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1982 CRYONICS Index.....,,,.Center Pullout

\*\*\*\*TYPYST'S NOTE: INDEX MOVED TO END OF THIS ISSUE.\*\*\*\*

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EDITORIAL MATTERS

We have received some comments about giving "undue" coverage or "biased" coverage to Alcor. These criticisms point up the need to clarify the current role of CRYONICS and its purpose. First, a little history is in order.

The Institute for Advanced Biological Studies (IABS) decided to publish CRYONICS in March of 1981 to meet a need for an open and uncensored forum for the expression of ideas and news of importance to all cryonics groups. The first action IABS took when it decided to undertake publication of CRYONICS was to contact other groups and offer to share the publication (and frankly the load as well). We hoped that BACS, Alcor and the Cryonics Society of Australia (CSA) would be anxious for such a forum and would be

willing to contribute both in terms of financial support and articles and opinions. We were quite emphatic about wanting other groups to edit issues and to provide large amounts of copy for the newsletter.

To a pretty fair extent this is what happened during the first year or two of publication. There were few issues edited by anyone but IABS (the Cryonics Society of Australia being the sole exception) but there were a fair number of articles coming in with outstanding support from Trans Time in particular. Neither BACS nor Alcor participated in the writing effort to any great degree. Both BACS and Alcor did, however, support us financially by purchasing magazines of CRYONICS. We are and we remain very grateful for this support.

Over the last six months or so, things have changed. Alcor and IABS have merged and BACS has experienced a cash flow squeeze and a change of policy which eliminated bulk purchase of CRYONICS for BACS members. In practice what this means is that CRYONICS has become pretty much the sole effort of Alcor. Certainly the bills which come due after each issue is mailed out are Alcor's responsibility alone. So too is the steady financial drain publication of CRYONICS inflicts on our treasury. These factors make it difficult for us to stay "completely neutral."

However, the real factor in making this an impossible task is that the editorial opinion and much of the rest of the magazine is written by Alcor personnel. Naturally, it is not possible for us to be objective at all times when we are intimately involved in the issues. We try not to be unfair, but we cannot always be objective. What we can do, have done, and will continue to do is make CRYONICS a forum where everyone can express their opinions. We passionately want this magazine to be a place where people can speak their mind. We want to see people express themselves -- and we promise to be here, as we have from the day we printed our first issue -- to provide a forum for that expression. Of course, we can only print what we receive; we urge readers who are dissatisfied or who wish to differ with our editorial opinion to write us with their comments. Phone calls do not allow for a sharing of opinion or perspective.

The point of all this is that it is important our readers understand that CRYONICS is the newsletter of Alcor and its editorial opinion will be colored by the fact that it is written by and for Alcor members. We stand ready and willing to transform this magazine back into a truly joint effort. But until and if that time comes CRYONICS continue to be published from the Alcor perspective.

#### ALCOR AT FUTURE WORLD EXPO

On the weekend of May 5th through 8th Alcor and Trans Time will be "on display" at Future World Expo: a massive exhibition of futuristic products,

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services and lifestyles to be held at the Los Angeles Convention Center. The exhibition is taking up all three halls of the Convention center and is anticipated to attract over 160,000 people during its four day run. Due to the generosity of the Expo's sponsor, Todd Mills, Alcor and Trans Time have been given complimentary booth space in which to set up an exhibit and sell promotional material and memberships. The directors of Alcor are very excited by this opportunity and we are currently preparing a display for the exhibit. We plan to sell a variety of our literature and we hope this will provide us with an opportunity for the public to meet some cryonics people face to face. We are going to need a great deal of help in preparing and staffing the exhibit and time is short. We will need people to help with transportation of equipment for demonstrations and with the

assembly and production of literature for sale. Just as importantly, we will need people to man the booth from the hours of 10 am. to 10 pm. on Thursday, Friday, and Saturday and from 10 am. to 7 pm. on Sunday. Some extra help on Sunday evening to dismantle the exhibit would also be greatly appreciated. If you would like to help -- or even if you wouldn't but can be persuaded to do so anyway -- please contact Mike Darwin at (714) 990-6651, Hugh Hixon at (213) 435-6471, or leave a message on the Alcor answering machine at (714) 738-5569. Come on people -- here's your opportunity to DO something about promoting cryonics.

For those of you in Northern California, we understand Trans Time could use some help with their effort too. Also, if any of you Los Angelenos would like to show a little Southern Hospitality we understand a few of the Trans Time crew could use a place to stay during the Expo.

#### STELLA GRAMER, FORMER CSC COUNSEL MURDERED

Stella Gramer was the legal counsel for the now defunct Cryonics Society of California and a close associate of CSC's former president, Robert Nelson. Mrs. Gramer was influential in CSC on almost every level, and we understand that it was due largely to her financial support that Cryonics Interment (CSC's sister for-profit company) was able to construct its underground facility at Chatsworth. Mrs. Gramer was very active in CSC in the early days of cryonics and she can be regarded as a pioneer cryonicist.

We were horrified to learn that Mrs. Gramer was brutally murdered on February 7th; an unemployed scriptwriter named Thomas DeSoto is being held in connection with her death. Apparently DeSoto and his mother, June Nelson, had been living with Mrs. Gramer for the past five years. Mrs. Gramer had practiced law in California for 61 years and was still actively practicing law at the time of her death at 84 years of age. Mrs. Gramer was described by friends and associates as being "spry and energetic, very much involved with her law practice." She was reported to be the oldest practicing female member of the California Bar.

We are shocked at such a tragic and violent end to a fine and outstanding woman. We are especially saddened that Mrs. Gramer's death was unattended by any arrangements for cryonic suspension.

#### WOMEN OPT OUT ON LIFE EXTENSION

The March issue of PSYCHOLOGY TODAY contains the results of a survey recently conducted by that magazine in which readers were asked whether or not they would take a pill that would make it possible for them to live 500 years. Thirteen hundred readers ranging in age from 13 to 95 responded to the question. Only 50% of the women and 79% of the men said they would take such an offer. Women refused the offer for a variety of reasons, a sampling of which included:

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fear of loneliness as a result of outliving friends and loved ones, fear of being too ugly, and ennui -- as one woman is quoted as saying: "Why prolong the struggle?" The men who opted not to take the pill stated reasons such as: life is too boring, they preferred an afterlife, or that "longevity is no guarantee against pain and suffering." To that last reason we would respond; neither is being born.

All of this leaves us wondering just what the hell is the matter with these people. After all, these are relatively well educated, reasonably affluent people, not on the average "bag ladies" or ghetto dwellers. What can be said about such people? More importantly, why do they feel this way

and what if anything can be done about it?

Those who did decide to take the pill are a bit more comprehensible with reasons we cryonicists can easily identify with: a desire to see the future, a positive joy in life and a belief that life is good.

#### CALIFORNIA COURT SETS DRAMATIC NEW PRECEDENT ON BRAIN DEATH

In what is being referred to in California as a "landmark" decision a California judge refused to return an indictment in a preliminary hearing against two physicians who discontinued all supportive care to a brain injured patient who did not meeting existing state criteria for "brain death."

The patient, 55 year old Clarence Herbert, underwent surgery for hernia repair on August 26, 1981. While in the recovery room Herbert experienced a cardiac arrest which caused severe brain damage and left him totally unresponsive and in a deep coma. After a neurological work-up disclosed severe anoxic brain damage and minimal but not absent brain electrical activity, Herbert's physicians, internist Neil Barber and surgeon Robert Nejd1 consulted with the family and explained that Herbert was in an "irreversible coma" and would continue to exist on a respirator only in a vegetative state -- ultimately to die of pneumonia or other complications anyway. With the family's permission the decision was made to disconnect Herbert from the respirator. However, Herbert did not die after discontinuation of respiratory support. Instead, he began breathing on his own and continued to do so for six more days. The definition of brain death under California law includes absence of all electrocortical activity and lack of spontaneous respiration for at least three minutes when unhooked from a respirator. There are other criteria such as unresponsiveness and reflex changes which Herbert met, but he had not demonstrated "electrocerebral silence" and he was still breathing spontaneously. Since this maneuver did not succeed in "ending" Herbert's life, the physicians decided to withdraw all other supportive care; they removed all intravenous and nasogastric feeding lines, withdrew oxygen administration to his tracheostomy and indeed, refused to even allow the tracheostomy to be kept moistened with an aerosol mist. This treatment, or lack of it ultimately led to a nurse filing a complaint and turning over the patient's records to the Los Angeles District Attorney's Office after Herbert's death on September 6th. Since the immediate causes of Herbert's death were starvation and dehydration due to lack of supportive care, the District Attorney called for an indictment for first degree murder.

The ruling of the court is a landmark one of great importance to cryonicists everywhere. In the judge's opinion, it was stated that determination of when a patient dies is a decision to be made by physicians, not by courts. The decision to withdraw supportive care, even the most basic kind such as food and water, were also viewed as a decision to be made by physicians and family -- not by lawyers. What this decision means for cryonicists is that physicians are liable to be much more likely to cooperate with us when we

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request removal of a patient from a respirator so that cryonic suspension can be initiated in a timely fashion without the disaster of "respirator brain" occurring. This decision seriously erodes the tradition of courts in medical cases to act in the "best interests" of the patient by taking the most conservative and supportive approach to treatment possible. It will also allow hospitals, physicians, and especially health maintenance organizations (who are essentially "self-insured" and thus very cost

conscious) to reduce the financial burden of giving vigorous supportive care to those patients who are clearly terminal and who would not "benefit" from it. It will certainly be an advantage to California cryonicists to know that this decision has "taken the heat off" of physicians who make decisions to discontinue life support measures when they will not result in return of consciousness or health.

#### SOCIETY FOR CRYOBIOLOGY POLICY STATEMENT

We have now received a copy of the Society for Cryobiology's policy statement on cryonics. This policy statement is a far cry from the first one drafted by the Society's president, Dr. Harold Meryman in September of 1981. Due in no small part to the efforts of Jerry Leaf, the Institute for Cryobiological Extension, Cryonics Institute, and IABS/Alcor the policy statement does not contain much of the damaging language the early drafts did. We reprint the Society's policy statement below.

#### The Society for Cryobiology Policy Statement

The Society for Cryobiology has received inquiries regarding the policy of the Society toward the practice of freezing human cadavers in anticipation of eventual reanimation.

The Society recognizes and respects the well established freedom of individuals to hold and express their own opinions and to act, within lawful limits, according to their beliefs. Preferences regarding disposition of the dead are clearly a matter of personal choice and, therefore, inappropriate subjects of Society policy.

The Society does, however, take the position that cadaver freezing is not science. The knowledge necessary for the revival of whole mammals following freezing and for bringing the dead to life does not currently exist and can come only from conscientious and patient research in cryobiology, biology, chemistry, and medicine. The act of freezing a dead body and storing it indefinitely on the chance that some future generation may restore it to life is an act of faith, not science.

Yes, that's it folks! The above may be contrasted with the draft statement of September 4, 1981 which is reproduced below.

#### Policy Draft: Cadaver Freezing

The Board of Governors of the Society for Cryobiology has received inquiries regarding the policy of the Society toward individuals and organizations engaged in the long-term, low temperature storage of human cadavers in anticipation of eventual reanimation.

The Board recognizes and respects the well-established freedom of individuals to hold and express their own opinions and to act, within lawful limits, according to their beliefs. Preferences regarding disposition of the dead are clearly a matter of personal belief and, therefore, inappropriate

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subjects of Society policy.

The Board also recognizes that the goals of cryobiology include not only achieving an understanding of freezing injury and its avoidance but also applying this knowledge to the preservation of cells, tissues, organs, and organisms. A future achievement may well be successful mammalian cryopreservation. However complex the social consequences of such a

development might be, this is no basis for discouraging research in cryobiology. The cryopreservation of biological systems remains a legitimate scientific endeavor which the Society for Cryobiology is chartered to support.

Current understanding in cryobiology is at best fragmentary. Many cells and tissues are refractory to cryopreservation by the best available techniques. There is no confirmed report of successful cryopreservation of an intact animal organ. It can be stated unequivocally that mammalian cryopreservation cannot be achieved by current technology.

Nonetheless, certain organizations and individuals are advocating that persons be frozen subsequent to death on the premise that science may ultimately develop the capability both to reverse the injury of freezing and revive the cadaver. The Board does not choose to involve itself in a discussion of the degree of remoteness of this possibility. The Board does, however, take the position that cadaver freezing is not an experimental procedure from which anything can be learned. The knowledge necessary for revival of whole animals following freezing and for revival of the dead will come not by freezing cadavers but from conscientious and patient research in cryobiology, biology, chemistry, and medicine. The sole motivation for freezing cadavers today is the remote hope on the part of the individuals that this may be a means of avoiding death. It is an exercise in faith, not science. Furthermore, to encourage individuals to invest many tens of thousands of dollars in post-mortem freezing with the implication of ultimate reanimation borders more on fraud than either faith or science.

The Board finds human cadaver freezing to be at this time a practice devoid of scientific or social value and inconsistent with the ethical and scientific standards of the Society. The Board recommends to the Society that membership be denied to organizations or individuals actively engaged in this practice.

#### LETTER TO THE EDITORS

Dear Editors:

We were astonished by one of the anonymous letters in the March issue. An individual whose prejudice against (homo)sexuality is extremely strong stated, in effect, "let them catch the plague and die."

The kind of Hitler-like mentality is the stuff from which the persecution of immortalists might come. Some day this very person may see his "straight" loved ones being condemned to age and die because "who cares if a bunch of crazies want to extend their lifespans."

Human beings are presently a competitive species engaged in "survival of the fittest" and this biological drive too often fans the fires of prejudice to our detriment. As we arise from our animal beginnings, and reach for the gold ring of immortality, let us hope we will find the majority of our fellow time travelers basing their opinions of one another on accomplishments and mutually shared intellectual values, rather than the destructive cultural mores which have stunted man's progress throughout history.

Fred and Linda Chamberlain

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#### RIGHTS OF TERMINALLY ILL TO REFUSE CARE

The presidential commission on medical ethics has issued a report on the issue of whether or not terminally ill patients and/or their families

have the right to refuse life extending medical care. The commission is recommending that "Competent patients' decisions regarding medical treatment should be honored even when they lead to an earlier death." More importantly to cryonicists the commission also recommended that the families of terminally ill comatose or incompetent patients be allowed to decide whether to continue with life support or other medical care.

In the case of incompetent patients the report urges that an appropriate surrogate, usually a family member, be appointed to make decisions for the patient regarding the type and duration of supportive care given. The report stated that "The decisions of surrogates, should, when possible, attempt to replicate the ones that the patient would make if capable of doing so." The commission pointed out that most terminal illnesses are of considerable duration with the average being 29 months, thus allowing a terminally ill individual time to establish written or other guidelines about the extent of care to be given.

The importance of this to cryonicists is obvious. While the report has no force of law, it will be given a great deal of attention by legislators and is expected to have a very significant impact on future legislation. The commission's report represents a real step forward for cryonicists and should make it much easier for us to terminate medical care for ourselves when we have nothing to gain from it and everything to lose; both financially and physically.

ARCHIVAL MATERIAL DONATED: MORE WANTED

Alcor has received several donations of archival materials in the last few months. Some of this material is of considerable historical importance and is now being preserved and catalogued. All of the material we have been given will be of tremendous use to historians of cryonics, both now and in the future. The receipt of this material, some of it already damaged by oxidation, rodents, and moisture raises the question of how much other history is out there being lost forever. One of the things which was most distressing about this recent contribution was the severe damage some of the material sustained from field mice which gained access to it in the garage where it was being stored. Without proper preservation and placement in nitrogen purged, tight sealing, all metal containers records are doomed to loss from atmospheric oxidation and the ravages of insects and animals.

If there are other people out there who have historical material relating to cryonics that they would like to see preserved, please contact Alcor. We have a deep commitment to insuring that such items will be properly cared for and catalogued. We are especially interested in old newsletters, correspondence, and personal papers. If the collection of documents is large enough and of appropriate importance we will even fly a team anywhere in the continental U.S. to collect the documents and transport them back to the Alcor archives.

If you have material, but are not interested in donating it to the Alcor archives, we would still be very happy to offer any advice or assistance we can on how to protect and preserve it. We are also a source for preservation materials such as acid free paper and gas tight steel storage boxes. Our consulting services are available free of charge.

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The Only Movie Star

by Robert Brakeman

It was a time when none of the Big Three was a star yet. Douglas Fairbanks was still trying to figure out how to buckle-his-swash, Mary Pickford was still taking look-cute lessons each day at 10am, and Charlie

Chaplin was still asking his managers "Is this funny?" But it was not a time without movie stars, for a girl too young to vote, drink, or do anything interesting with men (she was 17) was beginning work on a picture which would make her not only the dominant star of her period, and not only the first true star of the movies, but also -- for a two-year period before others began to hit -- the only movie star. . . .

That unique phenomenon (there'll never be only-one-movie-star again, unless the industry begins to die off and at the end there's only one left) had its beginnings in a place which seems to have gone out of tis way to define un-unique: "Springfield" is among the most common town-names in America; and Ohio (along with Iowa) is the state usually used to symbolize Heartland America or America Itself; and that not-entirely-exotic environment saw the birth of Lillian Gish in 1896. The roots of the term "Indian Summer" aren't undisputedly clear, but Ohioans swear that it came from the fall of '96, an autumn when Halloween pumpkins were said to have melted-all-over-the-place and the Thanksgiving turkeys didn't have to be killed because they'd already been scaled to death by the sun. Toward the middle of the middle month of that fall (October 14), the Wednesday-morning stillness was assaulted by the cries of a newborn-kidlet who would, while still in her mid-teens, cause the term "movie star" to be added to American usage.

It seems appropriate (in a demented/Hollywood kind of way) that the first movie star should have, for a parent, the first of the classic Stage Mothers, and Lillian Gish did: Mom had the kid performing on the stage regularly from the time she was six years old. By the age of seven she was touring constantly with her mother and sister Dorothy (two years younger than Lillian). That endless-touring continued until 1912, when a then-little-known Mary Pickford introduced Lillian Gish to D.W. Griffith, who was said to be a man with big ideas. What is "said to be" true is almost always false -- but in this case the sayers got it right: Griffith was about to produce and direct what would become the first "modern" motion picture -- it would have a multi-hour running time and a massive cast and high production values and a multi-plotted, complex storyline -- all of which would make it everything that the cheapie/quickie/two-reel shorts then dominating the industry were not. When "The Birth of a Nation" was finally released in late 1914, it both ensured the survival of films and revolutionized their nature simultaneously.

Almost invariably called "The Greatest Film Ever Made" by any voting of film critics, "The Birth of a Nation" also made a star of Lillian Gish. Playing Elsie Stoneman, the most appealing member of a family caught up in the Civil War and reconstruction, she "stole the picture" (and gave birth to that phrase, too) from Griffith and his other actors. Her appeal was such that Griffith immediately built another mega-picture around her -- and out came "Intolerance" -- which is generally voted the second greatest film of all time. In it Lillian Gish anticipated Clint Eastwood's famous character of half-a-century later, The Man With No Name (the terminal-avenger of such films as "A Fistful of Dollars" and "For A Few Dollars More" and "The Good, The Bad, And The Ugly"); she played "The Woman Who Rocks The Cradle" -- and the woman who ties together the four separate, centuries-spanning stories which make up "Intolerance."

Although she'd starred in the most successful and next-most-successful films of all time(\*) while still in her teens, it's worth mentioning that Gish wasn't playing teeny-boppy parts: like Brooke Shields two-thirds-of-a-century later, Gish had a very adult face while still in her mid-teens, and the roles

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\* And their success wasn't just critical: In constant-dollar and constant-population terms those films are the two all time box-office champions too.

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which made her the first movie star where adult roles, not kid stuff. Having starred in the definitive war-movie and the definitive Historical Epic, Gish in the next few years seemed to be trying to star in the ultimate-version of every kind of film: "Orphans of the Storm" was a best-of-its-kind soap opera; "Broken Blossoms" was a fine interracial drama; "Way Down East" is a masterpiece of New England life; "Hearts of the World" was the first/best World War I story (if one can ignore its blood-is-fun propaganda aspects); "A Romance of Happy Valley" did for the second word of its title what other Gish vehicles had done for other subjects; "The White Sister" was the first major movie made from a "scandalous" novel; "Romola" was the yardstick-early-film about medieval life; and "The Scarlet Letter" was the definitive early-movie from a classic novel.

That last-named film produced a Gish-performance which in turn produced a quote demonstrating how brilliantly Gish's reputation has survived among critics, half-a-century after she did-what-she-did. This is New York critic Pauline Kael writing in 1968 (about Gish in "The Scarlet Letter"): "Her Hester Prynne is one of the most beautifully sustained performances in screen history -- mercurial, delicate, passionate. There isn't an actress on the screen today, and perhaps there never was another, who can move like Lillian Gish: it's as if no bones, no physical barriers, stood between her intuitive understanding of the role and her expression of it." The Gish Cult is now, incredibly, into its 8th decade, and as a proud member of it I'll quote what some other critics have had to say about her screen performances: "Lillian Gish didn't invent acting -- but she did invent screen acting"; "In the whole of my adult life, I have cried only when my mother died -- and every time I've seen Lillian Gish on the screen"; "Those who say that Lillian Gish is the greatest screen actress of the century miss the point; she is the only screen-actress -- all the other women have merely been making attempts at acting." (\*)

The woman whose screen presence inspires this kind of verbal hysteria (absolutely-justified hysteria, you understand. . .) is, 70 years after her reign as The Only Movie Star, still alive-and-well-and-living-in-Hollywood. She's also still working in Hollywood, something people in 1927 no doubt thought would not be happening: In that year she walked out on the industry. Fed up with a series of what she considered to be contract-betrayals, she returned to the stage and stayed there, for most of the next five decades (ever notice how Gish's career has been so productive for so long that writers-about-her are drive to ignore the "years" and to speak instead of "decades"?). Although she did an occasional film and made the transition to talkies not just with ease but with brilliance (the critics became semi-crazed and began to babble -- accurate babbling -- about the incredibly-gentle sound of "the miracle girl with the miracle voice," Gish was content to walk-away-a-legend and only do the occasional film which especially interested her. Her big roles from the past 4 decades: From the 40's, Lionel Barrymore's wife in David Selznick's western-clone of "Gone With The Wind," "Duel In The Sun"; from the 50's, a starring role in Charles Laughton's only directorial chore, the chilling "Night of the Hunter"; from the 60's, playing Burt Lancaster's mother in a tale of bigotry-on-the-frontier, "The Unforgiven"; and from the 70's, a starring part in Robert

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\* And a major film historian called her "the sublimest actress of the cinema"; and director King Vidor said of her, "She is the most dedicated actress I have ever known -- she makes you believe a scene is actually happening"; and on and on.

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Altmann's superior-to-M\*A\*S\*H\*-and-"Nashville" ensemble-film, "A Wedding."

So much for Gish the Cult Figure. Time now for Gish The Human. Lillian Gish's main interest to us here is as the object of a campaign which is now being directed at her (or will be shortly, depending on when you read this). It's a campaign which sprang, sadly, from a failed earlier campaign. The earlier effort, described by the present writer in an issue of THE IMMORTALIST magazine, was an attempt to convince Paramount Pictures founder Adolph Zukor to have himself cryonically suspended, so that a man responsible for an astounding amount of much-loved entertainment would have more future-options than just maggots-or-incineration. Although the efforts of myself and others in the Hollywood community didn't succeed in getting A.Z. to "get with the program" in the sense of making arrangements to have himself suspended, in a broader sense getting-with-the-program is exactly what he did do, for we did convince him to give a fair amount of money to a private cryonics-research program.

But, those of us involved in all of that still consider that "failure" is the right word to apply to our efforts, because our main goal all along had been to get Zukor suspended, partly because of the publicity-value we would have derived from having "The Man Who Invented The Movies" suspended and partly because as both cryonicists and entertainment-oriented people we just cared enough about A.Z. and what he'd done to want him not to cease to exist. Since myself and others involved had had a good deal of success in

convincing other less famous people to make arrangements for their cryonic suspension, we weren't discouraged by the Zukor failure (or partial failure, as we call it on our more Pollyanna-ish days). When we began to look around for new targets, it was wholly natural that we should have turned toward Lillian Gish: among Founders-Of-The-Industry, she is the direct in-front-of-the-camera counterpart to Zukor's behind-the-camera prominence; he was the first of the great producers and she the first of the great stars. Furthermore, of the Founding Generation there were only Zukor and Gish left by the mid-seventies -- and when Zukor let "public opinion" cause him to choose annihilation that left -- and leaves -- only Lillian Gish.

So, what's being done is this: friends/acquaintances of hers with an interest in immortalism are pushing the cause with her; relevant literature (she's an omnivorous reader) is being supplied; offers are being made to fly in national leaders of the cryonics movement to talk to her if she'd like; her ever-growing cult-status among both fans and critics around the world is being used as a two-edged weapon (certain members of that cult are being used to prompt her into a pro-immortalist position, and her own very personal concern for her own legend is being played upon -- in the form of why-not-keep-the-legend-alive? arguments); and her well-known open-mindedness and rationalism is being used as an opening-wedge in getting her to listen seriously to the pro-immortalist case.

Chances of success? You tell me. We're predicting nothing one way or the other (\*) -- except this: if Lillian Gish chooses oblivion instead of continued life, it will be in spite of the best efforts of a lot of people who care about her deeply -- not because we did nothing.

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\* However, it's worth mentioning that we would probably not have plunged into this without some expression of interest-in-the-subject on the part of the "target" -- and we've gotten that in the case of Lillian Gish.

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Epilog (In the form of a comment to those who don't care much about movies):

Fine; your opinion here then is no doubt something like "Good God, Brakeman, what's the big deal? She's just a silly actress, no better or worse than any other person." Two responses to that: First, although we've not had space to go into it here, Gish's private life is just as beautifully appealing as her screen performances, and shows her to be much above the average person in those qualities which make humans the exceptional species. Second, even if she were the "average person," she'd be the average-person-in-danger-of-annihilation; isn't that reason enough to save her?

Epilog-To-The-Epilog (In the form of a comment to those who do care about movies):

Those of us involved in Hollywood in various ways tend to be very cynical (especially about actors) and very far from star-struck; so it takes someone with a very powerful on-and-off screen presence to turn us into "fans." Lillian Gish is a precious resource; we'll do what we can do to see that she remains just that. As a producer friend of mine once told me:

"For the most part, Hollywood taught me about lying and cheating and stealing and treachery. But one part of Hollywood taught me about compassion and love and tenderness and caring and humanity. That part -- on the screen and off it -- was Lillian Gish."

#### SCIENCE UPDATE

##### LIKELIHOOD OF DEATH AFTER A HEART ATTACK

We all know how our probability of death increases sharply after a heart attack; because preparations for our suspension in case of deanimation will necessarily cause extreme disruption to our finances and our jobs and ordinary lives, we need criteria which are as good as possible by which we can judge the likelihood, after a heart attack, of our having to be suspended.

The authors (G Sanz et al) of a recent study on this problem have observed that most studies of risk of death after a heart attack were retrospective (and therefore may have excluded important cases) and involved no direct measurements (angiography) of the extent of blood circulation failure in the diseased heart. They therefore set out to remedy this lack, publishing their results in NEW ENGLAND JOURNAL OF MEDICINE 306 (1982) 1065.

Their results after angiography showed that the probability of survival for 4 years was highest in patients for whom left ventricular function was unimpaired; impaired function of the left ventricle produces a smaller ejection of blood from the heart, and patients with ejection fractions below 20 percent had poor prospects for survival. If the ejection fraction lay between 21 and 49 percent survival was significantly worse than that for a normal ejection fraction only in the cases in which three or more blood vessels were diseased.

The authors point out that their results have implications for the effectiveness of the widely-performed coronary bypass surgery. They suggest that the group most likely to benefit from such surgery is those patients who have ejection fractions between 21 to 49 percent and three or

more disease blood vessels. The case that coronary bypass would help patients with normal ejection fractions seems weaker after this study than before, although the authors are cautious. The class of patients likely to benefit from coronary bypass comprises about 17% of the total.

For cryonicists the implication is fairly clear. If you have a heart attack, it is desirable to undergo angiography and discover these factors. Of course an informed decision cannot sit only upon angiography; however these results seem particularly significant for anyone who may have to disrupt their life in order to be suspended.

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#### PRICING OF CRYONICS MEMBERSHIPS

I have already discussed the justification for society membership rates which increase with age. To summarize, membership rates which do NOT depend on age will promote chronically weak societies in which a few younger members will subsidize all the older members, both financially and in terms of their own workload. Younger people will therefore quite reasonably hesitate to sign up for suspension, knowing that much of their effort will go not for themselves but for the suspension of sick or elderly members. People will tend to join only when ill. We can only really avoid this by making membership rates depend on age and state of health.

In short, present cryonics membership rates place a heavy burden on younger members, which many candidates will quite reasonably decline to assume. We can see just how heavy a burden by looking at the Table in this article. However I do want to add here my doubts that this reason alone accounts for widespread cryonics apathy. Even so, it certainly can't help.

However once we have decided that rates should depend on age we haven't gone very far. We need to work out precisely HOW. To do so, we're going to need some mathematics; but the mathematics really won't tell us what to do. It will allow us to throw some possibilities out of court, but our final choices will depend very much on nonmathematical ideas about the economy (inflation in particular), about fairness, and about how we can expect people to react to a very different set of rates.

The mathematics is fundamentally simple. By agreeing to join a cryonics society, someone is agreeing to pay a fixed yearly dues for a number of years equal to their total remaining lifespan. We want to calculate the VALUE TO US of such a promise (always assuming that he does not renege!). We can do this in at least three different ways:

1. NET PRESENT VALUE. This is a simple idea. If I promise to pay you \$100 one year from now, my promise is worth less to you than if I were to pay the money right now. Here's how to work out exactly how much less: if the prevailing interest rate is (say) 10%, then my promise to pay you \$100 in one year's time is exactly the value X such that at interest of 10% after one year you would have \$100. That is, we solve an algebraic equation:  $(1.1)*X=100$ .

Similarly, if I promise to pay \$100 after 2 years, we get  $(1.1)*(1.1)*X=100$ , and so on. If I promise to pay 100 for N years, there is a formula I can use to calculate the net present value: we add up all the values for each year:

$100 + 100/(1.1) + 100/(1.1)*(1.1) . . .$

If we want to use this formula to work out a rate for cryonics society membership, then we need to know the EXPECTATION OF LIFE of someone of each age. A good source for such figures is the "Statistical Abstract of the United States 1981." For each expectation of life we then get a different N. I have included a Table of the final result with this article, for several different interest rates.

Some general things need saying about this method. Note first that the rates differ depending on the member's sex. We would expect this. Note also that (perhaps to an initial surprise) at HIGH rates of interest our membership dues would NOT increase very steeply with the age of the member. The reason for this is quite simple: someone who joins at age 21 is promising to pay membership dues up to age 70, but at high interest rates a promise to pay \$120 after 49 years just isn't worth very much.

ACCUMULATED TOTAL VALUE. To calculate the worth of a membership by this method, we don't ask how much the membership is worth to us NOW, but rather how much it WILL be worth to us at the time of the member's suspension. This means that we take into account the interest received on the member's yearly dues, which will compound the longer that member survives. In this reckoning, an early membership is worth a great deal more to us than a late one, since we will count as much as 50 years of interest on his/her first membership dues. To find the value of a membership by this method, we add up all the yearly dues with their accumulated interest. If we have an interest rate of I of 10% annual dues of R of \$120, and the member lives for N years until suspension, we have:

$$120 + 120*(1.1) + 120*(1.1)*(1.1) + . . .$$

with a total of N terms. The same formula as in the last case lets us add up the worth of a member by this test. As before, we can use the "Statistical Abstract of the US 1981" for our basic data on life expectations, and I have included a table of some of these possibilities also.

These two methods are essentially the two mathematical possibilities, but naturally they go only part way toward telling us what we really must do. In the first place, it is not at all obvious what INTEREST RATE we should place in these formulas. For instance, there will be a REAL interest rate over and above inflation, and we have to work out what that is. This rate will change, and it will not always change immediately that inflation changes (there won't be any simple formula). Second, we have to decide just which of these formulas we should use, and that isn't a choice we can make from mathematics alone. Thirdly, membership dues simply are NOT going to remain constant for decades. How do we decide how to assess dues in the event of an increase in the basic rate? Finally, an important practical matter: what do we do about people who seek to join when they are ill and have a life expectancy far less than the average for

their age? How are we to price their membership?

My suggestions on these points have no particular mathematical authority; I shall state them here and give my reasons.

INTEREST RATES. Yes, this is a complex matter. For instance, we have recently passed through a period of high inflation, and it is a matter of judgement whether or not this inflation will continue; judging from the price of gold, many people think that it will, but this is far from obvious. Second, we do not have to impute an interest rate which coincides with the CONSUMER PRICE INDEX. Cryonics prices don't have any direct relation to the CPI, and the best indicator of how we should adjust our rates is not the general index but measures of the cost of the actual cryonics services.

PRICING SCHEMES. Secondly, our choice of one or the other of the pricing schemes (either Net Present Value or Total Accumulated Value) depends very much on whether we wish specifically to favor the entrance of younger members. If we use the TAV method, we will in effect promote the entrance of younger members by assessing a penalty for older members. If we use the NPV method, we are attaching a smaller value than otherwise to memberships from younger persons.

On this ground I feel that the TAV method is best. The younger members (who will, because they are more energetic, contribute more to the organization) should receive a subsidy for their efforts. Furthermore, no cryonics society could possibly survive without a continuing flow of younger members. We therefore have every reason to try to promote membership among younger people, who have no immediate prospect of suspension.

To promote this membership, we should attach some INTEREST RATE PENALTY to late membership. Just exactly what this penalty should be needs to be worked out. It is true that interest rates now are at historically high levels, but a high proportion of this interest simply goes to compensate the lender for inflation, i.e. it is not a real interest rate. We must work out how to distinguish real from illusory gains here.

During the 50's, when interest rates and inflation were both low, interest rates were about 5%. On this basis, I think a real interest rate 4% is likely to be about right. (Readers should bear in mind that I use my judgement here). But how to take account of illusory interest, that is, inflation? My suggestion on this is to judge inflation simply by cost of cryonics services themselves.

Here is how I would propose to do this. At present yearly dues for the different societies run about \$120 a year. If, say, ALCOR decides next year to increase their rates, they should NOT decide to increase these rates by some fixed dollar amount, such as \$15. Instead they should decide to make a PERCENTAGE increase. This percentage increase, when it is assessed, we shall declare to be

exactly the INFLATION in the cost of cryonics membership. In the case of a \$15 increase, we would have almost a 10% increase in the cost of cryonics membership and thus in inflation. To calculate the dues payable by members, we would simply increase ALL dues, Entry Fees, and so on by this 10%. I include here the dues of those who are already members: when someone joins we don't promise them that they will always pay the same amount, but only that the RATIO of their annual dues to the annual dues of someone joining at age 21 will remain the same.

I believe this method would be both more accurate and more fair than relaying on a government index such as the CPI. The CPI bears little relation to the cost of cryonics, while cryonics dues bear a direct relation. If (as is virtually certain) cryonics dues then increase still more, the member is assessed MORE as a PERCENTAGE increase on his/her present dues. Similarly (though I think this unlikely) if cryonics costs decrease, everyone will get a percentage discount.

The tables with this article should give some idea of different possibilities and what they would mean for membership rates. I include with the tables statements of the formulas I have used to calculate them. I also have available several computer programs in Applesoft Basic to calculate these tables; they may be of particular interest to anyone wanting to work out the likely effects of their OWN ideas on the proper scale of charges.

CANDIDATES IN POOR HEALTH. Finally we have the last vexing question, what to do if a candidate wishes to join and has some medical condition which will clearly curtail his/her lifespan. The idea thing to do here would be to have a special Committee with actuarial advice to assess fees payable. The proposed Committee would then assess the probably future expectation of life of the member and on that basis assess dues. However as we all know, cryonics is not large and we can't really field enough manpower to make this practical. At the same time, it seems to me that we should have some arrangements by which people with medical conditions CAN join under SOME terms. (One way of dealing with the administrative problems they might case, of course, simply not to allow them to join!).

My suggestion, valid until the societies become sufficiently large to support their own actuaries, gives the candidates TWO alternatives. First, the candidate may submit estimates of his/her future lifespan from two separate doctors, one nominated by us and the other by the candidate, at the candidates's expense. The Board of Governors of the Society would then make a decision, which would not admit appeal, on the basis of the evidence and estimates supplied. IN other words, the Application Forms should state that medical examinations may be requested, and that they are to be paid for by the candidate. If the candidate has poor health, we request a medical examination.

A second possibility, taken by the candidate at his/her option,

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is simply to pay the rates paid by someone considered actuarially to have a future expected lifespan of ZERO. This would (at present rates) be a single lump sum payment of \$10,000, after which the new member would pay \$120 a year for life. Clearly unless you really were likely to soon die, it would be much to your advantage to submit a medical exam and argument about your future lifespan. At the same time, \$10,000 is the minimum lump sum we can charge, since if someone really does die soon after joining that is exactly the appropriate charge.

Finally I want to repeat a point I have made before so everyone will be CERTAIN what I intend. It is essential to this scheme that the Annual Dues of everyone presently a member will remain UNCHANGED, and furthermore that once someone joins THEY WILL PAY THE SAME RATES FOR LIFE (EXCEPT FOR INFLATION). To modify these points would pervert the entire intention and justification of the scheme.

With this discussion, here are the tables of charges under several different pricing regimens:

About the Table: Cryonics Pricing for Males:

I have calculated this Table by finding the TOTAL CONTRIBUTION with someone of age 21 will make to the Society, and assessing all Annual Dues so that EVERYONE WILL CONTRIBUTE THE SAME AMOUNT. In the present fee schedules, younger members contribute much more than do older ones, and one way of looking at the Table is as a way of measuring just how much more. The size of the difference is very great, particularly for people who join when old.

The methods used are the following: for a ZERO interest rate, I have calculated the total amount that a male member who joined at age 21 would pay, on average, given an expectation of life of 51.1 years (taken from the "Statistical Abstract of the U.S. 1981"). This turns out to be \$6132. To find how much other members joining at different ages must pay, I calculate how much they must pay yearly in order to pay a total of \$6132 at suspension.

To find the other rates, I have used the methods described in the text. The specific formulas are:

$$(1: \text{ NPV}) \quad \text{TOTAL} = R + R/(1+I) + R/(1+I)^2 + \dots$$

$$(2: \text{ TAV}) \quad \text{TOTAL} = R + R*(1+I) + R*(1+I)^2 + \dots$$

where in each case TOTAL is the total worth to us, R is the annual dues, I is the interest rate, and we sum a total of N terms where N is the expectation of life of the member. To find the Annual Dues, I find R so that TOTAL is equal for all members regardless of their age of joining. The price figures are in \$ dollars.

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TABLE 1: Cryonics pricing for MALES

AGE	0 interest	4% (TAV)	4% (NPV)
0	87.00	53.00	111.00
10	100.00	77.00	114.00
15	108.00	96.00	117.00
20	118.00	115.00	119.00
21	120.00	120.00	120.00
25	129.00	144.00	123.00
30	143.00	182.00	128.00
35	161.00	222.00	133.00
40	183.00	287.00	142.00
50	247.00	482.00	167.00
60	357.00	782.00	206.00
70	552.00	1335.00	278.00
80	915.00	2540.00	435.00
90	6132.00	9833.00	1384.00

Expectation of life for people older than 85 does not seem well established. I have arbitrarily assumed an expectation of ZERO for these ages.

As mentioned above, I have calculated a complete table giving all the rates



for all the different ages, together with computer programs allowing you to explore the consequences of different rates scales for yourselves.

We can easily calculate a table for female members on the same principles. We can also calculate tables for other reference ages: for instance, we may wish to choose the age of 30 as the age at which Annual Dues equal \$120, rather than the age of 21 as in the above table.

The behavior of the rates at different ages of entry should be very clear from these samples figures. If we charge NO interest rate, then the first column shows how much the Annual Dues should increase with age at entry; except at high ages it coincides closely to the second column, but they diverge more and more as compounded interest takes effect, until at the highest ages Annual Dues are \$3000 more. The last column shows the effect of assessing dues on the basis of Net Present Value: dues increase very slowly with age. I DO NOT RECOMMEND USING NET PRESENT VALUE. The last column is presented for your own thinking in the matter, not as a recommendation.

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Those Whose Name Would Title It

by Michael Darwin

They came not with life or strength and  
passion to extend it but  
with weakness and broken dreams  
Rheumy eyes that question for  
answers to lack of discipline's  
despair  
They did not bring love to it but  
need instead they  
did not bring strong dreams but  
crippled visions of escape  
instead  
instead  
instead  
This task will ask your best will  
ask the blood of all your passions will  
ask for dreams  
strong and true and disciplined and  
patient

Above all patient  
With confidence  
No need for reassurance

So idle dreamers and  
lonesome losers

leave us

This task demands the best --  
Cryonics deserves no less

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## THE LAKE TAHOE LIFE EXTENSION FESTIVAL: Its Purpose, History, and Goals

by Fred and Linda Chamberlain

The Lake Tahoe Life Extension Festival is an outgrowth of several smaller scale meetings of previous years. Basically, it is a combination of recreation and serious discussion; a chance to renew old acquaintances, hear what's new in technical and organizational areas, and enjoy the activities of a mountain and lake holiday. All registration fees in excess of actual expenses will go for life extension research. Each person attending designates the organization to receive this contribution, at the time of registration.

### HOW DID THE "FESTIVAL" GET STARTED?

In September, 1980, BACS and Trans Time, Inc. held a meeting at Lake Tahoe. By word of mouth, the news spread and people came from the midwest, New York, and Florida, as well as from southern California. On Saturday of Labor Day weekend, life extensionists from all over the country began to arrive. By Sunday, approximately 20 people were on hand for a meeting under the pine trees on a deck outside our house. On Monday morning, those who could stay rode the tram to a restaurant high on the slopes of Heavenly Valley Ski Resort, for brunch and feeding the local chipmunks.

By popular consensus, it was decided that this type of gathering should be repeated the following year. In September of 1981, two days of sessions were scheduled at the Tahoe Marina Inn overlooking the lake. Over 40 life extensionists showed up. Hugh Hixon coordinated a number of excellent technical presentations on Saturday, while on Sunday Art Quaipe served as chairman for a Trans Time, Inc., meeting with numerous agenda items addressed by persons from outside Trans Time.

Pot luck feasting took place on Friday, Saturday, and Sunday evenings. Morning hikes in the mountain air, a car trip around the lake, a dinner cruise on a 3-story paddle wheeler (the M.S. Dixie) as well as other recreation was enjoyed by many. CRYONICS magazine carried a detailed description of the weekend in its (then) next issue. As in the case of the 1980 event, many attendees proclaimed they "couldn't wait to do it again."

### IS THE "FESTIVAL" DIFFERENT FROM OTHER "LIFE EXTENSION CONFERENCES"?

In several ways, the Lake Tahoe Life Extension Festival is different. As noted earlier, recreation has (from the start) been an integral part of the proceedings. Lake Tahoe is a world class destination resort, with a unique blend of almost every entertainment and sports activity imaginable. The Festival provides a perfect excuse for working these things into a set of otherwise serious meetings.

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Those persons who are active in life extension are widely scattered, and to be able to get together as a group is of great personal benefit. The sharing of technical information and personal points of view enriches all who participate. Also, in a recreational setting, life extensionists see both themselves and others in the context of a wider dimensionality. Life cannot exist without survival, but survival is only a framework for life as a whole. Life extensionists, almost without exception, see life as an opportunity for fulfillment and enjoyment. A life extension "Festival" provides a way of combining the enjoyment of life with the companionship of

other life extensionists. Each previous life extension "Tahoe-Fest" has proven that those attending drive great pleasure from such an event.

In still another way, the Festival is different from life extension conferences of the past. It is not an event sponsored by any particular organization, which otherwise would have to shoulder the load. This makes the Festival completely "non-denominational." It is a forum where no one organization has an axe to grind. It is hoped that the Festival will grow over the years, not only in the number of attendees, but also in the number of life extension organizations, both anti-aging and cryonics, who will participate by giving presentations about the work they are doing.

In addition to the above, the Festival adds something new. . . it attempts to raise funds for life extension research. Again, no particular organization is given preference. All researchers and organizations doing research are asked to submit a short research proposal. All submitted research proposals (to this point in time) have been published in previous issues of CRYONICS for registrants to review and consider. Part of each registration fee will go to one of these organizations. Each registrant is requested to select the organization to which his donation shall go (see the registration form). If future Festivals grow in size and scope, the amounts raised for research will grow accordingly. The number of organizations receiving research funds is also expected to grow.

#### WHAT IS THE 1983 FESTIVAL GOING TO BE LIKE?

Unlike the previous Autumn get-togethers, the 1983 Festival is in early June. The climate elsewhere will be hitting those upper temperatures, but at Tahoe's 6000 foot elevation it will be like the middle of springtime. Streams will be rushing with melting snow, and flowers will just be starting to bloom. If ever there were a time to celebrate the bursting forth of life, this is it!

Most vacationers postpone coming to Tahoe until July and August when schools are out and summer heat is at its worst (elsewhere). In this respect, you will be ahead of the crowd. Conversely, almost all recreational activities are open and ready to go by Memorial Day (a river raft trip is scheduled this year, and this is the best time for this type activity). The weekend following Memorial Day provides the maximum recreational opportunity, with a minimum of crowds.

Saturday and Sunday are scheduled for meetings, in a conference facility that will hold over a hundred; registration includes a banquet on Saturday night. A tentative list of speakers and titles is found elsewhere in this issue. Friday and Monday are set aside for recreation. Those who can attend only the meetings

will find the weekend most convenient, while those who want to enjoy recreation too, can add either or both of the "long weekend" days to their trip. This year, river rafting (Friday) and a day hike with lunch cooked over an open fire (Monday) have been picked as primary recreational activities (described on the registration form). The very popular M.S. Dixie dinner cruise has also been worked in, on Friday night. An informal, pre-Festival reception will be held at our home on Thursday evening for those arriving early. Many other activities may be taken in, of course, all the way from water skiing to pulling slot machine handles.

## THE FUTURE OF THE LAKE TAHOE LIFE EXTENSION FESTIVAL

The Festival has received most of its current publicity through this periodical. We would be happy to provide information to be published in other newsletters, etc., upon request. We do want to extend the invitation for registration and participation to all life extension organizations, their members and to all other interested persons. Please let us know of any person, organization or mailing list you would like to have receive Festival literature.

If there is enough interest in and support the Festival, it could become an annual event. How big it becomes -- and how often it happens -- depends strictly on interest and participation. We do need your help! We're not asking for donations or volunteers to stuff envelopes, but we do need to know whether or not you support the idea of the Festival. If you like the idea of a life extension Festival and want a vacation at Lake Tahoe, please register today. If you want to go on the M.S. Dixie dinner cruise on Friday night, don't delay! Large group reservations must be guaranteed, therefore, we need your payment no later than May 1, 1983.

Don't put it off until tomorrow! The registration form has full details about locations, times, and events. Mail it in, this very minute! If you have any questions, call Fed or Linda Chamberlain at (916) 542-1329 or write to P.O. Box 16589, South Lake Tahoe, California 95706.

### PRELIMINARY SAMPLING OF SPEAKERS

#### FOR THE LAKE TAHOE LIFE EXTENSION FESTIVAL

##### SATURDAY

- Mike Darwin: "Overview of Recent Research" and "Cryogenics and Cryonics."  
Chad Everone: "The Inhibition of Non-renewable Proteins in Life Extension"  
Jerry Leaf: "Pulsatile vs Non-Pulsatile Flow," "Experimental Hollow Fiber Oxygenator," "Protecting the Central Nervous System"  
Paul Segall: "Reversible Cryoprotective Perfusion of the Hyperthermic Hamster"

##### SUNDAY

- Mike Darwin: "A Review of Currently Available Life Extension Drugs"  
Saul Kent: "Life Extension Strategies for the 80's"  
Art Quaife: The showing of several video tapes (interviews, etc.)  
Jean Wasson: "A Life Extension Poetry Reading"

These titles are only preliminary, and further speakers are expected to participate.

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LAKE TAHOE LIFE EXTENSION FESTIVAL -- SCHEDULE

THURSDAY, June 2, 1983, 7PM

An informal reception will be held at the home of Fred and Linda Chamberlain for those arriving early. Maps will be mailed to registrants.

(916-577-4746) (1836 Brule, in Tahoe Paradise).

FRIDAY, June 3, 1983

10 AM

RIVER RAFTING (Mild and non-dangerous). Leave from the Condor Lodge and caravan to the Truckee River outside of Tahoe City on the north shore (or meet at the put-in site on the river, call Linda Chamberlain for details). Cost is \$10 per person and includes raft, paddles, life jackets and a return ride on a shuttle bus. This "beer run" (i.e., lazy day floating down the river sipping a beer) takes about 4 hours depending on the number

and duration of stops along the way. Wear shorts or swim suits (maybe bring a hat for sunburn and a sweater in case you get wet) and don't forget the sunburn cream! Bring your lunch and whatever drinks you want. It's going to be fun!

7 PM (Boat Departs -- arrive earlier)

DINNER CRUISE on the M. S. DIXIE (Paddle Wheeler). Meet at the boarding site in Zephyr Cove, Nevada, south shore of the lake. There is a live band and a cocktail bar on the second deck (enclosed) for your pleasure cruise. While cruising to Emerald Bay, the upper (open) deck is an excellent vantage point for viewing the shoreline and the mountain sunset. Seating for the steak and wine dinner will be at 8:30 on the return trip. The group rate is \$23.00 per person and reservations are required. As we have to put up a deposit and guarantee the number of persons in the group, we must have your payment no later than May 1, 1983 if you plan to go on the cruise. (If you're coming to the Festival, you don't want to miss the Dixie cruise!) Dress is casual. Bring a warm coat if you want to enjoy the evening breezes on the deck.

SATURDAY June 4, 1983

SUNDAY June 5, 1983

10 AM Technical Session  
Condor Lodge on  
Highway 50 in  
South Lake Tahoe

10 AM Non-technical Session  
Condor Lodge on  
Highway 50 in  
South Lake Tahoe

1-3 PM Lunch Break

1-3 PM Lunch Break

3-5 PM Technical Session

3-5 PM Non-technical Session

7 PM Banquet (same room)

7 PM Potluck Dinner  
Condor Lodge

9 PM Star gaze, bring your  
telescopes!

9 PM Planning session for  
Monday's fun activities

MONDAY June 6, 1983

FREE DAY FOR THE ACTIVITIES OF YOUR CHOICE such as horseback riding, casino gambling, water skiing, or join the Chamberlains on their Great Life Extension Day Hike! Details will be mailed to registrants.

The activities on Friday and Monday are not included in the registration fee. The registration fee covers the Saturday and Sunday sessions and banquet on Saturday.

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\*\*\* TYPIST'S NOTE: THE FINAL PAGE OF THIS ISSUE WAS A REGISTRATION FORM FOR THE LAKE TAHOE LIFE EXTENSION FESTIVAL. \*\*\*

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## INDEX TO CRYONICS MAGAZINE -- 1982

This index covers issues #18-29 (January-December) of 1983. The format of this index lists the month of issue followed by the page number of the article -- e.g., "May:4." Titles (usually a shortened form) are in quotation marks and are only given where they seem useful. Subjects are in CAPITAL letters. Authors are listed only for major articles.

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 CRYOVITA LABS (see SOUTHERN CALIFORNIA OPEN HOUSE)  
 DARWIN, Michael, author  
 "A Gift for the Colonel" Jan:4-5  
 "Waiting" (poem) Jan:11  
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 "How Ayn Rand Didn't Get Frozen" May:17-18  
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 "Calcium blockers" Feb:1-2  
 DE RIVAZ, John, author  
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 "and pituitary" Jul:8  
 "tryptophan" Jul:11-18  
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 DILANTIN -- toxicity Aug:20-21  
 DONALDSON, Thomas K., author  
 --Research reports in most issues  
 "Memory loss" Jan:8-9  
 "Comments on Sheskin" Mar:4  
 "Future growth of cryonics" Mar:20  
 Interviewed -- Aug:5-13  
 "What you can do" Aug:14-16; Oct:8-11  
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 "Dues should depend on age" Sep:9-16  
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 "Society fees" Dec:4-8  
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 ETTINGER, Robert C.W.  
 "The Prospect of Immortality," discussed, Jan:12-26; Feb:6-14  
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 FAHY, Gregory M. (researcher)  
 "Frozen kidneys" May:12  
 FALON, William, letter, Apr:7-8  
 FRANK, Benjamin. obit. and commentary, Mar:3; Kent reply Apr:8  
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 "Vitrification" Jan:7+  
 "Frogs" May:7  
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 "H.G. Wells excerpt" May:3-5  
 "Taking the Long View" Sep:3  
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 "and frogs" May:7  
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 HARTMAN, CHARLES, author  
 "3% Solution"  
 HEART ATTACKS Nov:4  
 HIBERNATION and aging May:11  
 HIXON, HUGH, Jr., author  
 "Science notes" May:7-8  
 "The High Cost of Cryonics" Jan:12-26; Feb:6-14  
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 INSTITUTE FOR ADVANCED BIOLOGICAL STUDIES (see also SOUTHERN CALIFORNIA OPEN HOUSE)  
 "Annual evaluation" Mar:1-3  
 "Storage Unit" Apr:2  
 "Merger with Alcor" Nov:1-2  
 IMMORTALITY (de Unamuno) Nov:19-22  
 INSURANCE (see also CRYONICS--FUNDING)  
 "Life insurance" Aug:1-2  
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 ISCHEMIA (see also BRAIN DEATH)  
 "Calcium Blockers" Feb:1-2  
 KENT, Saul, author (see also CRYONICS SOCIETY OF SOUTH FLORIDA)  
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 LAKE TAHOE LIFE EXTENSION FESTIVAL (1983) -- Nov:23-26  
 LEAF, Jerry, author  
 letter Apr:3-5  
 "Society for Cryobiology report" Nov:5-10+  
 LEAF, Kristen, author (poem) Apr:14  
 LEUKEMIA and monoclonal antibodies Dec:1-2  
 LIFE EXTENSION FOUNDATION  
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 "Hibernation" May:11  
 "Segall research" Jul:11-14  
 "Dopamine" Aug:21  
 "Cholesterol" Sep:16-17  
 "Vitamin C, etc." Dec:12-13

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LOPP, Allen, author  
  " 'Hot Ice' (play review)" Jun:14  
  " 'Blade Runner' (play review)" Jul:7  
MEDICARE Dec:9-11  
MEMORY  
  "loss of" Jan:8-9  
  "S-100 protein" Jan:9-10  
  "Brain proteins" Jan:10  
  "Glial cells" Mar:19  
  "Alzheimer's disease" Apr:13  
  "Vasopressin" Sep:18  
  "in mollusks and cockroaches" Oct:6  
MERYMAN, Harold  
  Letter from Darwin Jun:3-6  
  "Soc. for Cryobiology Report"  
    Nov:5-10+  
MICROWAVES AND HYPOTHERMIA Dec:11  
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MOVIE REVIEWS  
  "On Golden Pond; Whose Life is it  
  Anyway?; Chariots of Fire" Mar:5-7  
  "Blade Runner" Jul:7  
  "Movies Tomorrow" Aug:17-18  
NEUROPRESERVATION  
  "The case for ..." Apr:10-12  
  "...and cremation" Jul:2  
NOBLE, Corey (pseud.), author  
  "Vitrification" Jan:7+  
NOE, Gregory S., letter, Oct:2  
NURSING HOMES Dec:9-11  
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  CRYONICS -- OBJECTIONS TO)  
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"OMNI" MAGAZINE Jan:3  
PEGG, David Jun:3  
PENTYLENETETRAZOL Mar:14-17  
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PITUITARY GLAND  
  "and dietary restrictions" Jul:8  
PIZER, David S. letter Jan:2  
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PROTEINS -- BRAIN Jan:9-10  
QUAIFE, Art, author  
  "Tragedy averted" Jan:6-7  
  "Remote Standby Insurance"  
    Feb:3-5; Jul:18; Oct:11  
  "Funding Suspension" Mar:12-16  
  "TT computer" May:15-16  
  "Emergency Response" Dec:3+  
RAND, AYN -- "How Ayn Rand Didn't  
  Get Frozen" May:17-18  
  READE, Winwood, author, quoted.  
    "Passages from 'The Martyrdom of  
    Man' Sep:7-9  
  RECRUITMENT OF MEMBERS Mar:20-22  
  REMOTE STANDBY Oct:8-11  
  REMOTE STANDBY INSURANCE  
    Feb:3-5; Jul:18; Oct:11  
  RESPIRATOR BRAIN May:13-15  
  RESUSCITATION and Brain death  
    May:13-15  
  RNA (Benjamin Frank) Mar:3; Apr:8-9  
  ROE, A.M., author  
    "Problems of cryonics" Sep:6  
  ROTHACKER, Frank, author  
    "Goals for Cryonics" Oct:12-14  
  SEGALL, Paul, author  
    "Life Extension Research" Jul:11-14  
  SEVERE COMBINED IMMUNE DEFICIENCY  
    (SCID) Dec:1-2  
  SHESKIN, Arlene, author of "Cryonics:  
  A Sociology of Death and Bereave-  
  ment." Further comments by Bridge  
  and Donaldson -- Jan:12; Mar:4  
  SOCIETY FOR CRYOBIOLOGY  
    "Statement on Body Freezing" Jun:1-9  
    "Annual Meeting Report" Nov:5-10+  
  SONGS FOR CRYONICISTS Dec:26-30  
  SOUTHERN CALIFORNIA OPEN HOUSE  
    Jun:15; Aug:3-4; Oct:3-6  
  STORAGE UNITS  
    "IABS Multi-patient unit" Apr:2  
    "Neuropreservation" Apr:10-12  
  SULFINPYRAZONE Nov:4  
  SUPRACHIASMATIC NUCLEUS May:8-9  
  SUSPENSION PATIENTS  
    "A Gift for the Colonel" Jan:4-5  
    "Tragedy Averted" Jan:6-7  
    "Transfer to LN2" Jul:1  
  SUSPENSION PREPARATION  
    "What You Can Do" Aug:14-16;  
    Oct:8-11  
  TECHNOLOGY  
    "The High Cost of Cryonics"  
    Part Two -- Feb:6-14  
    Reply from Leaf -- Apr:3-5  
  TRANS TIME  
    "Tragedy averted" Jan:6-7  
    "High Cost of Cryonics," Part Two:  
    Feb:6-14  
    "Remote Standby Insurance"  
    Feb:3-5; Jul:18; Oct:11  
    "Funding Suspension" Mar:12-16  
    "Raises Rates: Apr:2



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"Litigation settled" May:1

"Computer" May:15-16

"Patient to LN2" Jul:1

"Unlocking the Directorates"

Jul:4-6

"Rent increase" Nov:2

"Emergency Response Funding"

Dec:3+

TRANSPLANTATION OF ORGANS

"liver" Nov:3

TRYPTOPHAN Jul:11-14

UNAMUNO, MIGUEL de Nov:19-22

UNIFORM ANATOMICAL GIFT ACT

"Legislation" Apr:14

VASOPRESSIN Sep:18

VITAMIN C Dec:12-13

VITAMIN E Dec:11

VITAMIN K Dec:11

VITRIFICATION Jan:7+

WELLS, H.G.

"Excerpts from speech" May:3-5