Cryonics

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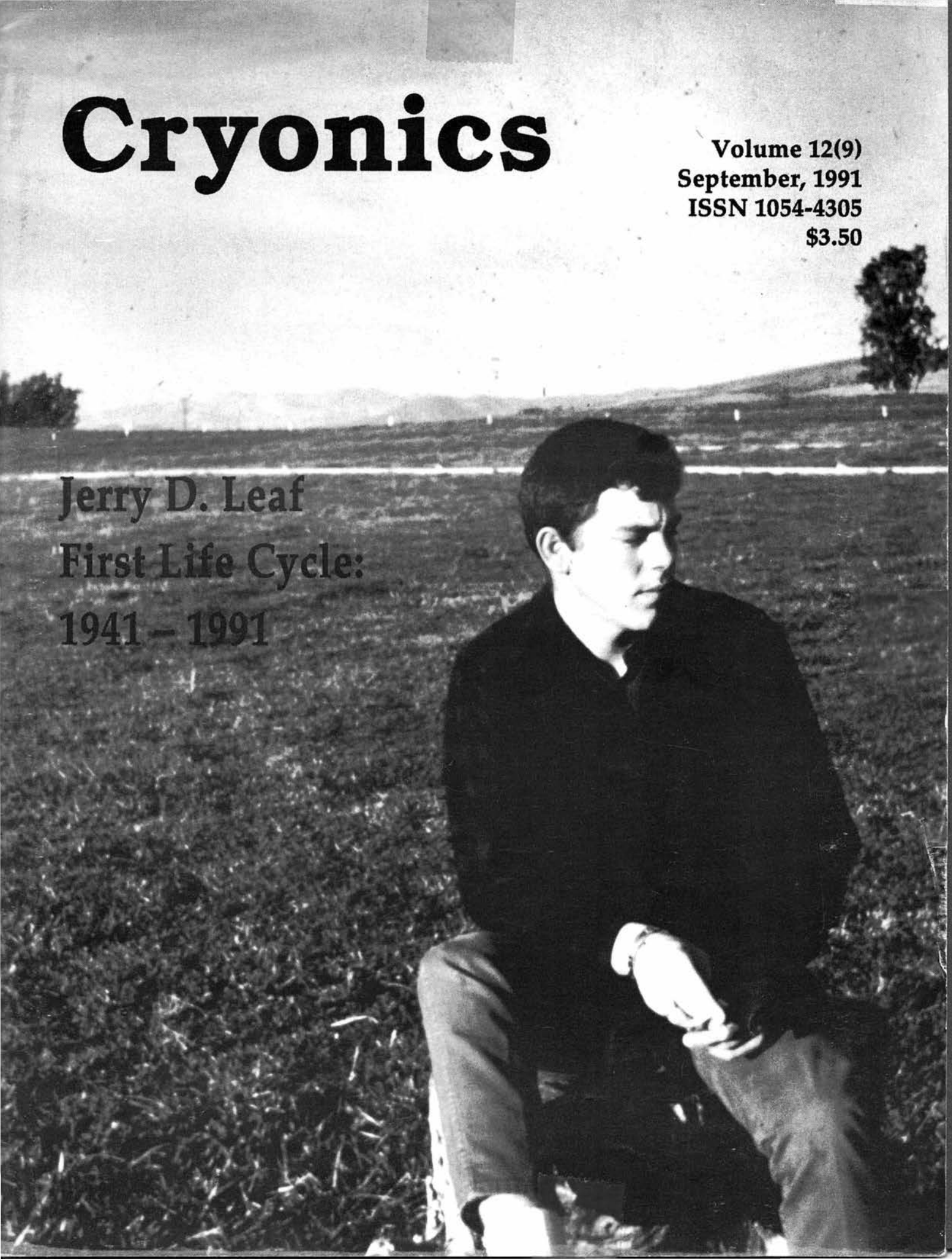

Jerry D. Leaf
First Life Cycle:
1941 – 1991

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Cryonics

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Please address all editorial correspondence to ALCOR, 12327 Doherty Street, Riverside, CA 92503 or phone (800) 367-2228 or (714) 736-1703. FAX #: (714) 736-6917. E-mail: alcor@cup.portal.com

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Issue to press: August 1, 1991.

Cover:
Jerry Leaf, circa 1965

Our Lesson in Dedication and Persistence

Most of this issue is dedicated to accounts, tributes, and reminiscences of Jerry Leaf, who deanimated from a heart attack on the night of July 10, 1991 and was put into cryonic suspension shortly thereafter. Jerry was the President of Cryovita Laboratories, the Vice-President and a Director of Alcor, the head of the Alcor Suspension Team, our surgeon, and a whole lot more. Not with any amount of words and pictures could we relate the depth of our dismay at having to suspend Jerry, but we do our best in this issue to convey to our readers a sense of the respect and dedication that is his due. If you didn't know Jerry and feel the loss personally, perhaps through our words you'll still inherit the renewed dedication to an idea — and an ideal — that we now feel in adding him to the ranks of members in suspension.

Mutual Benefit Seized

Mutual Benefit Life Insurance Co. has now gone the way of Executive Life, with the primary difference being that Mutual was bigger than Executive, was in fact the largest insurance company ever seized by state regulators. What's more important from *our* standpoint, though, is that apparently none of our Suspension Members were dependent on Mutual Benefit, though at least two of our Suspension Member Applicants were. We'll keep you posted and remind you to *watch your carrier*. As Alcor President Carlos Mondragón's article in the March, '91 *Cryonics* explained, there *are* warning signs that your company is in trouble. Don't get caught with your portfolio down!

A4 THE WALL STREET JOURNAL TUESDAY, JULY 16, 1991

New Jersey Takes Over Mutual Benefit In Largest Seizure Ever of an Insurer

By SUSAN PULLIAM
Staff Reporter of THE WALL STREET JOURNAL

NEW YORK—New Jersey insurance regulators took control of troubled **Mutual Benefit Life Insurance** Co., as expected, making it the largest insuran[illegible] seizure ever.

The state's action c[illegible] tual Benefit's board asked [illegible] in [illegible] revent a [illegible]

sands of union members, teachers, hospital workers and other employees of nonprofit organizations whose pensions are invested in Mutual Benefit annuities. Many of the groups invested in a type of tax-deferred annuity that gives people working for or belonging to nonprofit [illegible]anizations special tax treatment.

[illegible] York Ci[illegible]

You Took the Words Right Out of Our Mouths

Keith Henson relayed the following words to us, out of the mouth of J.A. Armstrong, IBM Chief Scientist and Vice President for Science and Technology:

> *"I believe that nanoscience and nanotechnology will be central to the next epoch of the information age, and will be as revolutionary as science and technology at the micron scale have been since the early '70s.... Indeed, we will have the ability to make electronic and mechanical devices atom-by-atom when that is appropriate to the job at hand."*

Membership Status

Alcor has 251 Suspension Members, 509 Associate Members, and 19 members in suspension.

Hey! Hey! FDA! How Many Folks Have You Killed Today?

Every move you make, every breath you take, I'll be watching you.

— Sting

The print and electronic media have been abuzz recently with the "good news about the new tough Food and Drug Administration (FDA)." The Riverside *Press-Enterprise* recently exhorted that it was "about time the FDA started acting to protect the consumers..."

So, they've started to "protect" us. Their first big action was seizing orange juice and spaghetti sauce labelled "fresh" when it contained processed ingredients. The next big coup was citing manufacturers who put "no cholesterol" labels on products which don't have cholesterol and never did — claiming this is "defrauding the consumer." We like that last one especially — how can you defraud someone by

telling the simple truth? In a similar move, they ordered Borden and others to stop labelling products as to fat content such as "98% fat free" — once again, Borden was just telling the truth.

But the drug mavens were not content to rest there. Under the "renewed" and "vigorous" leadership of FDA commissioner David Kessler, M.D., J.D., they're going further still:

1) The FDA has announced that it intends to PROSECUTE both physicians and drug companies for promoting unapproved use of approved drugs. Thus, if a physician advises his patient use a drug like deprenyl, which is approved only for Parkinson's disease, to treat aging or depression, he could be fined or face criminal penalties! Ditto for drug companies who participate in such "scams." Early targets for the FDA's new "protection" racket are Ortho Pharmecuticals, the manufacturer of Retin-A, and plastic surgeons and manufacturers involved in the use of collagen injection for lip enlargement or removal of wrinkles: collagen injections are "approved" only for treating acne scars. The reason the FDA cites for this action: A few people (like 2 or 3) have developed lupus after collagen injections! The stupidity of excluding wrinkles or lipless people and allowing acne scar sufferers to get the product is that acne scars, like wrinkles, are "skin filling defects" and neither is life threatening. Why not TELL the consumer or WARN the consumer and then let the consumer decide?

In the case of Retin-A, Ortho has been accused of promoting the product's use for treating sun-damaged skin and wrinkles, when the only "authorized" use is for acne. The FDA doesn't dare attack Ortho for making these claims because the fact is that study after study and widespread public use/feedback has demonstrated that Retin-A works for both these things and works VERY well! So, instead, the FDA warns that Retin-A could cause skin cancer. This would be funny if it weren't so pathetic — the fact is that Retin-A has been shown to consistently transform premalignant skin lesions into normal or more normal tissue. And responsible dermatologists always advised people using Retin-A to use a sunblock with it.

2) The FDA intends to ban and seize unauthorized drugs which have been "fradulently" classified as nutrients. And what kind of "drugs" is FDA talking about? Why just about everything in your health food store: Co-enzyme Q-10, DMAE, unusual forms of vitamin such as intra-nasal B-12 or micellized vitamins, BHT, and on and on....

3) The FDA is backing passage of one of the most draconian bills we've ever seen. This bill would not even have had a chance in Germany in 1933. Even during Hitler's first six months in office he wouldn't have had the courage to do what Kessler is proposing in H.R. 2597:

a) The FDA would be able to execute warrantless searches and take all manner of police and law enforcement action without any need for judicial authorization. For example, they can go into a health food store and seize or copy all records, all goods, and order the proprietor to keep any and all records that the FDA deems necessary or desirable.

b) The FDA would have subpoena power. No longer would a judge be necessary to issue a subponea. The FDA could do it without any outside review; in effect forcing anyone they choose to appear before them and produce any records they demand — all without judicial oversight.

c) The FDA could impose huge civil penalties — $250,000 to $1 million for **EACH ACT** that violates the FDA's arbitrary rules. These huge civil penalties would be imposed for ANY violation of ANY part of Federal Food, Drug and Cosmetic Act (FFDCA). Thus, the FDA would be judge, jury, and executioner. No outside review is necessary, thank you please. And don't let issues like whether a product actually WORKS or not cloud your judgement — the only thing that matters is whether or not the regulatory pooh-bahs have been satisfied. Oh, and one more little problem: the FFDCA is so complicated, byzantine, and contradictory that no one, and I do mean NO ONE, could possibly not be in violation of it. This is a typical government strategy: pass lots and lots of complicated laws which everyone must break to live or do business, then enforce them SELECTIVELY against those you don't like...

d) Any imported food, drug, or cosmetic may be **destroyed** by the FDA at the FDA's sole and absolute discretion. Currently, the recipient can appeal and if s/he loses, the item is shipped back to the country of origin. Now it would be destroyed.

When will the world learn to let people make their own mistakes and have their own successes. I'm a big boy now and I don't need Mommy, Daddy, or Big Brother to tell me how to think, what drugs to take, or what foods to eat.

Letters to the Editors

Dear Carlos:

We were saddened to hear of the death of long-time cryonicist Jerry Leaf. Jerry's enormous contribution to cryonics technology is universally recognized. His technical skills, patience as a teacher, and dedication to high professional standards, elevated the technology of suspension to a level comparable to that of a hospital surgical team.

We shall always remember him as embodying the highest ethical standards. To Jerry, cryonics was "saving lives." He was always available to do a suspension anywhere, anytime, even risking his own health in the process.

It is fitting that his hard work resulted in his own suspension with a very real chance of eventual reanimation. We of the American Cryonics Society join Alcor and cryonicists of good will everywhere in paying tribute to Jerry. If we are ever again able to pay our respects personally, it will be in large measure because he was with us and helped show us the way.

Long life,
Jim Yount
Secretary,
American Cryonics Society

To Everyone:

As you will read elsewhere in this issue, our Vice President, Jerry Leaf, recently deanimated and is now in suspension. Most readers know that Jerry was our chief surgeon and leader of the suspension

team. Jerry, along with others, was responsible for much of our research. There is no question that Jerry's deanimation will leave us with much work to do. Besides the surgical expertise, Jerry played an important part on the Board of Directors. His expertise went far beyond surgical advice. He was a stabilizing force that often kept us all together.

But, beyond his contribution to the surgical procedures and to the Board, Jerry was one of the fairest, wisest, and kindest persons at Alcor (or anywhere else). All of us who worked with Jerry had the utmost admiration and respect for him. I know that I and many others are going to miss Jerry. If there ever was a moral reason why cryonic patients should be reanimated, when technology becomes available, it is Jerry Leaf.

Jerry was more than a co-worker, he was a friend who could always be trusted. His quiet bravery in tough times was a comfort. His gentle smile complemented his courageous spirit. We are all going to miss Jerry. We all want to have him back again someday.

David Pizer
Treasurer

Dear Sirs,

This letter is to express my sorrow over the temporary passing of Jerry Leaf. He was a rational man in an irrational world. If he ever lost his temper, I never saw it. His dedication to the cryonics movement will long be noted. The grief of our emotions can, however, be tempered by the optimism of our intellect. Jerry will be back.

Long Life,
H. Jackson Zinn,
President,
International Cryonics Foundation, Inc.

Dear Mike,

I just read your article, "Cryonics, Intellectual Property, and the Problem of the Commons" in the June *Cryonics*, and I had to write and tell you how much I have come to respect and admire you and your work at Alcor. While living in Toronto (not the easiest place for Alcor to do a suspension), being in principle against using any form of insurance, and being so healthy that I haven't required a doctor for over 20 years, I nonetheless became a suspension member very directly because of the intensity, dedication, earnestness, integrity, concern consideration, intelligence, and creativity which I have seen emanating from the pages of *Cryonics* during the five years of my reading. I felt that I didn't need to even consider the other cryonics organizations. Now that I am reading the full range of cryonics publications, I am fully satisfied that I made no mistake. I, too, am a person who gets very zealous about what I consider important. I intensely care about what I do (sometimes too much for the good of my mental health), else, why would it be worth doing? And I recognize and esteem this attribute in you and others at Alcor. If anyone in the world can make the cryonic idea work and grow and last, it is people like yourself and your associates at Alcor.

I have two small criticisms of your article:

1) You may not have got your understanding of intellectual property and "the unworkability of the collectivism of innovation, of the collectivism of the world of ideas" from reading Ayn Rand, but having read everything she (and Nathaniel Branden until 1967) wrote, I assure you that those ideas were fully explicated in her writings (surely they were even the central theme of *Atlas Shrugged*).

2) The last part of your title, "The Problem of the Commons," while mentioned in your article, was examined too briefly to allow anyone except those who already know to grasp the nature and depth of the problem.

I was very concerned by your remarks in the article with respect to the DHS case, i.e., "We'll try to get by on less than the best. . . by degrading the quality and quantity of preparation." While I have donated a few thousand dollars over the last five years to various Alcor causes, I have not donated anything to your legal fights specifically because I am an anarchist. I view all governments as worse than the Mafia and all their activities as causing a (very negative) distortion of the spontaneous order which would govern material and intellectual property among truly free people. I wish we could take Alcor "underground" as I and many other anarchists have done with their business and personal activities. I would ask that other Alcor members also give some thought to this possibility. In the meantime, much as it hurts me to say so, it seems we have little choice (as in some of my activities, e.g.. I must use the government's roads) but to go to the courts, pay lawyers (ugh!), and even, as Allen Lopp would have us do, get friendly with politicians (ugh, ugh! I almost get sick thinking about it).

So choosing the lesser of evils, I am now ready to make a more general contribution to Alcor funding. The proposal I am about to make came to mind because I also took note, in your article, that some people are even "borrowing against credit cards or taking on other debts to deal with the crisis." Many of these loans will most certainly have been at quite high interest rates, again a sign of the dedication to the cause, of some Alcorians. To allow for the fuller flowering of this dedication and to alleviate the hurt of high interest rates, I suggest that I make available to Alcor from $50,000 to $100,000 over the next year for any Alcor donor to borrow against, up to the full amount of their donation, (the donation may for any purpose) with a rate of interest which would change each quarter to equal 75% of current T-bill rate compounded quarterly. Of course, Alcor too can borrow against this fund; all I require is my quarterly interest. This will be considered a long-term (say 10 years) loan. Promissory notes from the borrowers due in 10 years will suffice as payment guarantees to me. Furthermore, I am certain that there are many Alcor members far richer than I (I am not rich; my total assets are under $500,000, I'm just a good saver with few material needs), and I urge them to consider this idea or something similar for themselves.

Health and happiness forever,
Paul Wakfer

Dear *Cryonics*,

I'm an Alcor Suspension Member who writes science fiction (my novel, *The Silicon Man* is being reviewed in this issue).

In a new novel that I am currently planning, I will deal more directly with the promise and potential of cryonics. I prefer not to describe the plot in detail at this early stage, but it will be set 200 years in the future, when a patient who was suspended in the 1990's is successfully

revived. There will be a strong human-interest theme, since my intention is to emphasize the life-enhancing potential of cryonics and downplay the ghoulish connotations.

My reason for mentioning this to readers of *Cryonics* is that I would be very interested if anyone wants to tell me their views on how life will be on Earth 200 years from now. I am only interested in conservative, pragmatic projections; this novel must seem as realistic and as intimately connected with the twentieth century as possible. On the other hand, if rususcitation has become possible 200 years from now, we must assume that there have been dramatic breakthroughs in nanotechnology (or some substitute), medical control over disease and the aging process, and an industrial society that is vigorous and flexible enough to support these developments and tolerate the changes they would bring. We may also assume some form of artificial intelligence, though I remain a little more skeptical of developments in that area.

I can't offer a fee (I don't make huge sums of money from my writing), but I can certainly guarantee an acknowledgement in the final book and a complimentary inscribed copy to anyone who throws some ideas my way. Naturally, I already have my own notion of what we may expect; but I don't imagine that mine is the only valid scenario, and I would enjoy having my assumptions challenged.

Send your ideas to me at 9 Patchin Place, New York, NY 10011. Or if you prefer, via GEnie, where I am C.PLATT3.

Charles Platt

Dear Editors:

I'd like to respond to Mike Darwin's article, "Call for Evidence in the Case Against Robert F. Nelson" (*Cryonics*, May 1991). First of all, I understand that some feelings were deeply hurt, in part by my actions, and for that I sincerely apologize; it was not my intention to bring about such pain.

Dave Pizer and I interviewed Mr. Nelson in March, 1990. The lengthy document that resulted from that meeting (supplemented slightly by other intermittent communications) ran in three installments in our publication, *Venturist Monthly News* (May, '90; Aug. '90; Apr. '91). Mike Darwin supplied the initial information that allowed us to contact Mr. Nelson, and I thought it would be reasonable to inform Mike at least that contact had been made. Dave mentioned to me at that time that he was afraid Mike might try to take the interview from me and suggested we keep this matter confidential until we went to press. I didn't think that was necessary, but didn't see any great harm in it either, so I went along.

A newspaper or other periodical, of course, isn't normally held to the standard of informing someone *beforehand* of an impending "big story" and indeed, a certain ability to surprise readers with new and interesting material is probably considered a mark of excellence. Unfortunately, our "big story," the Nelson interview, had certain "big problems" we didn't take adequately into account. Chatsworth is widely considered the cryonics Holocaust, with Nelson more-or-less in the role of Hitler, or at least, the closest thing to an incarnation of pure evil that has ever appeared in our movement. Some people have very bitter personal experiences over what happened, and may have suffered psychological trauma comparable to some WWII Holocaust victims. However, these thoughts were not uppermost in our minds when Dave and I met the middle-aged man that morning who smiled and with almost boyish enthusiasm exclaimed, "Cryonics!" (Nelson had come out from his home to a pre-arranged meeting place and this was his way of identifying himself. He then led us back to his home in his car and we did the interview.)

The confidentiality hurt us, I think, in two ways; (1) we were deprived of additional important information on the case, and (2) we alienated others who could have supplied it and helped us in other ways. Some of those people are now among our stern critics. I am not aware of any strong campaign to dissuade us from publishing the entire interview, however, contrary to the impression conveyed in Mike's article. Mike, I think, did earlier express the view that it should not be published. If I remember right this happened shortly after Part 2 was published, when he and Saul Kent were discussing the matter with me. Saul, however, insisted publication was acceptable, as long as there was a reasonable balance of other material, rather than just Nelson's side alone. Mike didn't challenge that, and it seemed reasonable to me. It's possible, too, that there was some exchange of this sort after Part 1 appeared, but I don't remember as much overall disapproval being expressed. (Part 1 mainly dealt with less inflammatory early history such as the Bedford freezing and Nelson's TV appearances in the late '60s.)

Apparently I had indicated, at some point, that I would also publish the judgment against Nelson with Part 2, but if I did I totally forgot about it. I was angrily reminded about this, after Part 2 appeared without it, so I did publish this document in the next issue of *VMN* (Sep. '90), along with some other material calling Nelson's actions into question (specifically, excerpts from Art Quaife's article, "Cryonic Interment Patients Abandoned," *The Cryonicist!*, Oct. '79, and from "Trouble in Southern California?" by Saul Kent, *Cryonics Reports*, Dec. '69). After this there was no further criticism of our handling of the Nelson interview — until Part 3 appeared.

By this point I was sensitized to the need for "balance" and determined that some would accompany that remaining portion of the interview. On the other hand, this remaining part struck me as relatively benign (that is, it dealt mainly with the trial rather than the loss of the patients, as had Part 2). Moreover, we had already printed the judgment and other materials; thus there didn't seem to be quite the same urgency as before. Another lulling factor was that, though Nelson was a good talker and spoke persuasively, he came across as a poor cryonicist, because of his negative position on neuroconversion. The fact is, by his own admission, he had terminated *whole body* suspensions, allegedly because of lack of funds, and hadn't tried to save them by saving the heads, even though he claimed full control under the Uniform Anatomical Gift Act. Anybody like that should obviously not be running a cryonics operation. An additional factor was that I had had some conversations with mortician Joseph Klockgether, who assisted Nelson. (Actually, this was before Part 2 was published.) Although he was a co-defendant with Nelson in the trial over Chatsworth, Klockgether is well-respected in the cryonics community, and not considered guilty of willful wrongdoing. The impression I got from him was one of confirming, more or less, Nelson's version of what happened.

Still, I did want to achieve some balance. Where would I get more material? I thought of using some court documents, but what I had, that might have been suitable in other ways, were lengthy and hard to excerpt in a meaningful way. (There are plenty of court documents to

choose from; just go down to the Hall of Records in Los Angeles and ask for case number C-161229; but it is very time consuming to go through these, and on the budget I had to work with, expensive also. I did go to the Hall of Records last summer, however, and retrieve the judgment and some other materials.) That left interviews. Unfortunately, not everybody with knowledge was willing, apparently. I had been led to understand that certain people were afraid of being sued by Nelson if they spoke their mind. On the other hand, Mike Darwin was willing to contribute a little information, but said that if he were to express himself more fully, he would rather write an article than do an interview. I used some of Mike's information, with acknowledgment, but mainly settled on Corey Noble, (a pseudonym for a well-known cryobiologist and cryonics sympathizer), who had some contact with Nelson in the '70s. Dr. Noble, though mildly critical, was not particularly damning, and the level of balance, as it would turn out, was "not good enough."

I think there is need of a more objective assessment of Nelson. It is widely thought that Nelson stopped maintaining patients, letting them thaw and decompose, while continuing to take money from relatives, for instance, and that should be looked into. I haven't seen proof of his accepting money in this fraudulent and horrible way, or on the other hand, that he had sufficient funds to maintain the patients when he said he didn't, though that accusation has also been levied. This is not to say that proof of either of these claims doesn't exist, of course, but it needs to be found if it can be. No document I have seen summarizes clearly the specific actions that resulted in the fine that was levied (nearly a million dollars against Nelson and Klockgether). Maybe it is in the several thousand pages of documents at the Hall of Records. I hope it can be found, in any case, and anything else that will shed light on what really happened. Nelson does seem to have had a remarkable penchant for misinformation, an impression that comes from several disparate sources. Some of his false claims led to major trouble for others, e.g., the Chamberlains when they were dragged into the Chatsworth suit unjustly, as Mike points out. The extent of this problem does not come across from the interview, and that is at least one major defect that, in all probability, would not have occurred, had there not been our initial policy of secrecy. Nelson himself had a policy of secrecy about his operations that could only have worsened the situation and may have, all by itself, amounted to criminal culpability. He is also, in some testimony, said to have been a heavy cocaine user. That may shed light on his behavior. Again, more research and openness initially would have led to better results in our interview.

So, Dave and I made some mistakes. However, I did not act out of malice or, as indicated earlier, a desire to hurt anyone's feelings, and I'm sure Dave feels that way too. To me there were a lot of confusing gray areas, from a moral perspective, and I had to use my judgment on issues that did not seem that clear. (For example, books by Hitler, Mao Tse-tung, and the Marquis de Sade are readily obtainable, with little if any "balancing material." Though I can now see reasons why this approach, limiting the caveats to a reminder that "this is *his* side of the story," may not have been appropriate in the present case, it wasn't so obvious initially. More recently also, I have been mildly criticized for the publication of some testimony relating to Nelson's domestic life, including alleged drug use, which some individuals felt went a bit too far the other way. So this is still something of a gray area to me.)

In closing I'd like to offer a few additional thoughts. First, I think an objective assessment of Nelson would be a good thing for the cryonics movement as a whole, as well as certain people who were caught up in the unhappy events of Chatsworth itself. Although these things are natural to want to "put behind us" it would be well to make information about what happened readily available. Some fears have been expressed that Nelson could emerge "from the woodwork" and again cause trouble. While that is a possibility (though I think it is unlikely based on impressions of myself and others of his apparent lack of interest in presently involving himself with cryonics), a greater danger may be a future "Nelson-clone" — only with more expertise. If cryonics is going to become a major enterprise, we can always expect those that are ill-suited to take an interest. Such people might be deterred by a clear and objective presentation of what happened before, as well as good cryonicists being put on their guard. Second, in the eagerness to expose the truth about Nelson, other individuals should not be overlooked, in particular, the plaintiffs' attorney, Michael Worthington. I believe he set out to destroy cryonics altogether, not just redress the Chatsworth matter, and I believe he was very unscrupulous. Finally: a plea for fairness, and even compassion. We need to protect ourselves from people who may pose a threat here and now, but should keep our sights on the larger issues also. I am of the opinion that there are no truly evil people, but only sick people in need of cure. At least we should be able to find out, in the world beyond death we hope to share someday. Let's work toward building that world, a place of happiness as well as mere survival, and apportion all our efforts with this higher goal in mind.

Sincerely,
Mike Perry

Dear Editors:

I would like the opportunity to respond to Mike Darwin's article, "Call for Evidence in the Case Against Robert F. Nelson," in the May issue of *Cryonics*. Mike's article tends to suggest that we (Mike Perry and I, or one of us) did something wrong in publishing an interview with Nelson, which ran in three installments in our newsletter, *Venturist Monthly News*. I think it would be helpful if I supplied some additional information and thoughts on the subject.

I have always been intrigued by the Chatsworth matter. It seemed horrible to me that such a thing could happen. Long before I had any thought of interviewing Bob Nelson, I discussed the case with Mike Darwin, and others, many times. It was during one such discussion that Mike suggested to me that I and Mike Perry might try to call Bob Nelson and see if he would consent to an interview, specifically for *Venturist Monthly News*. I believe Mike thought we would be turned down. I did not know how to contact Bob Nelson or what his real name was. Mike said that would be no problem and he supplied me with Bob's real name and his telephone number.

I called the number Mike gave me and found out that Bob was out of the country for a few weeks. A few weeks later I wanted to try again and found that I had lost Bob's number. Mike Perry went back to Mike Darwin and got the number again. We then were able to contact Nelson and we were surprised when Nelson agreed to be interviewed. We were additionally surprised when Nelson allowed us to tape the interview.

At this point I did something that I

now realize aroused bitter feelings and probably contributed substantially to the level of outrage that eventually developed. That is, I insisted that Mike Perry keep a strict lid of confidentiality on the interview until the first installment was printed. I did this because, quite frankly, I had apprehensions that Mike Darwin might borrow the idea for a Nelson interview. I felt that Darwin had encouraged us to contact Nelson and given us his number so that we would do the ground work in getting Nelson to agree to be interviewed, then if he learned that Nelson was amicable to being interviewed, Darwin would try to take over.

Several years ago Mike Darwin was editor-in-chief (and also Alcor's President) and had almost total control over what was published in *Cryonics* magazine. I had submitted articles to *Cryonics* which were not used, but later I felt Mike had borrowed some of my ideas for articles of his own. In retrospect, I was probably wrong; it was probably just coincidence. Or, it may be that any editor who reviews many submissions can't help absorbing some of the ideas for articles. However, believing I had reason for concern, once we had the Nelson interview, I wanted to publish it before Darwin realized that Nelson would allow himself to be interviewed and beat us into print.

Mike calls for evidence in the case against Nelson so that he can later run an article about him in *Cryonics*. I think an objective article of this sort would be of benefit to cryonicists and I support the basic idea. I must confess to having concerns as to whether Mike would be totally objective in this, however. In his preliminary article he refers to Nelson's "lies, deceptions, and atrocities." I don't think this is a good starting point for an objective article. Also Mike asserts, in effect, that we did something wrong by allowing Nelson to "whitewash" himself but makes no mention of our efforts to achieve a balance which included publishing the full text of the judgment against him and Klockgether and other materials critical of his actions. I must confess, too, that I think Mike has been affected, up to now at least, by a desire to "get even" with us for his own angry feelings over this matter. I hope that whoever does this story, if it is to be done in *Cryonics*, will be able to approach it in disinterested fashion, unclouded by preconceptions and motives that could lead to distortions.

In the meantime, *Venturist Monthly News* would also like to invite anyone who has information on this matter to submit an article, and/or consent to be interviewed.

Also for those who would like to read the original Nelson Interview and decide for themselves if something wrong was done, copies of the four issues in which his interview ran, the judgment against him, and Corey Noble's interview, are available. (We will also include a more recent issue in which further material on Nelson appeared, making five issues in all.) Please write *Venturist Monthly News* at the following address.

Venturist Monthly News
PO Box 458
Wrightwood, CA 92397

In his article Mike Darwin said I did the Nelson interview to "stir up controversy." I do not remember saying that. What I believe I said, and certainly what I meant, was, "I think a Bob Nelson interview should be done, and the Chatsworth affair retold, so that people will not forget the tragedy that happened." It was my intention to encourage people to remember what happened so that the odds of such a thing happening again would be minimized. In addition to complaints, we also received numerous compliments on the article from several long-time cryonicists.

Lastly I would like to publicly apologize if my desire to protect my story idea appears to be a lack of professionalism, and for any pain that I may have caused any cryonicist by virtue of doing the interview. I know this has deeply hurt a few of my old friends and I am sincerely sorry. I also affirm that both Mike Perry and I tried to interview several of the opposing persons in the Chatsworth matter and no one except Corey Noble would grant an interview. (More recently we were able to interview Joseph Klockgether and Curtis Henderson.) Most people said that it would just be too painful or that if they said what they felt they might get sued.

Sincerely,
David Pizer, Treasurer

Dear Editor,

In the May issue of *Cryonics*, I read "The Penultimate Trump," a science-fiction story that appeared in a 1948 publication of *Startling Stories*, and Mike Perry's review in his column and I'd just like to "*correct the record.*"

The story concerned the life of Harley D. Haworth, a billionaire who died and was reanimated only to be exiled to Mars, or as it was re-named: Hell, where he was expected to undergo a series of *torture treatments* as a consequence for previous actions now considered "*wrong.*"

Perry's article focused on two factors: (1) the lack of a technical explanation for cryonics and revival and (2) the idea of torture for any previous, mischievous acts one may have committed. His alternative was *controlled virtual reality* as opposed to torture. This is where the correction must be made.

Ettinger recently said, (personal communication) that his intent, concerning *The Penultimate Trump*, was to introduce cryonics as a feasible and logical concept and to deter people from using any form of coercive act after revival.

Every person is an individual and consequently has rights, which are moral concepts that define and sanction a person's freedom in a social structure. It is the hope of rational man to conquer all restrictions on individual liberty because it is the restrictions that are causing the criminal catastrophy. Criminals who insist on their old ways, despite the freedom given them in the future, should be dematerialized. This action, though it may seem coercive, is not if taken during an attack emanating from the criminal. However, most serious individualists believe that a non-restrictive environment would not invite any criminals because of its advantages versus its disadvantages DD oblivion!

David Brian Christiansen
Ontario, CA

Why You Should Attend The Alcor Fund-Raising Dinner For Cryonics Research

Alcor is holding a $100 per plate fund-raising dinner to raise money for cryonics research on **Saturday, Sep. 28 at the Marriott Hotel near Los Angeles International Airport**. It is vitally important that you attend this dinner or--if you are unable to do so--that you donate money to **Alcor's Cryonics Research Fund**.

Alcor has shown that it can conduct path-breaking research leading to significant improvements in cryonic suspension. But there is still a long way to go. We need to learn how to reduce and, eventually, eliminate freezing-related damage (especially in the brain) in our patients. We need to develop better cryoprotective agents to help achieve that end. And we need to demonstrate the retention of memory after freezing and thawing.

Every research advance that Alcor makes will improve **your** chances of being restored to health and youthful vigor should you need to be suspended. Every research advance will increase our credibility with scientists, with the media, and with the public. Such advances will lead to faster membership growth and faster progress towards the achievement of a long and healthy lifespan.

SPEAKERS AT THE ALCOR FUND-RAISING DINNER

* **ADVANCES IN CRYONIC SUSPENSION By Michael Darwin**, Director of Research at Alcor - An historial overview of advances in the treatment of cryonic suspension patients, from the birth of the cryonics movement in the 1960s to the present. Also discussed will be some of the improvements in cryonic suspension we can expect to see in the near future, based upon current research.

* **DOES MEMORY SURVIVE FREEZING? - Jerry Leaf** was scheduled to give this presentation, but suffered a heart attack in July and had to be placed into cryonic suspension. **Dr. Gregory M. Fahy** of the American Red Cross--who worked with Jerry to develop the protocol for these experiments, will discuss their design and **Michael Darwin** of Alcor will discuss plans to carry them out.

* **VITRIFICATION: A NEW TECHNOLOGY By Gregory M. Fahy, Ph.D**, Research Scientist at the American Red Cross in Rockville, Maryland - Vitrification enables scientists to preserve biological systems at ulta-low temperatures without the formation of ice crystals. The world's foremost expert on vitrification will discuss advances in this exciting new field and will speculate about the possible applications of vitrification to cryonics.

* **WHY YOU SHOULD SUPPORT ALCOR'S RESEARCH PROGRAM By Saul Kent**, President of The Life Extension Foundation in Ft. Lauderdale, Florida - Why you should donate money to Alcor's research program today! The benefits your donations will bring.

To Reserve Your Place At The Alcor Dinner call: 1-800-367-2228

__ **Yes!** I want to attend the **Alcor Fund-Raising Dinner For Cryonics Research.** Enclosed is my check or money order for $100, or charge my credit card. Please mail to: **Alcor, 12327 Doherty St., Riverside, CA 92503**

NAME_____ ADDRESS_____

CITY_____ STATE_____ ZIP_____ PHONE NO: _____

CREDIT CARD (Visa or Mastercard) No: _____ EXPIRATION DATE _____

___I am unable to attend the **Alcor Fund-Raising Dinner.** Enclosed is my tax-deductible donation of $ _____ for the **Alcor Cryonics Research Fund.**

Elegy for Jerry

Ralph Whelan

The life and times of Jerry Leaf may never be properly told. He was a quiet and stoic man — by no means shy, but reserved and meticulous. What you heard about Jerry Leaf is what he thought you ought to know. When he talked about himself you listened, and took mental notes. He was the sort of man who never shouted, not because he couldn't, but because he didn't have to. If anyone had a story worth telling and a lesson worth learning, it was Jerry.

If you never were so fortunate as to meet and know Jerry, this account will probably be your best chance at knowing what you missed, at least for some decades to come. More than anything else I hope that we all get a chance to share his company once again, be it for you a reunion or an introduction. Think of it as something to look forward to, and something to work for.

Jerry Donnell Leaf was born on April 5, 1941, in Artesia, California. A scant three years later, he made it clear to all concerned which side of life's fulcrum he would be on. His mother relates that Jerry overheard his uncle talking about a bear in Alaska. Little Jerry, age three, said, "I'm going to slip up and cut his tail off."

Fortunately for the bear, Jerry had parents, as well as an older brother, Ronald. He and his family lived in Norwalk, California until he was four years old. By all accounts, Jerry was every bit as tenacious and determined at that young age as he would be later in life. I wish I could've been there to see Jerry — utterly dependable even at age three — come running from the chicken pen, screaming, the big rooster right on his heels. He did not drop the eggs he clutched to his chest.

Jerry's independence equalled his dependability. If we who knew him as an adult could look back through time, we'd surely pick the 4-year-old Jerry out of a crowd with little trouble. For instance (as Jerry's brother, Ron, tells it):

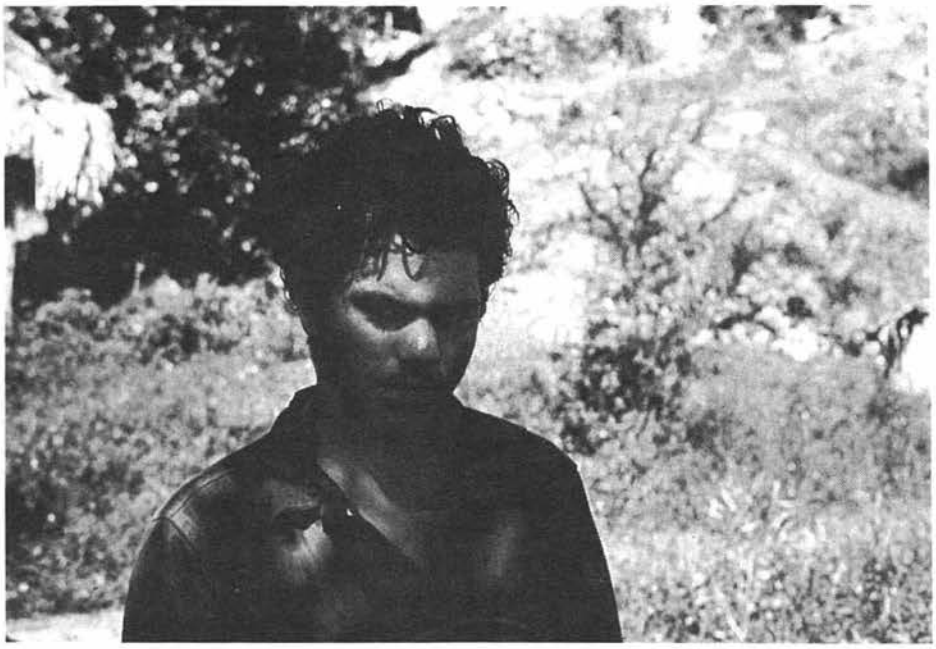
"Once, when we were living in Norwalk, California, our father took us to one of those street fairs. Shortly into it we noticed that Jerry, who was about four years old at the time, had gotten separated from us. With all the people and noise, it was about an hour before we finally turned him up, with a police officer on each hand. But Jerry wasn't crying or asking for his Mommy. He was just angry that the police had caught him."

This spirit persisted as Jerry grew. At age six, living in Oregon, after viewing a cougar that some men had killed, he said to his brother, "Come on Ronald, let's go see if we can find a cougar." Ronald, being a gouty 7-year-old, advised against this. Instead they hunted up an old abandoned cider mill to explore.

In a conversation with me, Ron related that even then he had a sense that things were somehow backwards, that Jerry was *his* big brother, and seemed in some respects a hundred years older than he. With his next breath, Ron described the fierce loyalty Jerry had toward those he respected. Through all their adventures and tribulations, "I never had to turn around to see if Jerry was backing me up. He was always there."

As far as I can tell, Jerry had this effect on everyone. When he was 11, his sixth grade teacher remarked that, "If I had to choose one student in my class that was apt to be successful, it would be Jerry." By this time Jerry and family were back in California, living in Downey. There Jerry met Doug Beverly, who would be his closest friend. After graduating from high school, Jerry and Doug worked for a couple of months to earn enough money to buy some equipment and supplies, then went on a month-long trip through the jungles of Guatemala that they had been planning for two years.

Hearing Jerry talk about this trip, as I often did, I have a sense that Jerry's opinions and values and ideals began to solidify for him during this period. The picture of him that begins this article was taken during that month and has always been his favorite picture of himself. This, for Jerry, floating down a jungle river, meeting natives, hunting up dinner, encountering communists. . . was living. And although he would later hold his own presenting scientific papers at meetings of the Society for Cryobiology, I will forever have the sense that this is what Jerry was all about. This was the sort of environment that allowed him to continually, moment to moment, prove to himself that whatever life had in store for him, he could take it. In fact, he would welcome it. *What's this? Another chance to see what I'm capable*



In 1959, just after graduating from high school, Jerry spent a month in Guatemala.

of? Good. I'd like to know myself.

Upon his return from Guatemala, Jerry was faced with a choice between three job opportunities. He chose the fourth, which was to enlist in the Army under the Buddy Plan with Doug and be sent off to Germany. He spoke to me of the atrocities that he saw during this initial

Jerry spent years in the military, first in the Signal Corps, then Special Forces.

tour, atrocities that he attributed to the Communist regime, and that culminated in the construction of the Berlin Wall. Thus, when he was approached, he volunteered for a Special Forces unit. In his own words, he did this because he *had* to make the people who caused such pain pay. It's my impression that he felt morally obligated to prevent this injustice, to the best of his ability. And he was a very able man.

His experiences in the Special Forces are in many respects a black box, even today. Jerry believed that, with regard to much of his activities, the lives of good men might depend on his silence. But what he did feel at liberty to discuss, he spoke about with a combination of intense pride and great pain. A combination of profound events, culminating with the loss of his friends in combat, started him on a road of meticulous consideration of the value of life, as he recounted in an interview with *Cryonics* magazine in July, 1986.

> "This caused me to begin to think about the fragility of life and what could be done to prevent the loss of people that you cared about. People whose lives were in extreme jeopardy — or even beyond the ability of current medical science to recover."

Jerry came out of his wartime experiences with an intense animosity toward death. Not a *fear* of death; he was perfectly willing to accept that he would die someday. What he was *not* willing to accept, though, was that the people he cared about would also die. This frustration was born when he carried one of his friend's remains through the jungle to an air extraction site. This frustration he would fight, intellectually and fearlessly, for the next three decades.

> "I left my fear of death somewhere in the jungles of Vietnam. To this day I have absolutely no fear of death, only the fear of not being able to save someone else that I care about. It's not that I don't want life for myself, because I do very much. I just don't feel anything about nonexistence. I only have positive feeling towards life. I want more of it."

It's unreasonable to not make a causal connection between his experiences in the jungle and his motivations in cryonics. His combat experiences left him staunchly refusing to give up on anyone who he considered a friend. No matter what. He was forced to confront the issues in a way that no one should have to.

> "There is a special kind of chemistry and feeling that is shared by people who face death together over a period of time. I came away from these missions with the face of death having a very specific meaning; it was defined by a roll call of men we carried out of North Vietnam. They went home; there were no MIA's. I lived because of these friends, and it was the worst feeling not to be able to reciprocate."

Despite the pain that he carried with him into his civilian life, Jerry persevered and even thrived. One thing that I've always admired very deeply in Jerry is that he never turned sour toward life in general, or the military, or his countrymen as a result of his difficulties in combat. He went into battle with a set and solid idea of who he was fighting and why, and he came out the same way. Where other men lost their affinity for life as a result of the inhumanities they witnessed, Jerry's verve was reaffirmed. And although the loss of his friends would haunt him for the rest of his life, he would always recognize that loss as exactly what it was. In other words, Jerry's universe was not "malevolent."

> "As far as my war experiences are concerned I have no regrets about my involvement in the war or the activities that I participated in. The only thing that even remotely would be considered a regret in that respect would be the effect that it has had on my life over the past two years [since 1984], in which I found myself returning to those memories of that conflict. Memories not of activities which I thought were not appro-

After his tour with the military, Jerry spent several weeks in Honduras, alone.

priate, but rather to the feelings that I had about the friends that I lost in that conflict. . . . I do not regret having fought against an organized political system, which, even today, threatens the freedom of its own citizens and those of neighboring countries."

Jerry at twenty-three.

He lost his fear of death but not his love of life, and his regard for the lives of those he loved was fortified.

When Jerry returned to the U.S. and resumed civilian life (sort of. . .), one of his first projects was to head up into Northern California and spend a few weeks camping out and panning for gold. Why not, right? Then he spent about six weeks alone in Honduras, roughing it. Again, this was *living* for Jerry, at a time when he needed to indulge himself. But soon he hunkered down to educating himself (that is, in the academic sense of the word). He enrolled in Cerritos College, concentrating heavily on understanding life. This amounted to a regime of study divided fairly equally between biology and, of course, philosophy.

"When I came back (we were quietly reinserted into Germany after the Southeast Asian operations) and I was cycled back to the U.S. for a period of time (during which time I was involved in additional covert operations here) I began to become increasingly concerned over the issue of life and death — over the tremendous importance and preciousness of life. I began to ask questions about life itself — I started studying biology and philosophy in college and I became particularly interested in suspended animation."

During this period of intense study and introspection, Jerry met Kathy Connaughton, who would later be Kathy Leaf. As the record has it, Jerry sold all of his guns (you had to know Jerry to fully appreciate this) and drove across the country to propose to her. Soon after this they were married and living in Southern California, where Jerry would study toward getting a bachelor's degree in. . . philosophy. But his scientific strivings were still present, and his interest in the notion of suspended animation was percolating, presumably on some back burner, until he heard about a lecture that was being given by Robert Nelson of the Cryonics Society of California (CSC). After attending the lecture, he contacted all of the cryonics groups that were then in operation, and corresponded with them over the remaining years that he was in college.

After receiving his bachelor's degree, he began doing graduate work in biology at the University of Nevada. He was there for just under two years, pursuing a degree in low temperature biology. He eventually left the program because of inadequate instrumentation, exclaiming that through his independent study he knew more about low temperature biology than did his instructors. With an eye toward locating himself amidst better facilities and a better environment for low temperature biology, he relocated with his family in Southern California.

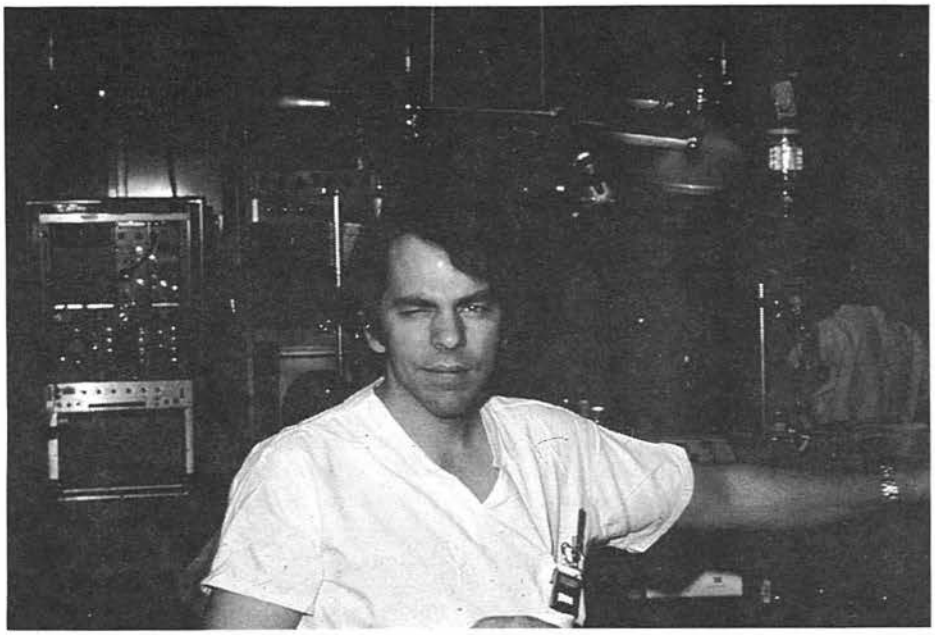
Soon he was working at UCLA in the operating rooms, hoping to gain enough experience and expertise to set up his own laboratory and do his own research. After many years of gaining experience in thoracic (chest) surgery and medical procedures in general, his path reconverged with that of the then-tiny cryonics community in 1977.

"I recontacted Southern California cryonics by attending a meeting sponsored by Trans Time. . . . At that time, I agreed to do the first Total Body Washout (TBW) of a dog, to be conducted at Trans Time's facilities in Emeryville. Shortly thereafter, I met with Fred and Linda Chamberlain of Alcor/Manrise and agreed to help them with dog work if they were interested."

They were interested. They collaborated on a dog experiment and planned more with an eye toward examining the perfusates of the day and developing new ones. So, in 1978, he created Cryovita Laboratories, a company devoted to cryonics research and suspension services.

At this time Alcor was not an active corporation, at least not in comparison to our current level of activities. Most of the experience Jerry gained in doing suspen-

Jerry and Kathy Leaf, with their daughter Kristen.



Jerry worked at the UCLA Medical Center for 17 years.

sions around this time were via his contracting services to Trans Time. It wasn't until a few years later that Mike Darwin moved himself and his Institute for Advanced Biological Studies (IABS) to Southern California, and Alcor began to come into its own as an organization.

> "In 1980 I had the occasion to make personal contact with Mike [Darwin], whom I had corresponded with before. Mike had transported a Trans Time patient to Southern California and then stayed on to help with a second suspension which came on the heels of the first. Mike had been working in a cryonics group in Indianapolis, Indiana for a number of years. At that time I tried to open the door as far as doing what I could to persuade him that Southern California offered an attractive alternative to the difficulties he was experiencing in Indiana. I needed someone else out here to work with who had a background in clinical medicine, such as Mike did, and he himself had begun to move toward clinical models of perfusion — using roller pumps and so on. I felt that he and I working together would allow us both to accomplish a lot more than if we were working alone. He was the only one else in the world who seemed to be aware of the fact that something needed to be done to upgrade the level of care — and to realize that that meant medical technology."

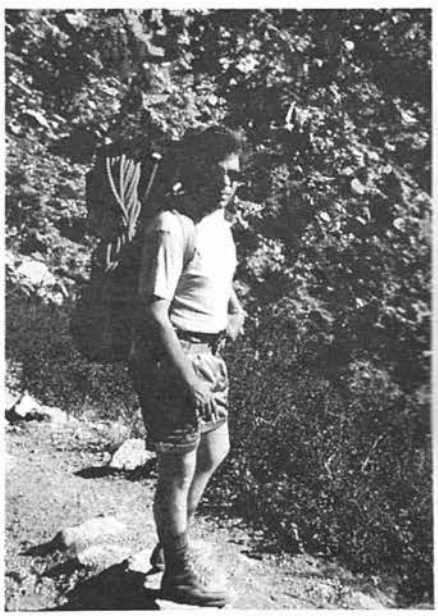
The above is a quotation of great import to many of the readers of *Cryonics* magazine. There is no question that Mike Darwin, who was clearly the single most important driving force in making Alcor what it is today, came out to Southern California solely because of Jerry Leaf. And putting the emphasis on Mike here does nothing to downplay Jerry's contributions; it's simply that they played different roles. As one person described it, no matter how tall a building you are planning, and no matter how much dedication and determination each floor or fixture may take, nothing can be done until the foundation is laid. And if you expect to have a truly monumental and profound structure, the foundation must be the strongest and most dependable part of the whole.

Jerry was that foundation. He provided the equipment, expertise, charisma, and integrity that led Mike and many other people to throw their lot in with him, and hence with Cryovita and Alcor. I can't emphasize enough Jerry's importance as a unifying figure, and as someone that everybody was willing to trust *with his or her life*. It was right around this time that cryonics was — in the public eye — as low as it could go. The Chatsworth disaster was fresh in the minds of those who paid attention to such pursuits and, in general, confidence was at a premium. Jerry was the nucleating agent that cryonics needed and, in many respects, had no right to hope for.

It's easy to explain this, at least on the surface. People *trusted* Jerry, and were willing to follow him into battle, so to speak. This was due in part to a sense of reciprocity; that is, through the briefest conversation and interaction with Jerry, you knew he was your brother in arms. It was as his brother Ron described it: You didn't have to turn around to see if he was backing you up. You just *knew* he was behind you.

But it was something else, too. Jerry didn't just talk a good line. In fact, he didn't much talk at all, unless the circumstances were right. Rather, he presented a set of standards and objectives that made *sense*. And one could quickly see that he knew what he was talking about, and that he was capable of doing everything he described.

> "I think it's very important to avoid the state of mind that people have typically had in cryonics in the past of being willing to accept any kind of injury as long as the tissue has been reduced to the solid state. That seems to have been the hallmark of success in cryonics in the past: if you get them frozen, nothing else matters. I think it's going to take more than this for cryonics to work. It's tremendously important to know that you are preserving cell structure rather than blindly proceeding and hoping that future medical and biological scientists will be able to straighten everything out. . . . If we



start with the attitude: 'Well, this doesn't matter, they'll figure out how to fix that tomorrow,' then we've surrendered before we've started to fight."

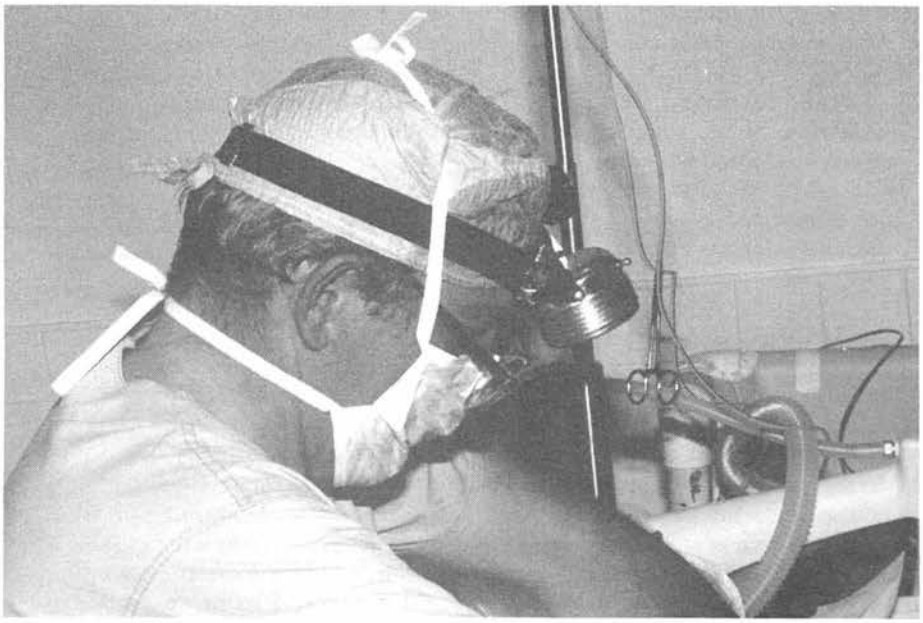
And that's what it was for Jerry: a fight. Not that he was violent or fanatical about what he belived; rather, he was persistent and rational and matter-of-fact. Every issue and problem got his full attention. He was unwavering in seeking out "the whole story" before he made a decision or rendered an opinion. Which isn't to say that his opinions were unassailable. I had my own differences of opinion with Jerry, few as they were, but far more importantly I saw him *change his mind* about matters with far-reaching consequences. People would sometimes say (or more likely *hint*) that Jerry was steadfast to the point of being obstinate. This may have been true, but my impression was always that rarely have I seen someone so willing to adjust his thinking *and, at the same time, so particular about doing so.*

And there was another (and for some more impressive) aspect to Jerry's charisma as a cryonicist. The "pie-in-the-sky," meet-me-on-the-other-side unreasonableness that many cryonics enthusiasts project rarely, if ever, surfaced with Jerry. He dreamed of tomorrow, but he lived in today and he *knew it*. When asked, during an interview, what research areas in cryonics need to be addressed in the next few years, he replied, "Virtually every aspect of the procedure."

"We're like children standing in the middle of the Hershey factory at lunch time. We've got all these goodies begging for our attention in virtually every direction that we look. It's very difficult to decide what to do first. We need to do everything. We need to do virtually everything that clinical medicine itself is beginning to look at."

And that was a goal toward which he would contribute more than any other single person. His achievements in contemporary medicine are astounding even without taking into account his achievements *outside* that demesne. In 1986 he described his "professional" situation with a directness that bears repeating word-for-word:

"I'm in the Department of Surgery, Division of Thoracic Surgery, attached to the UCLA School of Medicine. My primary responsibility is in the research laboratory. However, I've worked on the clinical open heart team in the operating rooms, and I'm a Board Eligible Cardiopulmonary Perfusionist. I've been through the ECMO (Extracorporeal Membrane Oxygenator) training program at the University of Michigan as well. The research has required me to acquire competence in thoracic surgery techniques. I'm involved in training neophyte thoracic surgeons in the laboratory environment as well as participating in research. My expertise in low temperature biology has been useful, since most of the techniques for protecting the heart involve hypothermia. You could say that I've had something more than a graduate education in cardiac physiology. I've been functioning as a scientist and have been co-author of over 25 papers coming out of the UCLA laboratory. This is a distinction usually shared only with MD's and PhD's. I've also set up the entire aortic valve/conduit storage program at UCLA which involves the cryogenic storage of human heart valves and arteries for transplantation into children."



Jerry during the suspension of Arlene Fried.

Jerry took a trip to Germany in mid-1990, shortly after the Berlin Wall came down.

Meanwhile he was President of Cryovita, Vice President of Alcor, head of the Suspension Team, husband to Kathy Leaf and father of two. His *curriculum vitae* is so impressive it reads almost like fiction. And on top of this he was spearheading his own campaign to educate the Society for Cryobiology and establish cryonics as a reasonable pursuit. His efforts toward this end seem to have been mostly ineffective, and yet I wonder what sort of impact we'd have had on the Society were it *not* for his efforts. He was relentless in defending his right to present legitimate research results, regardless of intended applications or motivations. His attitude in this regard, as in most, was very laissez-faire.

> "The legitimacy of my participation, or any other person's, should be judged on the basis of my scientific work. That is the standard that is accepted in science and it is the only standard which should apply."

In fact, Jerry held a libertarian viewpoint in every matter that I ever took up with him, and I think that he would have described himself as an objectivist, to one degree or another. His collection of Rand books and articles was extensive and stood prominently on his shelves. More than anyone else I've ever known Jerry embodied the stoic but well-spoken equanimity of an Ayn Rand protagonist. I remember once thinking of how much he reminded me of Ragnar Danneskjold, the philosophy teacher who became a pirate to destroy the oppression of the State.

This notion struck even closer to home with me when Joe Hovey, Alcor's MIS Director and close friend to Jerry, communicated to me his most prominent impressions of Jerry. "I knew him to be a first-rate scientist, but I discovered that he was also a philosopher who could quote chapter and verse from Plato and Aristotle to Freud and Rand. In addition he believed fiercely in individual rights, and opposed strongly any attempt by any governmental body to suppress any individual or group activity which did not harm others."

That description of Jerry was as evident to me on the day I first met him as it is today. As I write this, I have been working and living as an Alcor employee for one year to the day. My involvement is so brief, historically, and yet total immersion has its benefits. In my one year of involvement with cryonics and more specifically Jerry, I came to respect and care for him as much as I've ever cared for anybody. How could one person be *so much* to so many people? When I'd been here for scarcely a week I contracted a very serious case of food poisoning. Jerry, barely knowing my name, took me to the hospital, half-carrying me most of the way, stood by my side in the emergency room for hours, and even held my hand as I slipped in and out of consciousness in hyperventilation. I barely remember anything of that day, and yet I'll never forget his support.

Jerry was more things to more people than anyone I've ever known. He was on any given day my co-worker, my teacher, my confidant, my doctor, my small-arms instructor, my fellow soldier, my commander, and my drinking buddy. For others around here he was all those things and more, being the voice of reason and very often the unifying factor for Board and staff meetings. He was respected in some capacity by all I ever heard speak of him, within and outside of Alcor. His integrity and veracity as a man and as a cryonicist were attested to by all who knew him, and this in an environment that could best be described as "unforgiving."

He was a complex man. Life around

The Cold Warrior returns. Jerry was in Germany when the Wall went up, in 1961.

Jerry was a constant succession of surprise and bewilderment at the seemingly unending supply of fresh facets he had to present to the world, should he be in the mood to do so. Just when you thought you had him pegged, he would say or display something apparently designed just to thwart your underestimations. Waiting for and appreciating these was one of my greatest pleasures as an Alcor employee.

Jerry was a very hard man to "let down," since he so infrequently and reluctantly relied on anyone for anything. And yet, if any one aspect of this whole unfortunate incident strikes me as somehow *unjust*, as if I inadvertantly *did* let him down, it's that Jerry didn't live to read or hear the honor he deserved. I don't mean money and I don't mean public laurels, though I'd have cheered to see those come his way too. I mean he never got his due from *me*.

Perhaps others feel this way and perhaps not. But as I was putting together this issue of *Cryonics*, and more specifically this article, I was overwhelmed by the pile of letters, phone messages, and articles testifying to his immense value as a man and as a cryonicist. And now, I can't help wondering how Jerry might have felt to see such unabashed appreciation when he was living.

People usually feel guilt when a close friend dies, especially in situations that seem as avoidable as this one. The most common sort of guilt comes in sentiments like, "I should've had told him I loved him more," and "I wish I hadn't taken him for granted so." And yet, even knowing this on an intellectual level, I'm certain that we *did* take him for granted — I know *I* did. When I think about him sitting quietly in his office, with people bustling about him and invading his space for phone calls and computer time and spot meetings, I wonder if he knew how important he was and to how many people. I wonder if he wouldn't have appreciated six months ago an article or a letter like the ones in this issue. I think that, despite the toughness and dedication and hard-nosed demeanor, he would have.

Cryonics: What do you plan to do if this thing really works? What are your long-term goals and ambitions?

Jerry: To be a free man who is allowed to pursue whatever in life allows me to contribute to my well-being. . . I'm probably like most people who enjoy living; I like to use all my senses. I like to see things that look good, smell things that smell good and use my body and mind to the fullest. . . .

Cryonics: That surprises us a little. We figured you more as a space-dog or soldier/adventurer, solar sail ship captain. . .

Jerry: I was getting to that (laughter). . . yes, when I was asked the question as to what I would be in the future at one of the Tahoe meetings I said that I would like to live long enough to become an Interstellar Smuggler — such as Han Solo of *Star Wars*. That would suit my lifestyle well. Particularly if I could find a Princess Leia out there among the stardust.

Jerry's military unit had a tradition of not leaving anyone behind. Alive or dead. Wounded or whole. The resounding sentiment from everyone after the news of his deanimation was (after whatever words of pure grief): Well, now it's our turn.

You don't have to turn around to see if we're behind you Jerry. Now it's our turn.

Photo: Steve Harris

I have been to war, and fought with valor.

I have explored the unknown, and discovered.

I have friends, and I care for them.

I have found a fine woman, and I love her.

I have fulfilled my commitments, and my name is integrity.

I could not share my grief nor my anger, and now I am alone.

I now have to decide, and live or die.

— Jerry D. Leaf

Total Eclipse

Mike Darwin

"To examine the causes of life, we must first have recourse to death. I became acquainted with the science of anatomy: but this was not sufficient; I must observe the natural decay and corruption of the human body... I do not ever remember to have trembled at a tale of superstition, or to have feared the apparition of a spirit. Darkness had no effect upon my fancy; and a churchyard was to me merely a receptacle of bodies which had been deprived of life, which from being the seat of beauty and strength, had become food for the worm. Now I was led to examine the causes and progress of this decay, and forced to spend days and nights in vaults and charnel houses. My attention was fixed upon every object most insupportable to the delicacy of the human feelings... I paused, examining and analysing all the minutiae of causation, as exemplefied in the change of life to death, and death to life, until from the midst of this darkness a sudden light broke in upon me — a light so brilliant and wondrous, yet so simple, that while I became dizzy with the immensity of the prospect which it illustrated, I was surprized that among so many men of genius, who had directed their inquiries toward the same science, that I alone should be reserved to discover so astonishing a secret.

— Mary Wollstonecraft Shelly
Frankenstein

Mike Darwin at a loss for words. Jerry would've liked that a lot. I hardly know where to begin. The hardest thing for me to realize about Jerry's deanimation and his suspension is that it could have happened at all. The man was like gravity, like a force of nature. What do you think when you wake up one morning to find everything floating around the room: that gravity has disappeared in the night?

I had just sat down in front of the television at around 12:30 AM when the phone rang and Hugh Hixon blurted out, "Jerry Leaf is dead of a heart attack in the emergency room of Downey Community hospital." Intellectually, I wasn't surprized. Anyone who knew Jerry and who really thought about it wouldn't have been. Emotionally I didn't feel anything at all except an urgent need to get to him and help him. In fact, it wasn't until 15 minutes or so after I walked in the door at home following his suspension 18 hours later that it began to hit me. Jerry Leaf was in cryonic suspension. Jerry Leaf had deanimated.

I trusted Jerry Leaf more than I trusted any other human being I have ever known. I trusted him with **my life** — on many levels. He was the one person I knew I could always count on. I still can't believe he is gone.

I could wax eloquent about Jerry and his accomplishments and the experiences I had with him and about his courage and his singlemindeness. But I will not. I just don't have the heart to do it. I just can't bring myself to really write what I feel. It hurts too much.

But more than anything I could write or say about Jerry there is the testimony of Thursday, 11 July, 1991. Jerry Leaf was the one on the operating room table and the bottom line is that things went on as they would have during any other cryonic suspension. There was no panic, no uncertainty. The largest error made was a minor break in sterile technique. As several members of the team noted in amazement: "Jesus, technically this was just like any other suspension."

That is the proudest, purest, and best testimony that could be given to or for Jerry. In a moment of terrible crisis his soldiers didn't let him down. They got him out of the jungle and to the medivac, they stayed by his side, and are by it now. He made that possible. He made it all happen by the 20 years of work and planning that preceded that day.

My tribute to Jerry was not and will not be with words I write here or elsewhere about him. The man is a Giant and those who cannot or will not see it are either blind, or lost in his shadow. Rather, my "tribute" will be to *continue*. To not give up. That is sometimes a very hard thing to do. Leaving aside all the technical skill and know-how he gave me, leaving aside his loyalty and his friendship, the most important things I learned from Jerry Leaf are NEVER GIVE UP and NEVER LET A FRIEND DOWN. Now to practice them, and to repay the debt of gratitude I

owe by carrying him as far as I can towards safety. In this I know I will have the help of many others.

Five years ago I interviewed Jerry for *Cryonics*. I had the following to say about him at that time. It is just as true then as it is now:

> "Almost singlehandedly Jerry has transformed cryonics, at least cryonics in Southern California, into a credible professional operation. He has also, more than any other man improved the quality of care delivered to suspension patients. But most importantly he has brought with him to cryonics a degree of integrity and high values which were sorely lacking before. Jerry's integrity, coupled with his total commitment to the use of reason and the scientific method, has forever changed cryonics and attracted the best and brightest from around the world to make their home in Orange County and to become part of the Cryovita (and thus Alcor) family. Both of us, the editors of *Cryonics*, are here doing the job we're doing almost exclusively because of Jerry Leaf and the values and skills he represents.
>
> However, integrity, values, skill, competence — while these things describe Jerry, and while they are necessary and even critical ingredients in the making of a world shaper — they are not enough. It takes more — it takes sensitivity, fairness, and humanity to attract and hold **people** and to gain their loyalty and love. Jerry is blessed with these things in abundance. Though blessed is the wrong word to use, since it implies that "it just happened." To know Jerry is to feel completely and at once that you are in the presence of a man who has taken nothing, but who has made and shaped himself completely. This interview will hopefully provide a glimpse of that tremendous self control and of the immense reservoir of concern and competence which accompanies it."

Oh Jerry, I'm going to miss you so much. Words will never tell. Words will never tell.

Until we meet again.
Mike Darwin, 29 July, 1991

An Appreciation of Jerry Leaf

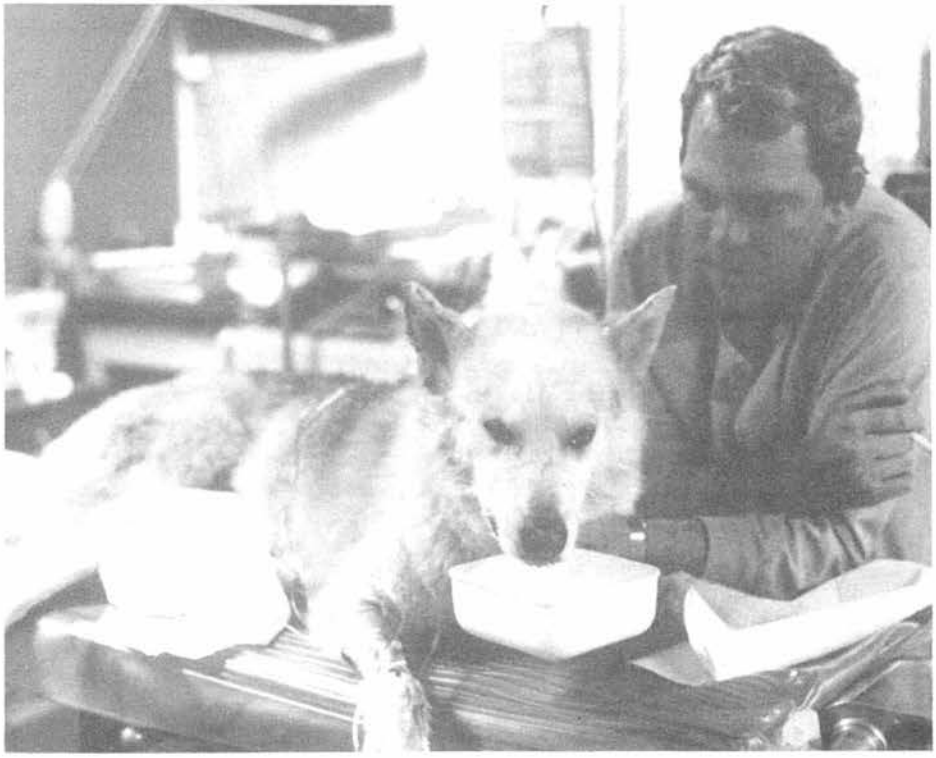
Steve Bridge

We're all trapped in a sea of drowning people. The shores are rocky and slippery and no one can pull himself out alone. Only a group working together can throw someone up on the shore, possibly to be rescued by the unknown people who inhabit that world. But some are stronger than others; some do the work of ten while many only cheer. Jerry Leaf was one of these giants.

During the past few days I have been reading *Doctors: The Biography of Medicine* by Sherwin B. Nuland. It is the history of medical discovery, told through biographies of men like Vesalius, Harvey, Lister, and other physicians who changed the way medicine was done. If a similar book is ever done about cryonics, a large chapter should be devoted to Jerry Leaf. Jerry was the first person with a medical background to devote himself to cryonics. Along with a very small number of other people, he transmuted cryonics from the realm of mortuary science to the realm of heart-lung machines, medicine, and high technology.

Jerry is the first true technical leader in cryonics to go into suspension and the first Alcor decision maker to do so. In many ways, Jerry is the most important person ever placed into cryonic suspension. Others were better known to the general public; others were more involved in the very beginnings of cryonics; the suspension of others made more news. But no one else currently in suspension ever contributed as many ideas, techniques, time, money, and emotional energy as Jerry Leaf.

Mike Darwin and others will no doubt remind you of the many things Jerry Leaf accomplished for Alcor and for cryonics. They will talk about his introduction of extracorporeal technology, his insistence on high quality medical procedures and equipment, his establishment (along with others in Alcor) of the principle that the emphasis in cryonics must be on pro-



cedures and policies which are best for the patient and on research to find out what those procedures should be, and his constant striving for improvement. They will talk about his heroism in the face of attack from California authorities, about his calmness in the many sudden emergencies that happen during suspensions, and about his moral courage in his battles against the Society for Cryobiology.

No one knew the complete Jerry Leaf, and many knew him better than I did. I worked with him during my three months at Alcor, when I participated in two suspensions, and I worked with him on three other suspensions in earlier times. I understood and respected his abilities, his knowledge, and his accomplishments. But I admired him most because he was one of those few people who knew what he was doing and why he was doing it. I mean this both in the specific sense of the details of how to do cryonic suspensions and in the larger sense of "why do cryonics at all." Jerry did not rush into any procedure or decision. He always made sure he understood what his choices were and what his facts were before going forward. He pushed each of us to do the same. He hated what he saw as hasty decisions based on emotion (although, like each of us, he occasionally let his own emotions get in the way). He never let people get away with pat or easy answers and constantly made us — his co-workers and co-decision makers — defend our positions. This was frequently aggravating, and I believe that his opinions were sometimes wrong; but his arguments made us analyze our positions and generally made the result better.

I am sure he did not rush into his involvement with cryonics, either. However, when he understood the reasons in favor of cryonic suspension, his decision was permanent and unwavering. His service in Vietnam had given him a knowledge of arbitrary death and a hatred of it. I heard him say once that he had spent his early years "delivering death," but that he had resolved to "spend the rest of his time preserving life." While no one can know the motivations of another person, it seems to me that he meant this more as his duty than as a reaction to guilt.

There is so much more that Jerry Leaf wanted to accomplish. Unfortunately, writing was a hard job for Jerry and many of his ideas and much of his knowledge were never recorded. I know of no remedy for that other than to study what he did accomplish and what he discussed verbally with people. We will move forward from there.

We are still trapped in that sea of drowning people. One of our strongest finally tired out and nearly slipped beneath the waves. Because of his training and preparation, we as a group had the strength to place him on the shore. Now we must go on and become stronger and find others to work in his place. One person can never replace Jerry Leaf; so we must find other people and learn to progress in whatever direction their talents will take us.

As we mourn with Jerry's family over this loss, let us not lose sight of our goal: we want Jerry Leaf back and we want to be in that future with him. The only way that his life and suspension mean anything is if we follow in his footsteps. Let's start walking.

A Tribute to Jerry Leaf

Mike Perry

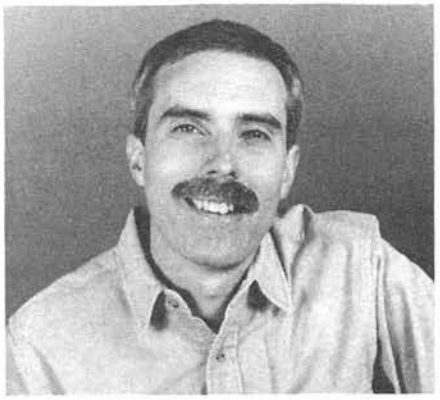
It was with shock and sadness that I learned of Jerry Leaf's fatal heart attack, which occurred the night of July 10. At the time I was in southern Baja California, and out of easy contact with affairs at Alcor. The next day I would see one of nature's glorious spectacles, a total eclispe of the sun, unaware of events closer to home. Jerry had lent me some equipment for this expedition — a sleeping bag and a first aid kit. (He himself had expressed interest in going along, but said his schedule didn't permit it.) As a final irony, I was involved in an auto accident the next day, July 12, which required an airlift out of Baja and hours of delicate plastic surgery. I was swathed in bandages and a little unsteady, though expected to fully recover when, on returning to the lab on the 14th, I learned about Jerry.

Jerry was a close personal friend, a brave and decent man, and a person whose skills in Alcor suspensions and other affairs in cryonics are presently irreplaceable. We lose much with Jerry not there, yet I believe we must not despair. We must recover and extend our capabilities and expertise, and we can do all that and more, inspired by the example he set.

Jerry is frozen now, awaiting confirmation of the cryonics premise to which he devoted so much of his life. I am optimistic that his hopes will be realized, and that within a century or two we will look back on this somber incident with some relief and amusement.

Jerry Leaf Enters Cryonic Suspension

Mike Darwin



Transport Team
Mike Darwin, *Transport Team Leader*
Ralph Whelan, *Driver, Team Member*
Tanya Jones, *Medications, Scribe*
Carlos Mondragón, *Legal/Executive*

Suspension Team
Mike Darwin, *Suspension Team Leader, Circulator, Housekeeping*
Hugh Hixon, *Laboratory Analysis, Perfusate Preparation*
Tanya Jones, *Physiological Monitoring, Scribe*
Carlos Mondragón, *Administrative, Photographer*
Thomas Munson, M.D., *Assistant Surgeon*
Paul Genteman, *O.R. Nurse*
Scott Greene, *O.R. Nurse*
Russell Whitaker, *Perfusionist*
Naomi Reynolds, *Perfusion Assistant, Housekeeping*
Ralph Whelan, *Perfusion Assistant*
Bill Jameson, *Samples, Perfusion Assistant, Housekeeping*
Fred and Linda Chamberlain, *Cool-Down Technicians*
David Christiansen, *Logistics Support*
Lawrence Gale, *Logistics Support*

Crew For Transfer Dry Ice to Liquid Nitrogen Cooling
Hugh Hixon, *Crew Leader, Engineer, LN2 Cooldown Tech.*
Max More, *Strong back*
Ralph Whelan, *Strong back*
Carlos Mondragón, *Strong back*
Mike Darwin, *Strong back*
Fred Chamberlain, *Strong back*
Lawrence Gale, *Strong back*
David Christiansen, *Probe Wrangler*
Bill Seidel, *Video Recording*
Linda Chamberlain, *Video Recording*
Tanya Jones, *Photographer*
Everyone, *Housekeeping*

Introduction

At approximately 23:15 on 10 July, 1991 Alcor Suspension Team Leader Jerry D. Leaf experienced cardiac arrest in his home in Downey, California. His wife Kathy, who is a Registered Nurse, began CPR immediately and summoned the paramedics. After an unsuccessful attempt to establish an IV and re-start his heart with defibrillation, Jerry was transported to the Emergency Room of Downey Community Hospital, where he arrived at 23:41.

At the hospital vigorous attempts to resusciatate him were carried out for over 45 minutes, but to no avail. Alcor was notified of the situation by the ER staff at approximately 00:15. At 00:35 Jerry was pronounced legally dead by the ER physician. The ER was staff incredibly cooperative (it should be noted that Jerry's wife Kathy is head of Nursing at the hospital) and continued CPR for another 45 minutes and administered some transport drugs.

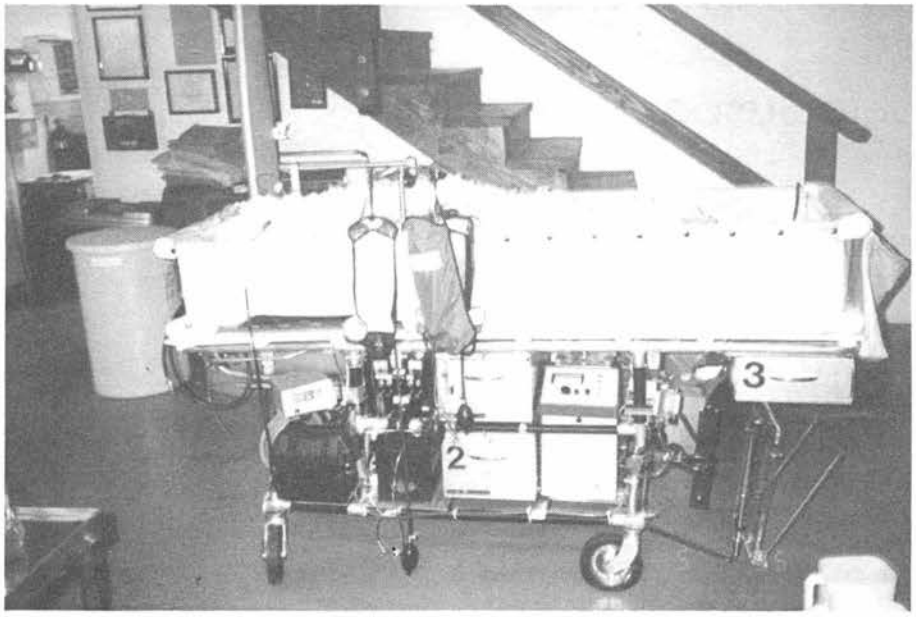
Transport Team Dispatched

A transport team consisting of Ralph Whelan, CRT, Carlos Mondragón, Tanya Jones CRT, and Mike Darwin, CRT, departed the Alcor facility at 00:50. When consideration is given to the fact that with one exception all personnel responding needed to be wakened and summoned from home (Mike Darwin was home, but awake) this response time is excellent. (Nevertheless we are working on ways to improve it further.)

When the Transport Team arrived at the hospital, CPR had been discontinued and Jerry's head had been incompletely packed in ice in plastic bags and he had been placed on a cooling blanket. His rectal temperature was 35 ℃.

Since Jerry experienced cardiac arrest suddenly and without a prior history of heart disease, he was automatically a Medical Examiner's (ME) case. Initially it was hoped that the ME would waive the case and give an ME's release number, enabling Alcor to take immediate custody and begin administering transport medications and continue external cooling.

However, when the Los Angeles County ME's office was reached by the ER physician they refused to issue a release number and ordered that no further transport medications be given. However, they did allow Alcor personnel to transfer



Jerry in the Portable Ice Bath atop the MALSS cart shortly after arrival in the facility.

Jerry to the portable ice bath (PIB) and begin cooling him with crushed ice in direct contact with his skin. The Transport Team was further informed that it would be sometime after 09:00 before an investigator could be sent out to determine if the ME was going to take custody and/or perform a partial or complete autopsy. This meant at least seven additional hours of ischemia (no blood flow).

Thus at 02:13 Jerry was transferred onto a bed of crushed ice in the PIB on the Mobile Advanced Life Support System (MALSS) cart and covered over with additional ice. He was then moved to the hospital morgue walk-in cooler for refrigeration until the ME investigator arrived.

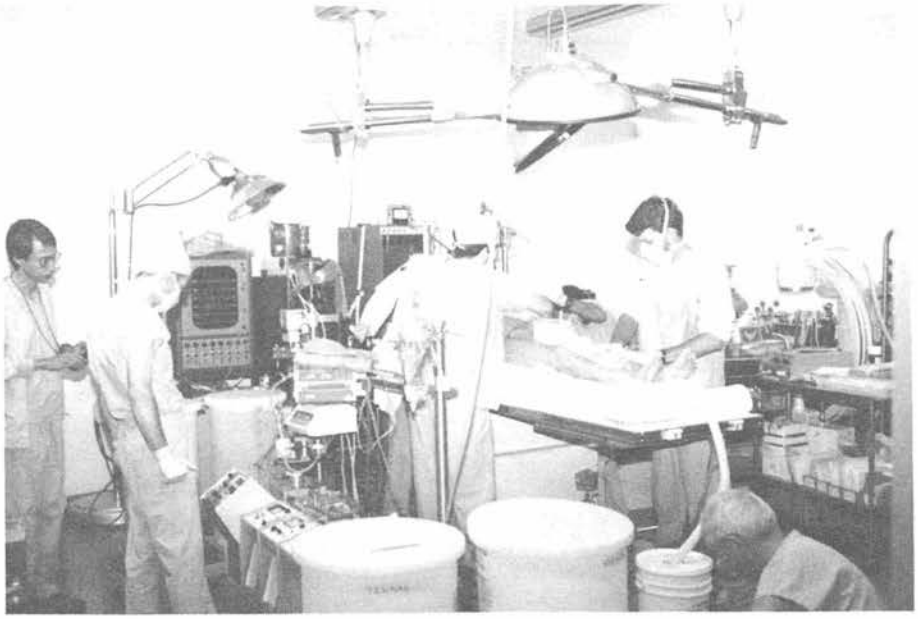
Throughout this interval Saul Kent was hard at work on the phone making arrangements to fly in our back-up surgeon and handle other logistic details. When it was determined that the ME was not going to release Jerry, Saul was appraised of this and he began an effort to reach Alcor attorney Chris Ashworth. Chris had recently moved and we did not have his new home phone. By an incredible stroke of luck Chris was working late and when Saul (in a last-ditched effort) called the law office at about 02:00, Chris answered the phone!

Once Chris was told of the situation he went into high gear and placed a phone call to Judge Aurelio Muñoz and explained the circumstances. Judge Muñoz then offered to issue a court order ordering Jerry's immediate release to the Alcor Transport Team. After some quick discussion Carlos decided to take this course of action and within a short time Judge Muñoz contacted the Administrator of Downey Community Hospital and ordered Jerry's immediate release. The ME was also notified of this court order. The ME then contacted Carlos and a compromise was worked out wherein the ME would have an investigator on the scene within 40 minutes and the ER physician would draw blood via a femoral stick for the ME so that a toxicology screen could be done to rule out foul play via poisoning. The ME investigators arrived in slightly under 40 minutes, carried out an external exam (to rule out trauma) and made a photographic record.

We felt it important to make this compromise even though it resulted in another hour's delay. Our reasons for this decision were that 1) given Jerry's condition an added (relatively) short period of time was not going to make much difference: with such a long down-time most of the up-front injury had already occured and there was not much we could do to hasten cooling or improve the situation beyond external cooling which was already underway, 2) The ME was being reasonable and friendly and, considering the circumstances and the delicate nature of the situation we felt it was prudent to be reasonable in return. We know we will have to work with the LA ME's Office in the future, and creating a bad situation will not make this any easier, 3) We wanted to reduce the chances that there might later be questions regarding the cause and mode of death by allowing the ME to do the modest examination they requested and to take the toxicology sample they needed.

By 04:12, Jerry had been loaded into the amubulance and transport to Alcor was underway. His temperature at this time was measured at 19.8 °C via a thermocouple probe placed in his pharynx (throat). At 04:19 cardiopulmonary support (CPS) was briefly established to cir-

Scott Greene looks on (seated) as Ralph Whelan (center) and Russell Whitaker (right) set up the heart-lung machine.



Repacking Jerry in ice after transfering him from the PIB onto the operating table.

culate transport medications and facilitate cooling. External cooling using a water circulating pump and perforated hose array (SQUID) was also begun at this time.

A modfified version of the usual Alcor Transport Protocol was given. When the gastric tube was placed to give the Maalox, it immediately became filled with blood. The Maalox was given and continuous suction established. Over the 40 minutes of HLR operation, over 1500 cc of blood was suctioned from the stomach; a not unexpected result of the delay in establishing good cardiopulmonary support and the inability to neutralize corrosive stomach acid with Maalox shortly after cardiac arrest. Administration of transport medications was completed by 04:52 and CPS was stopped at 05:22 because of inadequate blood circulation.

Jerry arrived at Alcor at 05:26 and was moved from the ambulance to the central work area to continue external cooling while final preparations were made for surgery and cryoprotective perfusion. Our back-up surgeon arrived a few minutes later.

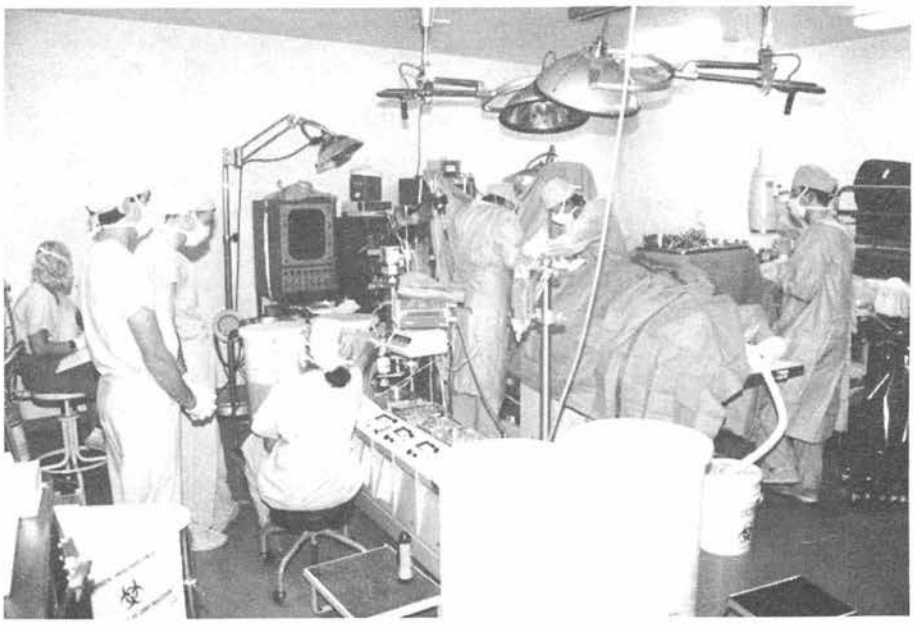
Because of his weight (approx. 90 kg) and lack of blood circulation (a third of his blood volume had been suctioned from his stomach!) Jerry cooled very slowly; his temperature upon arrival at the facility was 18.6 ℃ pharyngeally and 28.0 ℃ rectally.

By this time the entire suspension team had assembled. We were very fortunate that Russell Whitaker, whom Jerry had just completed training to set-up the heart-lung machine, was available. Russ had received an unexpected job offer and was scheduled to leave for Switzerland the morning of the day Jerry had his heart attack. A last-minute change in plans delayed Russ' departure. Russ had planned on training Alcor staffer Ralph Whelan before he left; however this had not proved possible. Russ' presence was especially important since Jerry had trained him on using a new circuit which only Jerry and Russ had familiarity with. Ralph thus got some unexpected on-the-job training in setting up the circuit.

At 08:49 the heart-lung machine was primed and ready and Jerry was moved onto the operating table. Prep for surgery began at 09:13 and surgery itself was begun 09:25. A burr hole over the frontal lobe was made to allow visualization of the brain surface. Access to the circulatory system for circulation of cryoprotective drugs (perfusion) was through the great vessels of the chest (via division of the breast-bone). Blood washout and cryoprotective perfusion were begun at 10:40. Blood washout was excellent with no sign of clotting. This was apparently as a result of heparinization by the hospital staff during the period of CPR following the pronouncement of legal death.

Shortly after the start of perfusion, brain swelling began to develop. The rate of addition of glycerol (the cryoprotectant used to minimize freezing damage) was increased to try to counter the swelling and pulsatile flow was also used in an attempt to minimize its progression. Neither of these maneuvers was particularly successful, and brain swelling continued throughout the remainder of cryoprotective perfusion.

At 12:06 brain swelling was sufficiently severe that a decision was made to terminate perfusion pending evaluation of the glycerol concentration in the venous perfusate (which should reflect the true tis-



Surgery underway to connect Jerry to the heart-lung machine for cryoprotective perfusion.

Twenty-five minutes into perfusion: most of the Suspension Team going full tilt.

sue concentration of the drug). Glycerol concentration was determined to be 1.62 M and perfusion was discontinued at 12:23. The final venous glycerol concentration was 2.36 M. However, it is doubtful that the terminal brain glycerol concentration was much over 1.5 M since cerebral edema (swelling) was so severe.

After removal of the perfusion cannulae, the heart was examined for evidence of infarct. The posterior and left inferior walls of the heart were edematous and discolored and a dark 3 cm long clot was noted in what appeared to be a coronary vein. It appeared that the cause of cardiac arrest was a massive myocardial infarction.

All wounds had been closed by 13:16 and Jerry was cleaned up, placed inside a heavy plastic bag and transferred to the cooling stretcher for loading into the Silcool silicon oil bath for cooling to -79 °C. Jerry was positioned in the Silcool bath at 13:37 and cooling was begun at an average rate of 5 °C per hour. Cooling to -79 °C (as measured by the pharyngeal probe) was completed on 12 July. Cooling was monitored and controlled by Fred and Linda Chamberlain who drove down from Northern California and then marathoned through till about 07:00 on the 12th!

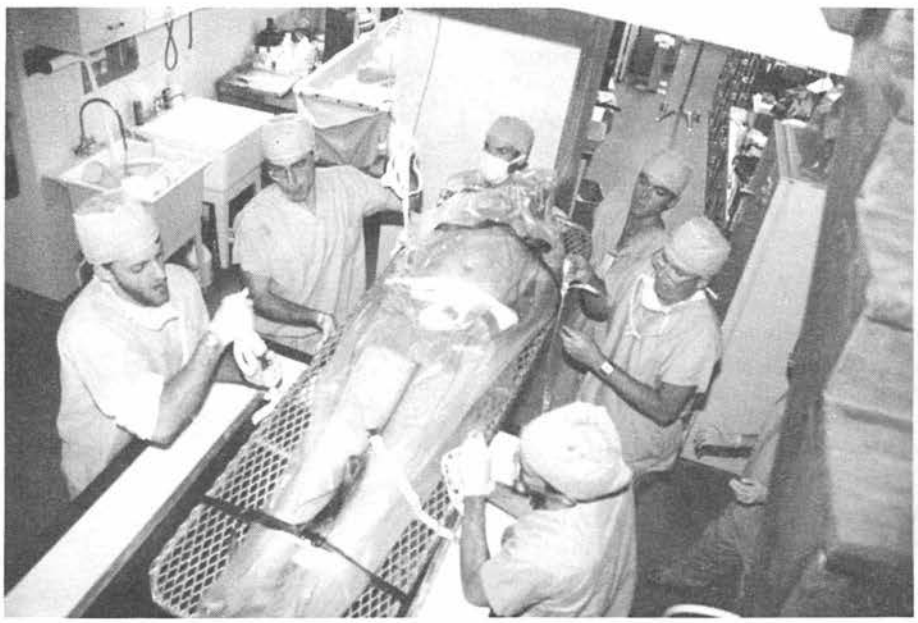
Credit also needs to be given to the new Barnant automated temperature monitor. This new device (purchased by Jerry via Cryovita a few months before) performed spectacularly. The unit automatically scans up to 12 probes at intervals from as low as three seconds (due to printer constraints our minimum scan interval is 15 seconds) to a maximum interval of 90 minutes. The unit can be interfaced with a computer to allow for direct dump of data to disk and, more important, to serve as the data collection end of an active temperature descent controller. The unit also has alarm features.

It is hard to understate how much effort this unit saves and how much more data it allows to be collected (a mixed blessing). In the past a human had to log temperatures by hand every 15 minutes over a period of 24 to 36 hours. While a human is still needed to control refrigerant addtions and to supervise, not having to log temperatures every 15 minutes is a godsend. We hope to automate the cooling system even further in the near future using the Barnant unit as the monitor/controller of the system and a PC as the recorder.

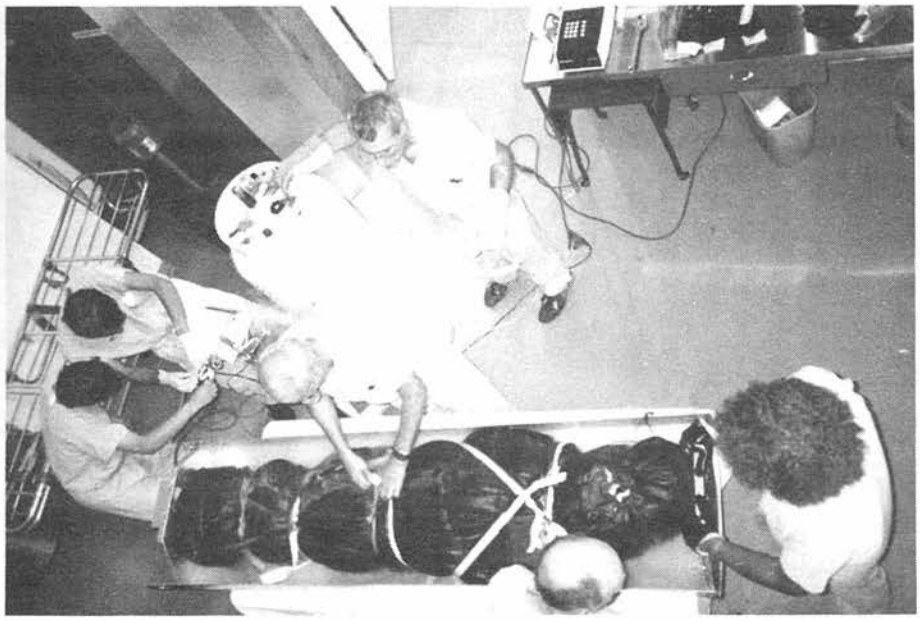
On the afternoon of Monday the 15th, Jerry was removed from the Silcool bath and transferred to a heavy-duty mummy-type sleeping bag inside an aluminum pod. The pod was then hoisted through the skylight in the patient care bay and lowered into Bigfoot dewar #3 for cooling to liquid nitrogen temperature. Cooling to -196 °C was commenced at 21:00 and completed (measured pharyngeally) at 06:00 on 17 July. Cooling to liquid nitrogen temperature was at a rate of approximately 6 °C per hour.

Reflections on the Suspension

There are at least two ways to evaluate any cryonic suspension: by absolute criteria and by relative criteria. By relative criteria Jerry's suspension went phenomenally well. Personnel responded promptly and in a reasonably organized fashion, although there were a couple of



Jerry is hoisted up and into the Silcool bath for cooling to dry ice temperature (-79°C).



Closed up in the sleeping bag, Jerry is secured to the pod by Hugh Hixon. Mike Darwin stands ready with an LN_2 sprayer to hold the line on temperatures while Carlos Mondragón and Dave Christiansen sort out the temperature monitoring probes.

oversights: the transport data logging sheets were left behind and the nimodipine was left in the freezer (and thus was unavailable for administration). The unavailability of the nimodipine is not considered significant due to the long period of CPR time in the ER and the long ischemic (no blood flow) period; nimodipine is likely to be of benefit only if administered at the very beginning of cardiopulmonary support (CPS). Data was logged on regular paper and was very complete.

The availability of Chris Ashworth, his vigorous efforts and good judgment, and the willingness of Judge Muñoz to issue a court order to release Jerry after being wakened in the middle of the night leave us speechless with both amazement and gratitude. There was much good luck in the unfolding of these events!

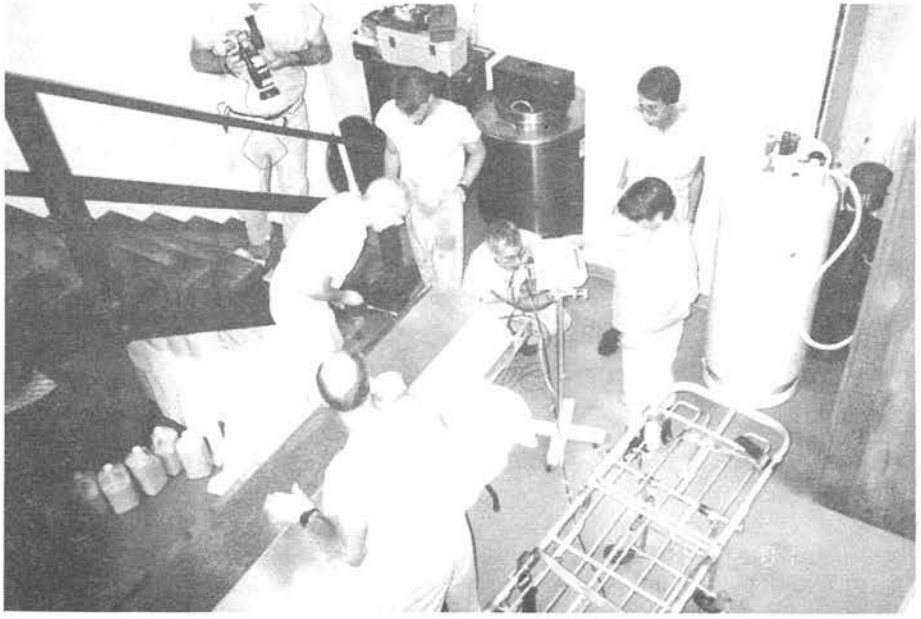
Similarly, cryoprotective perfusion and dry ice and liquid nitrogen cooling proceeded more or less routinely. It is true that Mike Darwin was extremely busy and unable to give the usual supervisory attention and that this resulted in minor problems such as data being recorded in the wrong column on the data sheet and some data regarding perfusate reservoir levels being lost, but these errors were not significant and did not effect the outcome of perfusion. Relatively speaking, the suspension went very, very well.

From an absolute point of view the suspension was far less than optimum. There was a prolonged period of warm and cold ischemia in the absence of either cardiopulmonary support or blood substitution with an appropriate tissue preservative solution. There was obvious injury to the brain capillary bed as evidenced by the development of cerebral edema and probably injury to the brain cell membranes from autolytic degradation by phospholipases. While these injuries in and of themselves are not likely to be insurmountable in terms of repair, they are complicated by the fact that their presence prevented the introduction of the high concentrations of glycerol (3.5 M to 4 M) required to protect against mechanical injury during freezing. Only time will tell as to what price has been paid in terms of loss of information encoded on an ultrastructural level.

It is more than a little ironic that much of the effort exerted by Jerry during his career in both medicine and cryonics was unavailable to him personally when the need arose. His professional career, which spanned 15 years of work at the UCLA Medical Center, was focused on the development of techniques for treating heart attack: especially controlling "reperfusion injury" to the heart after a clot in a coronary vessel was removed or bypassed and circulation was re-started.

Similarly, much of Jerry's work in cryonics concerned itself with eliminating ischemic injury to patients and improving transport techniques. Sadly, his benefit from these advances was also minimal.

Nevertheless, Jerry did make it into suspension and some degree of cryoprotection was achieved; certainly significant membrane cryoprotection was achieved with both sucrose and 1.5M glycerol. Considering the circumstances, this in and of itself is nothing less than amazing.



Hugh Hixon closes the pod in preparation for hoisting it into the Bigfoot for cooldown to -196°C.

The Decline and Fall of LES, Part 2

Michael Perry

With much of the work falling on Cooper himself, in spite of the help, the newsletters began to fall behind schedule. Soon they were months behind — the May, 1969 *FWR* (*Freeze, Wait, Reanimate*) seems to have come out around October of that year or later. Despite the worsening situation, a volunteer helper, Harriet Wellisch, left an almost idyllic description of the Lab site, and other interesting observations when she visited:

"In September I took a trip to Washington, D.C., (part vacation and part in answer to the call for volunteers). I advised Mr. Cooper that I could type, took a bit of shorthand, and was an artist ... of sorts. Ev thought I might do a few sketches of the farmhouse, etc., take some photos and perhaps write a comentary for *FWR*. Literate I may be, but literary I am not ... so bear with me as I attempt to relate my little venture to you.

"It was early in the morning. Loaded down with sketch pads, pencils, camera et al, I folded myself into Ev's Volkswagon and off we went. It was a long trip from Hyattsville, Maryland where I was staying, to the farm. To say I was thrilled would be an understatement, even Ev's description of how primitive the area was failed to dim my excitement.

"A rough, narrow dirt road, surrounded by lush uncultivated greenery led to a small padlocked fence thrown across the road. Past this and we were on LES land. Our first stop was to pick up a feline of unknown parentage, who wandered onto the land one day and took possession of the property as only a cat can. Cat, (well, what else would you call him?) gave me the once over and decided that I was acceptable ... thus with Cat purring contentedly in my lap, we drove to the farmhouse.

"I fell in love with the house at first sight. It is an ancient two story building, (with a wing recently added). Tilted at a crazy angle, it is a ramshackled, weathered, eccentric building with a rustic look that is charming ... warped logs, falling timbers and all. Inside there is a stove, sink, refrigerator, some furnishings and dominating the front room, a huge pot-bellied stove. It might not be the most comforting place, but it is so delightful. The best thing of all ... at least to a city gal like me ... is the outhouse. The only thing missing is a crescent in the door. The house is surrounded by a tangled mass of trees and undergrowth with a liberal sprinkling of aromatic mint, which grows with a persistent abundance, giving the air a refreshing minty breath.

Ev Cooper

"I took a few photographs, made a few sketches and continued on to the lab, located about a hundred yards from the house. With Cat leading the way, we took a circuitous route, so that Ev could show me the pond. He explained that when properly dammed, it was filled with clean water. Now it was polluted with an edge of white mold, (actually slime, but mold sounds so much nicer). Never-the-less, with the gnarled trees growing right down to the water's edge, it was a romantic picture.

"We walked around a no-path path. The forest was alive with the movement of creatures ... some like the Leopard Frog, I was quick enough to spot it before it went into the undergrowth ... and yes Virginia, there is a Pileated Woodpecker!

"The lab is a deceptively simple building which stands out in a clearing overlooking the pond. One thing is apparent, both here and at the farmhouse, a tremendous amount of work has been done. Unhappily, because there are not enough volunteers the work is progressing slowly.

"As with any organization, LES is perpetually short of money, and while funds are most necessary, important too is the active involvement of its membership. There is a constant call for volunteers ... and my trip to the farm showed what could be done if enough members would give, not only their dollars, but their time as well. While there, I saw a new perspective. Civilization now seems to be at the point of annihilation ... and so it must have appeared to sages of old ... who in the past bemoaned the pettiness of man ... often treacly and insincere. But each time civilization stumbled into another age, a little better, a bit more enlightened than the one before it. LES is a part of the new age coming. An age where people care more about people and respect individual

human life. LES inculcates this with its interest in the preservation of man and the betterment of his surroundings."[10]

Unfortunately, LES would not survive long, leaving it to others to carry on the work it had begun. Cooper, staggering under a too-heavy, self-imposed regimen, began to take more interest in the sailing excursions he sometimes took. *FWR* would struggle on for a few more issues, culminating with number 60, dated September 1969, which was actually released around Christmas, and written by helpers. In 1970 Cooper was still active at the lab site, though no longer publishing. Soon he must have realized the game was over, though apparently there was still a lot of mopping up to do. In May 1971 he would write, "Gad, I'm so smothered in back LES work I can't write sensibly."[11] After that he would find increasing refuge in the simpler world of sailing. He had had a childless marriage that had ended in divorce, and was now without family ties. His boat could be piloted singlehandedly though Cooper preferred a companion or two. In May 1972 he would report from the Bahamas:

"I'm ... at a small inn in Gregorytown, with a puppy dog licking my toes & The Bahamians having a good time all around, sipping 7-Up & other things. We are anchored at Hatchet Bay, Eleuthera Island. It is a beautiful island, no doubt about it.[12] ... LES is definitely in suspended animation as the boys I turned the work over to have disappeared or been incommunicado. At least, they don't answer. So I'll have clean up work to do. ..."[13]

Apparently little was actually done. The October 1974 *Outlook* reported that the society would "settle its affairs and dissolve ..." and added:

"The society's charter was lifted a couple of years ago for failure to file reports. Alice Brazda, who loaned LES a sum reported to be $20,000 to erect a building, has been ill and in need of the money ... .

"At one time LES had a mailing list of about 2,000. Ev Cooper, Bill Albaugh, John Prince Jr., Peter Kline, and the others once active in LES played an important part in getting the cryonics program off the ground ... ."[14]

For a few years longer Cooper would continue to sail, being well-liked wherever he stopped. On October 9, 1982 his boat, moored in the harbor at Nantucket, Massachusetts, was damaged in a severe storm. An insurance company representative said the company would probably not be able to cover expenses. (This was confirmed later when the mishap was ruled an "act of God.") Impatient to head south for the winter, Cooper made makeshift repairs, and set off alone. He was last seen October 21, leaving Martha's Vineyard nearby. A few days later there was another severe storm ... .[15]

If there is a common thread running through the latter phases of Cooper's career, it would seem to be that of escape: first, to the wilderness with the lab-to-be-finished, and when that too proved unworkable, to the open sea. In cryonics there are many pressures, now as then, and we who feel them would all like to escape. Often I've had occasion to envy that man in the restaurant in the Bahamas, with the puppy at his feet ... . On the other hand, we have our own great escape we are trying to engineer, something our lives and those of others are depending on. So we will have to work hard, before we too perhaps can take a very extended — but safer — vacation.

References:

10. *Freeze-Wait-Reanimate* **57** (May 1969) 2-3.

11. Letter to Jerry Cullins postmarked 20 May 1971.

12. Postcard to Jerry Cullins postmarked 23 May 1972.

13. Letter to Jerry Cullins postmarked 29 May 1972.

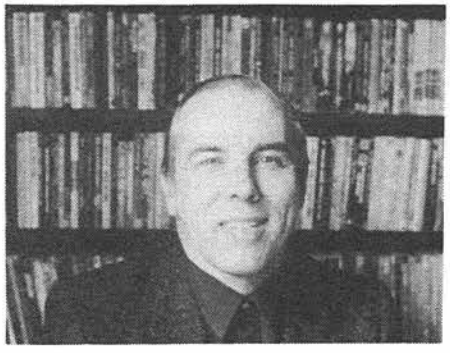
14. *The Outlook* **5(10)** (Oct. 1974) 2.

15. *Cryonics* **32** (Mar. 1982) 8; private correspondence.

Future Tech

Virtual Couch Potatoes

H. Keith Henson



Arel, Amber and I had just gotten back from a trip to Mazatlan where we saw the total eclipse July 11, 1991. I wrote most of this article sitting by the pool at the hotel where we stayed, watching a bunch of kids splash and thinking how nice it would be to run the eclipse over again.

A description such as I write is the palest shadow of the actual experience. Someone commented that a total solar eclipse is the most impressive show put on by nature that does not include a significant chance of being killed. (The Mexican buses we rode over narrow, twisting roads, passing on blind hills, are another story.)

Much of the Mexican coast was

socked in that day, but the group of Canadian astronomy buffs we were with included two meteorologists who had scouted out a likely location with a long north-south road so we could move out from under the typical-sized cloud. For all I know, they may have done an anti-cloud dance as well. Anyway, it worked. Nine busses from our group wound up on a beach right in the middle of a clear spot from first touch to just before the moon left the solar disk. Totality was a surprise even to people who had seen a number of total eclipses. It did not get as dark as usual. Recent sunspot activity has been at near-record levels (the aurora has been seen clear down to San Francisco) so the solar corona was nearly as bright as a quarter moon. Viewed through binoculars, there were three prominences burning out beyond the edge of the moon like highway flares! Where we were, totality persisted for 6:30. (Right in the middle of the path, it reached 7:01 or so.)

Altogether, an awesome sight, well worth the effort to go see it. I now understand the intense addiction a lot of people have for seeing every solar eclipse they can. The next solar eclipse this long will be in 2132, a long wait even for a cryonicist. (I wonder if an article on cryonics as a method to see more eclipses might be of interest to an astronomy magazine? Some of these folks are so dedicated that they might see cryonics as just another way to travel to an eclipse!)

As I was sitting by the pool, I got to thinking about playing the solar eclipse over, not only the part people captured on film of the sun, but the feel of sand, the view of palm trees, clouds, confused sea gulls, breeze, incredible 360 degree "sunset," sounds of the other people, and all. My total sensory input is certainly under 100 megabits per second (of which it is said that people store a few bits per second). The optic nerve transmits about a megabit per second, and it is the dominant input to the brain. A TV channel, for comparison, takes about 5 MHz of bandwidth, but there is a lot of redundancy. In any case, the computation to simulate an environment to a human without significant sensory enhancement will not be very expensive. Moving the data stream is not hard either; optical fibers already transmit data in the thousands of megabits per second range.

Significant progress in simulated environments goes by the name of virtual reality. Virtual reality is still crude, much like early movies, but improvements are being made at a fair clip. Given nanotechnology, connecting directly into the nervous system would be possible, it would be even easier to connect to people who were mostly or entirely using hardware to support their minds. Reproducing the sensory input for a solar eclipse would be an obvious project. People will eventually do such a good job that it will become impossible to distinguish the real world from an artificial reality. When artificial reality gets this good, will we be able to resist the temptation to move into it?

Besides "being there" for solar eclipses, there is a lot you can do in artificial reality; there are problems you can "solve" which are either impossible or very, very difficult in the real world. "Impossible" is used here in the sense that the universe as we understand it does not seem to permit something. Time travel comes to mind. An artificial reality's state could be stored at intervals and restarted from a selected point, either with an additional person, or by feeding memory of the "previous future" into one or more of the inhabitants. This gives rise to subjective time travel, at least back to the oldest stored state of the artificial reality. (Subjective faster than light (FTL) travel can be done in the real world. You pull the lever back to warp 8 and it slows down your perception of time by 10^8. At that rate, it takes a subjective 8 hours to cross the galaxy!

Uncontrolled exponential population growth within a limited environment is also possible. You just time-share the computational power among the inhabitants, resulting in a progressive lengthening of the generation time. (Though every time you double the population, you halve the subjective time to the end of the universe.)

While nanotechnology will work wonders in the real world, it is limited by the laws of chemistry and physics. An artificial reality is subject only to the rules you set up in the operating system. Barsoom, Oz, Middle Earth, Gone with the Wind, there is no work of fiction which could not be subjectively experienced. Heck, you could set up a world where magic worked and prayers were answered.

Perhaps artificial reality is *too* seductive. Whatever the goals of an intelligent life form are, they could certainly be "achieved" in a suitable artificial reality more easily than in the real world. Perhaps the folks who think intelligent life is rare are wrong, and, if we can avoid diving into our favorite artificial reality, we will find them. I leave you with the conflicting thoughts that artificial realities may be more dangerous than the grey goo (uncontrolled replicators) problem, and that I sure would like to use artificial realities to experience a batch of total solar eclipses.

Reviews

How to Build a Person: A Prolegomenon

by John Pollock; MIT (Bradford Press) 1989

Reviewed by Thomas Donaldson

I confess that when I first saw this book, and noticed where it had been printed, I thought that it was just another piece of MIT Minsky-Moravec trivia, worth neither reading nor reviewing. I'm very pleased to say that I was quite wrong.

John Pollock is presently a philosopher working at the University of Arizona. Philosophy? Yes, but philosophy has been changing. A major part of Pollock's work relates quite directly to AI, computer science, neurology, and some of the more abstract ranges of psychology. His current major project is to implement a robot which will be, not merely a robot, but also justifiably a *person*. The name of this person, or attempt to build one, is/will be OSCAR.

Many cryonicists would respond to this by saying, certainly, it's obvious we

can make a machine intelligence like that of a human being, and proceed to equate this with "Uploading." That is not what Pollock's book is about at all. Pollock takes the problem seriously and tries to look at it seriously, all the way down to the nooks and crannies of how we (the persons) actually think. By doing so he writes an extremely interesting book, full of insights and intimations of what is possible. What does he find?

One of the first issues to arise, and one taking up more than half the book (long before any actual program architecture can be discussed) is that of just exactly what IS a person, anyway? Personhood seems clear and obvious until you start thinking about it (and if you're supposed to build one, then you need to know what you're building, yes?). Pollock's discussion on the many questions arising out of this simple notion is very much worth reading, OSCAR or not.

So what does Pollock think a person is? AI programs as such, alone, cannot qualify, even if they are much extended versions of Eliza. (Pollock does not accept the Turing test, for reasons to be explained.) The fact is that people do not simply reason on the contents of their database. Of course they have interests and values, too (philosophers call this conation, as opposed to cognition); but even more than that they must have extra circuits allowing them to reason on their reasoning itself, and reason on their perceptions too. That is, they have extra feedback beyond that of a machine only capable of learning. These circuits are needed first so that OSCAR (or you) can respond even to his perceptions as matters which might be doubted and ignored, and second, so that you can form *generalizations* about events rather than simply respond to them. Pollock calls these "introspective sensors," and distinguishes two different kinds: those for pain, and those for perceptions and thoughts in general (pain is important because you must attend to it regardless of anything else).

And finally (after some discussion; I don't claim any of Pollock's conclusions are obvious or necessarily true) they must have circuits which identify the contents of their database as *their* database, and the perceptions which keep pouring in as *their* perceptions. Pollock has a nice image about that. Suppose you are the tallest person in the room. Lacking this notion of *me*, you could learn that the tallest person in the room was about to be executed but not think of escaping. The problem is that without these extra circuits you would have no way of identifying *yourself* with the tallest person in the room (think of *algorithms* by which a machine could do this).

These observations bear on a good deal of philosophy. The first issue is the famous mind-body problem. Pollock's account of it is simple: It arises because we have more than one way of perceiving ourselves. The first kind of perception is direct. The second is introspective, in Pollock's senses. These relate to one another very much the same way as we can sense a beach ball both by touching it and seeing it. We notice (most of us) the correlation between these two senses of the beach ball, and know (this actually requires the same circuits as our sense of me-ness) that they are the same object.

Many cryonicists have thought about and debated the problem of identity. Pollock has no direct answer. But he does argue that the problem of identity for human beings is no different from the problem of identity for beach balls. This process — by which we generate variables to hold the attributes of an object, and these variables persist even if the attributes change — plays a critical role in everything we persons do.

Introspective circuits and Object circuits, by Pollock's analysis, play essential roles in the thinking and behavior of any Person. Pollock discusses why that is so, with the conclusion that both provide much more economical computation for problem solving and even remembering by Persons. However he himself says that a vastly more powerful computer might dispense with them. Since these circuits are part of the physical architecture of our brains, their existence is (at least theoretically) verifiable, just as any other physical thing. These circuits give us the reason why Pollock does not accept Turing's test.

They have further consequences too. For instance, Pollock suggests along the way that introspection probably requires a separate memory store from that which we use for our long-term memories. This might provide a reason why we have these separate kinds of memory: not just biological fluke, but actually because of our Personhood. No Person, even a machine, could work without them.

Moreover, OSCAR isn't just a theoretical exercise. Pollock is actually working on the problem on real computers. Even more, one subprogram he designed specifically to include the Introspective and Objective circuits, and reasoning on their results, has done far better than other AI programs without that architecture. Pollock does not measure this by speed (fast enough processing can solve that!). He measures it by *economy*. As it turns out, his program, not even optimized, can solve its logic problems in only 3% of the number of steps other AI programs must take. In one case, Pollock's OSCAR program solved a logic problem in 14 steps, while all the others took thousands. To be fair, Pollock incorporates many other ideas into his program, too. But many of these depend of the Introspective circuits to work in the first place.

I found this book very rich in ideas, and I can't really pretend to do justice to it in a short review. However, as a cryonicist it awoke many thoughts to me. First of all, the Introspective circuits lie behind all self-awareness. Suppose our memories are placed into a far more powerful computer lacking these features. In what sense then would that computer be our continuation? Pollock tells of recent experiments showing that people with part of their visual hemisphere ablated, and unable to report seeing anything, can still respond correctly to questions about what they see. Turned into such a computer we could be aware of nothing: even though outsiders might cheer at our survival and our resemblance to the self we once were.

Again, Pollock gives a long discussion in his book about one problem which may at first seem quite philosophical. The problem is that of whether, when we both look at the same scene, we each see the same things in identical colors, shapes, etc. How do you know that what you see as blue doesn't appear to me as red, and so on? Remembering that we are talking about two different "computers," these questions might someday be answerable by reference to our individual wiring diagrams. They even have a sting to them. I've described to many of my associates how I have had "strange" feelings for many years, but did not even mention them to anyone. I thought everyone felt that way sometimes. So this philosophical problem is not so philosophical after all. And by understanding these circuits we might very easily come to a point at which we could control them: to enhance an ability to see patterns, for instance, or even to *introspect*

patterns.

We know also that our conscious selves float on a vast sea of other activities of which we are not directly aware. I'm not alluding to Freud, who would say that all of these things are "repressed." I'm pointing out that our Introspective circuits tell us only part of what's going on in our brains. Would it help to have even more feedback paths? Naturally these paths might also require their own special memories and other structures too. For instance, Pollock is not at all opposed to neural nets; for him they underlie our senses and abilities to recognize and categorize. Would feedback loops here make an improvement? What about feedback loops for our access to long-term memories? Of course these loops would all mean nothing if they did not allow us to change the ongoing processes we introspected.

I will now say a few words for myself. Many cryonicists seem to believe that I am against any biological improvements other than immortality. That's not so at all. But the issues I see in such changes come to the fore exactly when we begin to discuss improving our own brains.

No one who thinks about the issue in depth would deny that the notion of "intelligence," almost like the notion of "person," becomes more complex the longer we look at it. Computers have shown us another example of "intelligence" besides the one we know; they tell us among other things that "genius" performance on an IQ test means very little as an indication of possible improvements. Among other problems, a computer able to score perfectly on a standard IQ test may show very little "actual intelligence," whatever that means. It just does a great job of moving symbols about. So exactly what IS this elusive intelligence?

Before we set about improving ourselves we'd better understand how the self that we are works now. At present our understanding is woefully poor. Sure, we certainly can and should learn *concurrently* with changing ourselves. But I would not like to be uploaded into a computer lacking self-awareness, even (perhaps especially) if all the other problems in porting a program I've alluded to before are solved. Pollock has taken a long journey into this wilderness, bringing back many insights for study toward this aim.

Mike Darwin Doesn't Review *The Silicon Man*, by Charles Platt

Mike Darwin

Trying to understand what a good book is really about by reading a book review is a little like trying to understand what a frog is all about standing over one at the dissection table. There the poor thing is, pinned to a scarred block of wax, its little mind stirred up with a sharp needle on the end of a rough wooden stick. Its insides are feathered out in front of you and its heart is even still weakly beating. There is much to learn from such a preparation. But that hardly tells you what the creature was like that squirms with slick violence in your hands, or croaks a love song to a hopping mate in the velvet dark of a hot summer night. One doesn't really come to grips with **frogness** by staring into the pieces of one in the bottom of a wax-filled cake pan in Biology 101.

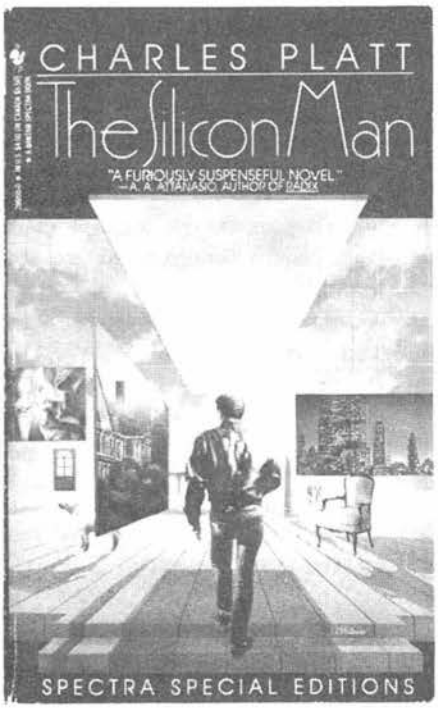
And so, too, with book reviews. Dissecting the plot, the characters, the motives, the social significance is all very useful and very necessary, but it somehow usually misses the **sense** of the thing.

Thus, I won't subject you, *The Silicon Man*, or its author, Charles Platt, to such an ordeal. I'll leave that to those made of sterner stuff. Rather, my purpose here is to tell you about how I reacted to this book and what I felt about it; how it squirmed in my hands, how it excited me, and filled me with wonder, how it made me **understand.**

I first met Charles Platt about four or five years ago. He came to the lab for a tour and wrote a brief article about Alcor and cryonics for *Fantasy and Science Fiction* magazine. I felt that piece was rather mediocre and that it missed what cryonics was really all about. Mr. Platt, like so many, seemed hung up on the (to me) unimportant details and superficial emotional reactions. I didn't hate the piece, but I didn't much like it either, and I think that disappointed Mr. Platt.

Having read *The Silicon Man* cover-to-cover in one sitting I can now say this: Mr. Platt is a quick study, a **real** quick study.

I haven't read a science fiction novel cover-to-cover in one sitting in at least five years, and probably not in ten. A once voracious reader of SF, I now would be lucky to find half a dozen novels a year that seem worthy of my attention: in short, I really don't read SF anymore. When I am moved to pick up an SF novel I usually end up pitching it, full tilt, in disgust at the nearest wall.



That my wall and the *The Silicon Man* are both un-dented is a testimony to what I think of it. Some readers of *Cryonics* may be put off by the book's title or by its core subject matter: uploading. That would be a mistake, a BIG mistake. Because this book isn't about uploading or cryonics or any particular technological path to biological immortality or indefinitely long life, if you prefer. Rather it is an exploration of the possibilities such an open-ended life may offer us. I think of this book as a glimpse, brief, fleeting and incomplete of what life **could** be like. Imagine a Medieval peasant

ground down by Church and King and poverty. His life, to quote Hobbes, is nasty, brutish, and short. He has no freedom. What would a world free of fleas, the freezing darkness of winter, the oppressive intrusion of the church-state into every corner of his life, and the terror of infectious disease and early death be like to him? What would a glimpse of a world filled with televisions, VCRs, perfumed people, automobiles, nylon stockings, and Haagen-Daz ice cream shops seem like to such a creature? Could he even begin to **imagine** the freedom, the choices, or the problems such a world would bring?

Well, we are the flea-bitten creatures and Mr. Platt has given us a glimpse, just a glimpse, of the kind of changes and choices the world may offer us if we survive long enough and work hard enough.

He has also given us a portrait of the kind of people many of the hard-core cryonicists really are. Sometimes it is a hard portrait to look at, but it is always an unflinchingly honest one. Looking at it straight-on, without a turning of the head is instructive, for it does much to explain why people are often frightened of us and why **they turn away.** People who want to survive as nakedly and as badly as we do don't cause warm fuzzies in most of the rest of the human population. And perhaps we *are* a little inhuman; it's hard to be nice when you KNOW you are dying. So be it. But we should be prepared to understand the consequences.

As much as it is about the quest for immortality, *The Silicon Man* is about the quest for freedom. I found myself closely identifying with one of the characters in the book. (Perhaps this was no accident.) I have this desire which burns within me almost as brightly as my desire to survive; the desire to **be left alone by all the meddling, invasive, intolerant, narrow minded, idiotic bureaucrats in the world.** This desire has grown over the years into a deep and smoldering hatred which is best expressed in a recurring fantasy I have: I like to think about developing an intelligent virus that will selectively infect every bureaucrat of every stripe in the world. This virus will cause them to root to the ground and turn into stone. Everywhere in the world there will be those stone figures that will cause children to ask, "Mommy, what is that statue?" and mothers to answer: "Dear, that was someone who went around minding someone else's business. So, if you ever get the urge to mind someone else's business **DON'T."**

For those who share a burning desire to live forever and to be free, *The Silicon Man* will provide top-notch entertainment. For those who think that either freedom or immortality will arrive free of problems and hard choices this book will not be enjoyable reading.

Charles Platt

But then, even with TV, Perrier, jumbo jets and face lifts we still have problems too... But for now the glimpse of the **possibilities** is what dazzles and that is exactly what Mr. Platt has so skillfully given us in *The Silicon Man.*

How the Dutch Really Handle Euthanasia

Thomas Donaldson

Even among cryonicists Holland is often referred to as a country which might show far more tolerance toward suspension before legal death. The related (at least in the minds of noncryonicists) issue of Dutch tolerance to euthanasia arises in discussions among "bioethicists" too. In fact, issues raised by such cases as the Cruzan case have started a powerful wave of discussion among those who claim interest in the ethics of medicine.

To this end, Margaret Batton, a philosopher who has actually lived in Holland, has contributed a discussion of the actual situation there (*Perspectives in Biology and Medicine*, 34 (1990) 73-77). Her discussion should interest cryonicists too, even if our own purposes differ from those of bioethicists. She makes seven points, each one bearing on the Dutch situation:

Nobody has any hard data on practice of euthanasia in Holland, but euthanasia there occurs far less often than most (Americans) think. Any case of active euthanasia in Holland must be reported to the police. The Dutch police in 1987 received a grand total of 197 reports for a country of 15 million. Others have very loosely estimated the yearly toll at 6000, most unreported. Compared to total mortality per year of 120,000, this is a small figure. Euthanasia is NOT frequently practiced in Holland.

Furthermore, just to confuse everybody, the Dutch have a slightly different set of ideas as to what "euthanasia" means in the first place. Dutch who are in favor of "euthanasia" mean by it what Americans would call "active euthanasia," directly killing someone at their request. They consider the ideas of "passive euthanasia" meaningless and "active euthanasia" redundant. They refer to treatments which cause the death of a patient, such as withdrawing or withholding treatment, as "levensbeindigend handelen" (life-ending treatment). This kind of treatment is actually very widespread in the United States, as any cryonicist with hospital background will testify.

In Holland, it seems, nobody tries to make the foolish and hairsplitting distinction between passive and active euthanasia. According to Battin, opponents of

"euthanasia" are actually opponents of the kind of "passive euthanasia" practiced in the United States. (To the Dutch, then, Americans already are on the "slippery slope" — the distinction being that "levensberindigend handeln" is applied WITHOUT consent of the patient!).

The legal situation in Holland is at best muddy. Killing at the request of the person killed constitutes a crime in Holland, punishable by imprisonment. However Dutch courts have set out criteria by which defendants can claim (not any rights of privacy, freedom of speech, or freedom of action) force majeure; i.e., they were forced to do it. These criteria include requirements that the killer be a doctor, that he or she exercised due care in diagnosis, informed patients beforehand about their prognosis, the patient must suffer unbearably, there is no acceptable alternative, etc, etc.

This situation means that euthanasia can't be excused in advance. It is (ideally) reported to the police and investigated afterwards. If and only if it meets the criteria, the Dutch legal system excuses the doctor from prosecution.

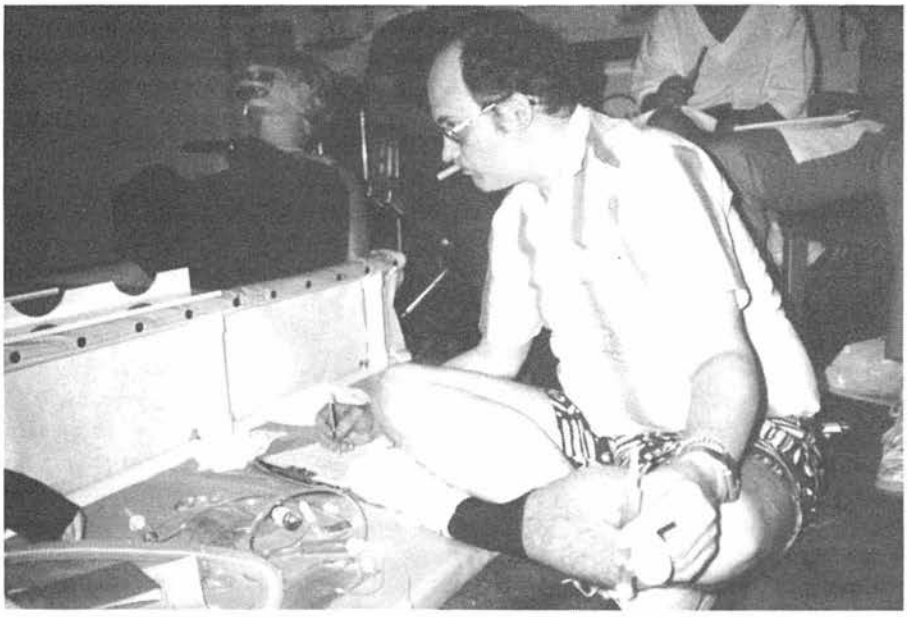
Again, almost all health care in Holland occurs at the patient's home rather than in a hospital. Doctors would perform euthanasia at the patient's home, in the presence of family, pastor, and nurses if the patient requests. Since the Dutch live under a system of "socialized medicine," costs of extended illness play no direct role in any decision a patient might make. (American patients might choose euthanasia for purely financial reasons, an important practical difference). Finally, Dutch society is far more homogeneous than American society, so that euthanasia in any form has much less chance of abuse against blacks, religious and political deviants, and so on.

How then would the Dutch react to a team of American cryonicists arriving in Holland to carry out a "premortem" suspension on a patient, either Dutch or American? Possibly other factors would play a role: Battin does not say, for instance, whether the doctor involved must have a license to practice medicine IN HOLLAND. The major issue may come down to whether the doctor leading the team can present himself as FORCED to carry out the cryonic suspension. (Recall again that the Dutch courts did not argue on the basis of any kind of "rights," of patient or doctor!). How a Dutch judge would decide seems unclear to me; unlike most of the other 6000 cases, it's very unlikely that this particular instance of "euthanasia" could go unreported.

One reason, perhaps even the only reason, for Donaldson v. California Attorney General comes from the undesirability of risking an entire cryonics suspension team on the outcome of a court case for murder. If Battin's account of the Dutch situation is accurate, then it isn't at all clear that things would turn out better in Holland. Different, certainly, but better? As European cryonics grows, we're certain to learn the answer, eventually.

Another Transport Certification Course Completed

Mike Darwin



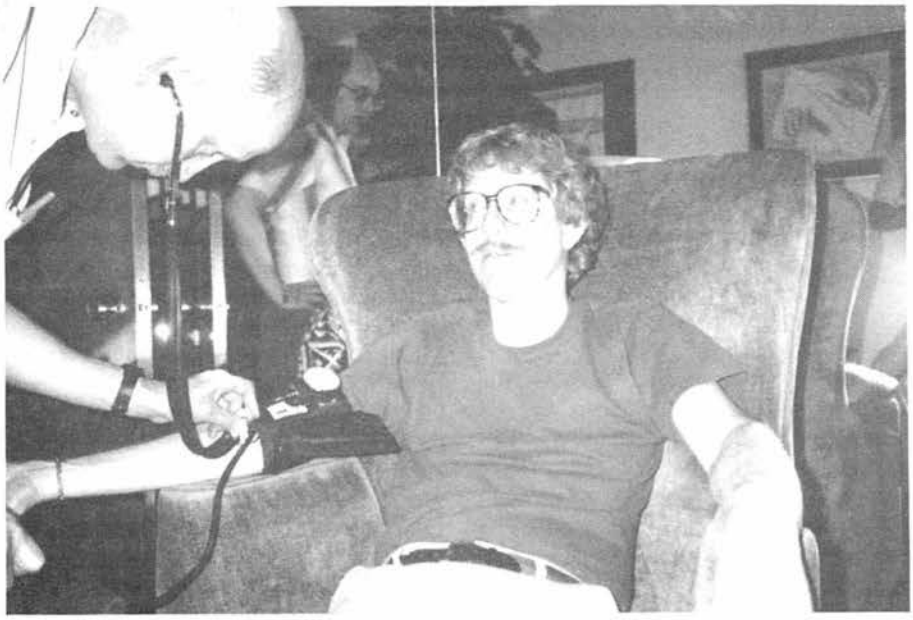
Ever fashion-conscious Ben Best makes notes on how to draw up medications. (You really oughta see this one in color!)

Total Exhaustion! That's how one of the students in the Alcor Transport course summed up the experience. Hats off to the nine hardy souls who converged on Alcor Southern California from around the U.S. and Canada for the Transport Training Certification Course held the week of June 3-9.

Since regular readers will recall the details of the course from Ralph Welan's excellent summary in the February issue of *Cryonics*, I'll keep it brief and to the point here.

Attending the course were Steve Bridge (Midwestern Coordinator) and Bob Schwartz who flew in from Indianapolis, Indiana, Jerry Arthus (New York Coordinator) and Curtis Henderson who flew in from New York, Brian Wowk (Canadian Coordinator) and Benjamin Best from Winnipeg and Ontario, respectively, and Tanya Jones and Russell Whitaker representing Southern California. Alcor Treasurer Dave Pizer audited part of the course — but missed the "final."

This course was an expanded version of the previous certification course, with an even greater emphasis on building skills. Another reason for the six day format was the need to learn TWO radically different kinds of heart lung resuscitators. Currently Alcor has both the new Mich-



Steve Bridge serves as victim for Bob Schwartz's blood pressure taking efforts. Good ol' Steve must have let eight people take his blood pressure — repeatedly!

igan Instruments "Thumpers" and the older (badly antiquated) Brunswick machines out in the field (MII units are used exclusively in-house or in the field if there is time for a Southern California team to be deployed). Thus, personnel needed to know how to operate BOTH kinds of equipment. A full day was given over to skills building on each type of machine.

The highlight of the course for me as the instructor was an absolutely hillarious performance by Curtis Henderson as The Hospital Administrator during the role-playing section of the course. What was so funny was that it was so real. It ended with the administrator granting cooperation in exchange for a large cash bribe — if only it were that easy in real life.

The final was a "mock transport" employing a pig. Miss Piggy, while none too thrilled to be the subject of our attentions, obliged after a few drinks skillfully administered by Steve Bridge, who as I can attest has had plenty of practice with other young ladies (albeit much better looking).

Miss Piggy proved a real education to the students. Several things went wrong during the transport and everyone, including the instructors, got to see what happens when there is inadequate ventilation (in this case due to a kinked ventilation tube); you get inadequate perfusion as well! **Lesson #1: Always look for chest expansion!** A few ribs were also broken due to a misalignment of the HLR piston after it had been correctly placed. This latter incident occured as a result of shouted "instructions" given from the peanut gallery by a peanut who knew beans about HLRs. **Lesson #2 Don't listen to peanuts: the HLR piston can be applied correctly only one way!**

Miss Piggy's autopsy was fascinating and graphic feedback. Despite this somewhat less than technically perfect final, the entire class was certified. Needless to say, we wish we could have them do it again and again and again until they are perfect. Would that we could. But we can't. And the point is, overall, everyone did very well.

Finally, as was forcefully (and correctly) pointed out to everyone involved:

1) Better that errors be made in the lab on the pig than in the field on a human patient.

2) It is unlikely that any of the errors made will ever be made again by these students.

3) Miss Piggy was scheduled for an early morning visit to Oscar Mayer the day she came to the lab, so the upside is that she, unlike her porcine cohorts, got to live an extra day.

4) At least you (students) got to do a mock transport and actually get some practice. Imagine what would go on if we didn't do regular training?

One very important take-home message was pounded out over and over again: PRACTICE MAKES PERFECT. It's absurd to think that the skills involved in Transport can be taught in six days. They can't. The only way to really build and consolidate those skills is regular, local practice/training sessions. The New York and Indiana people will be holding these sessions on a quarterly basis to refresh and build skills. If they stick to such a schedule diligently they will be more than ready when the phone rings...

A special word of thanks needs to be offered up to all who attended the course.

Learning to move Annie with a draw sheet. Sadly, sometimes human patients weigh little more than the foam and plastic Resusci-Anne.

Practicing HLR support on Resusci-Annie, L to R: Brian Wowk (facing away), Mike Darwin, Tanya Jones, Curtis Henderson, and Steve Bridge.

Most used up precious vacation time from work — over a week's worth. All paid their own way with airfares costing hundreds of dollars. While Jerry Arthus, Curtis Henderson, Steve Bridge, and Russ Whitaker were Emergency Medical Technician (EMT) certified, some were not. The fast pace and technical terminology were especially hard for these people and they did surprisingly well.

Alcor is incredibly fortunate to have people like these. People who would spend a week of vacation time in a grueling and difficult course and pay (on average) well over $500 for transporation in the bargain! Thank you, each and every one of you!

Transport Competition

An excellent suggestion was put forth at the training sessions by Dave Pizer, namely that we hold an annual Transport Competition wherein regional groups can publically compete (say during Turkey Roast weekend) for a large cash prize. Each group would contribute $300 to be matched by half by Alcor Southern California. Extra contributions or "bets" could be made by local group members in anticipation of their team winning.

The winning team will "take all" and the proceeds will be used to purchase transport equipment needed by the local group. A logical "first purchase" would be new Michigan Instruments high-impulse heart-lung resuscitators.

This coming Turkey Roast is already booked up with the Game of Shame — I mean, the Battle of the Ages — basketball fundraiser. But there's always next year. What do the other regional groups think? Would any of you be interested in competing?

And by the way folks, it looks like another regional group is forming in Texas with the express purpose of getting Coordinator status and an emergency response capability. But more on that if and when it materializes.

Alcor News

A Conversation With a Coroner

Cath Woof

One of the most serious threats cryonicists face in achieving prompt suspension under ideal conditions, is that of undergoing an autopsy. An autopsy may not take place for several days after legal death, and the brain can be severely damaged by a pathologist eager to carry out his job thoroughly and determine the cause of "death." Cryonicists would regard the cause of death as "autopsy," but few others would share that view.

On April 17th, in my capacity as Cryonics Association of Australia Suspension Officer, I phoned the State Coroner's office seeking a meeting with him. By chance, I reached the State Coroner directly; he refused a meeting, stating we were too small a group to be permitted to interfere with coronial procedures. However, I managed to talk to him for a few minutes, which brought to light the following facts and attitudes:

• In New South Wales, 95% of deaths are autopsied — not all are coroner's cases, of course. However, we should note that we are going against a well-established practice.

• He will vacate the office in January 1992, and we should attempt a meeting with his successor.

• In automobile-related fatalities, the driver is always autopsied to help determine the cause of the accident. With respect to passengers: they usually undergo an autopsy, but he is persuadable on a case-by-case basis by the next of kin — in our situation, the executor, who has the say over disposition of our remains and, thus, *should be chosen to be someone who supports our wishes strongly.*

• In the case of objection to autopsy by the next of kin on religious grounds, he is also persuadable on a case by case basis. This happens three or four times a year.

I outlined Thomas Donaldson's medical situation and his intention, should tumour growth recur and all reasonable medical treatments were exhausted, to refuse all food and fluids. I specifically asked the Coroner what position he would take on this planned, slow, and public form of suicide. He said he would probably not need to do a complete autopsy if the attending physician signed the certificate and stated that this was, indeed, the cause of death. The Coroner would still need some tissue and body fluid samples to make sure drugs were not administered to cause death.

I stated that suspension should take place as soon as possible after declaration of death — he could see the rationale for this.

In a situation such as Thomas', *which each of us should contemplate as something we, personally, may have to face* as the incidence of degenerative brain diseases is rising sharply, an early and co-operative relationship with the Coroner's office would improve our chances of avoiding autopsy and thus receving a prompt suspension.

In summary, the Coroner did not show active hostility toward our needs, if not our goals, although I sensed he may have thought we were of dubious rationality — i.e., extremists or dreamers. I felt the opportunity to talk with him had softened this view somewhat. Autopsy is a very serious threat — we are up against the law, established procedure, and a very powerful government office that regards citizens as having no rights in this matter.

Advertisements And Personals

The Alcor Life Extension Foundation *and* Cryonics *reserve the right to accept, reject, or edit ads at our own discretion and assume no responsibility for their content or the consequences of answering these advertisements. The rate is $8.00 per line per month (lines are approximately 66 columns wide). Tip-in rates per sheet are $90 (already printed and folded); or $180 (printed one side) or $270 (printed both sides), from camera-ready copy. Tip-in ads must be clearly identified as such.*

Warm-hearted handsome male immortalist, 31, seeks to meet/correspond with a similar woman. NYC area preferred. Write Box 1011, Suite 142, Trumbull, CT 06611

25-year-old single cryonicist looking to meet confident, smart, single women cryonicists who like science fiction and have a good sense of humor. Interest in the financial world, roller coasters, computers, or script writing a plus. Call Eric Klien at (508) 670-5235.

MARY NAPLES, CLU and BOB GILMORE – CRYONICS INSURANCE SPECIALISTS. New York Life Insurance Company; 4600 Bohannon Drive, Suite 100; Menlo Park, CA 94025. (800) 621-6677.

EXTROPY: The Journal of Transhumanist Thought, #7. Memetics and cryonics, privately produced law, spontaneous orders (markets, agoristic computing, hypertext) neurocomputation, neologisms, transhumanism, reviews of *Smart Drugs*, and more. $4 from Max More; P.O. Box 77243, Los Angeles, CA 90007-0243.

Meeting Schedules

Alcor business meetings are usually held on the first Sunday of the month. Guests are welcome. Unless otherwise noted, meetings start at 1 PM. For meeting directions, or if you get lost, call Alcor at (714) 736-1703 and page the technician on call.

The **SUN, SEPTEMBER 1** meeting will be held at the home of:
Marce & Walt Johnson
8081 Yorktown Avenue
Huntington Beach, CA

Directions: Take the San Diego Freeway (Interstate 405) to Beach Blvd. (Hwy 39) in Huntington Beach. Go south on Beach Blvd. approximately 4-5 miles to Yorktown Ave. Turn east (left) on Yorktown. 8081 is less than one block east, on the left (north) side of the street.

The **SUN, OCTOBER 6** meeting will be at the home of:
Russell Cheney
5618 Ruby Place
Torrance, CA
213-332-1000 days; 213-316-5761/3925 eves.

Directions: Take the Harbor Freeway (110) south from the San Diego Freeway (405). Exit on Carson, going west (right), and go all the way to the west end of Carson in Torrance. Follow Carson as it angles right (north) and becomes Howard Ave. Go about 1/4 block and turn right onto Ruby Place. There is a bear in the front yard.

There is an Alcor chapter in the **San Francisco Bay area.** Its members are aggressively pursuing an improved rescue and suspension capability in that area. Meetings are generally held on the second Sunday of the month, at 4 PM, followed by a potluck. Meeting locations can be obtained by calling the chapter's secretary, Carol Shaw, at (408) 730-5224.

The **SUN, SEPTEMBER 8** meeting will be held at the home of:
Leonard Zubkoff
3078 Sulphur Spring Court
San Jose, CA

The **SUN, OCTOBER 13** meeting will be held at the home of:

Ralph Merkle and Carol Shaw
1134 Pimento Ave.
Sunnyvale, CA
Home 408-730-5224; Work 415-494-4422

There will be an *Introduction to Cryonics* talk at 7 PM, followed by a question and answer period.

Directions: Take US 85 through Sunnyvale and exit going East on Fremont to Mary. Go left on Mary to Ticonderoga. Go right on Ticonderoga to Pimento. Turn left on Pimento to 1134 Pimento Ave.

There two Alcor discussion groups in the **Greater New York area.** Details may be obtained by calling either Gerard Arthus, at (516) 474-2949, or Curtis Henderson, at (516) 589-4256.

The ***New York Cryonics Discussion Group of Alcor*** meets on the the third **Sunday** of each month at 2:30 PM, at **72nd Street Studios.** The address is 131 West 72nd Street (New York), between Columbus and Broadway. Ask for the Alcor group. Subway stop: 72nd Street, on the 1, 2, or 3 trains.

Meeting dates: **Sept. 15, Oct. 20, Nov. 17, Dec. 15.**

The ***Long Island Cryonics Discussion Group of Alcor*** meets on the first Saturday of every month, at the home of Gerry Arthus. The address is: 10 Jefferson Blvd.; Port Jefferson Station, L.I., telephone (516) 474-2949.

Meeting dates: **Sept. 7, Oct. 5, Nov. 2, Dec. 7.**

There is a cryonics discussion group in the **Boston area** meeting every second Sunday at 3:00 PM. Information may be obtained by contacting Eric Klien at (508) 663-5480 (work) or (508) 670-5235 (home). There will be a meeting August 11 at 3 PM at the home of Eric Klien; 28 Kenmar Dr., #272; Billerica, MA 01821. Take the 3 north to the Concord exit, and go right toward Billerica. The fifth street on the right is Kenmar. Go to the driveway one short of the end of Kenmar and turn left. Go to Building 28 (last building).

The **Houston area** has a discussion group on cryonics, life extension, and the high/low diet. Meetings are typically held the second Saturday of every month. For more information call Ravin Jain at 713-797-1076 or Rupert Hazle at 713-480-3309. Correspondence may be addressed to Rupert Hazle at 15107 McConn, Webster, TX 77598.

Other Events Of Interest

There will be an Alcor fund-raising dinner on Saturday, September 28 at 7 PM at the LAX Marriott Hotel, 5855 W. Century Blvd., Los Angeles. The goal is to raise money to continue Alcor's research to improve cryonic suspension services. Reports will be given on recent advances in cryonic suspension, ongoing research in cryonics, and plans for future research. Reservations are $100/plate, check or money order to Alcor at 12327 Doherty St., Riverside, CA 92503; or by credit card to 1-800-367-2228.

ALCOR LIFE EXTENSION FOUNDATION
12327 Doherty Street
Riverside, CA 92503

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1-800-367-2228 (toll-free, non-members only) or 1-714-736-1703 (members).