICS ARCHIVE (1999), <https://www.alcor.org/library/alcor-legal-battles/> [https://perma.cc/CDM7-NU36].

205. See *Head Abused*, *supra* note 9.

206. *Former Alcor Employee Makes Harsh Allegations Against Cryonics Foundation*, ABCNEWS (Oct. 7, 2009, 11:53 AM), <https://abcnews.go.com/Nightline/alcor-employee-makes-harsh-allegations-cryonics-foundation/story?id=8764331> [https://perma.cc/H3M8-JQVK].

207. *Head Abused*, *supra* note 9.

208. *Id.*

209. *Id.*

hit the head, and “[t]iny pieces of frozen head sprayed around the room.”²¹⁰ The employee also noted that “there was a significant crack in Williams’ head” after that point.²¹¹

The employee also reiterated an allegation that had long been recited by other employees—that samples of Williams’ DNA had gone missing from the facility at the time of the preservation.²¹²

C. Existing Laws that Partially Govern the Cryonics Industry

While there are no specific laws that govern the cryonics and the cryopreservation industry,²¹³ some frameworks and laws touch upon certain aspects of the cryonics process. Cryonics and its funding “is often trapped in a tangle of laws concerning trusts, tax-exemption, and insurance policies.”²¹⁴ Some regulations that touch upon areas of cryonics include constraints or exemptions to certain portions of the Uniform Anatomical Gift Act,²¹⁵ “Next of Kin” agreements,²¹⁶ insurance policies,²¹⁷ and laws governing the lifespan of trusts.²¹⁸ Some state laws and regulations on cryonics exist, however, they are rare.²¹⁹

The following are some existing laws and regulations that partially regulate aspects of the cryonics industry and the cryopreservation process.

210. *Id.*

211. *Id.*

212. *Id.*

213. See *Author-run Search*, *supra* note 19.

214. Bridge, *Legal Status*, *supra* note 131.

215. See generally REV. UNIF. ANATOMICAL GIFT ACT (NAT’L CONF. COMM’RS ON UNIF. STATE LS. 2009).

216. *A Guide to Cryopreservation Contracts*, CRYONICS INST., <https://cryonics.org/members/member-forms/a-guide-to-cryopreservation-contracts/> [<https://perma.cc/4RM9-XTPN>]; see also Zoltan Istvan, *We Need Better Laws to Protect the Rights of Future Frozen Cryonicists*, QUARTZ (Feb. 22, 2019), <https://qz.com/emails/quartz-weekend-brief/1849801392/the-8-billion-person-planet> [<https://perma.cc/NZ4Q-PNEC>] (illustrating that next of kin proceedings often override the wishes of the decedent).

217. *Life Insurance*, NAIC (Jan. 1, 2024), <https://content.naic.org/cipr-topics/life-insurance> [hereinafter *Life Insurance*] [<https://perma.cc/5KDP-MWHG>].

218. See Matt Hongotlz-Hetling, *Meet the People Who Want to Live—and Keep Their Wealth—Forever*, POL’YGENIUS (Dec. 21, 2020), <https://www.policygenius.com/personal-finance/news/cryonic-money-management/> [<https://perma.cc/2E5X-UUA5>].

219. See, e.g., *Arizona House Floor Debate on Bill to Regulate Cryonics*, CRYONICS ARCHIVE (Mar. 12, 2004), <https://www.cryonicsarchive.org/library/arizona-house-floor-debate-on-bill-to-regulate-cryonics/> [<https://perma.cc/335K-E2M5>].

1. 26 U.S.C. 501(C)(3)

Cryonics institutes, such as Alcor, are classified as tax-exempt corporations under 26 U.S.C. 501(c)(3).²²⁰ In addition to listing the requirements to be recognized as tax exempt organization under Section 501(c)(3) of the Internal Revenue Code,²²¹ this section also dictates specific activities tax exempt corporations may or may not engage in.²²² For example, unlike other corporations, these corporations are forbidden to turn a profit for those who own or operate the company.²²³ They also face a unique limitation in that they are not allowed to engage in political campaigning, which severely limits their capability to: (1) influence beneficial policies²²⁴ and (2) advertise their services on a much larger scale.²²⁵

2. INSURANCE POLICIES

Life insurance serves to provide “financial protection for loved ones should the policyholder die.”²²⁶ There are many types of life insurance, thus individuals can select a policy best suited to their personal needs.²²⁷ Alcor encourages members to finance their cryonics services through the use of life insurance by listing Alcor as the sole beneficiary of the life insurance.²²⁸

There are three main categories of life insurance policies: term life insurance, whole life insurance, and universal life insurance.²²⁹ Within each of these broad categories, there are several smaller, specific policies.²³⁰ All life insurance policies are regulated on a state-level, with

220. 26 U.S.C. § 501(c)(3); *see also Alcor Tax Filings*, *supra* note 79.

221. *See generally* 26 U.S.C. § 501(c)(3) (stating that “[c]orporations, and any community chest, fund, or foundation, organized and operated exclusively for religious, charitable, scientific, testing for public safety, literary, or educational purposes, or to foster national or international amateur sports competition. . .” are tax exempt under this section).

222. *Prohibited Activities by Nonprofit Organizations*, WINGATE, KEARNEY & CULLEN, LLP (Oct. 11, 2019), <https://wkclaw.com/corporate-law/prohibited-activities-by-nonprofit-organizations/> [<https://perma.cc/R9HS-VRGE>].

223. *Id.*

224. *Id.*

225. *See generally* Bridge, *supra* note 52, at 12.

226. *Life Insurance*, *supra* note 217.

227. *Id.*

228. Rudi Hoffman, *Cryonics Life Insurance and Inflation*, CRYONICS ARCHIVE, <https://www.alcor.org/library/cryonics-life-insurance-and-inflation/> (last visited Jan. 23, 2024) [<https://perma.cc/SWP8-DLQA>].

229. *See Life Insurance*, *supra* note 217.

230. *Id.*

most states developing guidelines based on suggestions from the National Association of Insurance Commissioners (NAIC).²³¹ The NAIC is the “standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia, and five U.S. territories.”²³² The NAIC, through a series of model regulations, encourages states to “adopt model laws and regulations designed to inform and protect insurance consumers.”²³³ The NAIC also urges states to engage in educational programs on life insurance and to be transparent when dealing with customers.²³⁴

Alcor does not explicitly endorse one specific type of life insurance.²³⁵ Rather, it leaves it up to members to speak with knowledgeable brokers and to pick a policy that best fits their specific financial situation.²³⁶

3. ESTATE PLANNING AND TRUST CREATION

Maintaining wealth into the future is an important consideration for those who would like to be cryonically frozen.²³⁷ Retention of wealth eliminates the risk and uncertainty of having to start all over again, should the procedure succeed and the individual is one day revived.²³⁸ Consequently, “many members have been looking at future trusts and moving money to fund them in the future.”²³⁹ Trusts are “agreements in which one person or entity holds assets for another person or entity and is governed by mutually agreed-upon rules.”²⁴⁰ While this may seem straightforward, this process is hindered by an important limitation on all trusts: the rule against perpetuities.²⁴¹

The rule against perpetuities states “certain interests in property must vest, if at all, within 21 years after the death of a life in being at

231. *Id.*

232. NAT'L ASS'N INS. COMM'RS, What is the NAIC and What Does it Do? 1, <https://content.naic.org/sites/default/files/about-naic.pdf> [<https://perma.cc/RT3A-H82B>].

233. *Life Insurance*, *supra* note 217.

234. *Id.*

235. *See Hoffman*, *supra* note 228.

236. *Id.*

237. *See Hongoltz-Hetling*, *supra* note 218.

238. *See id.*

239. *Id.* (quoting Marji Klima, operations manager for Alcor).

240. *Id.*

241. *Id.*

the time that the interest was created.”²⁴² The purpose of the rule is to prevent individuals from creating transfer agreements which would allow them to hold on to property for long periods of time after their natural death.²⁴³ Simply put, the rule of perpetuities is in place to prevent “dynastic properties” whose transfers are “restricted by the wishes of someone who has been dead for hundreds of years.”²⁴⁴

To get around the limitations set by the rule against perpetuities, individuals can establish charitable trusts or dynasty trusts.²⁴⁵ In a charitable trust, the creator of the trust commonly acts as both the benefactor and the beneficiary.²⁴⁶ Charitable trusts allow individuals to donate to an organization and receive tax benefits, thus creating regular income for themselves or their beneficiaries.²⁴⁷ The issue with charitable trusts, however, is that they cannot solely benefit the individual creating the trust.²⁴⁸ Therefore, it would likely not benefit an individual looking to preserve their wealth over a long period of time.²⁴⁹

An alternative solution could be to create a dynasty trust.²⁵⁰ A dynasty trust is a long-term trust created to pass wealth from generation to generation without incurring transfer taxes—such as gift taxes, estate taxes or generation-skipping transfer tax (GSTT)—for as long as assets remain in the trust.²⁵¹ Essentially they are a state-sanctioned exception to rule against perpetuities.²⁵² However, a dynasty trust also raises wealth retention issues because other individuals have access to the trust.²⁵³ Thus, there is a possibility for the trust to be bled of its value before the cryonically preserved individual is revived.²⁵⁴ Furthermore,

242. *Rule Against Perpetuities*, L.SHELF, <https://lawshelf.com/coursewarecontent/view/rule-against-perpetuities> (last visited Jan. 23, 2024) [<https://perma.cc/52PJ-SWNX>].

243. *Id.*

244. *Id.*

245. Hongoltz-Hetling, *supra* note 218.

246. Derek Silva, *How to Start a Charitable Trust*, POL'YGENIUS (Nov. 30, 2021), <https://www.policygenius.com/trusts/how-to-start-a-charitable-trust> [<https://perma.cc/6MRX-SK65>].

247. *Id.*

248. *See id.*

249. *See id.*

250. See Will Kenton, *Dynasty Trust: Definition, Purposes, How It Works, and Tax Rules*, INVESTOPEDIA (Oct. 21, 2022), <https://www.investopedia.com/terms/d/dynasty-trust.asp> [<https://perma.cc/YK3K-66Y2>].

251. *Id.*

252. *See id.*

253. *Id.*

254. *Id.*

the rules on dynasty trusts vary from state to state, with some states not even recognizing them as valid.²⁵⁵

In response to these wealth retention issues, the Future Income Trust was developed.²⁵⁶ The Future Income Trust is a custom trust that can be modified on a case-by-case basis.²⁵⁷ This trust is offered by Alcor in Arizona and benefits from Arizona's lax rule against perpetuities.²⁵⁸ In Arizona, "[t]he rule against perpetuities . . . allows assets to be held for 500 years, after which relevant trusts are renewed for another 500 years,"²⁵⁹ for a total of uninterrupted 1,000 years of trust life.²⁶⁰ Furthermore, "Arizona also allows trusts to be transferred out of state as that 500-year mark approaches, which would allow assets to move to a more hospitable state in the 26th century."²⁶¹

4. THE UNIFORM ANATOMICAL GIFT ACT

The Uniform Anatomical Gift Act (UAGA) was developed in 1986 by the National Conference of Commissioners on Uniform State Laws (NCCUSL), also known as the Uniform Law Commission (ULC).²⁶² It is an advisory framework regarding how anatomical gifts should be made.²⁶³ All fifty states have adopted the provisions of the UAGA in some form.²⁶⁴ It is important to note that UAGA is a uniform code, which are advisory or model codes to federal regulations.²⁶⁵ They are not federal legislation.²⁶⁶ The UAGA states that "an anatomical gift of a donor's body or part may be made during the life of the donor for the

255. See generally *Comparison: The Best Trust Situs and Laws by State*, WEALTH ADVISORS: TRUST COMPANY, <https://www.wealthadvisorstrust.com/best-trust-laws-by-state> (last visited Jan. 23, 2024) (illustrating the various differences in state laws on trusts) [<https://perma.cc/7CP9-NVDZ>].

256. See Hongoltz-Hetling, *supra* note 218.

257. *Id.*

258. *Id.*

259. *Id.*

260. *Id.*

261. *Id.*

262. *Uniform Anatomical Gift Act*, LEGAL INFO. INST. (Dec. 2021), https://www.law.cornell.edu/wex/uniform_anatomical_gift_act [<https://perma.cc/V5FL-KMG9>]; see Britta Martinez, *Uniform Anatomical Gift Act (1986)*, ASU: THE EMBRYO PROJECT ENCYCLOPEDIA (AUG. 5, 2013), <https://embryo.asu.edu/pages/uniform-anatomical-gift-act-1968> [<https://perma.cc/8X78-LDTE>]; see generally REV. UNIF. ANATOMICAL GIFT ACT.

263. Martinez, *supra* note 262.

264. *Id.*

265. See *id.*

266. See *id.*

purpose of transplantation, therapy, research, or education.”²⁶⁷ The Act also addresses the need for donations while respecting the religious and moral sensibilities of those who do not wish to donate.²⁶⁸

Arizona, where Alcor is housed, has specifically had debates in their legislature regarding limiting cryonics through the use of UAGA guidelines.²⁶⁹ In 2004, Representative Bob Stump introduced HB 2637 to the Arizona House of Representatives that proposed to regulate cryonics.²⁷⁰ HB 2637 proposed that cryonics be regulated under the Funeral and Embalmer’s Board and that Alcor’s use of the Uniform Anatomical Gift Act (UAGA) be stripped.²⁷¹ This legislation did not pass.²⁷²

Furthermore, Alcor is exempt from a 2017 Arizona law that regulates the body-donation industry through the state’s UAGA provision.²⁷³ This state law, HB 2037, was passed after the Biological Reserve Center (BRC) in Phoenix “deceived . . . families into donating their loved ones’ bodies only for them to end up dismembered and distributed for profit all over the country.”²⁷⁴ Naturally, this shocking scandal prompted swift legislative action.²⁷⁵ HB 2037 required strict licensure of body donation companies and further stipulated that these companies

267. REV. UNIF. ANATOMICAL GIFT ACT § 4.

268. See Martinez, *supra* note 262.

269. See *Arizona House Floor Debate on Bill to Regulate Cryonics*, CRYONICS ARCHIVE (Mar. 12, 2004), <https://www.cryonicsarchive.org/library/arizona-house-floor-debate-on-bill-to-regulate-cryonics/> [hereinafter *Ariz. Debate*] [<https://perma.cc/S5EN-Z4UA>].

270. *Id.*; see Stephanie Innes, *Scottsdale Cryonics Facility, the Home of Ted William’s Head, Hopes Frozen Dead People Will Live Again*, AZCENT. (JULY 5, 2019 7:04 PM), <https://www.azcentral.com/story/news/local/arizona-health/2019/06/11/arizona-cryonics-facility-alcor-life-extension-foundation-houses-head-baseball-legend-ted-williams/1146880001/> [hereinafter Innes, *Scottsdale Cryonics Facility*] [<https://perma.cc/C5P2-NS75>]; see also E-mail from Mike LaTorra, Professor, New Mexico State University, to unknown recipient (Feb. 22, 2004, 5:50 PM) (<http://www.cryonet.org/cgi-bin/dsp.cgi?msg=23488>) (providing a transcription of Rep. Stump’s view on cryonics and his intent for pushing legislation) [<https://perma.cc/C442-C8YR>].

271. *Ariz. Debate*, *supra* note 269.

272. See *id.*; see also Innes, *Scottsdale Cryonics Facility*, *supra* note 270.

273. Stephanie Innes, *Despite 2-Year-Old State Law, Arizona’s Body Donation Industry Still Unregulated*, AZCENT. (DEC. 14, 2019, 11:37 AM), <https://www.azcentral.com/in-depth/news/local/arizona-health/2019/06/10/despite-state-law-arizonas-body-donation-industry-still-unregulated/2918524002/> [hereinafter Innes, *Body Donation Industry*] [<https://perma.cc/EFY4-L4TS>].

274. Meagan Flynn, *Human Chop Shop That Sold Body Parts for Experiments Without Consent Ordered to Pay \$58 Million to Donors’ Families*, WASH. POST (Nov. 20, 2019 7:40 AM), <https://www.washingtonpost.com/nation/2019/11/20/arizona-human-chop-shop-sold-body-parts-experiments/> [<https://perma.cc/274B-WAUV>].

275. *Id.*

could not operate without a license, to prevent situations such as the BRC scandal.²⁷⁶

Unfortunately, there is no way to analyze how this law would have impacted Alcor and their cryonics business.²⁷⁷ At the time of the law's adoption, Alcor was exempted from the bill's licensing requirements.²⁷⁸ Furthermore, HB 2037 was set to be enacted in 2020, but the Arizona Health Department shifted its focus to combat the opioid crisis.²⁷⁹ Accordingly, the body donation market was left as it was before: wholly unregulated.

5. "NEXT OF KIN AGREEMENTS"

The greatest risk to cryonicists are their own family members.²⁸⁰ Given that the topic of cryo-preservation is one that is quite controversial, individuals responsible for a cryonicist's post-mortem affairs may not want to honor their wishes to be cryo-preserved.²⁸¹ Next of Kin protocols used by coroners almost "always follow the wishes of the next of kin," despite the wishes of the decedent.²⁸² Evidence of pre-mortem agreements and contracts can sometimes prevent the complete disregard of the decedents wishes.²⁸³ However, in cryonics cases, even if there were agreements and contracts made before a decedent's passing which explicitly state their wish to be cryo-preserved, "the great majority of US states don't abide by cryonics contracts, even if legally created."²⁸⁴

The heated conflict between Ted Williams's children is just one example of the many disagreements family members often get involved in when choosing between their wishes and that of a decedent.²⁸⁵ This

276. *Id.*

277. *See generally* Innes, *Body Donation Industry*, *supra* note 273 (stating that the law, though passed, never came to be in effect).

278. *Id.*

279. *Id.*

280. Rebecca Lively, *Protecting Your Cryonics Arrangements from Third Parties*, CRYONICS ARCHIVE (2010), <https://www.cryonicsarchive.org/library/protecting-your-cryonics-arrangements-from-third-parties/> [<https://perma.cc/7M5K-E78S>].

281. *See generally* Istvan, *supra* note 216 (presenting a case in which family members did not want a loved one to be cryopreserved).

282. *Id.*

283. *See generally* McCormack, *supra* note 1 (showing that Williams was cryo-preserved likely because of evidence that he wanted to go through with the procedure).

284. Istvan, *supra* note 216.

285. *See id.*; *see also* McCormack, *supra* note 1.

is a common problem, and several other examples of such disagreements exist across the board.²⁸⁶

One method cryonicists use to try to circumvent such conflicts is by signing a Document of Gift under the UAGA.²⁸⁷ A Document of Gift is a donor card that allows an individual to donate parts of their body after death.²⁸⁸ The idea behind this is that a cryonicist would instruct in the Document of Gift to transfer their body into the possession of Alcor at the time of their death.²⁸⁹ However, this method “doesn’t always work, especially if the recipient of the donation is not an accredited hospital or medical research center.”²⁹⁰ Thus, it is not guaranteed that the person’s body would be given to Alcor, depending on whether a state has categorized Alcor as an accredited hospital or research center.²⁹¹

D. Cryonics in the Courts

Alcor and the cryonics industry remain compromised in the court of public opinion. In contrast, the actual court system has consistently ruled in Alcor’s favor, despite the lack of formal legislation or regulations on the cryonics industry.²⁹² Thus far, claims brought by or against Alcor have been adjudicated at the state level, and most of these claims concern post-mortem bodily rights and bodily possession.²⁹³

1. *ALCOR LIFE EXTENSION FOUNDATION V. MITCHELL*

In this 1992 case, the California Court of Appeals was tasked with deciding a dispute between Alcor and the Department of Health Services (DHS).²⁹⁴ It is important to note here that this case was adjudicated under California state law, because Alcor was founded in California and operated under its laws prior to moving to its current location in Scottsdale, Arizona.²⁹⁵ Under California law, anatomical body parts

286. See Istvan, *supra* note 216; see, e.g., Hayden, *supra* note 15.

287. Istvan, *supra* note 216.

288. *Id.*

289. *Id.*

290. *Id.*

291. *Id.*; see *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 576 (App. 2d Dist. 1992); *Alcor Life Extension Found. v. Richardson*, 785 N.W.2d 717, 732 (Iowa Ct. App., 2010).

292. See *Mitchell*, 9 Cal. Rptr. 2d at 572; see also *Richardson*, 785 N.W.2d at 717; see also *Author-run Search*, *supra* note 19 (showing that there is a lack of explicit legislation or regulation on cryonics).

293. See *Mitchell*, 9 Cal. Rptr. 2d at 572; see also *Richardson*, 785 N.W.2d at 717.

294. *Mitchell*, 9 Cal. Rptr. 2d at 572.

295. See *id.*

could only be donated and stored at facilities “for scientific purposes or [if it] qualifie[d] as a gift under the Anatomical Gift Act.”²⁹⁶ Furthermore, “disposing . . . a dead body anywhere in the city or county, except within a cemetery” constituted a misdemeanor.²⁹⁷ In the eyes of the DHS, cryonics was not recognized as a “scientific use” under the UAGA, nor did Alcor qualify as a cemetery.²⁹⁸

In defending their position, the DHS pointed out that Alcor was not “‘licensed, accredited or approved’ to function as a procurement organization” for bodily remains.²⁹⁹ The Court responded that Alcor could not have possibly been licensed because the “DHS has not established any procedure or mechanism which would permit Alcor or any other organization even to make application”³⁰⁰ to become a licensed procurement facility.³⁰¹ The Court of Appeals ruled in Alcor’s favor.³⁰² They held that a:

permanent injunction preventing interference with issuance of disposition permits or registration of deaths for bodies of persons who had designated the business as a donee and directed that the business place their bodies in cryonic suspension was warranted until DHS implemented licensing and registration system for procurement organizations pursuant to Uniform Anatomical Gift Act.³⁰³

The Court’s analysis of the issue made it clear that it refused to accept the argument that Alcor’s cryonic operations posed an actual threat to public health.³⁰⁴

2. *ALCOR LIFE EXTENSION FOUNDATION V. RICHARDSON*

Twelve years after *Alcor Life Extension Foundation v. Mitchell*,³⁰⁵ the Iowa Court of Appeals adjudicated a dispute between Alcor and family members of a decedent in the case *Alcor Life Extension Foundation v. Richardson*.³⁰⁶ In this case, Alcor requested an order from the Court to compel the next of kin of a decedent, who had arranged a cryo-preservation transaction with Alcor, to sign a waiver to disinter the body of

296. *Id.* at 574.

297. *Id.*

298. *Id.*

299. *Id.* at 575.

300. *Id.*

301. *Id.*

302. *Id.*

303. *Id.* at 572.

304. *Id.* at 575.

305. *Id.*

306. See generally *Alcor Life Extension Found. v. Richardson*, 785 N.W.2d 717 (Iowa App. 2010).

the decedent in accordance to the company's arrangement with the decedent.³⁰⁷ There were several issues for the Court to consider in this case, the most important being 1) whether Alcor was a valid procurement organization under Iowa's Revised Uniform Anatomical Gift Act, and 2) whether the contract between Alcor and the decedent was valid, thus requiring a remedial measure.³⁰⁸

On the first issue, the Court held that Alcor fell under Iowa's Revised Uniform Anatomical Gift Act as an "appropriate persons for research."³⁰⁹ In coming to this decision, the Court first looked at the decision in *Alcor Life Extension Foundation v. Mitchell*,³¹⁰ which ultimately recognized Alcor as a legitimate recipient of body donations under the original UAGA.³¹¹ Then the Court looked at the revisions made by Iowa in their passing of a Revised Uniform Anatomical Gift Act (RUAGA).³¹² Iowa's RUAGA stated that "an anatomical gift of a donor's body or part may be made during the life of the donor for the purposes of transplantation, therapy, research, or education."³¹³ The Court determined that Alcor's position as a nonprofit organization under "26 U.S.C. § 501(c)(3), as well as documents indicating Alcor's bona fides as an organization engaged in research in cryopreservation" designated it as an appropriate persons for research and thus, they could be the recipient of donated body parts.³¹⁴

On the second issue, the Court held that the contract between the decedent and Alcor was valid.³¹⁵ Thus, Alcor was entitled a remedy.³¹⁶ The Court stated that the agreement between the decedent and Alcor constituted an anatomical gift under the RUAGA.³¹⁷ Furthermore, because the decedent's next of kin were well aware of the provision in the will that stated his body be given to Alcor, the Court decided that Alcor was entitled to equitable remedy—in this case, disinterment and delivery of the body to Alcor's facilities for cryopreservation.³¹⁸

307. *Id.* at 725–26.

308. *Id.*

309. *Id.* at 724.

310. *Id.* at 724–25 (citing *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 576 (App. 2d Dist. 1992)).

311. *Id.* at 717.

312. *Id.* at 727.

313. *Id.* at 724.

314. *Id.* at 725.

315. *Id.* at 730.

316. *Id.*

317. *Id.*

318. *Id.* at 732.

The premise of this case is strange because cryonicists emphasize that the cryopreservation process is heavily dependent on immediate procedure after natural death.³¹⁹ In this case, disinterring the body would no doubt mean that the decomposition process had already begun, likely reducing the chances that the body would be able to be revived without major defects in the future.³²⁰ At this point, why not just leave the body as the decedent's loved ones wish? Alcor argues that it was the principle of the matter behind this case,³²¹ the principle being that Alcor is committed to acting "upon the written wishes of members."³²²

The decisions made in these cases illustrate the unwillingness of the courts to rule on whether cryonics is a "legally allowed" practice.³²³ The decisions highlight the courts' preference to make judgments based on existing regulations while deferring to the legislative and administrative authorities to create clearer guidelines for future rulings, if they so wish.³²⁴

V. Recommendation

Regulating cryonics is difficult because the industry deals heavily with issues that may or may not arise in the future.³²⁵ Yet regulation is necessary, considering that a growing number of people are spending their money on cryonics services with the hopes to reap some benefits in the future.³²⁶ As the commentary from the courts that have dealt with cryonics shows, there is no current standard by which to regulate cryonics.³²⁷ Regulating cryonics requires a two-prong approach. On one side, there is a need to protect the integrity of the existing free market system. On the other, there is a need to impose regulations on the market in a way that protects vulnerable individuals like the elderly from false hope and misinformation.

319. See Best, *supra* note 24, at 493.

320. *Id.* at 499.

321. Press Release, Alcor Life Extension Foundation, Iowa Court Appeals Uphold Cryopreservation Wishes (May 12, 2010) (on file with author).

322. *Id.*

323. See generally *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 576 (App. 2d Dist. 1992); *Alcor Life Found., Inc. v. Richardson*, 785 N.W.2d 717.

324. See *Richardson*, 785 N.W.2d at 723–29.

325. See generally Best, *supra* note 24, at 494–99.

326. See *Alcor Membership Statistics*, *supra* note 78.

327. See *Mitchell*, 9 Cal. Rptr. 2d at 573; see also *Richardson*, 785 N.W.2d at 717.

A. Who Should Have the Authority?

As with any regulation, the first question to consider is whether regulations should be overseen by federal or state actors. As demonstrated by the courts' commentary in *Alcor Life Extension Foundation v. Mitchell* and *Alcor Life Extension Foundation v. Richardson*, many state and federal legislatures have avoided discussion on the issue of cryonics.³²⁸

Areas of the law that currently touch upon aspects of the cryonics industry are largely dictated by state legislation.³²⁹ Even adaptations of the UAGA operate slightly differently in each state.³³⁰

Given these state-by-state inconsistencies, the ideal regulation structure should consist of a federally authorized licensing framework, which would apply uniformly to all states. The licensing standard should be flexible to consider future changes or developments in technology, as well to allow states to modify standards in accordance with their existing legislation and precedent.

1. CONSIDERING SOLUTIONS FROM OTHER MARKETS

Other cryonics markets, or prospective markets, around the world have developed or are developing methods to control the cryonics market to prevent misappropriation and ethical dilemmas. Some markets, such as Russia, have started considering legislation methods for cryonics.³³¹ Other prospective markets, like India, have begun considering how they would regulate the cryonics market if it were to develop in their country.³³²

The Russian regulations on cryonics are relatively thin.³³³ However, in past years Russia has initiated conversations surrounding their cryonics market.³³⁴ These conversations involved human rights and other interest groups to help guide legislators to develop a cryonics industry that balances seemingly competing interests.³³⁵

328. See *Mitchell*, 9 Cal. Rptr. 2d at 573; see also *Richardson*, 785 N.W.2d at 725.

329. See UNIF. ANATOMICAL GIFT ACT (NAT'L CONF. COMM'RS ON UNIF. STATE LS. 2009); *Life Insurance*, supra note 217.

330. See *Richardson*, 785 N.W.2d at 724 (showing that Iowa revised the UAGA according to state standards).

331. See *Burnov*, supra note 121.

332. Pradeep & Praveen, supra note 124, at 13–15.

333. See *Burnov*, supra note 121.

334. See *id.*

335. *Id.*

Given the social and ethical implications of the cryonics industry, the United States would also benefit from considering the opinions of a variety of interested parties. Interested parties likely include scientists, technology experts, and human rights organizations. It may also be beneficial to get Alcor, or similar organizations, involved in the conversations when developing regulations on the industry. Such involvement would provide for more clarity on the practice, and thus, allow for better regulation.³³⁶ The nature and extent of Alcor's involvement would be up to the parties developing the respective legislation.

The United States can also look to the legal theories considered by legal scholars in India.³³⁷ While the country does not yet have an established cryonics market, Indian legal scholars have proactively considered ways by which cryonics could be regulated if the practice enters their market.³³⁸ They have suggested governmental regulation through broadly adopting the Transplantation of Human Organs and Tissues Act (THOA) to include cryonics.³³⁹ This Act substantively parallels the Uniform Anatomical Gift Act in the United States.³⁴⁰ Furthermore, they recognize that cryonics "requires an exhaustive and prolonged scrutiny before [they] conclusively render an established and well-drafted legislative act to this medical field of biotechnology."³⁴¹

A similar recognition of cryonics as a valid field of biotechnology could make it easier to regulate within the United States, as will be discussed in a later section.³⁴²

B. Creating a Uniform Licensing Framework

The courts in *Alcor Life Extension Foundation v. Mitchell* and *Alcor Life Extension Foundation v. Richardson* determined that there was no procedure or mechanism by which Alcor could apply to become a licensed procurement agency, and thus be regulated.³⁴³ They hinted for the creation of a standardized licensing procedure to govern cryonics

336. See Pradeep & Praveen, *supra* note 124, at 21.

337. *Id.* at 17–21.

338. *Id.*

339. *Id.* at 19–21.

340. *Id.* at 8; UNIF. ANATOMICAL GIFT ACT (NAT'L CONF. COMM'RS ON UNIF. STATE LS. 2009).

341. Pradeep & Praveen, *supra* note 124, at 21.

342. *Infra* Section V.B(1).

343. See *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572, 575 (App. 2d Dist. 1992); see also *Alcor Life Extension Found. v. Richardson*, 785 N.W.2d 717, 725 (Iowa Ct. App. 2010).

providers, stating that “those persons who . . . head our various branches of government will be far wiser than we and entirely capable of resolving such dilemmatic issues without our assistance.”³⁴⁴ Both the California Court of Appeals and the Iowa Court of Appeals showed a judicial preference for the creation of some type of licensing standard by the legislature.³⁴⁵ The courts themselves refrained from engaging in the creation of such standards.³⁴⁶

The courts’ suggestion of a uniform licensing standard for cryonics agencies is likely the best method of regulation for the industry.³⁴⁷ A uniform licensing standard for cryonics agencies would be the best way to protect consumers without hindering the interested parties from engaging in cryonics. The proposed licensing standard should: (1) list cryonics as a biotechnology so that it may be regulated under the current biotechnology framework that applies to similar technologies and (2) create a contracting process which is predicated on informed consent, and universally recognized to avoid post-mortem conflicts.

1. BIOTECHNOLOGY FRAMEWORK

In developing a proper method of regulation, legislators can look at already existing avenues, such as the Coordinated Framework for Regulation of Biotechnology.³⁴⁸ The dictionary definition of biotechnology is “the use of biology to solve problems and make useful products.”³⁴⁹ Theoretically, cryonics fits under this definition because other forms of cryopreservation, such as that of embryos or sperm cells, are categorized as a biotechnology.³⁵⁰ Categorizing cryonics as a biotechnology for the purposes of regulation would allow for the adoption of

344. *Mitchell*, 9 Cal. Rptr. 2d at 576.

345. *See Mitchell*, 9 Cal. Rptr. 2d at 574–75; *see also Richardson*, 785 N.W.2d at 732.

346. *See Richardson*, 785 N.W.2d at 732.

347. *See Mitchell*, 9 Cal. Rptr. 2d at 574–76.

348. *See* Robbie Barbero, James Kim, Ted Boling & Julia Doherty, *Increasing the Transparency, Coordination, and Predictability of the Biotechnology Regulatory System*, WHITE HOUSE (Jan. 4, 2017, 1:20 PM), <https://obamawhitehouse.archives.gov/blog/2017/01/04/increasing-transparency-coordination-and-predictability-biotechnology-regulatory> [hereinafter Barbero et al.] [<https://perma.cc/Q4P2-Y6N6>].

349. *Biotechnology*, BRITANNICA (Jan. 16, 2024), <https://www.britannica.com/technology/biotechnology> [<https://perma.cc/HWW8-E3KN>].

350. *See* Yusuf Bozkurt, *Introductory Chapter: Application Fields of Cryopreservation Biotechnology*, in *CRYOPRESERVATION BIOTECHNOLOGY IN BIOMEDICAL AND BIOLOGICAL SCIENCES 1–2* (Yusuf Bozkurt, ed. 2018).

an already existing regulation framework—the Coordinated Framework for Regulation of Biotechnology.³⁵¹

The current biotechnology industry is governed at the federal level by a variety of regulatory agencies, including the Food and Drug Administration, the Environmental Protection Agency, and the United States Department of Agriculture.³⁵² The industry regulations were last updated by the Obama administration in response to major changes in biotechnology.³⁵³ The update, known as the Coordinated Framework for Regulation of Biotechnology, was developed due to concerns about “agency jurisdiction, lack of predictability of timeframes for review, and other processes [that] have imposed unnecessary costs and burdens on small and mid-sized companies and academics.”³⁵⁴

The new framework established a strategy to improve the industry and accomplish three major goals.³⁵⁵ First, it would ensure that the industry “maintain[ed] high standards . . . based on the best available science and that deliver appropriate health and environmental protection.”³⁵⁶ Second, it would establish “transparent, coordinated, predictable, and efficient regulatory practices across agencies with overlapping jurisdiction[s].”³⁵⁷ Finally, it would “promote public confidence in the oversight of the products of biotechnology through clear and transparent public engagement.”³⁵⁸ The Coordinated Framework has led to some significant changes in legislation surrounding biotechnology.³⁵⁹ However, it has left the cryonic industry untouched.³⁶⁰

Categorizing cryonics as a biotechnology would subject it to the regulations created by the Coordinated Framework.³⁶¹ This may help ensure that current providers are not engaging in misleading practices

351. Barbero et al., *supra* note 349.

352. *See id.*

353. *See* EMERGING TECH. INTERAGENCY POL’Y COORDINATION COMM.’S BIOTECH. WORKING GRP., National Strategy for Modernizing the Regulatory System for Biotechnology Products 2 (2016), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/biotech_national_strategy_final.pdf [<https://perma.cc/3KMS-MH7T>].

354. *Id.* at 4.

355. *Id.*

356. *Id.*

357. *Id.*

358. *Id.*

359. *See generally id.*

360. *See generally id.*

361. *See id.* at 6 (asserting that all biotechnologies are regulated to some degree under this new framework).

or misappropriating patients' bodies.³⁶² Furthermore, such categorization would create a foundation upon which future legislation can be developed.³⁶³

2. LEGITIMIZING CONTRACTS AND REQUIRING INFORMED CONSENT

The 1987 amendment to the UAGA by the National Conference on Commissioners for Uniform State Laws made it clear that “[a]n anatomical gift that is not revoked by the donor before death is irrevocable and does not require the consent or concurrence of any person after the donor’s death.”³⁶⁴ Yet, next of kin proceedings in most states, including ones who have adopted the UAGA, trump decedents’ wishes, whether the decedent died testate or intestate.³⁶⁵ The ruling made in *Alcor Life Extension Foundation v. Richardson* is actually quite rare.³⁶⁶ In fact, in 2013, Iowa changed its laws on this matter.³⁶⁷ Under the new laws, even if a decedent died testate, the wishes of their next of kin would govern over theirs in terms of what should happen with their body.³⁶⁸ Even though such laws come with several exceptions,³⁶⁹ they illustrate a growing problem for the cryonics industry—individuals have either paid or allotted thousands of dollars to be cryonically preserved, only to have such contracts go unfulfilled.³⁷⁰

Any proposed licensing framework should aim to alleviate this problem through legitimizing cryonics contracts and honoring the decedent’s wishes.³⁷¹ Legitimizing such contracts should be done with great caution in consideration of consumer protection principles and

362. See generally *id.* at 4–6 (stating that this new framework is meant to improve transparency in the biotechnology realm and support future innovations).

363. See generally *id.* at 6 (providing a framework for regulation that can apply to all biotechnologies).

364. U.S. Dep’t of Health and Human Services *Recommendations 19-28*, HRSRA (June 2021), <https://www.hrsa.gov/advisory-committees/organ-transplantation/recommendations/19-28> [hereinafter *HSRA 19-28*] [<https://perma.cc/644N-QTJZ>] (quoting the 1987 National Conference on Commissioners for Uniform State Laws).

365. See *id.*

366. *Id.*; see *Alcor Life Extension Found. v. Richardson*, 785 N.W.2d 717, 732 (Iowa Ct. App. 2010).

367. See IOWA CODE § 523i.309 (2023).

368. *Id.*

369. See *id.*

370. See *id.*; see generally *HSRA 19-28*, *supra* note 365 (explaining that the UAGA as drafted prohibits overriding the decedent’s wishes, but state laws have amended this to allow next of kin input).

371. See generally *Istvan*, *supra* note 216 (explaining that most states do not see cryonics contracts as legitimate, and therefore do not abide by them).

the nature of cryonics. Though cryonics is not a recognized medical procedure, informed consent, which is required when undergoing most medical procedures,³⁷² should also be required in order for a cryonics contract to be legitimate and enforceable. Furthermore, for the sake of clarity, a proper documentation and filing scheme with the local government, like the one required for marriage certificates,³⁷³ may also help alleviate doubts about decedents' wishes.

B. Revising the Uniform Anatomical Gift Act

Another possible method to regulate the cryonics industry would be through a revision and expansion of the UAGA. Since a majority of states have adopted the UAGA as well as its subsequent amendments, it is likely that revising the UAGA to include cryonics as a procurement agency for cadavers would likely be adopted as well. However, this method of regulating cryonics should be secondary to a federally adopted licensing standard for two reasons.

First, even though most states have adopted the UAGA, it is not the law.³⁷⁴ States have the authority to decide whether or not to accept the UAGA and further, they can choose to adopt or ignore certain sections in accordance to their own existing legislation, as is evidenced by the fact that most states still apply next of kin proceedings which are explicitly not recognized by the UAGA.³⁷⁵ Thus, there is no way of ensuring that states will recognize cryonics providers as appropriate procurement agencies even if the UAGA is amended to do so. Second, the UAGA revision process is lengthy and does not occur often. Given that the cryonics industry is growing quickly, it would be beneficial to act sooner rather than later.³⁷⁶

However, the expansion of the UAGA to include cryonics would be beneficial for one very specific reason—it would allow cryonics to

372. Timothy J. Legg, *What you Need to Know About Informed Consent*, HEALTHLINE (Oct. 11, 2019), <https://www.healthline.com/health/informed-consent> [<https://perma.cc/5WY2-H6V2>].

373. *How to Get a Copy of a Marriage Certificate or a Marriage License*, USA.GOV (Jan. 26, 2024), <https://www.usa.gov/marriage-certificate> [<https://perma.cc/2MAR-59T8>].

374. See UNIF. ANATOMICAL GIFT ACT (NAT'L CONF. COMM'RS ON UNIF. STATE LS. 2009).

375. HSRA 19-28, *supra* note 364.

376. See *Alcor Membership Statistics*, *supra* note 78 (showing increased membership in graph form).

be subject to any state laws that amend or supplement the UAGA.³⁷⁷ Cryonics providers have typically been exempted from such laws in the past, such as the failed Arizona HB 2637.³⁷⁸

1. MORTUARY CONSIDERATIONS & THE UAGA

Several states have legislation that puts restrictions on what can happen to a decedent's body after death.³⁷⁹ After death, a body can be donated as a gift to a recognized agency, autopsied, cremated, or traditionally buried.³⁸⁰

As illustrated by *Alcor Life Extension Foundation v. Mitchell*, the cryonics industry often runs into issues with the acquisition of patrons' bodies because there is no universal acknowledgement that they are an appropriate procurement organization or a recognized medical or research facility as specified under the UAGA.³⁸¹ Both courts in the aforementioned cryonics cases have elected to interpret that cryonic facilities do fall under the meaning of a medical or research facility under the UAGA.³⁸²

Expanding the UAGA to include cryonics agencies as appropriate procurement organizations for the donation of bodies would prevent such conflicts and wastage of judicial resources.³⁸³ In this manner, cryonics agencies should also be subject to any restrictions or checks placed by the UAGA on recognized facilities. For example, Arizona's HB 2037 meant to regulate body donation facilities that fall under the UAGA should apply to Alcor if they are officially recognized as appropriate procurement agencies under a revised version of the UAGA.³⁸⁴

377. See, e.g., IOWA CODE § 523i.309 (2023); see also Innes, *Scottsdale Cryonics Facility*, *supra* note 270 (explaining that Alcor was exempt from a narrowing of Arizona's UAGA allowances).

378. See Innes, *Body Donation Industry*, *supra* note 273.

379. See generally *Alcor Life Extension Found., Inc. v. Mitchell*, 9 Cal. Rptr. 2d 572 (App. 2d Dist. 1992) (illustrating that the California Safety Code in this case made it a misdemeanor to deal with a cadaver in any way other than the permitted limitations set by the statute).

380. See UNIF. ANATOMICAL GIFT ACT (NAT'L CONF. COMM'RS ON UNIF. STATE LS. 2009); see also *The FTC Funeral Rule*, FED. TRADE COMM'N: CONSUMER ADVICE (July 2012), <https://consumer.ftc.gov/articles/ftc-funeral-rule#arrange> [<https://perma.cc/F74L-HRBB>].

381. See *Mitchell*, 9 Cal. Rptr. 2d at 575.

382. *Id.* at 1292; see also *Alcor Life Extension Found v. Richardson*, 785 N.W.2d 717, 725.

383. See *Mitchell*, 9 Cal. Rptr. 2d at 575–76; see also *Richardson*, 785 N.W.2d at 732 (explaining that this is policy question better left for the legislature to resolve).

384. See Innes, *Body Donation Industry*, *supra* note 273.

C. Accounting for Future Changes

As science and technology continues to change and grow, any laws meant to regulate them must also be able to adapt in response.³⁸⁵ Cryonics rests on the belief that, eventually, science will advance far enough to allow the revival of cryopreserved human beings.³⁸⁶ Any method chosen to regulate the cryonics industry, whether it be something similar to the suggested licensing standard or a revision of the UAGA, should not be too stringent. Instead, it should be flexible enough to allow both state alteration, as well as changes in response to new developments in science and the law.

VI. Conclusion

The United States, typically a leader in legislation protecting the rights of its citizens,³⁸⁷ has neglected to regulate the growing cryonics industry. Governing cryonics may prove to be difficult because it is a technology that deals heavily with events that are alleged to take place in the future. However, there is a compelling need to regulate cryonics for many reasons, including the growing rates of membership over the last few years, the fragmented regulation of the industry through currently existing laws, and ethical concerns presented by the industry.

The best method of regulation would be to recognize cryonics as a biotechnology, so that it may be regulated under the currently existing Coordinated Framework. Another possible means to regulate cryonics would be through expanding the Uniform Anatomical Gift Act's definition of a valid procurement facility to include cryonics agencies. The overarching goals of any regulation should be to strike a balance between maintaining the integrity of science, innovation and the consumers that wish to partake in procedures such as cryonics, with the government's duties to protect its vulnerable populations from being misled and defrauded.

385. See generally Julia Griffith, *A Losing Game: The Law Is Struggling to Keep Up with Technology*, J. HIGH TECH. L. (Apr. 12, 2019), <https://sites.suffolk.edu/jhtl/2019/04/12/a-losing-game-the-law-is-struggling-to-keep-up-with-technology/> [https://perma.cc/5PP9-D6WZ] (asserting that the law and legal actors need to be held responsible to understand technologies to effectively complete their duties).

386. See generally Best, *supra* note 24, at 500–01.

387. See generally Daniel F. Runde, *Someone Has to Lead*, CTR. FOR STRATEGIC AND INT'L STUD. (Dec. 1, 2023), <https://www.csis.org/analysis/someone-has-lead> [https://perma.cc/Z84P-SYRV].