

The Catholic University of America, Columbus School of Law

CUA Law Scholarship Repository

Scholarly Articles and Other Contributions

Faculty Scholarship

1986

Cryonic Suspension and the Law

George P. Smith II

The Catholic University of America, Columbus School of Law

Clare Hall

Follow this and additional works at: <https://scholarship.law.edu/scholar>



Part of the [Medical Jurisprudence Commons](#), and the [Science and Technology Law Commons](#)

Recommended Citation

George P. Smith, II, & Clare Hall, Cryonic Suspension and the Law, 17 OMEGA J. DEATH & DYING 1 (1986).

This Article is brought to you for free and open access by the Faculty Scholarship at CUA Law Scholarship Repository. It has been accepted for inclusion in Scholarly Articles and Other Contributions by an authorized administrator of CUA Law Scholarship Repository. For more information, please contact edinger@law.edu.

**CATHOLIC UNIVERSITY
NURSING/BIOLOGY LIBRARY**

**CRYONIC SUSPENSION
AND THE LAW**

GEORGE P. SMITH, II, B.S., J.D., LL.M.
Notre Dame Law School

CLARE HALL
*Cambridge University
England*

ABSTRACT

Three central problems which adversely affect the intriguing use, development, and perfection of the cryonic suspension of individuals are analyzed: the extent to which a physician may be guilty of malpractice in assisting with a suspension — owing to present weaknesses in defining death and coordinate criminal liability attaching thereto for murder; the need for a recognition of suspension; and the present effect of the law's anachronistic treatment of estate devolution upon a cryon — or one undergoing suspension. To meet these difficulties, a partnership is proposed between law and medicine which would respond to challenges to this type of new biology in measured anticipation of the future consequences, rather than with a passive spirit of resignation to things to come.

By lowering the body temperature of a cancer patient 32° from the usual 98.6° for forty minutes — stopping his heartbeat and inducing a state of hypothermia approximating suspended animation while performing surgery to remove a kidney growth which had spread through the vena cava into his heart — a group of physicians unwittingly advanced the possibility for medical science, at some time in the future, to achieve a total body suspension in order to combat physical degeneration caused by such occurrences as cancer, heart disease, etc. [1].

The implications of the process have not only intrigued the medical/scientific community, but also have touched the popular imagination with the distinct possibility of holding at bay illness and death and making the dream of immortality somewhat more tangible.

RECEIVED

1

JUN 27 1986

ep-freeze" burial, was
 ed a jury award of \$928,594 in
 a cryotorium — or place where
 s failure to provide continuous
 as were thawed and their family

ts program "Prime Time
 ed on the state of the art of
 y a hundred persons had
 cost of \$12,000 and an annual
 er. Another figure sets the cost
 enty-four bodies, or cryons,
 nt here is that while people are
 yonic suspension may well
 re willing to allow the process
 red.

veloping new legal mechanisms
 uspension is formidable. Owing
 of cryobiology and cryonics, it
 ith uniform purpose and resolve.
 reness is, itself, recognized as
 t temperament or attitude —
 sive. Society's goal of
 xatious conundrums which

S PROGENY

the 1950s, biologists designed
 e investigations which were
 [5]. Cryogenics, then, refers
 periments, while cryonics
 on human cold storage [6].
 elete with notable successes in
 blood serum and micro-
 transplantation, cryosurgery,
 [7]. Although the experimenta-
 proceeds with definite success
 in body *and its revival* has yet

nic suspension is that it is too
 unchallengable logic behind an
 e immortalist movement) has
 etuation of that idea or

movement. Faith and hope are more enduring indicia of success than perhaps anything else. Only when a complete revival has been documented will the nay-sayers be silenced and the immortalist movement flourish [11].

CHALLENGES TO LAW AND MEDICINE

The major concern of both law and of medicine in meeting the challenges presented by the developing use and eventual perfection of cryonic suspension is to organize itself in such a manner as to perform a full and active partnership in this area where decision making is demanded by society for its own long-range interests. Law must be not merely anticipatory to the legal challenges of the new biology, but must develop its basic postulate for action from, by, through, and with medicine [12]. Succinctly, the new biology is considered to include those biological technologies that allow a rather startling degree of influence over, as well as knowledge about, not only human characteristics (e.g., eugenic predetermination and genetic selectivity) but life processes as well and that — in so doing — generate major value conflicts and give rise to complex, social, legal, ethical, and religious problems [13].

A pivotal issue or question concerning the use and administration of a cryonic suspension process is the extent to which a physician may be guilty of malpractice. More particularly, the immediate challenge here is the need to clarify the legal-medical definition of death and, where necessary, validate a new definition of cryonic suspension thus avoiding criminal liability for murder. Such definitions would also modify the laws of inheritance. Obviously, of concern is the plight of the individual who — trusting that modern medical science will develop a solution to his particular malady — goes to his grave, commits a significant sum of money from his estate for his cryonic suspension, and then expects to be revived in due course and cured of his deadly illness.

To my knowledge, no reported cases exist where individuals who have made contracts for cryonic suspension prior to their death had these arrangements ignored upon actual death. However, if situations of this nature were to occur, several difficulties would be presented. First, in determining the validity of the contract, a court could well hold that the very essence of the agreement was offensive to public morals (e.g., a negation or refutation of death) and as such void, or at least unenforceable. In the alternative, a court could find a contract for cryonic suspension to be valid and one of personal service to the deceased and thus unenforceable once the primary contracting party is deceased. If not regarded as a personal service contract, a court could find the contract valid and assess damages (difficult though they would be to calculate) in favor of the decedent's estate. Of course, neither of these judicial attitudes would have any practical effect for the decedent — for if the process of suspension is not undertaken immediately upon death, it is of little effect. Any damages assessed for a breach would enhance a decedent's estate but be of no avail to his efforts to gain immortality through cryonic suspension.

THE PHENOMENON OF DEATH

Although attempts to draw sharp distinctions between the legal and medical definitions of death have been attempted by serious scholars [14], the law generally treats the determination as one of fact — determined accordingly by the “ordinary standards of medical practice” in each community and guided by the customs and laws of each state [14].

While not regarded as infallible, the standardized methods for determining death are: irreversible cessation of spontaneous circulation and/or respiration; absence of reflex in the eye’s pupil; absence of brain activity; and absence of response to nerve stimulations [15]. As scientific advances continue, it may be expected that new criteria will be developed or a finer level of sophisticated application will be achieved in charting the occurrence of death. Owing to the rapid expansion of the technology of biomedicine, it would be unwise for a statutory definition of death to be recognized which would structure criteria for diagnosing time of death, for all too often the motivating forces behind the drive to evolve a uniform or statutory definition of death have been made by those wishing to ensure a ready source for human transplantation [16]. Trafficking in human body parts, in turn, presents another area of ethical and social problems which have yet to be dealt with by definitive, controlling legislation at the state and federal levels of government.

Meeting in Australia in 1968, the World Medical Association put forth the argument against the use of a precise statutory definition of death by noting: “this definition (of the time of death) will be based on a clinical judgment supplemented if necessary by a number of diagnostic aids (of which the electroencephalograph is currently the most helpful). However, no single technical criterion is entirely satisfactory in the present state of medicine, nor can any one technological procedure be substituted for the overall judgment of the physician” [17].

In 1981, The President’s Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research gave its unanimous approval, in drafting a Uniform Determination of Death Act, that death be redefined as an occurrence where: “(1) irreversible cessation of circulatory and respiratory functions or (2) irreversible cessation of all functions of the entire brain, including the brain stem A determination of death must be made in accordance with accepted medical standards” [18].

A NEW MEDICO-LEGAL DEFINITION

None of the current movement in clarifying the legal and medical concepts of death is particularly heartening to either individuals presently in cryonic suspension or those anticipating its use. If one were “suspended” before death, the real issue becomes how should the law deal with this occurrence, especially from the standpoint of the disposition of a “decedent’s” estate. A working

definition of cryonic suspension v difficulties in this field. According and defined in law and in medicine supervision, body temperature is temporary cessation of vital processes the vexatious Rule Against Perpetuities an estate.

LEGAL COMPLEX

The Rule Against Perpetuities vest, if at all, no later than twenty years after the creation of the interest” [20]. It is the same today: namely, to confine the interest to a short period after their creation [20].

Since the cryonic suspension a number of generations, it would s Yet, an argument could be made suspension twenty-one years with of this period, a judicial determination through existed for a cure of the or was imminent would issue. If the process of being perfected, an additional period) could be arguably allowed revivification completed. If, on the breakthrough had been achieved a final, legal determination of the case settled [10].

PREVENTION

In order to allow or even encourage participants to participate in the preparation of a will at death, an exculpatory clause in the will inserted which would have the effect of relieving criminal liability on the doctors, surgeons, or cure for the illness of those suspended participating or supervising a surgical procedure (itself) determined subsequently by a court.

It would be wise, furthermore, to grant immunity from suit from a criminal action for the acts of cryonic suspension under federal or, a state statute, for the matter, to defend the acts undertaken to insure the safety of the suspension process.

DEATH

between the legal and medical scholars [14], the law determined accordingly by each community and guided by

ed methods for determining circulation and/or respiration; brain activity; and absence of advances continue, it may be finer level of sophisticated presence of death. Owing to the, it would be unwise for a which would structure criteria for motivating forces behind the of death have been made by transplantation [16]. is another area of ethical and y definitive, controlling ment.

al Association put forth the definition of death by noting: ed on a clinical judgment ostic aids (of which the ful). However, no single present state of medicine, nor ed for the overall judgment of

Study of Ethical Problems in n gave its unanimous approval, t, that death be redefined as an rculatory and respiratory ions of the entire brain, f death must be made in 8].

DEFINITION

the legal and medical concepts of als presently in cryonic ere "suspended" before death, ith this occurrence, especially dent's" estate. A working

definition of cryonic suspension would, thus, go far in easing potential difficulties in this field. Accordingly, cryonic suspension should be recognized and defined in law and in medicine as that state where, under medical supervision, body temperature is lowered to such a degree that a condition of temporary cessation of vital processes is achieved [19]. Given this definition, the vexatious Rule Against Perpetuities might not be a total bar to disposition of an estate.

LEGAL COMPLEXITIES IN ESTATE PLANNING

The Rule Against Perpetuities states that, "no interest is good unless it must vest, if at all, no later than twenty-one years after some life in being at the creation of the interest" [20]. Its object, as first formulated and applied, is the same today: namely, to confine the vesting of contingent estates to a relatively short period after their creation [21].

Since the cryonic suspension and revival process will probably extend over a number of generations, it would seem obvious that the Rule would be violated. Yet, an argument could be made that a cryon could remain in a state of cryonic suspension twenty-one years without being pronounced dead. At the conclusions of this period, a judicial determination of whether or not a scientific breakthrough existed for a cure of the disease which befell the cryon had been made or was imminent would issue. If one did in fact exist or was predictably in the process of being perfected, an additional period of time (e.g., five- to ten-year period) could be arguably allowed for the suspension to be continued and revivification completed. If, on the contrary, no such medical or scientific breakthrough had been achieved or was ascertainable in the immediate future, a final, legal determination of the cryon's "death" would be made and the estate settled [10].

PREVENTING MURDER

In order to allow or even encourage physician-scientists or law persons to participate in the preparation of an individual for cryonic suspension *before* death, an exculpatory clause in the contract for suspension would have to be inserted which would have the effect of conferring an immunity from civil and criminal liability on the doctors, scientists, and others for either failure to find a cure for the illness of those suspended during the period of suspension or for participating or supervising a surgical intervention (that is the initial suspension, itself) determined subsequently by a court to be life-ending.

It would be wise, furthermore, to have either a judicial recognition of the immunity from suit from a criminal prosecution for murder in connection with the acts of cryonic suspension undertaken by a physician on a living individual or, a state statute, for the matter, which would admit as an absolute bar or total defense the acts undertaken to initiate the suspension.

Presently, to undergo a cryonic suspension one must first be pronounced dead; and once such a pronouncement is made, in order to pay off a life insurance policy (since the policy is actually a death benefit), the insurance company needs a death certificate. If a legal and medical state of cryonic suspension were recognized, a suspension certificate might be issued and the problems here of life insurance coverage would be resolved [22]. It is obvious that the proceeds from the policy would be used to meet the initial expenses associated with the suspension process and the maintenance of it over the years until revival.

In those cases where, *after* a determination of death is made, one seeks to have his or her remains cryonically preserved, the law should be less flexible than in the cases where the suspension was undertaken before death. Indeed, to fail to recognize death as death not only would play havoc with the law of property and succession, but also would act to destabilize the very social and religious fabric of society.

A NEEDED PARTNERSHIP

Rather than wait until the reality of human cryonic suspension occurs in order to map a response strategy or actual mechanism, law and medicine should begin to anticipate and to plan now for this and the other rapid developments of the new biology of the brave, yet necessarily somewhat frightened, new world which will come in its aftermath [23]. Only with a full committed partnership on these issues between law and medicine can enduring progress—as opposed to un-chartered chaos — be recorded as the benchmark of the twenty-first century.

Law and medicine can be, however, only as strong and directive as the prevailing standards of morality and social recognition allow. Jaded skepticism is undoubtedly tied to the present state of the art of cryonics. Thus, bold and decisive posturing by law, science, and medicine can, in reality, but find itself *reacting* to scientific advances in cryonics instead of either influencing or directing them. Because of the social realities of the day, then, the prized goal of immortality remains fascinating and intriguing — but for the foreseeable future unattainable.

REFERENCES

1. L. McShane, Hopkins Saves a Life with New Technique, *Washington Post*, p. C1, col. 5, October 12, 1983.
2. *Time*, p. 71, June 22, 1981.
3. *Newsweek*, p. 8, July 7, 1980.
4. *Newsweek*, p. 8, August 16, 1976.
5. A. U. Smith (ed.), *Current Trends in Cryobiology*, Plenum Books, New York, 1970.
6. R. C. W. Ettinger, *Man into Superman*, St. Martin's Press, New York, p. 251, 1972.

7. P. Mazur, *Cryobiology: The* 168:3934, pp. 939-949, 1970.
8. J. Dukeminier and D. Sander, *Salvaging of Cadaver Organs*, pp. 413, 419, 1969.
9. B. J. Luyet and M. P. Geheni, *Biodynamics, Normandy, Mis*
10. G. P. Smith, *Medical-Legal A*, Associated Faculty Press, Inc.
11. _____, *Intimations of Imm*, *University of New South Wal*
12. W. E. Burger, *Reflections of L and Social Challenges to the B*, Faculty Press, Inc., Port Wash
13. M. H. Shapiro and R. G. Spec, *Bioethics and Law*, West Pub
14. Task Force on Death and Dy, *Sciences, Refinements in Crit*, *American Medical Associatio*
15. N. T. Jeddalah, *The Uniform*, *Definition of Death, Transpla*, pp. 245-249, 1976.
16. J. Dukeminier, *Supplying Org*, *Review*, 68:5, pp. 811-866, 1
17. International Comments, *De*, *Medical Association*, 206:2, 1
18. Minutes of the Eleventh Mee, *Study of Ethical Problems in*, *Research*, Washington, D.C.,
19. R. C. W. Ettinger, *The Prosp*, 1964.
20. J. C. Gray, *The Rule Against*, Massachusetts, 1942.
21. D. M. Schuyler, *The New Biol*, *of California at Los Angeles I*
22. R. Anderson (ed.), *Couch Cy*, Co-Operative, New York, 19
23. G. Smith, *Uncertainties on t*, *Biology, The Pharos*, 41:1, p

Direct reprint requests to:
George Smith, II
Notre Dame Law School
Notre Dame, IN 46556

must first be pronounced
 order to pay off a life
 (with benefit), the insurance
 medical state of cryonic
 state might be issued and the
 resolved [22]. It is obvious
 to meet the initial expenses
 maintenance of it over the years

death is made, one seeks to
 law should be less flexible
 taken before death. Indeed, to
 lay havoc with the law of
 stabilize the very social and

ERSHIP

ryonic suspension occurs in
 nism, law and medicine should
 the other rapid developments of
 somewhat frightened, new world
 a full committed partnership on
 g progress—as opposed to un-
 f the twenty-first century.
 ong and directive as the
 ition allow. Jaded skepticism
 of cryonics. Thus, bold and
 can, in reality, but find itself
 of either influencing or
 the day, then, the prized goal
 — but for the foreseeable

Technique, *Washington Post*,

ology, Plenum Books, New

artin's Press, New York, p. 251,

7. P. Mazur, Cryobiology: The Freezing of Biological Systems, *Science*, 168:3934, pp. 939-949, 1970.
8. J. Dukeminier and D. Sanders, Organ Transplantation: A Proposal for Route Salvaging of Cadaver Organs, *New England Journal of Medicine*, 279:8, pp. 413, 419, 1969.
9. B. J. Luyet and M. P. Gehenio, *Life and Death at Low Temperatures*, Biodynamics, Normandy, Missouri, 1940.
10. G. P. Smith, *Medical-Legal Aspects of Cryonics: Prospects for Immortality*, Associated Faculty Press, Inc., Port Washington, New York, pp. 15-23, 1983.
11. ———, Intimations of Immortality: Clones, Cryons, and the Law, *University of New South Wales Law Journal*, 6:1, pp. 119-132, 1983.
12. W. E. Burger, Reflections of Law and Experimental Medicine, in *Ethical, Legal, and Social Challenges to the Brave New World*, 1, G. P. Smith (ed.), Associated Faculty Press, Inc., Port Washington, New York, pp. 211-217, 1982.
13. M. H. Shapiro and R. G. Spece, Jr., *Cases, Materials, and Problems on Bioethics and Law*, West Publishing Co., St. Paul, Minnesota, 1981.
14. Task Force on Death and Dying of the Institute of Society, Ethics, and Life Sciences, Refinements in Criteria for Determination of Death, *Journal of the American Medical Association*, 221:1, pp. 48-53, 1972.
15. N. T. Jeddalah, The Uniform Anatomical Gift Act and a Statutory Definition of Death, *Transplantation Proceedings*, 8, Supp. No. 1, pp. 245-249, 1976.
16. J. Dukeminier, Supplying Organs for Transplantation, *Michigan Law Review*, 68:5, pp. 811-866, 1970.
17. International Comments, Declaration of Sydney, *Journal of the American Medical Association*, 206:2, p. 657, 1968.
18. Minutes of the Eleventh Meeting of the President's Commission for the Study of Ethical Problems in Medical and Biomedical and Behavioral Research, Washington, D.C., p. 3, July 9, 1983.
19. R. C. W. Ettinger, *The Prospect of Immortality*, Doubleday, New York, p. 3, 1964.
20. J. C. Gray, *The Rule Against Perpetuities*, Little Brown & Co., Boston, Massachusetts, 1942.
21. D. M. Schuyler, The New Biology and the Rule Against Perpetuities, *University of California at Los Angeles Law Review*, 15:2, pp. 420-435, 1968.
22. R. Anderson (ed.), *Couch Cyclopedia of Insurance Law*, The Lawyers Co-Operative, New York, 1959.
23. G. Smith, Uncertainties on the Spiral Staircase: Metaethics and the New Biology, *The Pharos*, 41:1, pp. 10-12, 1978.

Direct reprint requests to:

George Smith, II
 Notre Dame Law School
 Notre Dame, IN 46556