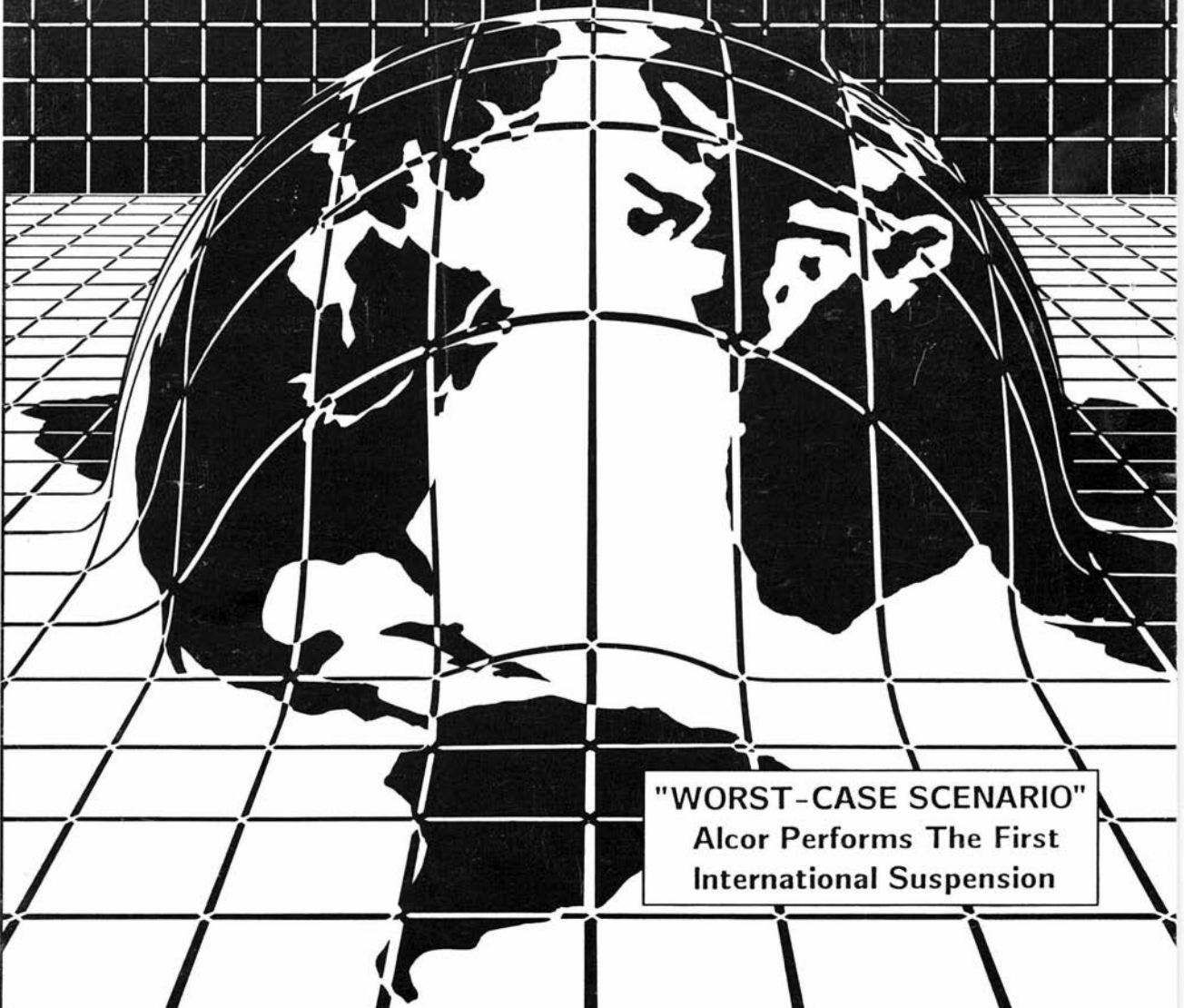


Cryonics

Volume 10(11) November, 1989



"WORST-CASE SCENARIO"
Alcor Performs The First
International Suspension

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Please address all editorial correspondence to ALCOR, 12327 Doherty Street, Riverside, CA 92503 or phone (800) 367-2228 (in California: (714) 736-1703). FAX #: (714) 736-6917.

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EDITORIAL MATTERS

A great many people have expressed interest in the "pre-Turkey Roast Conference" being held in Wrightwood -- so many in fact that there may not be enough rooms available at Dave and Trudy Pizer's *Mountain View Motel* where the event is being held. Dave and Trudy plan to put late registrants in contact with a nearby (three blocks away) motel, but obviously cannot guarantee that rooms will be available. To be sure of a room reservation at the Mountain View Motel, *please send in your full payment quickly!*

There will be a reception Friday night (1 Dec). Saturday, there will be talks by Saul Kent on the *Reanimation Foundation*, Mike Darwin on the *Coordinator Program*, and Chris Ashworth (Alcor's Constitutional attorney) on recent and proposed legal actions. During dinner, cryobiologist Greg Fahy will be available for questions. After dinner there will be a panel discussion on future directions for Alcor.

Dave requests that you call him for a weather report before you head up to Wrightwood. In the event of snow, the Highway Patrol may require chains, and some last-minute improvisation will be needed.

The registration fee for the Weekend Retreat (includes rolls and coffee Saturday and Sunday morning, dinner Saturday night, and access to all presentations) is \$30.00 per person until November 20th. Kids 5-10 will be \$15.00. After November 20th the registration fee is \$45.00 per person. Saturday lunch is fend-for-yourself. There are cafés about three blocks away.

Room rates: For cryonicists, the rate for a cabin holding up to four people is \$60.00/night. If you want pot-luck on roommates, this comes to \$15 per person per night per cabin of four, or \$20/person/night/cabin of three, or \$30/person/night/cabin of two. Checkout is 11:00 AM Sunday.

If enough people register early, the Pizers will close the motel to non-cryonicists for those two days.

Please remit registration fees to the Mountain View Motel; P.O. Box 458; Wrightwood, CA 92397.

If you have not previously received a flyer on the weekend's activities, there is a registration form on page 3 for you to copy:

(Text continued on page 3)

ALCOR TURKEY ROAST

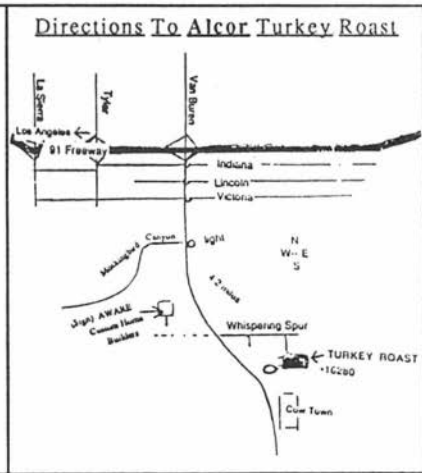
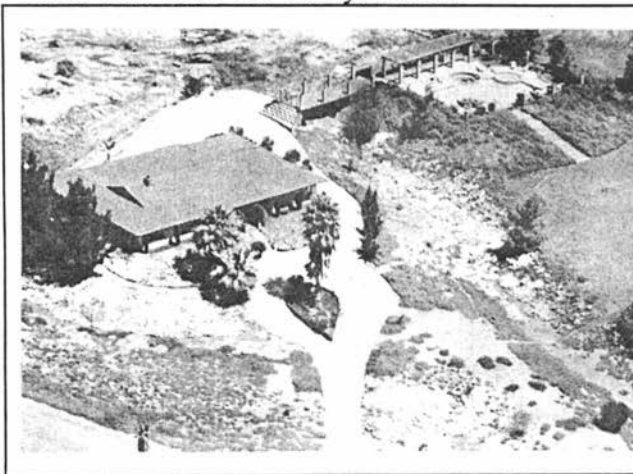
The Alcor annual turkey roast is for everyone who cherishes life and wants to be part of the fantastic world of the future.

This year's event will be held on **Sunday, Dec. 3, 1989** at the home of Saul Kent and Jo Ann Martin: 16280 Whispering Spur, Riverside, California.

The Alcor turkey roast starts at noon and ends at midnight. It is the event of the year on Alcor's social calendar. There will be a great deal of delicious food (brought by various Alcor members) including two large stuffed turkeys, canapes and condiments, a wide variety of vegetable dishes, fresh fruit, freshly-baked breads, and mouth-watering pies and pastries. There'll also be plenty to drink including fruit juices, soda pop, beer, and wine.

Among the recreational activities on the 2 1/2 acre site of the event will be swimming (in the pool), frolicking in the large heated spa, volleyball, croquet, and walks along flower-lined paths. Indoor activities will include the viewing of TV shows, newscasts and old movies about cryonics as well as professional entertainment.

It is the ideal opportunity for Alcor members and other interested parties to meet and get to know each other. Alcor members share a truly unique perspective. They know that the struggle against their common enemy (aging and death) is not only essential to their survival, but the key to their future happiness. In working together for a longer, healthier lifespan, they forge extraordinary emotional bonds that may last for centuries. It is an exhilarating experience. Why not come to the turkey roast and find out for yourself!



I will be attending the Alcor Weekend Retreat (\$45.00 after Nov. 20th)	\$30.00	_____
I will be staying at the Mountain View Motel		
Put me in with three other cryonicists	\$30.00/2 nights	_____
Put me in with two other cryonicists	\$40.00/2 nights	_____
Put me in with one other cryonicist	\$60.00/2 nights	_____
I'll take a cabin	\$120.00/2 nights	_____
Total enclosed:		_____

Name _____ Telephone: (____) _____
 Address _____

Send check to: Mountain View Motel; P.O. Box 458; Wrightwood, CA 92397
 Telephone (619) 249-3553

* * * * *

**ONCE A YEAR WE HAVE A CELEBRATION!
 AND YOU'RE INVITED!**

Somewhere out there, a turkey has arrangements with Alcor. They are NOT suspension arrangements. It's time for the annual Alcor Turkey Roast and get-together. The date will be the first Sunday in December, the normal day for an Alcor business meeting. FORGET BUSINESS. The Turkey Roast is a time for serious socializing. Topics will be *anything you can get through the door!* See old faces! See new faces! Meet people who are seriously planning to live forever. Mark the weekend on your calendar with indelible ink and swear on your Alcor Emergency ID tag to come. No tag? Come anyway. You may come away convinced you can't do without one. Remember, Alcor is its members. If you think this is going to be a memorable Turkey Roast, you're going to have to come and see for yourself!

The format will be as it has always been; potluck, bring a covered dish, a pie, a cake, a round of sodas. We have our two usual Turkey Roast Coordinators this year, so if you want some helpful advice on what to bring, please contact Marce Johnson at (714) 962-7898, Maureen Genteman at (213) 398-3464, or Jo Ann Martin at (714) 780-3366.

As we have announced both elsewhere in this issue and in a mailed flyer, we will have equipment available to videotape any of you who want to reinforce the directions in you wills for your suspension. The charge for this will be \$35 per half-hour or fraction thereof.

The celebration will start at 1:00 PM on Sunday, December 4th at the home of Saul Kent and Jo Ann Martin. Directions for reaching Saul and Jo Ann's are reproduced below. It's a little hard to find, so if you get lost feel free to give us a call at (714) 780-3366.

All of us at Alcor hope you will come. We look forward to some "unstructured time" to just sit and talk and share the events of the past year. The food is always great and

the conversation seems likely to be better than ever.

DIRECTIONS:

Saul Kent and Jo Ann Martin
16280 Whispering Spur
Riverside, California

Telephone: (714) 780-3252

Take the Riverside Freeway (Hwy 91) east to Riverside and get off going South (right) on Van Buren. Whispering Spur is south of the Freeway four miles, and 1.0 miles beyond Mockingbird Canyon Road, on the left. 16280 is the second house on the right, at the end of the white fence.

* * *

If you haven't seen the Alcor facility, it is close enough that we will probably be conducting a trip or two.

We look forward to seeing you on December 3th. Please come!

Notary Service at the Turkey Roast

Great food, fun talk, interesting people, Saul's pool and jacuzzi, and we *still* can't get away from business. If you have any outstanding paperwork that requires *notarization*, bring it! Alcor member Arel Lucas is a notary and will notarize cryonics forms for you without charge. We can probably come up with a few witnesses, too.

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(Text continued on page 6)



New Videotaping Service

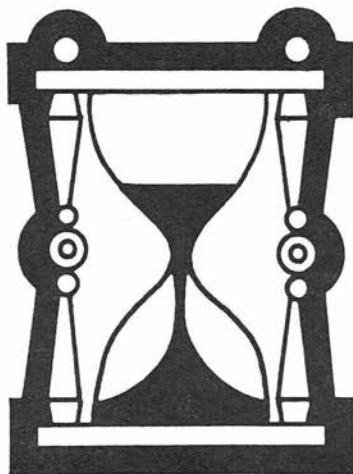
Alcor will launch a new videotaping service at this year's Turkey Roast. Members can have videotapes made for their suspension files for two purposes: (1) as a record of their wishes for cryonic suspension and (2) to provide a personal record that could be of value in efforts at future reanimation.

Members are advised to put their wishes for cryonic suspension on videotape to make it clear that their decision to be suspended was made in a lucid, rational state.

Such a videotape could prove to be invaluable should your relatives, business associates, creditors, or some agency of the government try to prevent your suspension or attempt to seize the assets you've set aside to pay for it. At the end of 1988, a relative of suspension member Dick Clair stole almost half his estate (by having him sign new legal papers) while he was in a state of delirium prior to his suspension. It could happen to you!

Alcor members may also want to make an ongoing videotape of any of their personal memories or ideas to provide an historical record that might assist future scientists in their attempts at reanimation. If there proves to be a problem (because of brain damage) in "reconstructing" the member's identity, such a videotaped "diary" might provide them with valuable clues to help them repair the brain properly.

Alcor members will be able to have videotapes made for \$35 per half hour (\$35 minimum) at the Turkey Roast. Assistance in making tapes for legal purposes will be provided.



TIME IS RUNNING OUT! If you have yet to sign up for cryonic suspension, you'd better do it soon. You need cryonic protection right now, even if you're young and healthy. If you've been waiting to see the Alcor facility before making up your mind, you can do so at the Turkey Roast. A special tour of the facility will be available at 3 PM. Alcor officials will be on hand to answer all your questions about cryonics. Free transportation will be provided to and from the facility.

THE GIFT OF A LIFETIME

We are offering introductory gift subscriptions again, at \$10 each, less than 1/2 the regular subscription price. The recipient cannot previously have been on our mailing list as either a subscriber to *Cryonics* or as a member of Alcor. This offer applies only in the U.S., due to the much higher price of non-domestic mailings. We are actually taking a loss on the gift subscriptions at this rate, but we consider that finding new cryonicists is well worth it. If you have a friend or acquaintance who has expressed any interest in cryonics, a gift subscription to *Cryonics* may well be the gift of a lifetime.

* * * * *

CRYONICS ON "L.A. LAW"

On Thursday evening, January 4, 1990 at 10:00 P.M. PST on NBC, an episode of the television show *L.A. Law* will air which will deal with cryonics. The theme of the show is that a terminally ill patient suffering from a degenerative brain disease wants to have his or her self placed into cryonic suspension *before* legal death occurs. We can't tell you how the show will end, but we can say that Alcor and Alcor's legal counsel were asked for advice and information on structuring the show. Of course, the usual caveat applies here: we have no way of knowing how much of our advice they took or how good the show will be. But, good or bad it should prove an interesting evening's entertainment.

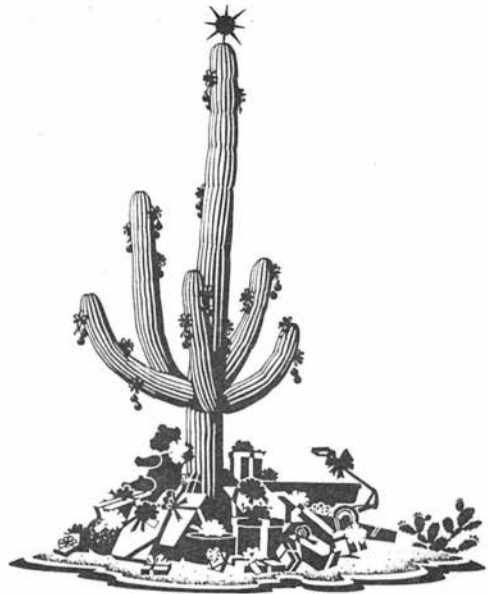
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BUTTONS AVAILABLE

by Mike Darwin

A few months ago Alcor Director Brenda Peters got a great idea: make up buttons to promote Alcor! After some investigation a button-making machine was purchased and Alcor began offering buttons for sale and as giveaways at conventions to promote cryonics. This tool has worked well. Under Brenda's direction Alcor has participated in several conventions and conferences in the last six months and the buttons have been a big hit. Recently, one of our members attending a convention suggested we offer the buttons for sale to members through the mail -- since many of our members never get the chance to attend Alcor functions. It was also suggested that we get some fresh button slogans by soliciting them from our membership.

It would be impossible to list all the button slogans now available in *Cryonics*. So, we've picked out a few that tickle the Editors' fancy and listed them below. The buttons are available for \$1.25, including postage and handling. We are in-stock on all the titles listed below. Proceeds from button sales will be used to support Alcor's presence at future conventions deemed likely places to recruit new cryonicists.



Those wishing to suggest new titles should send them along. If your suggestion is picked for addition to the stable of slogans already available, you'll be given two free buttons with the slogan on it.

Button Slogans

Freeze - Wait - Litigate

Freeze - Wait - Reanimate

Shit Happens. Join Alcor!

Immortalist

Old cryonicists never die. Period.

Immortality is the best revenge.

Death and taxes: Just say "No!"

Freeze your head to save your ass.

Cheat Death, Beat Taxes. --Alcor

Cryonics: the only rational choice.

Don't check out till you've checked out Alcor

Cryonics: the next to last medical care you'll ever need.

--Wanted-- Time travelers. One way, no refunds. Contact Alcor

Be here when hell freezes over -- Alcor

He who dies with the most toys, --DIES-- He who comes back starts a new collection.

WANTED: Heros for time travel. No experience necessary -- Alcor

Don't be part of the last generation to die --Alcor

You are priceless. Why not be timeless?

Cryonics: the key to immortality, freedom, and the stars.

If you have to ask how much cryonic suspension costs your life isn't worth very much.



And of course we have the *Alcor: Deathbusters!!!* logo on buttons in color.

* * * * *

NEW YORK GETS COORDINATOR STATUS

by Mike Darwin

On Thursday, July 13, I arrived at Long Island's Islip Airport to begin a weekend of training with the Alcor New York group (a.k.a. Cryonics Society of New York II). Curtis Henderson met me at the airport and shuttled me over to Gerry Arthus' home in Brentwood where half a dozen large containers of equipment sat waiting. The equipment had been shipped out over the previous weeks to prepare for the training session that was to be held at the Holiday Inn at Islip airport.

The training session began on Saturday morning and was well attended. All of the core members of the N.Y. group were present, including Gerry Arthus, Curtis Henderson, Phil Kirschner, Kevin Brown, Al Roca, Janet Pinkney, Alvin Steinberg and Phillip Marden. Alcor Suspension Member (and Emergency Medical Technician and nursing student) Jerry Cullins also made the trip up from North Carolina to participate in the session. This was second session for Jerry Cullins and Curtis Henderson, as they had attended the one held on Long Island almost four years ago.



Mike Darwin and the New York class of '89.

The session was a grueling one, covering as it did all aspects of Alcor's transport protocol in only two days. This included the use of new medications and the Pizer Tank Portable Ice Bath (PIB) (which the N.Y. group will shortly be issued as part of their rescue kit).

The session went well, although there were a few rocky moments. The scores on the final exam were mostly in the very respectable mid to high 80's and the bottom line is that the New York group was issued a rescue kit. As a result, Alcor now has a new Coordinator location providing coverage to the Northeastern U.S.

The New York group was the first to receive the expanded kit, which includes not only a heart-lung resuscitator and transport medications, but also a PIB.

The weekend in New York proved a busy and productive one, and not just with respect to the training session. On Saturday evening, after the first day of the session, Gerry Arthus and his mother Marion hosted a delightful barbecue in their home for rescue team members and others interested in meeting me and talking about cryonics.

Following the training sessions on July 18, Gerry and his fiancée, Curtis, Janet, and I drove up to Boston for a speaking engagement set up by Gerry with the *MIT Nanotechnology Study Group*.

The topic of this lecture was, of course, cryonics, and it was well attended. I would estimate that at least 30 people were present for the 7:30 P.M. presentation and upwards of 20 stayed on until well after midnight on a weeknight to continue the discussion.

Since this was a high caliber group consisting of exactly the kind of people we have historically had the best results recruiting, I asked for comments on my lecture and suggestions for improving it. Several people indicated that they thought my question and answer session was too emotional and that I exhibited too much anger and hostility. Two people commented that I should soft-pedal my philosophical opinions on the worth of the individual (i.e., my objectivist/libertarian leanings) and that I should have a kinder, gentler attitude about social questions. Overall, the lecture was rated as "good to excellent" and I was repeatedly told that it was one of the better presentations they'd

had.

In any event, it was one of the most enjoyable presentations I've ever given and I think I can say without hesitation that the question and answer session featured some of the best and most stimulating questions I've ever been asked.

Florida Session

Following the training session in New York, I caught a plane for Florida to conduct a training session with staff there. The Florida group consists of a mixture of local Suspension Members and paid paramedical staff who are available on-call around the clock in the event they should be needed. This session went very well and the Florida group's rescue kit was also updated to include new medications and a PIB.

The days I spent in Florida were pleasant, especially as a result of Bill Faloon's hospitality. This trip was also a chance for me to get to meet some of the newer members in the Florida group, since Bill hosted a lovely party on Saturday evening after the training session. I met a number of new faces and got to brush up on things with some "old friends" too. It was particularly nice of Dayna Dye to take this lonely Alcor member under her wing and to the movies.

All in all, the trips East were very worthwhile and I feel they did much to increase Alcor's level of capability in Florida and New York.

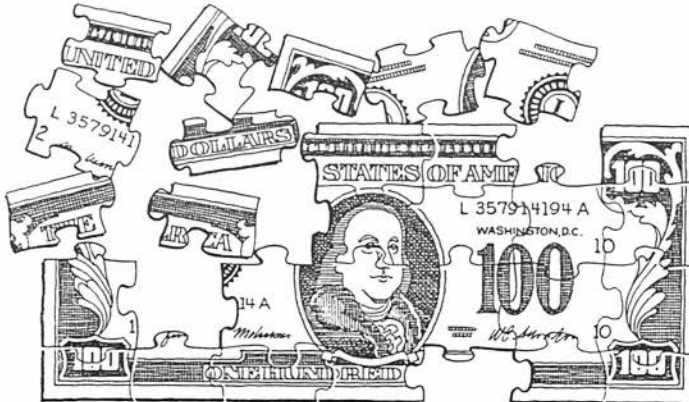
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Why Suspension Members Need More Than Minimum Funding

by Saul Kent

Perhaps you first heard about cryonics on TV, or in an article you read. If so, you may have learned (in that initial encounter) that the "cost" of cryonic suspension is \$100,000.00 for whole-body suspension and \$35,000.00 for neuro suspension.

You now know, I suspect, that those figures represent the *minimum* amounts of money charged for suspension, not necessarily its true cost. When I say this, I don't mean that minimum funding is inadequate in any way, or that Alcor will not be able to fulfill its contract with you. That's not my intention at all because I have great confidence in Alcor's ability to meet *all* its commitments and obligations.



The True Costs Are Unknown

My real purpose in calling your attention to Alcor's minimum charges for suspension is that it is vitally important for you to understand that the true costs of suspension are unknown and that current charges (by any cryonics organization) are only vague guesses about the costs of the procedure.

What's so difficult (you may ask) about determining the cost of suspension? After 22 years of suspensions, why can't anyone come up with the right cost figures? What's the problem?

The problem is that -- on the indefinite time scale of cryonics -- it's only been a little while since we started placing patients into suspension and we've had relatively little business during this period. Most important of all, we're completely in the dark about the costs of reanimation.

Why Reanimation Costs Have Been Neglected

The possible costs of reanimation have just begun to be discussed within Alcor. After all, the idea of even mentioning the subject seemed rather self-indulgent when Alcor's existence was being threatened by "bombing raids" from a half-crazed coroner, the prospect of criminal charges from a half-witted district attorney, and public cries that cryonics is "illegal" from health department officials trying to convince the authorities to put us out of business.

When you're struggling to fight off the yahoos, there isn't much time to contemplate the future -- especially the possible costs of technologies that don't yet exist, or the possible constraints of a society that's likely to be radically different from ours. Besides, cryonicists have always been so giddy at the thought of actually being able to challenge death that we've never really been concerned about how to pay for it. An oft-quoted remark among cryonicists goes something like this: "If I'm lucky enough to come back young, fair, and debonair, I won't care if I don't have a dime."

What isn't considered is the possibility that Alcor may not have enough dimes to bring you back at all. Or that you may have to remain frozen for an extra century or two while Alcor comes up with the spare cash to get you back on your feet again.



Fantasies About The Future

A common fantasy is that money won't be a factor in the super-abundant future. That everyone will be so wealthy and magnanimous that patients will be brought back to life routinely, regardless of cost.

The problem with this notion is that it is highly speculative, perhaps more so than the idea of being brought back at all. And that if we're successful as we expect to be, there may be millions of patients in suspension awaiting nanotech revival. So if you

don't give Alcor enough of your money, you could find yourself at the end of the line.

Next is the idea that nanotechnology will make reanimation so simple and inexpensive that it will be "a piece of cake" to make us young and healthy again. This is possible. It could happen that future physicians will be able to turn us into immortals with ease, but I prefer not to bet my life on it.

Great Expectations

It isn't that I don't have great expectations about the future. I do. I think we'll be able to transform ourselves into true superbeings with incredible powers. That eventually we'll become more different from our current selves than we are today from non-human primates. And that someday in the not-too-distant future we'll have truly godlike powers. But I don't think it will be easy. And I don't think it will be inexpensive. Here are my reasons.

The Political Struggle

In the past two years, Alcor has come up against a formidable array of political opponents who have sought to crush us. The fact that we've been able to fight them off successfully has been due -- in large part -- to the availability of money from Alcor members to pay legal expenses. We now know that California agencies such as the Cemetery Board and Health Department first began to think about putting us out of business in 1981, after the Chatsworth scandal in which cryonics patients were abandoned by the Cryonics Society of California. If they had hit us hard at that time, it would have been difficult for us to survive.

Our political problems aren't about to disappear anytime soon. We're out to change the world in radical fashion.... And soon! Right now the established order is based upon aging and death and is run by deathists who have no intention of changing their ways without a struggle. Cryonics is more explosive than any idea in history because it threatens the entire fabric of society.

Many outsiders assume that our strongest opposition comes from organized religions threatened by the fact that we are working to actually deliver a promise (life after death) that they rely upon heavily. But we've had far more opposition from scientists and doctors threatened by our unorthodox behavior than from religious leaders. I think we can count on continued opposition from the scientific establishment for quite some time and I don't think the religionists will leave us alone much longer either.

The Bureaucratic Mentality

We've also been attacked by mindless bureaucrats threatened by our insistence on doing things that don't fit neatly into the fixed categories that govern their lives. The inflexibility of bureaucrats -- especially in government -- has always been a problem with anything new, but never has there been an idea (like cryonics) that threatens so many bureaucrats in so many different places. We've already had our share of trouble with officials having auth-



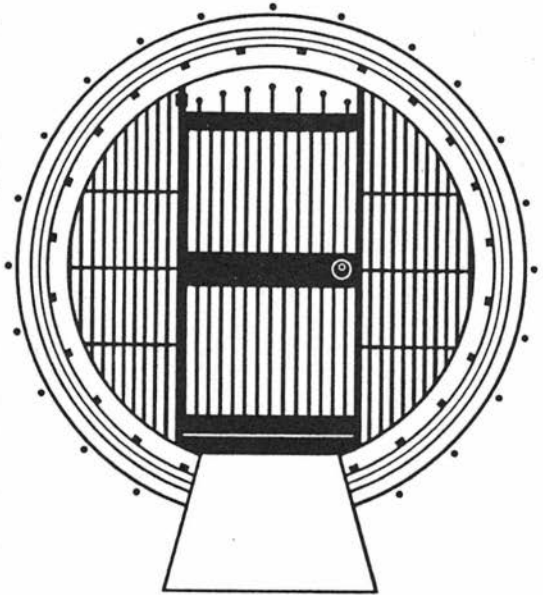
ority over matters of health statistics, medicine, scientific research, law enforcement, zoning, disposition of bodies, transportation, and customs.

These problems are far from over. Since cryonics involves every aspect of human life, we can expect a long series of painful collisions with officials whose primary concern is to avoid conflict with those who have authority over them.

Threatening the Financial Establishment

I also think we're on the verge of disturbing some of the most powerful bureaucrats on Earth -- the officials who control the financial system that regulates the lifeblood of government itself -- the flow of money. These are officials who not only *play* by the "rules of the game", but are the ones (along with the bankers, industrialists, and politicians who stand behind them) who actually *make* the rules.

Sometime soon, the financial establishment will discover that cryonics is likely to mess up their system. They're going to find that cryonics disrupts the orderly flow of assets from one generation to another, that it raises serious questions about the values behind the distribution of wealth, and -- most frightening of all -- that it is leading to accumulation of large amounts of capital in the hands of radicals who not only want to change the system, but who want to overthrow the species.

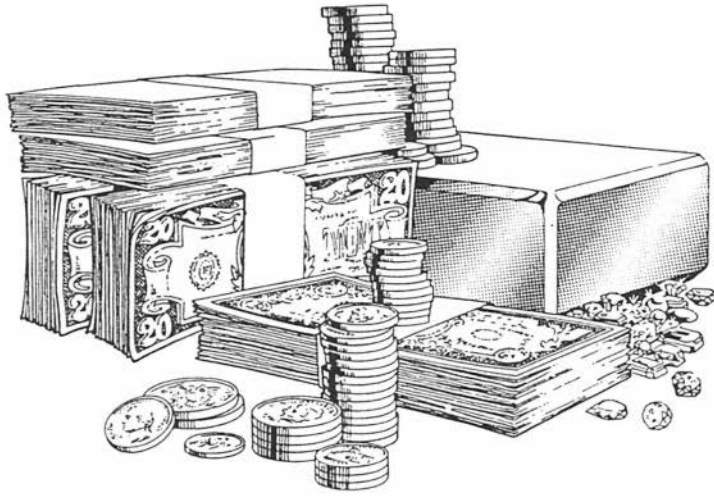


The Most Revolutionary Idea In History

Once the financial establishment begins to understand the full implications of cryonics, they will begin to cause us serious problems. Once the American people begin to appreciate what's up our sleeve, they'll begin to make demands (of their leaders) that will cause them (and us) a great deal of difficulty. Once the idea of cryonics takes hold, it will lead to political, economic, social, and religious turmoil throughout the world.

Although I firmly believe that cryonics will lead to many problems, I am also confident that, in the end, we will prevail, and that many of us living today will enjoy longer, healthier, and happier lives in the future.

I believe this because cryonics is the most revolutionary idea in history. The prospect of achieving an indefinite extended healthy lifespan -- with full control over aging, injury, and disease -- will alter our values and behavior in ways that will benefit everyone, including our opponents. I think that -- when enough of us know for sure -- that it's really possible for us to live in prosperity for centuries, we'll make sure it happens.



It Will Take Money

But it will take money...lots of money. Money for research, money for education, money for lawyers, and money for political action. There's simply no way of predicting the extent of the opposition we'll have to face, what we'll need to defend ourselves, or the length of time we'll have to fight. What we cannot afford to do (at any time) is underestimate the financial strength we'll need to succeed.

That's one reason why it is not a good idea to rely on minimum funding for cryonic suspension. We've already had several political crises that required a good deal of money from Alcor. If several members had not provided Alcor with the resources to fight these battles, the organization could have been destroyed, and with it the hopes and dreams of every member.

Developing Suspended Animation

Another reason to raise your funding above the minimum is the need for cryonics research to improve our methods of suspension and, eventually, to develop full-fledged suspended animation. The best way of improving your odds of reanimation is to help Alcor improve its suspension methods. The sooner Alcor improves these methods, the better your protection will be against loss of life, and the faster we can become too powerful to destroy.

Developing Reanimation Technology

Alcor will be aided in its quest for improved suspension methods by private companies, and when suspended animation has finally arrived it will be offered (along with other medical treatments) in clinics and medical centers throughout the world. When it comes to reanimation, however, things may be different.

There may be little or no interest on the part of companies (or governments) in research to develop reanimation technology for patients frozen under poor conditions with imperfect methods unless there are larger numbers of these patients and enough money available to justify such research.

While it's true that the development of nanotechnology will lead to ultra-small machines capable of repairing tissue damage from injury, disease, and aging, it will be necessary to modify these machines to deal with the special problems of reanimation. Nanotech systems to repair the tissues of frozen patients suffering from multiple types of injury will have different requirements than systems designed to repair living patients.

It's quite possible that the impetus to develop nanotech repair systems for patients in suspension will be lacking, unless Alcor takes the lead. After all, if Alcor (and other cryonics organizations) aren't concerned about these patients, then who will be? It may be that Alcor will have to spend a great deal of research money over a great many years, perhaps decades, in order to develop and perfect such systems.

Identity Reconstruction

It also may be quite expensive for Alcor to bring suspension patients back to life, especially those who have suffered severe brain damage. The ability to reconstruct an individual's identity is likely to be a formidable task (even for nanotech repair systems), which could require long and costly research and involve highly sophisticated techniques.

Right now we believe that the major component of identity is memory, but we have little or no knowledge of other cognitive, electrical, chemical, and structural factors that may be involved in determining the subjective feeling of being (and continuing to be) oneself, nor do we even have a clear picture of how memory contributes to identity, except to say (with some degree of confidence) that the more of our memories we retain the more likely we are to remain ourselves.

In my opinion, questions revolving around the issue of identity will be one of the major areas of study in the future, with many biological, medical, psychological, and philosophical implications. How long it will take to identify the physical components of identity is unknown, but it may prove to be an exceedingly complex task.

The Burden May Be On Alcor

Once again, it is not my intention in bringing up the potential problems of reconstructing the identity of those who suffer brain damage before (and during) the suspension process to cast any doubt whatever on the value of cryonics. On the contrary, I have great confidence that it will become possible to reconstruct the identity of most patients suspended with current techniques. But it may take a long time, it may prove to be quite expensive, and the burden of doing much of the research may fall on Alcor.

Although we don't know the degree to which the burden of identity reconstruction research will fall on Alcor, we do know that the more money Alcor has the better equipped it will be to perform whatever research is needed (and to motivate others to do this research) in the future. A strong, wealthy Alcor is your greatest assurance that your interests in staying alive (and in coming back to life after being suspended) will be looked after.

Money To Re-Enter Society

If it becomes possible to bring you back to life (after cryonic suspension), you'll



need money to get you back on your feet again. If you don't have any, it will probably make it difficult to do so and may even postpone your reanimation. (A future government may not look to kindly at having to bear costs of your re-introduction into society, especially if there are a great many other suspended patients who need this kind of assistance.

Right now, there is a law (the *Rule Against Perpetuities*) in most countries (including the U.S.) which makes it illegal for Alcor to set aside money for this purpose. To help solve this problem a new organization called the *Reanimation Foundation* is currently being set up in Liechtenstein, which has no *Rule Against Perpetuities* (more about this in a later

article). However, it's quite reasonable to expect that -- when cryonics becomes acceptable -- the *Rule Against Perpetuities* will be revoked or changed to make it legal (and perhaps even mandatory) for Alcor (and other cryonics organizations) to contribute to the costs of re-introducing reanimated members back into society.

Once again, the more money Alcor has, the more it will be able to contribute to the costs of putting you back on your feet again.

The Inescapable Conclusion

The inescapable conclusion is that minimum funding should not be relied upon to purchase your ticket to a future life, and that every penny that you contribute to Alcor will help solve the formidable problems that stand in the way of your reanimation.

To look at it from a slightly different perspective, just consider what the word "minimum" means. According to *Webster's New Universal Unabridged Dictionary*, "minimum" is defined as "the smallest quantity, number, or degree possible or permissible."

Minimum standards for nutrition involve the consumption of just enough vitamins (and other nutrients) to avoid vitamin deficiency (and other) disease. This is far less nutrition than you need for optimal health and longevity. The same principal holds for cryonics. If you consider cryonics essential to your survival, it is imperative for you to make every effort to increase your funding as much as possible above the minimum. If you think cryonics is "a matter of life and death", the extent to which you provide funding for your own suspension (and reanimation) is a clear-cut indication of the degree to which you value your own life.

Do It Now!

Cryonics is definitely "a matter of life and death" for me. I *know* that my life is likely to depend on the success of cryonics and that the urgency to succeed becomes more and more compelling with each passing day as I grow older. I've already provided Alcor with funds (in the form of life insurance) that are far in excess of the minimum needed for my own cryonic suspension and I intend to contribute more funding as long as I am able to.

What about you? Isn't it time you added to *your* funding? It isn't just that Alcor needs your money. It does, but the truth is that *you* need your money even more than Alcor does! When you're in suspension, you won't have any earning power...perhaps for a hundred years or more. Doesn't it make sense to put away as much money as you can while you're still able to?

My advice is: Do it now! And keep on doing it until it's time for you to be suspended! Although the ultimate payoff on your investment may not come until you're reanimated, you'll be more than amply rewarded by observing the growth of Alcor in the coming years.



* * * * *

EMERGENCY INSTRUCTIONS: SUSPENSION TRANSPORT PROTOCOL

In the July issue of *Cryonics* we ran an article detailing updates and changes in Alcor's *Suspension Transport Protocol*. The purpose of running this update was to keep members posted on advances in transport technology and changes in the quality of care we are giving. Unfortunately, it was not pointed out that this protocol contains compounds which would not be available to the average physician or hospital since they have not yet been FDA approved (and in some cases probably never will be). The reason we are able to use them is that cryonics is not medicine and we are not limited by FDA rules about what can or cannot be given to living people. In the eyes of medicine, cryonics is a *post-mortem* procedure and corpses are not considered people.

The advantage to this is that we use medications which have shown real promise in the laboratory in treating ischemia but which are still years away from clinical application. Indeed, in some cases the potential market may be too small to justify a drug company getting approval from the FDA even though the drug may work very well and be very safe.



After our updated protocol ran, we received two phone calls from members whose cooperating physicians stated they would be unable to carry out the protocol due to either its complexity or the unavailability of the medications listed in it. It was never our intention that this protocol be carried out by members' physicians in the field. The published protocol is one that *Alcor personnel* use if they are on the scene and allowed access to the patient at the time cardiac arrest occurs and legal death is pronounced.

We also have an abbreviated protocol (which a physician might very well be able to apply) which we did not publish in the July issue in order to save space, since there were no changes in it. This has apparently resulted in some confusion.

Printed below is the abbreviated protocol for use by medical personnel in a "field setting" where Alcor staff are unavailable to initiate stabilization of the patient.

We have underlined those medications which are most essential and which it would be most damaging to omit from the protocol. Most "code carts" in hospital emergency rooms should have all of the underlined medications.

Please note that full size (8-1/2" x 11") copies of this protocol with accompanying data logging sheets are available from Alcor upon request.

* * *

In some situations it will not be possible to provide extended cardiopulmonary support or to administer all the desired medications. The list of medications given below represents an abbreviated protocol which utilizes medications likely to be available in any resuscitation ("code") cart or hospital emergency room. Medications which are underlined are those considered most critical by Alcor.

ABBREVIATED EMERGENCY INSTRUCTIONS FOR STABILIZATION OF ALCOR BIOSTASIS PATIENTS

Introduction

Biostasis is a low temperature preservation process applied to patients after they have exhausted the resources of contemporary medical care and have been pronounced legally dead. The process of placing a patient into biostasis involves prompt "post-mortem" cardiopulmonary support (to minimize ischemic damage) concomitant with induction of hypothermia by surface and/or blood cooling, treatment of the patient with agents to minimize freezing damage, and cooling to ultra low temperature for continued long term care. The ultimate objective of biostasis is the restoration of life and health to the patient at some point in the future when biomedical technology has reached a degree of sophistication equal to reversal of the cause of death as well as the injury which results from the application of current, unperfected preservation techniques.

In some situations it will not be possible to provide extended cardiopulmonary support or to administer all the desired medications. The list of medications given below represents an abbreviated protocol which utilizes medications likely to be available in any resuscitation ("code") cart or hospital emergency room. Medications which are underlined are those considered most critical by Alcor.

Stabilization Protocol

If the patient has been pronounced legally dead we request that you undertake the following steps:

1. **Cardiopulmonary resuscitation (CPR):** *Immediately* begin administration of 100% oxygen via face mask or (preferably) endotracheal tube using positive pressure ventilation. Begin sternal compression.

If a mechanical heart-lung resuscitator (such as the Thumper) is available, apply it.

Continue CPR during the administration of all medications listed below.

Do not defibrillate the patient.

2. Establish and maintain a patent intravenous line (preferably a subclavian or peripheral cut-down) for administration of all medications. Patency of the IV should be maintained by filling the catheter with heparinized saline (2,500 units of heparin per cc) or maintaining TKO flow of normal saline or other solution *which does not contain dextrose*.

Administer the following medications by I.V. push:

3. Administer **tromethamine (THAM)**, 250 mg/kg, IV (give 200 cc of 0.3 molar THAM rapidly, then set rate of infusion at 30 drops per minute) to combat acidosis.

4. **Heparin**, 800 IU/kg IV push for anticoagulation.

5. **Deferoxamine (Desferal)** 2 g, IV push to scavenge free iron and minimize ischemia induced free radical damage.

6. **Verapamil (Isoptin, Calan)** 0.30 mg/kg, IV push to reduce ischemia-induced intracellular calcium loading.

7. **Chlorpromazine HCl (Thorazine)**, 3 mg/kg IV push to provide membrane stabilization and protection against cold ischemic injury.

8. **Methylprednisolone HCl (Solu-Medrol)**, 1 g by slow IV injection to provide membrane stabilization and protection against cold ischemic injury.

9. **Erythromycin (Erythrocin)**, 1 g, (or if unavailable **Keflex** 1 g), IV push to inhibit microbial overgrowth.

10. Cool the patient as quickly as possible by completely packing the body in bags of crushed or small cubed water ice. In situations where the supply of ice is limited, concentrate on the head.

11. If a nasogastric tube is in position it should be used to administer 250 cc of Maalox, Riopan, or Titalac in order to neutralize gastric hydrochloric acid and eliminate the risk of erosion of the gastric mucosa and hemorrhage during subsequent cryoprotective perfusion.

12. The eyelids should be closed with tape to prevent corneal dehydration.

13. Clamp **but do not remove any drainage tubes, catheters, or IV lines** in the patient.
14. Completely pack the patient in water ice for transport to our facilities.
15. It is of critical importance that the patient not be subjected to freezing temperatures (i.e., those below 0°C (32°F)). This includes, but is not limited to storage in a hospital morgue "cooler" at a temperature below 4°C (34°F), temporary storage in an unheated ambulance, hearse, or aircraft during transport when the ambient temperature is below freezing, or the use of refrigerants such as dry ice or water ice/salt mixtures for cooling or transport. If there is any question about the accuracy or reliability of mechanical refrigeration equipment it should be checked frequently on a manual basis with an accurate thermometer.
16. If you need further information call the emergency number listed below and ask to be connected with the Emergency Rescue Technician on call.

EMERGENCY PHONE #: (714) 736-1703

Thank you for your cooperation.

* * * * *

MEMBERSHIP STATUS

Alcor now has 142 Suspension Members, 261 Associate Members, and 13 members in suspension.

* * * * *

DO NOT DIE

**In each world they may put us
farther apart
do not die
as this world is made I might
live forever**

from The Carriers of Ladders
by W.S. Merwin

WORST CASE SCENARIO

by Mike Darwin (with Carlos Mondragón)
photos by Elleda Wilson and Saul Kent

On August 19, 1989, a 21-year-old woman experienced sudden cardiac arrest at a resort hotel off the coast of Spain. She was a Spanish national, young, apparently healthy, and with her whole life seemingly before her.

Five thousand miles away, life proceeded at its usual hectic pace at Alcor. The young woman, her life, and her predicament were unknown to us. In Spain, a frantic search and a desperate effort had begun. The parents of this young woman, wealthy, influential, and possessed of iron-willed determination, had made an incredible decision: to have their daughter placed into cryonic suspension.

The Struggle Begins

In the face of great opposition they enlisted the aid of their family physician and persuaded their Coroner to limit the scope of the autopsy. Further, they persuaded the Coroner to cool their daughter to a temperature a few degrees below freezing (-3°C).

The parents, their daughter-in-law, and the family physician began a frantic effort to reach an American cryonics organization and facilitate the cryonic suspension of their daughter. The odds against them, by any measure, were astronomical.

They placed calls to leading American medical centers and hospitals such as the Mayo Clinic. They called cryogenic companies in large American cities searching desperately for a lead.

Finally, on August 25th the phone at Alcor rang. It was a Maryland cryogenic equipment distributor who had talked with the parents' daughter-in-law (a young woman we'll call Alicia Tomás in this report*). The distributor remembered an article about Alcor which had appeared a few weeks before in the July issue of *People* magazine. Mike Darwin took the call and explained that Alcor did not take cases where non-members had experienced legal death and relatives were trying to facilitate their suspension. "You tell these people that," the distributor replied, "their grief and determination are unbelievable; it's their daughter they're calling about and these people have tried everywhere. They don't intend to take 'NO' for an answer." The distributor went on to ask if we would at least talk to them.

* Alicia Tomás is a pseudonym, as are the names of the patient and the patient's family members.

At 7:00 AM on the morning of August 26th the phone rang in the apartment of Alcor President Carlos Mondragón. It was Alicia, the daughter-in-law of the couple whose daughter had died. The details of the case began to emerge.

The young woman's name was Laura Tomás. She was the daughter of two Spanish hoteliers and she had experienced cardiac arrest unexpectedly and for as yet unknown reasons while at work at one of her parents' hotels. She had been unsuccessfully resuscitated and then taken to the Coroner's office where a "limited thoracic autopsy" had reportedly been performed. We were told that due to the family's and the family physician's influence, the scope of the post-mortem examination had been limited to her chest only, and she had been frozen to -3°C by air cooling in a refrigerated morgue. At the time of the call we were told that she was being maintained in the Provincial morgue (private mortuaries do not have refrigeration or embalming facilities in most areas of Spain) and that the authorities reportedly were willing to cooperate in transferring her to the United States for cryonic suspension.

Carlos talked with Alicia at length and explained Alcor's policy regarding non-member suspensions. Alicia was knowledgeable, articulate, and persistent. To every one of Carlos' objections she offered an answer.

"You must reconsider your policy in this case," she told us.

At 7:45 A.M. Mike Darwin's phone rang (Mike is Alcor's Director of Research). It was Mike's turn to try and dissuade Alicia and the rest of the family, by explaining not only Alcor's policies, but the enormous amount of injury such a delay at high temperatures after cardiac arrest would have caused.

Mike was also impressed by Alicia's determination, by her understanding of the issues, and by the philosophical position taken by the family, which Alicia relayed to him. Their attitude was typical of that of so many cryonicists: The Tomáses understood that the injury was enormous, but as they pointed out, "burying Laura or cremating her wasn't going to make it any better." There was obviously a great deal of structure left, and even if the fidelity of recovery was very low, in their opinion something was better than nothing. But most of all they kept saying that they "simply could not give up if there were any chance for Laura, any chance at all." Since it was impossible to know if there was any chance, let alone to quantify it, they felt obligated to proceed.

The Tomáses are substantial people, and they were forceful in pointing out that the \$100,000 minimum Alcor requires for whole body cryonic suspension was not an issue for them; and that in any event cryonic suspension for Laura was morally compelling to the Tomáses despite the dismal circumstances.

The Tomáses had heard of cryonic suspension many years ago and had decided on its rationality at the time. They had simply not given the matter any further thought until the untimely cardiac arrest of their daughter.

Making A Difficult Decision

After their conversations with Alicia, Carlos and Mike conferred at length, and several other Alcor Directors were contacted. Many issues were considered: the fierce dedication and formidable will already shown by this family, the advantage to Alcor in having a "trial run" overseas case, since we have a rapidly growing population of overseas

members and virtually no experience in transporting them into the United States, and of course the powerful negatives of lack of background information and questionable informed consent.

This core group of Directors made a very difficult decision: to accept Laura as a suspension patient, providing a number of critical milestones could be met. The first and most important milestone was to get approval of *all* of the other Alcor Directors before making an exception to the long-standing Alcor policy of not accepting non-members for suspension.

Another milestone was insuring informed consent. Somehow, across 5,100 miles with nothing but a telephone and a fax machine, Alcor must convey the essentials not only of cryonic suspension, but of Alcor's operational principles and the reality of our situation; including our legal problems and the questionable legal status of cryonics itself. And all of this must be done with the language barrier as an added complication. At least Carlos spoke fluent Spanish and Alicia spoke fluent English. The Tomases spoke only Spanish.

The first step was to fax core Alcor paperwork and literature to the family and provide them with instructions to further reduce Laura's temperature and prepare a shipping container for her safe, subzero transport to the United States. The next step was to have Carlos speak directly with the family, at length and in Spanish, in order to clarify the situation and give them the vast amount of information they would need. This was done early on August 27, and approval for an exception to Alcor's policy of not accepting non-members for suspension was given by the Board of Directors the same day.

Problems In Spain

Efforts to reduce Laura's temperature by cooling her to -79°C proved impossible. Dry ice simply was not available in such quantities on the resort island where she was located. The best that could be done was to reduce her temperature to -25°C with the morgue cooler. But a new problem had arisen. The Provincial authorities had announced that Laura would have to be *embalmed* before she could be shipped into the United States since this was "Spanish law." If such was to be the case, they could not cool her further until she was embalmed. After much additional negotiation it was decided that external disinfection would be sufficient and that her temperature could be reduced to -25°C . But exactly *when* it would be possible to further cool her was not made clear.

The next difficulty that began to emerge was that the Spanish authorities were reluctant to allow Laura's transfer to the United States for legal and political reasons which were not completely clear to us on this end. Early on the afternoon of August 28, Carlos called the United States Department of State to attempt to facilitate the paperwork and reassure the Spanish authorities that no problems would result as a consequence of the Tomases and their daughter's "remains" entering the United States for purposes of Laura's cryonic suspension.

The State Department cabled the Spanish authorities, stating that Laura's cryonic suspension presented no inconvenience to the government of the United States. We then faxed a letter to the U.S. embassy in Madrid and the U.S. consulate in Barcelona stating that Alcor would accept custody of Laura's "remains".

Unfortunately, that was hardly the end of the problems. After several other

communications with the U.S. embassy and a delay of *several more days*, paperwork was secured from Spanish authorities to release Laura for transport to the United States. In the interim, Laura's temperature had been reduced to -25°C and a special, modified casket was constructed with styrofoam insulation to facilitate safe shipment. Due to the intransigence of both the Spanish authorities and Iberia airlines it was not possible to ship Laura packed in dry ice. The Spanish authorities insisted she be in a hermetically sealed box (which as it later turned out, not only wasn't hermetically sealed, but actually had a charcoal-filtered vent on it!) and Iberia insisted that they could not allow that amount of dry ice to be shipped in the cargo hold of the aircraft!

What ultimately happened was that 60 kilos of dry ice *were* placed around the outside of the insulated box in an *uninsulated and vented* crate,* and thus Laura arrived packed in water ice at a temperature of -5°C at 4:00 P.M. on September 3 (even though all the dry ice had sublimed long before her arrival).

If the Spanish bureaucracy had proved tedious to deal with in getting Laura out of Spain, the U.S. bureaucracy proved unbelievably fast and efficient by comparison. It took a little less than *two* (yes, that's two) *minutes* to get Laura moved through U.S. Customs and freed for transport to the Alcor facility.

* The irony of this is that had the dry ice been placed inside the well-insulated shipping coffin, the amount of carbon dioxide generated in the aircraft would have been a tiny fraction of what was generated as the dry ice sublimed away in an uninsulated container, *and* Laura would have probably been colder on arrival, rather than warmer!



Saul Kent

Opening the insulated shipping container from Spain. Jerry Leaf and Arthur McCombs take tissue samples. Note the charcoal filter over the vent inside the lid at the far end.

While Laura was still packed in subzero water ice, biopsy samples of skin and muscle were taken for histological evaluation of her ischemic deterioration. She was then instrumented with thermocouples, photographed, given a rapid external exam (we were extremely anxious to avoid rewarming her), and prepared for placement in Alcor's silicone oil (Silcool) controlled cooling bath.

The recommendation of our professional cryobiologist was that we cool Laura fairly rapidly to dry ice temperature, by starting with a surface-to-core temperature differential of -40°C , maintaining it until it tailed out, and terminating at -79°C .

Unexpected Problems, Part I

Despite the fact that the Tomásés had been thoroughly briefed about Alcor's policies, our size, the character of our physical plant and the general status of cryonics, they were unprepared for what they saw when they arrived.

The small size and relative crudeness of Alcor's facilities in relation to what their expectations were deeply distressed them. They had expected that even though Alcor was small and controversial, we would be housed in a hospital-like or clinic-like environment. They were completely unprepared for a mixed-use industrial building with no private conference rooms and a patient care area which resembles an industrial plant more than a medical facility.

While courteous and pleasant, the Tomásés were obviously disturbed and unhappy. They immediately began to inquire about alternatives such as transfer of their daughter to their care in Australia, where they live half of the year and own additional business property.

While still in Spain, the Tomásés were advised that they would be given several days to evaluate Alcor and consider whether they wanted to pursue cryonic suspension with us, or even to pursue it at all. It quickly became apparent that while the Tomásés sincerely wanted cryonic suspension for Laura, they were not at all happy at the notion of Laura being cared for by Alcor and they declined to sign the Alcor paperwork or to transfer funding for Laura's cryonic suspension without much additional discussion.

By this time it had become apparent that Alcor was confronted with a troublesome and potentially serious situation. We were in the position of having a patient in our physical custody for whom we had no executed cryonic suspension paperwork, no funding, and relatives from a foreign country who were uncertain about proceeding with the suspension, or at least were uncertain about proceeding with it under the auspices of Alcor.

It was decided that Alicia, the family, and representatives from Alcor would meet to discuss the situation at length, review the options, and try to come up with a plan of action. A meeting was set up at the home of Saul Kent on the evening of September 4. This meeting proved something of a watershed. It lasted four hours and was emotionally and intellectually demanding. Simply put, the Tomásés had a number of concerns about Alcor, most of which were not unreasonable.

They were concerned about almost every aspect of Alcor's operations. What guarantees did we have that such a small organization would be able to care for Laura over a long time course? What about the adequacy of the financial arrangements? Why must they surrender control of Laura to Alcor when they, her parents, were making the arrangements and paying the bill? What kind of assurance did they have that if Alcor was being mismanaged they would be able to take possession of Laura and move her to safety

elsewhere? Why must Laura be placed in the cryogenic storage unit head down? Why couldn't periodic viewing of the patient be arranged for the purpose of identifying her and verifying her continued cryogenic care? On some of these items the Tomásés were very adamant and it was clear that major differences existed. It seemed possible that no agreement would be reached that would not compromise Alcor's principles and yet be acceptable to the Tomásés.

During the course of the discussion, the Tomásés were repeatedly told of other cryonics organizations and assured that Alcor would assist in transferring Laura to another organization should they choose this course of action. It was also explained that, due to the unique nature of the situation and their enormous grief and emotional distress (they had not slept adequately for nearly two weeks and had virtually no sleep at all for three days), they would be given a reasonable amount of time to make a decision. Carlos and Mike Darwin repeatedly urged the Tomásés to consider and to contact other organizations which did not have Alcor's policies with regard to control of the patient after suspension. But it was made clear that Alcor could not and would not compromise on these issues. We must have control of Laura's suspension and we must have the ability to offer the kind of care we feel is in the patient's best interest.

On September 6, after two days of consideration, the Tomásés signed the Alcor paperwork and began arrangements for electronic transfer of funds to Alcor's account.

The following day, Carlos took Alicia and the Tomásés to visit Los Angeles and see the sights. This was no small thing. The Tomásés had been in a terrible state of turmoil since their daughter's unexpected cardiac arrest 18 days earlier. They had been confronted with one frightening and unsettling thing after another, not the least of which was battling Spanish bureaucrats and then having to confront the uncomfortable realities of the state of cryonics in the United States. The trip to Los Angeles was the first break in a nightmare stretch of uncertainty and difficulties. They had made their decision, Laura would be suspended with Alcor. Their daughter was at dry ice temperature and was soon to be placed in long term liquid nitrogen storage. For the first time they could have some peace. Unfortunately, their respite was not to last for long.

Unexpected Problems, Part II

One of the things which had caused considerable concern was the fact that the autopsy incision did not match what Alicia had told Mike and Carlos on the phone from Spain. The incision apparently extended from the sternal notch to the pubic symphysis instead of being confined to just the chest.

Owing to the patient's subzero arrival temperature, and a thick head of hair saturated with partially frozen formalin, it had not been possible to evaluate the scalp for incisions. But the family physician, Laura's parents, and Alicia all assured us that no post-mortem cranial examination had been performed. "They did not touch her brain," we were assured.

The presence of what appeared to be a full autopsy incision caused us great concern. Having had some experience with the integrity of American coroners, we had reason to wonder about their Spanish colleagues. After some discussion it was decided that a full-body radiologic evaluation needed to be undertaken to determine the extent of the dissection and to rule out any possibility that a cranial autopsy had been performed without the family's knowledge.

Arrangements were made with a portable X-ray service to bring out an X-ray unit. A

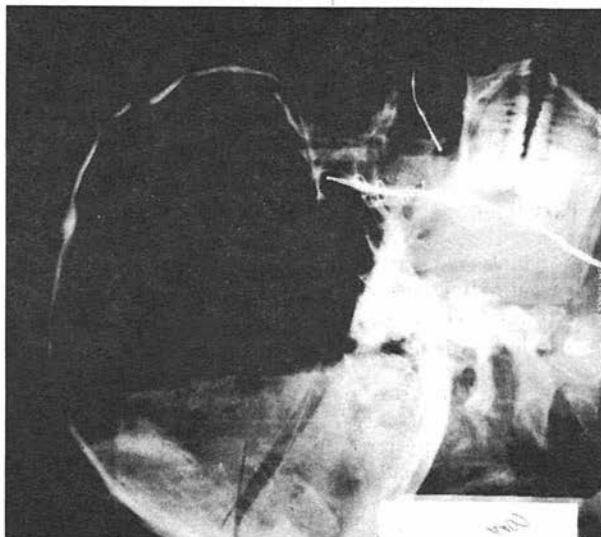
procedure was worked out whereby Laura could quickly be transferred from the Silcool bath to a sleeping bag which had been precooled with liquid nitrogen. The company also did some test shots to insure that the Silcool which would likely remain pooled on and/or in the plastic bags surrounding the patient would not cloud or obstruct the film. Once it was determined that this would not be a problem, the X-ray examination was scheduled. As an additional precaution we prepared dry ice packs by filling cloth pillow cases with crushed dry ice. These were to be packed around Laura's head while the chest and abdominal films were being taken.

The X-ray company offered as a routine part of their service on-the-spot processing of the film so it would be available for a quick evaluation by Alcor staff. The film would then be evaluated by a Board-Certified Radiologist with military-forensic experience (i.e., experience in reading films made on cadavers both before and *after* autopsy).

On September 8th at 11:30 A.M. the radiology service arrived and shot anterior-posterior films of Laura's head, chest, and abdomen. A lateral shot of Laura's head was also made. Within 15 minutes the film was processed and was put on the X-ray viewer in the Alcor operating room.

There was a stunned moment of silence. Laura's cranial vault was empty -- except for a homogenous mass occupying the posterior 1/3rd of it; apparently blood/fluid that had leaked into the empty cavity after her brain had been removed.

The abdominal and chest films revealed no cardiac shadow, abnormal bowel gas patterns and no evidence of a right kidney. **Laura had been completely autopsied.**



Conventional radiogram of the patient's head. The posterior 1/3rd of the braincase is filled with frozen body fluids. The discontinuity at the upper forehead and the cuts in the back of the skull indicate the way the top of the skull was cut to remove the brain during the patient's autopsy.

Breaking The News

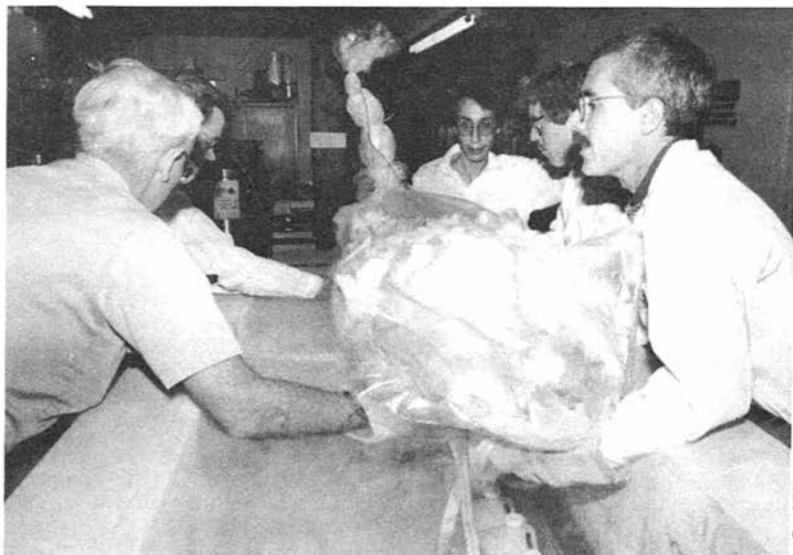
Carlos had a lunch date with the Tomásés at 1:00 P.M. Evaluation of the films was completed by Jerry Leaf and Mike Darwin at approximately 12:30 P.M. A decision was quickly made to inform the Tomásés of the results of the radiologic examination immediately, and to carry out a more exhaustive search for the missing brain using a CT scanner. Jerry Leaf set out to locate a mobile CT scanning company willing to make a house call on a weekend. A courier was sent with the processed film to the radiologist for a final and professional interpretation. Carlos and Mike Darwin proceeded to the hotel where the Tomásés were staying and explained that they had bad news for them.

The Tomásés reacted to the disclosure of their daughter's condition with shock, outrage, and total horror. It is not possible to describe the grief and anguish of the Tomásés, or for that matter to communicate the grief and anguish that *we* felt. Everyone was in tears. A few rapid phone calls were made to Spain. Carlos was assured "that no such thing was done in Spain! Under no circumstances would her brain have been removed. Always when there is an autopsy in Spain the organs are put back where they belong!"

The implication might well have been that *Alcor did it!* (Of course if we did, why would *we* tell them?) When the Tomásés recovered sufficiently to think coherently, they wanted to know what had happened to Laura's brain. Were we sure that the mass in the posterior part of her cranial vault was really fluid? Was there any chance that her brain had been returned to her chest or abdomen with the other viscera following the post-mortem exam?

We suggested that the *pathologist* who conducted the autopsy be contacted (as opposed to the coroner, with whom they had been dealing) and asked some rather pointed questions. We also told them of our intention to have CT scans done to try and resolve if tissue had been returned to the body cavity and perhaps, as a long shot, to try and identify the brain if it was there.

After much effort, Carlos was able to contact the pathologist who had performed the autopsy. With the Tomásés' connections it had proved possible to get his home phone number and he was rousted out of bed at 3:00 A.M. in Spain. He confirmed that a complete autopsy had been performed, further stated that Laura's brain had been bisected laterally, with a sample taken for microscopy, and confirmed that, *to the best of his*



Saul Kent

Lifting the patient from the Silcool bath to place her in a dry ice cooled sleeping bag for CAT scanning. Hugh Hixon, Mike Perry, Carlos Mondragón, Steve Bridge, Mike Darwin.

knowledge. his assistant had returned the brain to one of the body cavities with the rest of the viscera. The question now was: could he be believed? At this stage, after so many lies, could anyone be believed?

Needless to say, the Tomáses were told that this discovery of a heretofore unsuspected level of injury, so likely to be obliterative of Laura's identity, released them from the Alcor Cryonic Suspension Agreement which they had signed on September 6. It was explained that after the results of the CT scan, they would be given a reasonable amount of time to consider their options and if they chose not to proceed with Laura's suspension there would be no charges beyond those incurred in cooling her and arranging for her radiologic evaluations (\$6,000).

On the morning of September 9, Laura was transferred out of the Silcool bath into a large, "intermediate-weather-rated" military-style sleeping bag which had a bed of dry ice in it. Laura was then completely surrounded with a layer of pulverized dry ice and the bag was closed. She had been previously instrumented with an array of external thermocouple probes (and one internal, deep sinus probe) so it would be possible to monitor her temperature during the CT scan for any temperature rise.

Shortly after Laura was positioned in the sleeping bag, a mobile CT unit in a large van, with its accompanying 275 KW power unit on a smaller truck, rolled up to Alcor's front door. Laura was then placed on an ambulance cot and wheeled out of the Alcor facility and into the parking lot and the waiting CT unit. Axial scans were made at 10 mm and 5 mm intervals of Laura's head, chest, abdomen and pelvis.

It is hard to describe the mixture of



Saul Kent

Prior to the CT scan, the patient was placed in a sleeping bag and covered with dry ice.



Saul Kent

Mobile CAT scanner at Alcor. The 275 KW power unit truck sits in front of the scanner van.

The patient has been placed in a sleeping bag with dry ice, and placed in the insulated Spanish shipping container to await the arrival of the van. Scanner technician, Jerry Leaf, Carlos Mondragón, Mike Darwin, Hugh Hixon. Next to Jerry are the x-rays taken the previous day that show the extent of her autopsy.



Saul Kent



Saul Kent

Waiting to load the patient into the scanner van. Scanner technicians, Steve Bridge, Hugh Hixon, Carlos Mondragón, Mike Darwin.

emotions that confronted the Alcor staff as they watched the images materialize on the CT screen. There were seven people crowded into the control room of the CT unit: Suspension Team Director Jerry Leaf, Mike Darwin, Hugh Hixon, Dr. Mike Perry, the CT technicians, and Alicia (who was present as the family representative).

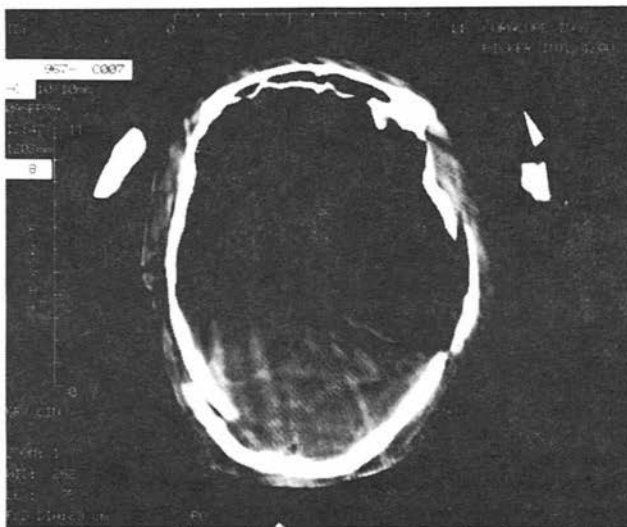
Cross-section after cross-section appeared on the CT screen. The level of detail was astonishing. Here, for the first time, a suspension patient was imaged by state-of-the-art non-invasive medical technology. Gradually the interior of the patient was being revealed a slice at time. The images were surreal and breathtaking; each cross-section showed not only the patient, but the surrounding cocoon of dry ice and sleeping bag, and the wires of the thermocouples and their shadows.

The first images confirmed the absence of brain tissue within the cranial vault. All that was present was a nearly uniform mass of ice occupying the posterior third of the cranial cavity. As the scan progressed, it was possible to make out irregular but unidentifiable tissue masses within the chest and abdomen. It was apparent that a large amount of tissue had been returned to Laura's body cavities, but it was not possible to determine *what kind of tissue it was*. At least it was possible to determine that tissues were present in the chest and abdomen (a very real possibility was that there were none, since some coroners simply



View inside the CT scanner van. The patient has been positioned in the imaging unit. l-to-r, Mike Darwin, scanner technician, Mike Perry.

Saul Kent



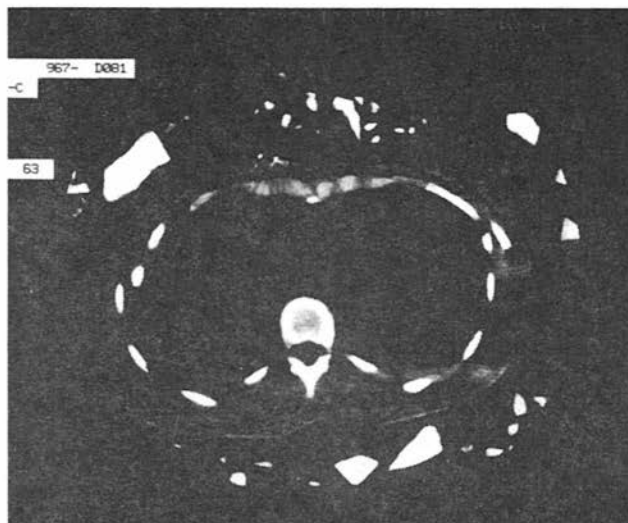
CT scan through the patient's head. The autopsy cuts are obvious as discontinuities in the skull. Enhancement of the scans indicated that some floating waste or absorbent material (gauze sponge, paper towel, etc.) was placed in the empty braincase before the top of the skull was replaced.

discard the removed viscera and replace it with absorbent packing and a plaster/ paraformaldehyde-based mortuary product called hardening compound).

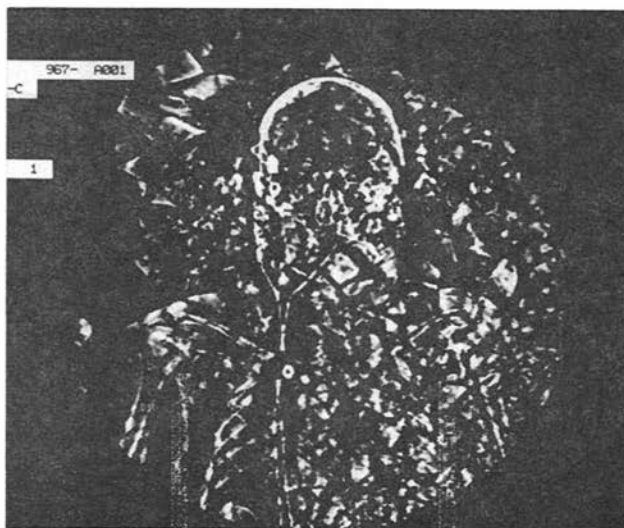
Due to our dry-ice-and-mummy-bag insulation, Laura's temperature did not rise at all throughout the entire two-hour CT scan procedure. Following the CT scan, Laura was returned to the Silcool bath for temporary storage at -79°C until a decision could be reached concerning her further care. The Tomáses were told of her condition and of the inconclusive results of the CT scan. They were left in the horrible position of having to rely on the word of people who had lied to them repeatedly in the past, and what's more, had absolutely no reason not to lie to them now concerning the location of Laura's brain and the extent to which it had been dissected.

Mike Darwin spoke to the Tomásés and advised them that *professionally speaking* it was hard to justify proceeding with the suspension if they expected recovery of their daughter in any usual sense of the word. The degree of injury from freezing, ischemic delay, and autopsy were, by any current or projected technologies, probably beyond repair. Granted, the exact molecular nature of memory was not yet understood, but what was understood was that there would be massive degradation of brain cells with likely disruption of membranes, as well as break-down of cell components. The most reasonable *conservative* advice we could give would be not to proceed. He explained that any other assessment on the part of Alcor would be both technically and morally indefensible. It was made clear that we were holding out no hope whatsoever.

The Tomásés stood fast. They explained their position simply (I am paraphrasing them here): "Since the possibility exists, we *have* to assume that our daughter's brain is in suspension. We *know* the damage she has sustained is massive, but what we *do not know* is what will be possible in the future. *If there is any chance at all, we want to take it.*



CT scan through the lower chest. Unidentifiable organs and packing. The white masses outside the body are the dry ice that surrounded her.



Transverse CT scan of the patient's head and chest. The gravel-looking effect is the dry ice placed around her.

The money is simply not an issue. We could not bear to walk away from here knowing that we did not take the most conservative action possible, which in this case is to continue to care for whatever is left of our daughter. We want to proceed with the suspension."

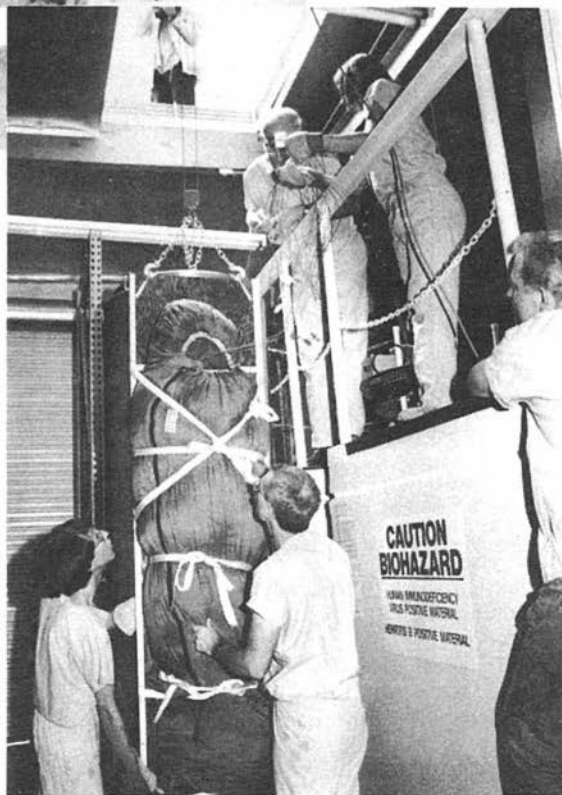
Once this decision was made, the Tomáses seemed at peace for the first time. The following day, September 10th, they returned home to Spain. On September 16, cooling below dry ice temperature was started, and she was placed in liquid nitrogen on the 21st. She was positioned head-up in the dewar to facilitate identification, since the usual reason (protection of the brain from warming to vapor temperature in an emergency where liquid nitrogen service was disrupted) clearly did not obtain in her case.



Elleda Wilson

Preparing to transfer the patient from the dry ice bath to the sleeping bag for N₂ cooling. Mike Perry stands by. Hugh Hixon controls LN₂ to Mike Darwin, who cools down the insulation the patient will be placed on for her preparation prior to going into the sleeping bags at right rear.

Picking up the patient with a crane rigged through the open skylight of the patient care bay. Carlos Mondragón and Mike Darwin steady the patient. Hugh Hixon stands by on the vaults, with Dave Christensen guiding the thermocouple wires. Jerry Leaf controls the crane. Through the skylight, Saul Kent takes photographs.



Elleda Wilson



Elleda Wilson

The patient is lowered into the dewar by a crane rigged through the open skylight in the Patient Care Bay. Mike Perry braces the dewar, Hugh Hixon guides the patient into the dewar on her tray, and Dave Christensen guides the thermocouple wires.



Elleda Wilson

Initiation of N_2 gas cooling. Hugh Hixon adds N_2 , while Mike Perry takes notes.

Analysis

The title of this case report is "Worst Case Scenario". In many ways this not true, though this title adequately sums up what we felt in living through it. Emotionally, in some ways this situation was worse than the straightforward irrevocable loss of a loved one. In that sense it was very much a worst case scenario.

As this case began to unfold, it became clear to all involved that Alcor had bought into some serious risks. There were many points where things could have taken a turn for the worse, possibly exposing Alcor both to damaging press and damaging litigation. To those who were involved in both making and implementing the decision to accept Laura Tomás as a patient it was abundantly clear that we were playing with fire.

The reasons for Alcor's long-standing policy of not accepting non-members for suspension were and are good ones. This case, an exception, seems to have worked out

well. But it is clear that if we are to make exceptions we had better have far better guidelines than we did in this case (which is to say almost none, aside from our personal assessment of the Tomases). Otherwise, we are likely to find ourselves embroiled in a situation which is indefensible. Is there a way around the issues of informed consent in last minute, non-member suspensions? What degree of risk is it acceptable for us to take?

The Directors of Alcor still believe that our policy of not accepting non-members for suspension is a good one. The many problems the Tomases had in absorbing and dealing with Alcor's policies and the realities of cryonic suspension while under enormous emotional duress were evident to all involved. Witnessing their anguish and their difficulty in becoming informed under such adverse circumstances powerfully confirmed emotionally what we have known intellectually for quite sometime (and what our policy of rejecting nonmembers for suspension addressed): it is simply not possible for people to make a rational decision about committing to cryonic suspension with Alcor under the kinds of emotional and logistic pressures experienced by the Tomases. The risks to Alcor in such a situation are potentially very great.

On the other hand, how should *other* situations be handled where the risks are considerably less and the issue of informed consent is not an issue? As an example, what about someone like the experts who have declared in favor of cryonics, are thoroughly familiar with Alcor, and yet who have not signed up themselves and find themselves confronting the sudden loss of a family member over whom they have the legal right to control post-mortem disposition? Can we come up with *objective* guidelines that will serve us well in accepting non-members for suspension under such emergency conditions? And should we?

This is an issue that the Alcor Board will be considering in the near future. Your input as Suspension Members and as family and friends of Alcor members now in suspension is solicited. We want to hear from you on this issue *today*.

It is also wise to keep in mind that an incredible amount was learned from this suspension. The majority of Alcor Suspension Members have authorized their cryonic suspension "regardless of the degree of damage from autopsy, fire, decomposition..." Laura certainly represents the first patient we have taken who has been this severely injured. But she will almost certainly not be the last. We learned much about how to move patients from overseas into the United States, about the honesty, or rather the lack thereof, of some forensic officials in other parts of the world (we've already had a lesson about the honesty of some of them here!) and about the kind of assessment that needs to be made a routine part of our program in evaluating the condition of patients who have been in the custody of Coroners or Medical Examiners. Significant changes in Alcor procedures for evaluating and documenting the condition of its patients will be made as a result of this case.

Finally, the excellent cooperation and support Alcor received from the United States government was gratifying and very helpful. It is quite possible that without the intervention of the Department of State, Laura Tomás would never have been suspended.

In short, this was a valuable learning experience on every level. We do not regret having accepted Laura as a suspension patient. But it is clear that we must develop a framework which is both fair and protective of all involved. We must quickly find a way to maximize the advantage of such cases while minimizing the disadvantage.

It has been suggested recently elsewhere that there should be developed a formal program of offering non-member suspension services via a network of morticians. This idea, while interesting, is not likely to meet Alcor's unique needs or address the

problems we are likely to confront when our phone rings. Laura Tomás' suspension is a salutary lesson here.

Hopefully, the coming months will bring some resolution to these issues and some much needed guidelines for future decisions.

* * * * *

Dear Gloria

Dear Mike:

Until a few days ago, I had not gone through Sue's file drawer since she was suspended.

Among other things I found a letter she had written some years ago and I had never been aware of it.

Gloria is a friend in the Detroit area who was interested in cryonics early in the game. She intended to write a book about my activities and flew to Minneapolis to interview me. We became good friends with Gloria and her husband and I still keep in touch.

While this letter is very good for my ego, I am not sending it to you for that reason.

What I believe you might be interested in is Sue's attitudes towards cryonics as years passed.

If you believe the letter might be helpful to spouses of cryonicists, I have no objection to your publishing it as long as you change names so that Sue and I are not identifiable. [Which we have. -- Ed.]

as ever,
Phil

* * *

Dear Gloria:

You have asked me what I think of Dr.[sic] Ettinger's proposition, and of Phil's efforts in helping that proposition develop into a complete workable actuality. It is difficult to remember one's thoughts over a period of years, but I shall attempt to reconstruct my feelings as best I can.

I do recall watching Dr. Ettinger's appearance on the Today Show late in 1964 with Phil. I remember Phil's immediate interest in and response to that program. It stimulated and seemed to capture his imagination from that moment as few ideas have. Since then we have discussed the numerous ramifications of the matter countless times and in many different ways. Generally, I share Phil's enthusiasm, but to a lesser degree, and I should like to explain why I feel as I do.

Basically, I believe it is a matter of differing personalities. My husband is a rather unusual person. He is basically a conservative person who thinks much more creatively than most people do. He is a dreamer, a man of more foresight than most, and unusual in that he has a way of turning his dreams into reality. In the more than twenty years we have been married, I have known him to tackle many propositions that others thought he could not successfully complete. Yet, I have never known him to fail in reaching his objective.

Although he is not too adept at the little formal niceties of life, I believe it is

because his thoughts are on other things, because basically, he is one of the kindest and most honest persons I have ever known. But he does have a different sense of values. The acquiring of money has never been too important to him. What is important, in his opinion, is to be of help to others, and to make the World a better and happier place in which to live. If a profit is involved, that's fine, but it's not most important. And most important of all, he's an eternal optimist in believing in the inherent good in people. I could mention a large number of times he has been disappointed in his relations with others. But it does not seem in any way to decrease his faith.

I believe it was his desire to help minimize the fear and sorrow of death that caused him to become involved in Dr. Ettinger's proposition. Phil is a man who is ready and eager to take a risk when the results justify the gamble. And to a person of his nature, Dr. Ettinger's proposition was one which offered no possible loss, but only the possibility of a gain. I have often heard Phil remark that he couldn't do everything he would like to do if he had the nine lives of a cat. To such a person, cryonics offers everything.

In my own case, while I can understand such great hope for the future, such hope of greatly extended life span doesn't mean as much to me. I have often said that my life has contained enough tragedy and sorrow in my younger years, that I wouldn't care to live it over if I had the chance. Perhaps because of this personal background, I am not too convinced that the future holds only happiness and better years. But then again, it may be that humans have been forced to accept their brief lifespan of mortal years for so long that it takes a little time to cast off the inevitableness of mortal life ceasing at the usual three-score and ten. Perhaps I have not yet been able to readjust my sights on a possibly greatly extended lifespan. It is hard to comprehend, and difficult for me to think of how I would use these premium years.

But as time passes, Phil's enthusiasm is slowly rubbing off on me. I do know, that if Phil should pass on, under favorable conditions so that he could be frozen, I too would want to take a chance on the future when my time arrives.

If Phil were not cryonically suspended at death, I really do not know if I would care to face the future without him. He, of course, doesn't agree at all. The optimist speaks out saying, "How do you know you wouldn't be much more happy than you have ever been so far, or perhaps ever will be able to in a normal life span?" He's so sure the World will improve, and will be a much better place in which to live in the future. I'm not that sure. In the light of past history, I wonder. But as he says, "What have you to lose? You can always commit hari-kari if you do come back and don't like what you find." So I guess I'll take a chance, with or without Phil.

(handscribed notes)

There are, having a powerful characteristic in my makeup, curiosity, and a fear of "missing something."

Phil is a true gentleman -- in the sense that he is a gentle man -- truly the most generous and thoughtful person I have ever known. He is kind and honest. He believes that to help others is the greatest purpose of man, and thus has donated his life to such activities. The world is, indeed, a better place for having had Phil as one of its inhabitants. Phil is a man with few regrets -- but one of those few is that life is much too short.

* * * * *

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.



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