

Cryonics

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Proposal for a Revised Patient Care Fund Policy by Linda Chamberlain

— And —

The First Recorded Cryonics Meeting
In this month's *For The Record*, by Mike Perry, Ph.D.



MACLEAN's April 2, 1966

EVAN COOPER

Plus:

**Surviving the Suspension
of
Someone You Love**
by Linda Chamberlain

Plus:

**A Visit from
Saint Assembler**
by J. Storrs Hall

Cryonics is...

Cryonic suspension is the application of low-temperature preservation technology to today's terminal patients. The goal of cryonic suspension and the technology of cryonics is the transport of today's terminal patients to a time in the future when cell/tissue repair technology is available, and restoration to full function and health is possible—a time when freezing damage is a fully reversible injury and cures exist for virtually all of today's diseases, including aging. As human knowledge and medical technology continue to expand in scope, people who would incorrectly be considered dead by today's medicine will commonly be restored to life and health. This coming control over living systems should allow us to fabricate new organisms and sub-cell-sized devices for repair and resuscitation of patients waiting in cryonic suspension.

Alcor is...

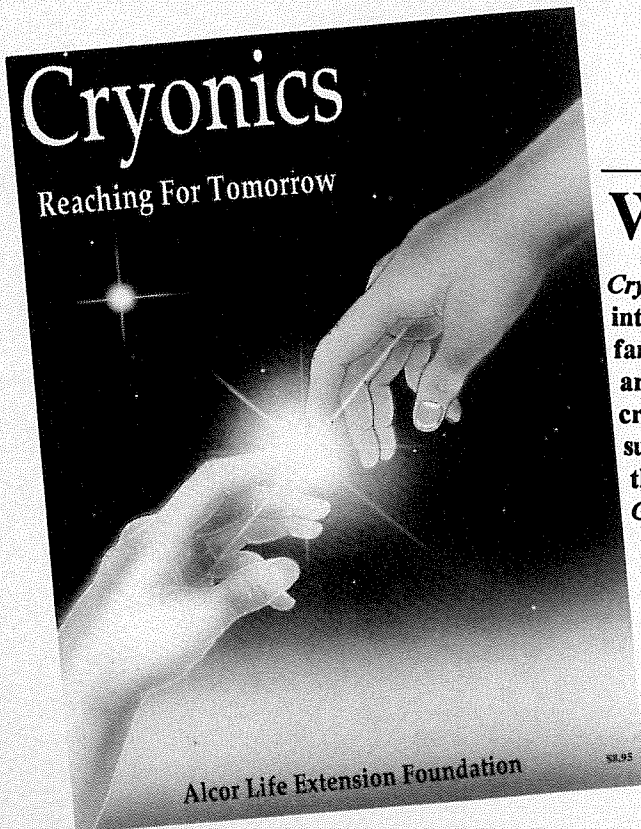
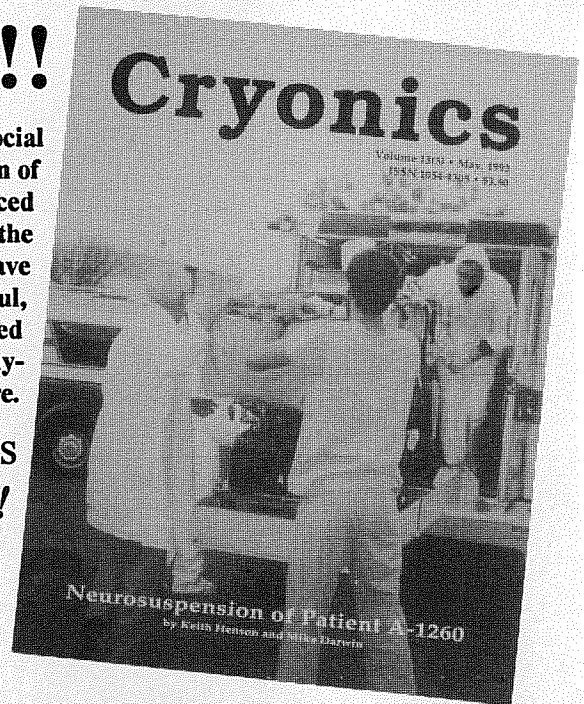
The Alcor Life Extension Foundation is a non-profit tax-exempt scientific and educational organization. Alcor currently has 27 members in cryonic suspension, hundreds of Suspension Members—people who have arrangements to be suspended—and hundreds more in the process of becoming Suspension Members. Our Emergency Response capability includes equipment and trained technicians in New York, Canada, Indiana, North California, and England, and a cool-down and perfusion facility in Florida.

The Alcor facility, located in Southern California, includes a full-time staff with employees present 24 hours a day. The facility also has a fully equipped and operational research laboratory, an ambulance for local response, an operating room, and a patient storage facility consisting of several stainless steel, state-of-the-art storage vessels.

Subscribe to *Cryonics*!!!

Cryonics magazine explores and promotes the practical, scientific, and social aspects of ultra-low temperature preservation of humans. As the publication of the Alcor Life Extension Foundation—the world's largest and most advanced cryonics organization—*Cryonics* takes a realistic, real-world approach to the challenge of maintaining in a biologically unchanging state patients who have reached the limitations of modern medicine. *Cryonics* contains thoughtful, provocative discussions of cryonic suspensions performed by Alcor, related research, nanotechnology and molecular engineering, book reviews, the physical format of memory and personality, the nature of identity, and more.

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Don't Miss the Lifeboat!

As announced in the previous two issues, we're getting ready to raise the cost of neurosuspension from \$41,000 to \$50,000. This rate increase will *not* affect existing Alcor Suspension Members or those who've paid the Application Fee (\$150) by the time the change takes effect. In keeping with our custom (which we hope to perpetuate indefinitely), all Suspension Members are still "grandfathered" at their respective original rates. (More on that below.)

Now the *good* news: Though the October and November issues announced the deadline for applying at the \$41,000 as midnight on December 31, 1993, we've delayed the rate increase by one month, so that now all existing members and anyone paying the Application Fee by midnight on January 31, 1994 enjoys minimum funding for neurosuspension of \$41,000 (or \$35,000, for you old-timers!). Persons applying for membership on or after February 1, 1994 will need to arrange (probably via life insurance) for \$50,000 in neurosuspension funding. The whole body suspension minimum remains unchanged at \$120,000. (Remember: it's *always* advisable to get \$10,000 or \$20,000 above the minimum as a safety margin if you can afford it.)

But How Permanent is the "Grandfathering" Practice?

So far, no Alcor Suspension Member who has maintained his/her membership uninterrupted has been included in a rate increase. But we've always stressed that the practice of grandfathering is not a *guarantee*, and that we may someday have to increase the suspension minimums for existing members. Still, we who've been paying dues for years like to suppose that cost increases can always be passed on to new members, so that we will never have to secure additional funding. Is this realistic, or unrealistic?

Unfortunately, it's still too early to say for sure, and that will probably be the case for several years yet. Our understanding of the relevant financial dynamics *is* improving, though. My own appreciation for the complexity of this issue peaked as I worked on "Suspension Pricing and the Cost of Patient Care" (*Cryonics*, October 1993), but I was pleased to see that my *very* preliminary analysis of suspension costing and pricing in the coming decade predicted a gradual *drop* in the cost of neuro and whole body

suspension — *in 1993 dollars, no less* — due to improving economies of scale. But this analysis did not attempt to factor in technological improvements, the potential for hugely expensive legal battles, or any other intangibles that could well force an across-the-board price increase.

Still, a little knowledge is better than a *very* little, and the near financial horizon looks friendly enough that the Alcor Board of Directors passed the following resolution at the November 7 Business Meeting:

Resolved: That the Suspension Minimum charges for all persons who are Alcor Suspension Members by January 31, 1994 are guaranteed not to be increased before January 1 of the year 2000. Any person entering the sign-up process by January 31, 1994 will also fall under this "grandfathering guarantee," provided that they complete their suspension arrangements by July 31, 1994.

In plain English, if you're a Suspension Member now, or if you apply by January 31 and complete the sign-up process within six months, your suspension prices are guaranteed to remain at or below \$41,000 for neurosuspension and \$120,000 for whole body suspension until at least January 1, 2000. As always, this requires *continuing* membership; if you cancel your arrangements with Alcor and then later reinstate them, you will fall under the new member rates.

Naturally, we hope to extend this guarantee come the year 2000, or perhaps even make it permanent. We'll keep you posted as the long-term financing picture comes into better focus. In the meantime, continue to keep as much above-the-minimum funding in place as you can reasonably afford.

Exciting Bio-Research News

Two *very* exciting breakthroughs have occurred, just days before this issue hits the press.

Dr. Jerry Hall of George Washington University Medical Center has successfully cloned a human embryo. Apparently, Dr. Hall was working on a method for increasing the number of embryos available for *in vitro* fertilization. We should be able to report on this in more detail next month, after the details of Dr. Hall's study are published in *Science*.

Even more exciting are the findings of

Dr. Dale Bredesen's UCLA research team, which indicate that the gene BCL-2 decreases production of free radicals (oxygen-based molecules that are highly reactive due to an unpaired electron) in brain cells. This is serious stuff, because free radicals produce hydrogen peroxide, which wears out cell membranes through a process called lipid peroxidation. This eventually leads to cell death.

Dr. Bredesen was quoted as saying, "The exciting thing about this finding is that BCL-2 prevents cell death from conditions that are analogous to Alzheimer's, Parkinson's, and other degenerative diseases... The whole process of cell damage, degeneration, and death is now more clear, and BCL-2 prevents the whole cycle." See the November 19 issue of *Science* for more details.

I feel younger already.

New CRFT On The Way

If this issue of *Cryonics* is a little bit late, well, it's for a good cause. The new edition of *Cryonics: Reaching For Tomorrow* is just moments from production, after having consumed all of the Editor's time for the past few weeks.

This edition of *CRFT* is considerably updated from the previous version, featuring many new photos, lots of new (and improved) text, and wonderful new cover art courtesy of a graphic designer who is now in the process of becoming an Alcor Suspension Member.

Like the previous edition, the new *CRFT* will have a cover price of \$8.95, though as always Suspension Members can purchase it for \$5.00. Consider buying lots and lots of copies and handing them out in lieu of business cards. (May you live in interesting times!) Also, buying a copy and donating it to your local library is an excellent way to get this information into the hands of dozens or even hundreds of report-writing students.

Alcor's cost for printing 5000 copies of *CRFT* will be about \$8,000. (That's less than we paid last time!) Please make a tax-deductible donation to help us cover the cost of this printing.

Arizona Updates

For the latest on the impending move to Scottsdale, see Steve Bridge's column, and "Arizona Media Progress," by Ralph Whelan.

Letters to the Editor

Dear Steve,

Thank you for responding to my previous letter in *Cryonics* magazine regarding the move to Arizona. You have raised some issues in your letter and in conversations with me that I feel need to be addressed.

Contrary to your statement in the last issue, I do not assume that when the Directors of Alcor make a decision in advance, it can never be changed even if circumstances change. However, I do not see how circumstances had changed when the Alcor board voted to close on the Acoma building. Alcor's reasons for moving are still the same as they were when Alcor began soliciting donations and money for investment in the purchase of the Acoma building.

Potential investors in the building were assured that all of the money would be received, by Alcor, not pledged, and all the required approvals by the various branches of the State of Arizona would be in writing before the Acoma building (or any other building) was purchased.

It is my understanding that only \$105,000 of the \$300,000 in shares of the LLC were purchased by Alcor members, (including Alcor Board members), therefore making Alcor the major shareholder of the LLC. \$71,000 of the \$100,000 goal for donations toward the cost of moving has been received from Alcor members (including Alcor Board members). The total cost of the building is \$770,000 with a balloon payment due in 1995.

You also mention that Alcor thought all of the approvals had been received before the LLC closed on the building. Since the approvals were to have been in writing did the "problem letter" you received several days after the closing of the building contradict what the Arizona officials had previously stated in writing (before the close of the building)?

Based on the information I have received from you the only circumstances I can see that have changed are that Alcor is the majority shareholder in the Acoma building (therefore increasing Alcor's liability), and the LLC closed on this building without the funding and approvals in place which were stated as part of the criteria when soliciting funds from investors and contributors. Were these investors and contributors advised that the original criteria for purchase of the Acoma building was not followed, before they made

their investment in the LLC or contribution to the move to Arizona?

In closing, since the approvals to move to the State of Arizona have not yet been received, but the building has been purchased, what are the legal costs, and travel expenses to date, and have you put a ceiling on what Alcor will spend to obtain approvals by the State of Arizona?

Thank You.
Maureen Genteman

Steve Bridge replies:

It is obvious that discussion of these issues could go on forever, in increasingly tighter spirals of detail. This particular discussion is rapidly getting to the point where each Director would have to recreate his state of mind at the time of the vote to interpret why the decision was made to invest in the building purchase at that time. To some extent such looking backward can be useful. Some members might have made the decisions differently if they had been Directors at the time. But at some point we have to say, "OK, we made this decision; now we have to concentrate on foresight for future decisions, not on hindsight for this one."

So, with the possible exception of an historical perspective sometime in the future, this will be the last Editorial Response in which I address the issue of the building investment itself. And I will do so here only briefly.

Approvals from government agencies are frequently not made in writing, although disapprovals usually are. Basically, it is legal to do something unless the legislature has said that it is not legal. If the responsible agency doesn't say, "No," you assume "Yes." In fact, we had a letter from the Arizona Department of Health Services from 1992 in which the same administrator currently giving us problems wrote, "Based on the description of your organization and its activities which you provided, we find no Departmental rules or statutes which would prohibit Alcor's business plans in Arizona." It was only after conversations this year to pin down details on death certificates and disposition permits that the current problem was discovered.

We thought we had the problem taken care of and expected nothing further in writing from the state. (See update on the current situation elsewhere in this issue.)

Problems with bureaucracy have been a large part of cryonics in the past and will be for decades. If our members think this is bad, wait until the bureaucratic response to revived patients, once that becomes possible.

The investors were sent frequent updates all through the process and we also spoke with them by phone. The Private Offering Memorandum made it quite clear that the building might be purchased even if our goals were not met. I should also point out that \$300,000 was the minimum required in interests sold to form the LLC and purchase the building. That criteria was not changed. Alcor purchased 19 1/2 Interests and individual members purchased 10 1/2. We never said that the building would be purchased only if all contributions came from individual members, although that was certainly our goal. The money was in hand to purchase the building when we closed on the building, although some additional investment came in before we stopped taking new investors on October 15. The additional investment reduced Alcor's ownership position. The donors (a much larger number) were informed in the same way as the general membership except for one extra letter which went out thanking them for their help and giving them what news we had at the time.

Alcor has now received about \$76,000 of the \$100,000 donations goal; but we have revised our moving and remodeling plans accordingly (no shortcuts on moving the patients). We feel this amount will be adequate to complete the move, even if not ideal. The Board did want Alcor's level of investment in Cryonics Property, LLC to be much lower than it is and the individual investments to be much higher. But at some point the decision had to be made to get out or to go ahead. I cannot predict how the situation might have been handled differently if the problem with the Arizona DHS had surfaced four days sooner than it did.

Finally, our travel expenses to deal with the legal issues have been only a few hundred dollars so far, though this will increase if the problem is not resolved soon. We have not yet gotten our first legal bill from our Arizona attorney (not the same attorney who formed the LLC for us). I do not yet have enough feel for the future of the disagreement to place a ceiling on what we will spend to obtain the approvals.

Dear Editor,

Since becoming a suspension member in 1985, I was comforted with the feeling that Alcor management was rock solid. I felt we shared a common philosophy and that I would be in good hands up to the time of my possible reanimation.

I had almost blind trust that things would stay that way throughout my suspension. Now I see that I was naive. Everything changes. And I no longer feel comfortable in placing my destiny *carte blanche* in any one person's or organization's hands. I realized that the best way to increase my odds is by having as much say about my personal destiny as possible... while I'm still breathing.

During most of my adult years, I've been very uncomfortable with democracies. But my reference point was political governments, rather than democracies in general.

All freedom-based social life is democratic in one way or another. We choose the policies and leaders of voluntarily joined organizations, clubs, or businesses. When we become unhappy with the consensus, we're free to leave or accept majority rule.

Democracies do work fairly well in the corporate world, even though it's often a short-term proposition as opposed to the long-term focus on cryonics. Each stockholder votes in accordance with his financial stake in the company. Whenever he becomes dissatisfied with that company's performance or policies, he usually moves his votes to another company... or withholds them altogether. This concept has served for hundreds of years.

At Alcor, members have much more at stake than they could possibly have in any other type of company or organization. But we're denied votes over the policies that could determine whether we live or die. Yes, we're able to vote with our feet. We could always join another cryonics group when we don't agree with Alcor's policies, but that's a drastic, time consuming and possibly expensive proposition.

Unfortunately, there's a groundswell going on right now within the Alcor membership to do just that.

This could be avoided by extending voting rights to the membership for the election of directors. We need the opportunity to vote periodically for board members either according to the amount of funding (or overfunding) in place — with an upper limit to keep members from buying board seats. Or it could be a simple one vote per seat for each suspension

member.

If that policy were adopted, then each candidate could publish his or her qualifications and a limited editorial (maybe one page) in a special issue of *Cryonics* — without censorship. A ballot and reply envelope could be included, and the votes tallied by a Big 6 accounting firm.

It's argued that democracy would bring politics to Alcor. Well politics are already here. And without every member having an opportunity for a say in those policies, that's exactly what could tear Alcor apart.

Members are all in this for the long-term. When informed, we'll vote for our best interests, and that means for a strong, capable, well-managed organization. There's nothing wrong with democracy when it doesn't involve coercion. A democratic Alcor will avoid the negative aspects of politics, not encourage them. All members will tend to vote for their long term interests and sacrifice short-term interests (the opposite of political democracies). Long term vested interest is why democracy will work in cryonics.

Any organization that doesn't listen to its market is doomed to mediocrity or failure. A democratic Alcor is the only way I see to avoid either.

Sincerely,
David A. Kekich

Dear Editor:

I have been a suspension members since 1987 and I have HIV/AIDS. Do the Editor and writers of *Cryonics* realize the fear and confusion they place on members like myself when they make what appear to be flippant and off-handed remarks regarding suspension funding?

In 1987, miraculously, I was able to purchase \$50,000 in life insurance to fund my neuropreservation for my contracted \$35,000 suspension. My insurance is payable to Alcor in full with a \$15,000 cushion which I thought could be used for emergency standby and anything else. After reading the mathematical masturbation on why suspension amounts are being increased for *new members*, I also read that everyone is encouraged to at least maintain \$50,000 in life insurance for neuropreservation and that suspension amounts *may be increased for everyone* at some future date.

Isn't that nice? Just try to get *any* life insurance with AIDS or any other terminal illness.

Does a real estate developer go back to the original purchasers of houses and demand more money because s/he lost money on the sale? No — the developer raises the prices on new sales!

If the reason for my concern isn't obvious, let me add that I am resentful that for perhaps most of the Alcor staff, the concept of suspension is "far away" and purchasing unlimited amounts of life insurance is not a problem. For myself, and other terminally ill Alcor members, suspension is very real and imminent. With all the things I worry about, I thought that I was at least safe with Alcor. Now it appears that I may be squeezed out when I need Alcor the most.

Stop the mathematical exercises! Double the suspension rates for *new members* and stop agonizing over which categories of members are "over or underfunded." Allow terminally ill members to have the option of excess life insurance funding to pay for emergency standby. You are forgetting that the terminally ill may also have deep financial hardships and may no longer have credit cards to pay for thousands of dollars in standby.

Kindly give future consideration to members like me and remember that new Alcor policies and procedures directly impact our very lives.

Sincerely,
Name Withheld by Request

Steve Bridge responds:

One of the great questions of cryonics has always been, "How do we plan financially today for an event (cryonic suspension) that may not take place for decades and for which the ultimate cost (standby + suspension + long-term care + revival + re-education) is completely unknown?" Inflation and the increase in technical sophistication have created marked price-rises in Alcor's Neurosuspension minimums over the past decade, from \$35,000 in the early 1980s to \$50,000 beginning in January, 1994. Even this may be too low to cover future costs.

To show our appreciation of the loyalty and contributions our long-term members have made, we have so far kept the required minimum funding for those members at the prevailing price when they signed up with Alcor. We have never been able to guarantee that "grandfathering," but we have always continued the policy. At the last Alcor Board meeting, the Directors voted to make the grandfathering offi-

cial at least until January 1, 2000. (See details elsewhere in this issue.)

We cannot guarantee that we will continue to grandfather in all previous members after that; but we have no plans now to raise their rates. And I sincerely doubt we will ever do so, because we think the eventual economies of scale will compensate for the increased cost. However... let us say 20 years from now inflation has raised the cost of neuropreservation to \$100,000 (as an example — there are other reasons to believe it will not go up much). At that point, if we had hundreds of members with \$35,000, \$41,000, or \$50,000 of funding, we will risk bankruptcy with each suspension.

You ask, "Does a real estate developer go back to the original purchaser of houses and demand more money because s/he lost money on the sale? No — the developer raises prices on new sales!"

True, but it doesn't apply here. Living members haven't bought "the product" yet; they have only bought "the right to buy," with their annual dues. A realtor does not make a deal to sell a house at today's prices to a customer who will not take possession for 40 years, and then hold the house empty for 40 years while the customer holds the money! We do not go back to the "purchasers" (those already in cryonic suspension) and demand more money.

Cryonics arrangements are a completely new kind of business, and we are still trying to figure how to do it right. If Alcor sets its prices too low, it may go out of business before it can make up the losses on future sales. We only do 2-5 suspensions per year right now, remember. If we go out of business from low prices, how do we take care of the people already in suspension, which might at that time include you or me?

The "mathematical exercises" were absolutely necessary. We discovered we were underestimating our storage costs by 400%! Fortunately, we have been underestimating our investment income by nearly the same amount, so we hadn't gone under already. We need this kind of information to decide how to prepare Alcor for long survival. We can't merely play it by ear and hope for the best.

Alcor's Directors are not being flip-pant or off-handed about this at all. We have struggled with these problems for years. It is such a difficult issue, both financially and emotionally, that we ourselves get very stirred up discussing it. We have an obligation both to place people into suspension and to insure the or-

ganization's survival.

On the issue of Emergency Standby. We took a loss early this year when a Member without provisions for Emergency Standby almost died in Florida. He did not die, and we received nothing. In your case, if we went to Florida on Standby for you, and you survived (a very common course of events with AIDS patients, who may overcome several near-fatal infections), your life insurance would not pay our expenses.

We would be happy to let Members use their over-funding for emergency standby, if we had a way to determine when the "final" standby actually was. And it may be possible that another solution will eventually be worked out for some members. Some life insurance companies, in the face of the numerous medical emergencies of AIDS patients, have begun making arrangements to pay off a certain percentage of the policy amount for emergencies while the patient is still alive. As we find out more about these changes, we will let the Members know. For now, we suggest that interested Members check with their own insurance agent or insurance company and see what is possible.

To: Charles Platt, Fred and Linda Chamberlain, and Everybody Else too:

I have been silent about the accusations leveled against me by Fred and Linda Chamberlain and about the subsequent debate because I saw no purpose to entering the fray when no real resolution is possible; in my opinion the parties involved lack the emotional resources and the perspective that time and distance from events bring to achieve such resolution. This not a criticism, but rather a statement of the facts as I see them.

Have I made mistakes, serious mistakes, in most areas of my practice of human cryopreservation? The answer is most assuredly, "yes." Where those mistakes have resulted in harm (biological, economic, and personal) I have offered both my apologies and, where appropriate and possible, attempted to make restitution. One of the first suspensions I ever did was technically substandard because of poor judgment on my part and I have done everything I could to repay the harm I caused — in that case by continuing the patient's suspension when this individual would otherwise have been thawed out. (This incident was not, incidentally, on the list of charges the Chamberlains brought against me.)

The Chamberlains have been very

vocal about prospective clients of mine being careful to evaluate me for honesty, competency, integrity, and so on, and have urged a "caveat emptor" approach to dealing with me. I have no problems with this whatsoever, and would add a strong second. However, they have also publicly accused me of dishonesty and "malefaction" in my care of patients and this is both untrue and unacceptable. If they and others wish to blame me for administrative incompetence, bad judgment, and even outright stupidity in the Dora Kent matter, and further to lay all responsibility on me for what occurred there, I am willing to accept such responsibility; I was the president of Alcor and I have never denied that the "buck stopped there."

Thus, as the Chamberlains so vocally advocate, I urge everyone who proposes to deal with me to both hold me responsible and to determine in their own minds whether they should deal with someone who was and is responsible for these matters. Personally, there have been other lapses in my judgment which concern me more than Dora Kent, but that is my opinion, and ultimately a matter between my conscience and my God. Those who feel the need to hear from me about my own assessment of my weaknesses are free to ask me: I will, within the limits of patient confidentiality, attempt to give an honest assessment.

Human cryopreservation is a new and dangerous field. A pioneering field. Pioneers have been defined as "the people with arrows in their backs." I have made many decisions and taken many actions over the course of my 25 years of involvement in cryonics: I have made many foolish decisions, said many things I have regretted, and done a few things I am deeply ashamed of. Everyone who would deal with me should know this about me.

What I am saying here is that I am not perfect and I am not likely to become so anytime in the foreseeable future. I am not Howard Roark, John Galt, Mother Theresa, or even Dagny Taggart, and those who are looking for such should look elsewhere. What I am is a man driven and handicapped by the same things that motivate and handicap much of the rest of humanity. I am at once insightful and blind, generous and stingy, possessed of good judgment and bad judgment, and in short a thoroughly human being.

I could give a litany of the mistakes and errors of anyone who has been deeply involved in cryonics over the years: including Fred and Linda Chamberlain! However, I think it would be more produc-

tive to simply say that people who plan to purchase a service as important and as free from feedback as cryonics now is, should ask a lot of questions and above all be comfortable with the honesty of the people they are dealing with. There are no guarantees. There is also the virtual certainty that *whoever* you choose is bound to make mistakes. Just hope it isn't on *you*. The most important thing is not the mistakes *but how they deal with them and how often they repeat them!*

A long time ago Curtis Henderson told me something very wise. He said, in effect, if you want to live forever you have to be prepared to pay the price. That means that if you live long enough you will be hungry, you will suffer unbearably, you will make many humiliating mistakes, you will suffer the loss of many things you hold dear. In short, you will *suffer* a great deal, period. That is the nature of life. The Buddha told us this in many eloquent and touching ways. Jesus told us the same thing. Hell, even Thomas Donaldson has told us this: "Life is hard." he has said on more than one occasion (and that was *before* he got a brain tumor). Don't expect anyone of us to be gods or supermen. The price for that expectation is just too high for *all* parties involved.

In the Alcor inquiry I believe that the one thing that came through clearly, and that most of those present (with the certain exception of Fred and Linda Chamberlain) would agree on, was an affirmation of my professional integrity. Fred and Linda charged me with *lying and deceit* in my handling of patient care and patient records, as well as their other charges relating to Dora Kent and a subsequent

suspension. These are the charges that concerned me the most. I have made my share of mistakes, but I have not sought *not* to be held accountable for them: that is one of the key elements of professionalism: honesty in your science, and in your care of patients, and accountability for that honesty.

While it may be material to Charles Platt and others that I be apologized to by Fred and Linda, it is not so important to me. I deeply appreciate the unsolicited support and defense that Charles and Steve Harris have shown me. However, enough is enough. There is no purpose to be served by dragging things out further because it will not solve anything. So I say to you, my friends: Let it drop.

To Fred and Linda I would say much the same thing. You have said your pieces; you have "warned the world" and you have (presumably) had the satisfaction of having me both publicly and privately yet again reaffirm my acceptance of responsibility for, and acknowledgment of, the errors I have made. If that was truly your objective I would urge you now to get on with your lives, and do what I intend to do with however much remains of my own life: try to enjoy it to the extent possible, try to do productive work which advances the state-of-the-art in cryonics, and try to deliver good care (as free from errors as we know how to make it) to the patients we will have contact with in the future.

Finally, I would presume to offer a piece of advice to Fred and Linda which I have a ways to go in implementing in my own life: People are not perfect and they must be evaluated in the context of *all* they have done. The Egyptians had it right;

when a man's soul was judged it was weighed on a balance not counterweighted with an evaluation of his utility or his error rate, but rather against Mat, the goddess of integrity and truth. During many of the years that I have known the both of you, you related to me in terms of the most unconditional admiration, elevating me to a height to which not only not I, but probably no man, can occupy. When I failed to meet those expectations I was thrown into the category of the deepest depravity. I have known and loved both of you long enough to have seen this pattern of behavior recreated in your dealings with numerous others. With you it is all too often black or white, all or none, pure good, or pure evil. It is my fondest wish for you that you come to realize that there are no Dagny Taggarts, only men and women, like you and me, struggling toward the light and out of the darkness, and making many false starts and wrong turns along the way.

This not to say that dishonesty, incompetence, or depravity should be overlooked or held unaccountable. Rather, it is to say that we all should be careful when we wish to cross the line between dealing with a man's specific foibles within the context of his good qualities, and when we wish to condemn the man en bloc.

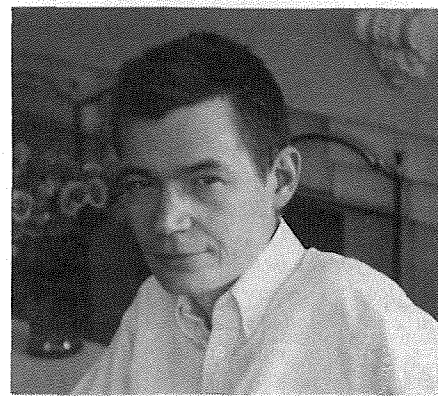
I continue to admire your many fine qualities and to hold deep affection for you both. You have shaped who I am in so many important ways. I wish you both long life and happiness. I also continue to hope that with the passage of time and events you will change your estimation of me.

Mike Darwin

For the Record

The First Recorded Meeting

Michael Perry



Cryonicists have been holding gatherings since the movement began, and as it

turns out, a little before, too. No doubt there were many informal discussions

before anything "official" got underway. Evan Cooper refers to some of these in his

1962, privately published book (written under the pen name of Nathan Duhring), *Immortality: Physically, Scientifically, Now*.¹

In the "Forewarning" Cooper notes that "immortality might eventually become a down-to-earth reality via science." He cannot remain silent about the evidence for this "outrageous possibility" but instead "must spell it out and ask you what you think of it." This in fact he has already done, "first in discussions and later on paper." In these discussions he was "met with bemused and nervous astonishment by some and blase acceptance by others." There is little said beyond this about these early meetings, except that "There was some considerable time elapse between the first discussion and deciding to write about it." A rough timetable based on internal evidence would place the "first discussion" around 1960, with writing of the book occupying 1961 and much of '62. (Robert Ettinger completed and copyrighted the first version of his book, *The Prospect of Immortality*, also in 1962.)

The book was copyrighted Nov. 3 of that year. Then a Postscript was added and, Dec. 31, the updated volume was entered in the Library of Congress. The Postscript, among other things, reports a meeting held Dec. 23. The ideas in the book were discussed, in particular Cooper's hypothesis (independently arrived at by Robert Ettinger and others) that by freezing the newly deceased a possible way was opened for their eventual restoration to life and health, with a prospect of physical immortality. This, then, is the first meeting on the basic cryonics theme of which there is substantial documentation. (Its location isn't disclosed, but a likely guess is at or near Cooper's address, 1500 Harvard NW, Washington, D.C. The meeting should not be confused with the one held a year later at which the Life Extension Society was formed.²) Some interesting issues were discussed, and one can see a pattern emerging that would be echoed and developed in the many cryonics gatherings to come. (The term "cryonics" itself, as many will know, had not yet been invented, and in fact there is a dearth of terminology at this early date, "freezing for purposes of resuscitation" being about all that had yet been conjured up.)

About 20 people attended. All had apparently been given copies of Cooper's book in its earlier draft, and a list of 12 questions to consider. It was not just a casual get-together, then. Here are the questions:

- "1. Subject: Does it [the book] have one? What is it?
- "2. Problem: Is there a problem? What is it?
- "3. Thesis: What is it?
 - a. Is it substantiated?
 - b. Does anything invalidate it?
 - c. How could the substantiation be improved?



MACLEAN'S April 2, 1966

EVAN COOPER

- d. What is missing?
 - e. Are there any factual inaccuracies?
 - f. Are any operations suggested for testing the thesis?
 - g. What is extraneous?
 - h. What kinds of arguments does the author use? Are any invalid? Are any analogies stretched too far?
 - i. Does the writer define his terms? If they are inadequate what improvements would you suggest?
- "4. What are the basic assumptions of this work?
 - "5. Do any value judgments get in the way of the main message?
 - "6. Organization: Are the arguments and data in a proper order? Assume it will be rewritten. How would you go about it?
 - "7. Consequences: What consequences do you see if the thesis happens to be

valid?

- "8. How could the style be improved?
- "9. Taste: Is poor taste shown in criticism of other viewpoints?
- "10. Audience: Who do you think the audience is or should be? Has the audience been treated appropriately?
- "11. Viewpoint: Has the author been trapped in his own cultural, geographical, political environment? What should be his vantage point?
- "12. OTHER CRITICISM: What have we missed?"

The principal responses were detailed in the Postscript. To question 1, "There seemed to be a consensus that the subject was immortality and the prolongation of life. The "problem" of question 2 was variously seen as "(1) how to achieve immortality," "(2) how to convince the public that immortality is possible," and "(3) what to do for people, here and now, who desire a reasonable chance at immortality in the interim period before successful methods of aging control have been achieved." The "thesis," question 3, was viewed as "(1) Death is not inevitable," "(2) Immortality is a real possibility," and "(3) Immortality is possible, during the interim period, via freezing and properly storing the body." (Apparently, more or less, all 3 propositions were to be taken together.) A poll taken of those present showed (in approximate figures) 11 convinced of the thesis (55%), 4 unconvinced (20%) and 5 undecided (25%), not bad for a first meeting!

More detailed responses to some of the questions are given, and interestingly anticipate future thinking. Some would only believe the basic premise (resuscitation from the frozen state) when it had been achieved, though as indicated above, others were more optimistic. Some were able to focus on the main problem: how much brain deterioration would occur prior to completion of the freezing process. It was recognized that the faster freezing could occur, the better. Experiments of Audrey Smith and others reported in the book, showing successful resuscitation of partially frozen hamsters, were a strong encouragement to one, though another strongly disagreed. Some expressed concern with social issues. Governments, they feared, were too warmongering and too

petty to ever favor personal immortality. One feared the problem of adjusting to the future "and all of the changes immortality would involve."

Cooper, not a professional writer, had modestly explained that he had created the book "[s]ince I knew of no one who had written down this particular cluster of ideas, and as I enjoy peppering away on the typewriter..." There was criticism that the material needed better organization, the concepts more careful definition, and certain terms "additional explanation." There was controversy too about the date, 2010, at which Cooper predicted the resuscitation of frozen persons of his era would be perfected: surely too optimistic! (Some more recent estimates place the development of a "general purpose assembler," the nanotechnologist's "holy grail" that should enable resuscitation, at 2015 or earlier, however.)

Cooper was at some pains to explain his position on immortality, and acknowledges that advanced future technology would not eliminate the possibility of destruction through a sufficiently catastrophic accident. However he then anticipates an up-loader's dream: "It is conceivable that scientists might be able to safely store each person's pattern, if the individual desired it, to offset

losses by accident." By "pattern" (a term Cooper borrows from cyberneticist Norbert Wiener) Cooper clearly means a body of information characteristic of the individual, something that would be "taped" into a "communication machine," so that in effect, the individual would resume functioning in the machine. In discussing his "human to automaton" idea he speculates that (in principle) "putting the pattern into the machine is easier than re-creating another flesh and bone individual and the new metallic and plastic individual is then immortal, given minimal upkeep." In fact there is an extended discussion in the book of the idea of transferal of the personality to a machine, with its superior durability

as well as the facility for making further copies. (The use of this and related ideas in science fiction also gets coverage.) Not everyone at the meeting was pleased. "Some felt that the long disquisition on the machines and the more imaginative literature could have been trimmed. Perhaps they are right. But would we have the feeling we had written a book?"

Other ideas proved controversial, such as Cooper's bold assertion: "Man was never meant to work." (He was advocating the elimination of drudgery, however, not eternal idleness.)

One unusual suggestion from the audience, mentioned near the end of the Postscript, was that, with the control of aging, the very young might wish to ac-

are additionally a forum for technical presentations. This was neither. Though the main focus was Cooper's book, the audience came having already read it, and prepared to discuss their responses. The idea of achieving immortality scientifically, and the thought that there was something people could do *now* to possibly bring this about, were *very* new and no doubt disturbing. It was natural to focus intensely on these topics, perhaps even more so than at any time since.

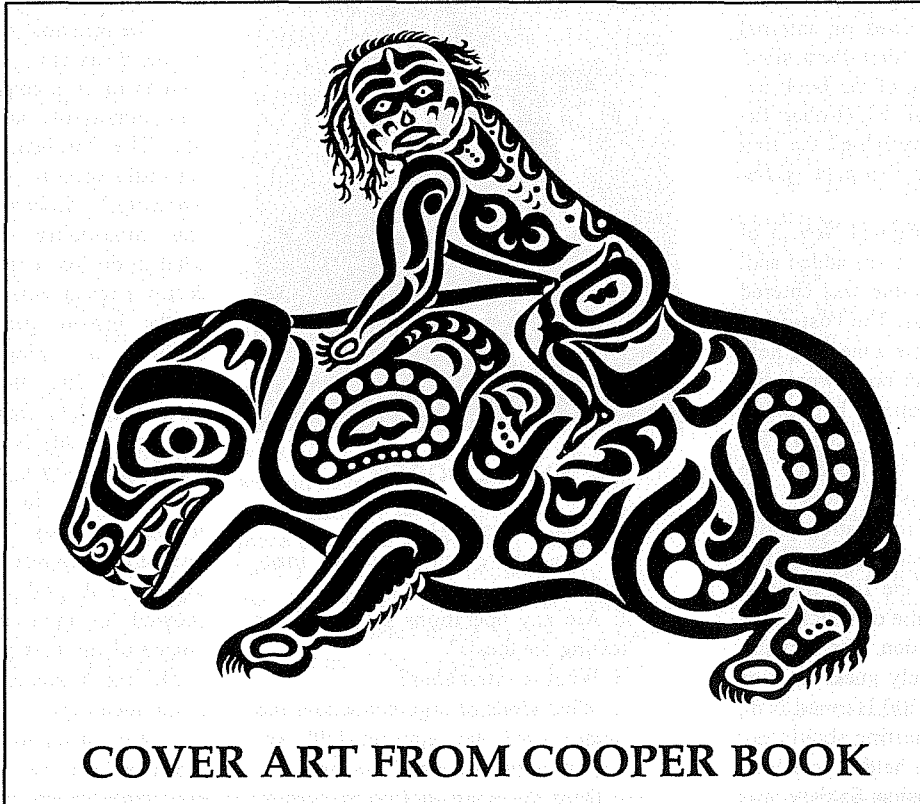
All things considered, it seems as if a rather large amount was accomplished. A lot more would remain, of course: mainly, the painful realization that discussions are one thing, actions another. Cryonics, above all else, is a movement that demands

a specific, physical procedure, not easy to initiate and sustain. And once sustained, it must be continued, without interruption, possibly for generations or even centuries. To most of the world, moreover, our ideas are still very new and disturbing, and we often have to proceed in the face of incomprehension, ridicule, and harassment. For all that, and our other troubles, we have much to be proud of. The old dream is still alive, and we are well past the discussion stage! Our final vindication — or refutation — awaits the breakthroughs that now seem much

closer than in the 1960s. Many of us hope to see those breakthroughs in our own natural lifetime, so we will *never* have to die — or be frozen. But if we don't make it, we have a backstop; we can now be suspended, with a reasonable hope of eventual awakening.

Sources:

1. Duhring, N. *Immortality: Physically, Scientifically, Now* (1962); 1991 repr. society for Venturism, available from Alcor Foundation.
2. *Life Extension Society Newsletter* Jan. 1964 p.1.



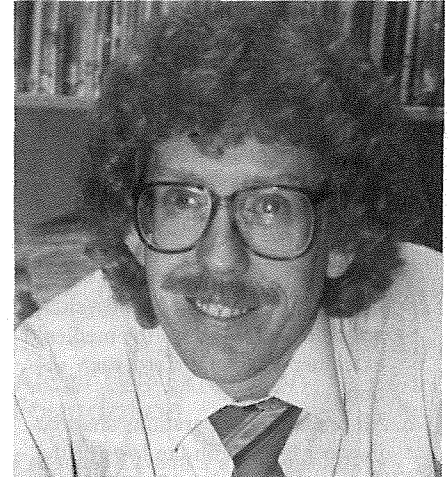
COVER ART FROM COOPER BOOK

celerate the process to more quickly reach adulthood. (If one assumes that the brain could be appropriately "programmed" in the process, which seems possible by nanotechnology, then the idea seems workable in principle, though more efficient means of doing the same thing would undoubtedly be found. However, this raises the question of why not simply create fully mature adults from scratch, if people need to be created. Sound scary? At least I, for one, would rather confront problems like this than some of the ones we face today.)

This first meeting differed from other immortalist gatherings in significant ways. There are some meetings that are exclusively social gatherings, while others

Update on Alcor's Arizona Situation

Steven Bridge



We've tried to keep you up-to-date on progress toward Alcor's move to Scottsdale, Arizona. To re-cap, Cryonics Property, LLC (CPL), a limited liability company made up of Alcor Suspension Members and Alcor itself, in September purchased a large building in the Scottsdale Airpark. This building is usually called "the Acoma Building," because it is on Acoma Drive. CPL has leased all of the open space except Alcor's three units; and the building has been repainted and its landscaping markedly improved.

In the months preceding the purchase, Alcor officers had several meetings with representatives of the City of Scottsdale, Maricopa County, and the State of Arizona, especially the Arizona Department of Health Services. The ADHS had some concerns about the way patients would be handled, but we had the very strong impression that we had satisfied their concerns, based on a letter we had sent in August.

Three days after Cryonics Property, LLC closed escrow on the Acoma Building, we received a letter from the DHS saying that they were still concerned about two administrative regulations. We decided it was time to involve an attorney in this, and on November 11, David Pizer, Mark Voelker, our attorney Ron Carmichael, and I met with the DHS administrator who had brought up the problem. We were expecting this meeting to resolve the problems and allow us to begin making our final moving plans. Unfortunately, the problem is more complex than that.

For the use of cryonicists perhaps looking for similar regulations in their own states and so that everyone will understand

the nature of the current problem, I'll quote the regulations and discuss them one at a time. The code numbers refer to the Arizona Administrative Code (if you are only looking at *statutes* in your state, you may be missing some potential roadblocks).

R9-19-313. Preservation when death caused by certain diseases.

A. The body of a person who died from cholera, diphtheria, infectious tuberculosis, plague, actual or suspected smallpox, yellow fever, actual or suspected viral hemorrhagic fevers (Lassa, Marburg, Ebola, or Congo-Crimean) or other such viral hemorrhagic fevers that may be later identified shall not be transported within or outside the state either by private or commercial transportation unless the body has been embalmed in accordance with procedures of the State Funeral Directors and Embalmers Board and placed in a hermetically sealed casket or metal lined container. The casket or container shall not be opened while in transit. The funeral director in charge of the body shall abide by any special instructions from the state or local health authorities.

B. [not relevant to this discussion]

For the moment, this regulation can easily be answered by showing the authorities that none of our current patients died of those conditions. I presented them with a list of what each patient died of [from the death certifi-

cates], without names or other identifying characteristics. I gave them the information both on whole bodies and on neuros; but if they interpret "body" in this regulation like they interpret it in the next one, the neuros should not matter.

Whether this regulation affects us now or not, it is likely to affect us in the future. Drug-resistant tuberculosis is now epidemic in some cities, primarily in AIDS patients and IV drug users, but also in many hospital personnel. Even cholera and diphtheria still kill some Americans every year — and we have many members who live and travel outside of the USA. While for most circumstances, the regulation is quite sensible, eventually we will need to push for some kind of change for cryonics. Such a change might allow (for instance) the patients to be frozen outside the state, with appropriate protection for suspension personnel, and then transported into the state for permanent care. We might even have to state that any such patients will automatically become neuropatients. Even then Lassa or Ebola Fever victims might be beyond help.

The next regulation is a bigger current problem.

R9-19-312. Preservation of bodies; general.

The body of any person who has died in this state, including a fetus of 20 completed weeks or more gestation, shall not be held at a temperature above 38 degrees Fahrenheit for a total period of more than 24 hours between the time of death and final disposition unless embalmed.

1. Embalming

- a. Except as otherwise provided in R9-19-313 and R9-19-326, embalming shall not be performed unless authorized by the family, next of kin, personal representative or other person assuming responsibility for final disposition.
- b. When death is from an unknown cause of [sic] there are reasonable grounds to suspect that a crime has been committed, a body shall not be embalmed until the medical examiner has authorized such action.
- c. All embalming operations shall be in accordance with the laws of the state and rules of the State Funeral Directors and Embalmers Board.

2. Bodies in vaults

- a. A body kept in a private or public vault, including a receiving vault, longer than 15 days shall be placed in an airtight casket or other container. This provision does not apply to bodies kept in mausoleums or other places of final disposition where aeration or dehydration processes are used.
- b. A body kept in a receiving vault longer than 30 days shall be regarded as interred. At such time as it is further buried, cremated, or removed, a disinterment permit shall be obtained.

There is one more bit under "Disposition of bodies" that applies. It reads:

R9-19-314. Disposition of bodies.

- C. A body stored under conditions of very low temperature shall be regarded as interred. At such time as it is further buried, cremated or removed, a disinterment permit shall be obtained.

Of course we can't keep liquid nitrogen in sealed containers, since it expands as it boils (liquid nitrogen is boiling at -196 C), building up pressure and finding *some* way out. Also, there seems to be no definition of what a "vault" is. We certainly don't think our dewars qualify. We also believe that this regulation should not apply to anatomical donations of any kind (can you imagine anatomy students at the

University of Arizona School of Medicine doing dissections in airtight containers?), and it certainly should not apply to human remains at -196C.

Some points that the DHS administrator seemed to insist on:

1. Bodies stored in liquid nitrogen may be a public health hazard. (Well refuted by various expert testimony over and over, of course.)

2. Only BODIES count under the sealed container regulation. (I specifically asked, "So if we cut our patients into four pieces and stored each one in separate containers, they would no longer constitute a public health hazard?" The administrator appeared to turn a bit green at this suggestion, and begin to flounder, with neither a yes or no.

3. It does not matter at all that these bodies are Anatomical Donations. ALL bodies in Arizona in a "vault" for more than 15 days must be in sealed containers.

4. Our suggestion that R9-19-312 appeared to be geared to bodies held at a temperature above 38 degrees F only confused him.

It would be improper for me to discuss our legal strategies here; but our attorney believes that we have many options to explore before any attempt at litigation should be contemplated. His and our conversations with other officials in various Executive Departments have located no general hostility to Alcor moving to Arizona. But one roadblock can cause plenty of aggravation, as we know from our experience in California. However, we do not plan to let one ill-informed bureaucrat dissuade us so easily. Cryonics will never succeed if we cannot prevail against such weird logic as we have seen here. And if we can win this one up front, our status will be more firmly established. We might even be part of the process of re-writing the regulations. The education process continues.

This will delay the move to Arizona longer, although I won't try to predict how long. This could be resolved in a couple of weeks or it could take much longer. We would very much like to get the patients moved soon for their protection, and we want to get research started again. But we are not in the same kind of desperate situation as we were in the 1988 Dora Kent case. We can still approach this in a

deliberate fashion and with an eye toward making more friends than enemies in Arizona. I've tried all along to plan this move in *cooperation* with state and local authorities. I am convinced that such an approach, if possible, is necessary for the protection of the patients and for the eventual integration of cryonics into the mainstream (at least, more "mainstream" than it is now). In Arizona so far we've succeeded on every step but this, and we're going to keep working on it.

We have an excellent attorney who is very well acquainted with State and Scottsdale government. And most of the other people we meet seem more interested than offended. As a matter of fact, Mark Voelker and I had other pleasant meetings while we were there, including a very entertaining half hour with the Mayor of Scottsdale, who — like my father — worked in the field of artificial insemination of cattle. More and more people do understand cryonics to some degree these days and we'll keep making progress.

One other update: Many Members have asked about the Spanish Family (they have asked us not to use their name in *Cryonics* just yet) which wants to build a brand new cryonics facility in Scottsdale. As many of you know, they plan to offer use of that facility to Alcor. All of the members of Alcor's Board of Directors are very interested in this opportunity and very much hope it will someday become a reality. While the family has purchased undeveloped property in the Scottsdale Airpark, there are many steps to go, and completion of such a project may take two years or more. Any problems Alcor has with Arizona governmental agencies must be worked out for *any* cryonics group, of course. We hope that a successful resolution of these problems for us now will lead to future success for this family's project as well.

Proposal for a Revised Patient Care Fund Policy

Linda Chamberlain



The original Patient Care Fund Policy (printed and discussed in the President's Column, *Cryonics*, June 1993, p. 8-10) has served well in bringing the Fund to well over a million dollars. The Patient Care Fund has given Alcor suspension members the greatest security currently offered anywhere. Readers who would like more information about the purpose and history of the Patient Care Fund will find such information in the President's Column, *Cryonics*, March 1993, p. 7-8.

In addition to providing long term care, Alcor has always sought better protection from such problems as litigation or even the possibility of future fiduciary abuse. In spite of several thousand dollars in legal fees, it may not be possible (at least for existing funds) to set up a trust that will guarantee against outside forces such as litigation (see President's Column, *Cryonics*, September 1993, p. 11-13). The search for ways to improve the safety of the Patient Care Fund along these lines continues.

There are many ways, even without extensive legal fees, to protect against fiduciary misuse, however. Several important new ideas are currently being investigated by the Investment Advisory Committee and the Alcor Board. Other new safeguards have already been introduced into the current revision of Alcor's Patient Care Fund Policy.

First, there is a tri-level check and balance. This is made possible by three different stages of involvement when changes are made to the Policy itself or to the investment vehicles held by the Fund. The first level is the Investment Advisory Committee, which gained its permanent charter at the November 7, 1993 Board meeting.

The Committee has no authority to manage the Fund, but does review (policy matters as well as the investment holdings and objectives) and advise the Board of

Directors. The Committee is subject to removal or replacement if its performance is not satisfactory. This introduces accountability.

The second level of diversification in the management of the Patient Care Fund is the Board of Directors. After reviewing the reports and recommendations of the Investment Advisory Committee, the Treasurer, and other officers (and, of course, their own counsel), the Board (by a 2/3 majority vote) confirms or vetoes the recommendations.

And finally, a third level of security is employed. Here, the authority and responsibility to carry out the actual purchases and redemptions lies with specified officers of Alcor. This authority and responsibility is subject to additional limits and safeguards. For example, two signatories are required for the redemption (sale) of investment vehicles.

In any step of this process, there are always two other "branches" watching and evaluating. In addition to the safety offered by this diversification of management within Alcor, the Patient Care Fund benefits from still another unique advantage. This is the personal dedication to and caring for dear friends and family members that no detached professional could possess or match. And yet, this is balanced and augmented by outside professional management in that approximately 70% of the Patient Care Fund is in mutual funds, run by investment management companies.

The revision of the Patient Care Fund proposed by the Investment Advisory Committee is reprinted below. The Board of Directors will vote on its acceptance at the January 3, 1994 Board meeting. Members and readers may know of additional protective measures and are encouraged to share their ideas with the Investment Advisory Committee and the Directors.

Alcor Life Extension Foundation

Proposed Patient Care Fund Policy

1. Definition and Time Commitment

The Patient Care Fund is a separate and specialized reservoir of assets belonging to the Alcor Life Extension Foundation, a non-profit California corporation. The Patient Care Fund is set aside for the exclusive scientific research and educational purpose of providing care for members in cryonic suspension. The Board of Directors recognizes that the Patient Care Fund cannot cover all overhead expenses as if it were a separate organization at this time. For this reason, the Alcor Board is committed to meeting such expenses of patient care for the indefinite future.

2. Statement of Purpose

The Patient Care Fund capital and income shall be utilized only for direct patient care expenses. Direct patient care expenses (as described in Section 7 below) shall initially focus on long term storage of suspended patients.

As the Patient Care Fund grows and at the discretion of the Board of Directors, these patient care expenses shall be expanded to include research into improving storage methods, revival methods (reanimation), and re-entry (rehabilitation).

3. Reports and Projections

In order that the Board of Directors can carry out the objectives of the Patient Care Fund as described above, the following reports and projections shall be prepared for Board consideration:

- 3.1. The Treasurer shall calculate quarterly (or as otherwise directed

or deemed necessary or advisable) the actual patient care expenses and submit a written report to the Board of Directors at the February, May, August, and November Board meetings, or the next regular meeting held.

3.2. The Officers shall submit at the July and January Board meetings (or as otherwise directed or deemed necessary or advisable) a written, comprehensive semi-annual projection of direct patient care expenses and contingencies.

3.3. The Investment Advisory Committee (IAC) described in Section 4 below shall review the investment vehicles held in the Patient Care Fund and shall quarterly (or as otherwise directed or deemed necessary or advisable) make written recommendations to the Board of Directors at the February, May, August, and November Board meetings, or the next regular meeting held. These reports shall cover changes in fund allocations, changes in specific holdings, and revisions to the Patient Care Fund Policy. The Committee shall research and respond to other questions regarding the Patient Care Fund which may be assigned to it by the Board of Directors.

4. Investment Advisory Committee

4.1. The Board of Directors shall appoint an Investment Advisory Committee (IAC) which shall consist of at least three (3) persons. All Investment Advisory Committee members must be Alcor suspension members. No member of the committee shall serve as an officer of Alcor while serving on the Investment Advisory Committee. At least one member of the Board of Directors will serve on the Committee and shall act as liaison between the Board and the Committee.

4.2. The Investment Advisory Committee shall have no authority to manage the assets of the Patient Care Fund but shall act in an advisory capacity only, preparing

the reports described in Sub-section 3.3 above.

4.3 The productivity of the Investment Advisory Committee shall be reviewed annually in March. If the Board does not feel the Investment Advisory Committee is doing an adequate job, the members of the committee shall be replaced.

5. Investment Guidelines

It is understood that markets do change and no given type of investment vehicle will always best serve the stated investment objectives. In view of the above, the Patient Care Fund Policy only provides guidelines. Accordingly, in addition to the reports and recommendations being submitted to it, the Board of Directors shall review annually the investment objectives and goals of the Patient Care Fund, in terms of the below guidelines. Changes can only be made by a two thirds majority vote of the Board of Directors, as required by Section 9.

The present (as of the date of acceptance of this document) investment guidelines are as follows: The primary objective shall be to preserve Fund capital while extracting income to cover Fund expenses (as defined in Section 2 above). The secondary objective shall be to invest any additional amounts in growth vehicles so that the Patient Care Fund can grow over time in order to achieve the objectives of the second paragraph in Section 2, while still providing safety.

While the Fund is relatively small (and expenses per patient are much higher than they will be later by virtue of economies of scale), this objective is challenging and requires a more aggressive approach than will later be desirable. When the Patient Care Fund is more mature, the allocations may be changed to reflect greater emphasis on more secure capital appreciation. Initially, however, a larger proportion shall be allocated to the income-producing portion of the Patient Care Fund.

The allocations to Conservative Growth/Current Income vehicles and to Aggressive Growth vehicles (or other investment vehicles that are from time to time determined to be advisable) shall be determined based on the projected patient care expenses for the period under consideration (conservative assumptions based

on the then current experience) as to the projected total return (appreciation plus yield) on the Conservative Growth/Current Income allocation and the total return on the Aggressive Growth allocation. Appendix A and Appendix B (attached) detail the manner in which this determination is carried out. These allocations and the investment vehicles purchased to accomplish the objectives of the Patient Care Fund will be reviewed quarterly as described in Sub-section 3.3 above.

5.1. Investments shall be sought for the Conservative Growth/Current Income allocation which yield the minimum return (after inflation) required to produce sufficient income to cover the patient care expenses for the year (Appendix A shows how this is to be calculated). The amount of the total return sought from this allocation shall be set by the Board of Directors. Investment vehicles most appropriate for this portion of the Patient Care Fund, in most market conditions, are individual stocks, individual bonds, money market funds, bond funds, and stock funds, subject to market vulnerability factors.

5.2. The balance of the Patient Care Fund, aside from the sum described in Sub-section 5.1 above, shall be allocated to Aggressive Growth vehicles. The amount of the total return sought from this allocation shall be set by the Board of Directors. The means of determining this is shown in Appendix A. Investment vehicles most appropriate for the Growth portion of the Patient Care Fund, in most market conditions, are individual stocks, stock funds, and real estate, again subject to market vulnerability factors.

6. Management and Signature Authority and Limitations

The Board of Directors shall review quarterly the reports and recommendations of the Treasurer, the officers, and the Investment Advisory Committee in making decisions about the Patient Care Fund. It is understood, however, that liability for the proper conduct and handling of the Patient Care Fund lies with the Board of Direc-

tors, regardless of the sources of consultation or information obtained. With that in mind, all decisions about possible changes to the investment holdings, the objectives of the Fund, or other management aspects shall be made exclusively by the Alcor Board of Directors, or an Executive Committee may be appointed by the Board for this purpose.

In order to provide for the greatest safety of the Fund, the following safeguards and limitations shall be followed:

6.1. Only the President, Treasurer and a third director to be designated by the Board, shall have the authority to carry out the decisions of the Board (as described in Section 5 above).

6.2. Two signatories (per Sub-section 6.1 above) shall be required to redeem (sell or withdraw) investment interests from the Patient Care Fund.

6.3. The Board of Directors shall continue to pursue the goal of establishment of trusts, division of Alcor into separate organizations, management of the Fund by outside professional money managers, bonding of officers authorized to sell or purchase Fund assets, or whatever other means might be found most suitable, in the interests of assuring that the Patient Care Fund is protected to a maximum degree from failure of fiduciary responsibility, liabilities of suspensions, and other sources of jeopardy to the Fund, consistent with existing financial prudence and social situations.

7. Valid Expenses for a Patient Care Fund

The objectives of the Patient Care Fund (as stated in Sections 1, 2, and 5 above) are to maintain the size of the Fund and cover expenses (care for the patients) only out of the income or appreciation of the Fund. Valid expenses of the Patient Care Fund include: *liquid nitrogen and/or other expendable items needed for storage, dewars and other equipment involved in storage of patients, salaries of personnel involved in storage of patients or ad-*

ministration of patient storage, legal bills related to patient care, rent or mortgage debt on a building to house the patients, costs involved in moving patients to new locations, research in storage and revival technologies, security (such as guards, fire protection, earth quake protection, etc.), engineering development to reduce costs, and an appropriate share of liability insurance, relevant office expenses, shipping expenses, postage, electricity (utilities), and related administration (the share of these expenses that is defined as appropriate shall be determined from time to time by the Board of Directors).

8. Payment of Patient Care Expenses

Since it is unwieldy to use two accounts to handle salaries, insurance, and other joint Patient Care and Operating expenses, during the year the Operating Fund may pay all usual Patient Care expenses. Such payments are charged to The Patient Care Fund as liabilities owed to the Operating Fund.

8.1 At the end of the months of June and December, Alcor's President and bookkeeper together determine the total amounts which 1) Patient Care Fund owes to the Operating Fund for its paid expenses, and 2) Operating Fund owes to the Patient Care Fund. The difference between these two amounts is transferred to the appropriate fund.

8.2 On a case by case basis, the Board of Directors may choose to have unusual Patient Care Fund expenses paid for directly by the Patient Care Fund.

8.3 At any time during the year, the President may transfer Patient Care Fund funds to the Operating Fund to cover expenses already paid by the Operating Fund, if cash flow problems necessitate such action. Any such transfer must be reported to the Board of Directors by electronic mail or at the next Directors' meeting.

8.4 The Board of Directors may choose at any time to retain in the Patient Care Trust Fund any or all of the money owed to the Operating Fund for paid expenses. Upon

such vote, the specified funds would be considered a permanent part of the Patient Care Trust Fund and no longer a liability owed to the Operating Fund.

9. Invasion of Patient Care Fund Capital

The primary objectives of the Patient Care Fund (as stated in Sections 1, 2, and 5 above) are to maintain the size of the Fund and cover expenses (care for the patients) out of the additional income produced. It is hoped that the Patient Care Fund will grow sufficiently over the years to also provide for reanimation and reentry for our members. In view of these objectives, invasion of capital would only be appropriate in emergency situations such as market downturns, legal attacks, social unrest, etc.

Invasion of Fund capital at any time or for any reason will require a two-thirds vote of the Board of Directors. In particular, this shall apply to circumstances where market performance of the Patient Care Fund has failed to meet the stated objectives of preserving asset size while meeting expenses. This is not to hamper the orderly conduct of necessary transactions, but to ensure that all Directors are aware of the situation and can work toward a resolution.

10. Changes, Additions, or Deletions

This Patient Care Fund Policy has been established by a resolution of the Board of Directors on (date): _____. Any changes, additions or deletions to the policies contained herein shall require a two-thirds vote of the Board of Directors and copies of such resolutions will be attached to this original Patient Care Fund Policy.

Arizona Media Progress

Ralph Whelan

The October 27 release of the *Scottsdale Progress Tribune* — or, “the *Progress*,” as it is called — contained a spread of four articles about Alcor, all of them apparently penned by reporter Mark J. Scarp. Unfortunately, none of the four articles could be considered particularly even-handed. The aim of the four articles, entitled “The Frozen Dead,” “Cryonics firm has fought for survival,” “Case of missing, frozen head puts firm in spotlight,” and “Some famous folks have flirted with cryonics,” was to present a rapid-fire rehash of every “scandal” in Alcor’s past. That the various unfounded accusations against Alcor were later refuted did not come across very well in the articles.

Consider the following excerpt, which reports on the “case of the missing, frozen head”:

Alcor officials defended administering the drugs, saying it was necessary to slow deterioration of the woman's cells while her head was prepared for freezing. But Riverside County law-enforcement agencies and prosecutors disagreed, raiding the lab twice in January 1988 in an ultimately futile search for Kent's head, the newspaper reported.

Authorities wished to thaw it and perform an autopsy to determine whether she died naturally or if the drugs were responsible for her death.

The latter determination could have meant homicide charges for those who attended Kent's death, Riverside County Assistant District Attorney Don Inskeep said Tuesday.

After recounting other dubious-sounding Alcor-in-the-media events, one

of the articles even goes on to provide a list of “Other accusations against Alcor that never stuck”! If this doesn’t strike you as a bit silly, imagine your spouse angrily brandishing a list of “People I Thought You Slept With, Though It Later Turned Out I Was Wrong.”

I was surprised to see that not once in any of the four articles was the question of scientific feasibility even alluded to. Except, of course, in reference to the famed Scientific Authorities: “Arguably Scottsdale’s most unusual potential new business, cryonics is a tiny — and some scientific authorities say unfounded — branch of cryogenics...”

I wrote a Letter to the Editor of the *Progress* (see reproduction) to correct some factual reporting errors and to voice some objection to the sensationalism and disregard for the *outcomes* of the situations reported. I’m not sure if it was published or not, but two days later there appeared an Editorial entitled “No Cold Shoulder,” which was underwhelming in its neighborliness, but pointedly *laissez-faire*. Consider the following passage from that editorial:

The question is what we should do when they get here? Should we set up the same defense that forced Tiffany's [a restaurant that featured topless dancers] out of town and fight to keep Alcor from bringing its 27 frozen capsules here? Or should we treat them as we would any other business that thinks Scottsdale is the ideal place to set up shop?

Just because a firm's chosen field may be unsettling to majority sensibilities, or even repulsive, is not a reason, in and of itself, to preclude a company from coming here...

As long as a firm operates within the laws of our community and presents no threat to the health and welfare of those who live and work nearby, it should be allowed to conduct its business and sink or swim on its own.

Two days after the *Progress* released its four-article series, *The Arizona Republic* (Arizona’s largest newspaper) published one of the most informative and upbeat articles on Alcor and cryonics that I have ever seen. Right from the opening paragraph (“Want to live forever? Want to witness, firsthand, the miraculous inventions of the distant future?”), the *Republic*’s article “The Chosen Frozen” is positive and entertaining. (Compare this with the opening paragraph of the first *Progress* article: “This isn’t Halloween stuff. It’s not science fiction. It’s real and it’s coming to Scottsdale.”)

The difference in reporting slants was remarkable, as the *Republic*’s summation of Alcor’s California legal history attests:

Alcor beat back legal challenges from California that questioned the company's right to freeze human bodies. Last year, the state appellate court affirmed Alcor's position.

The company also was embroiled in a case involving the death of an elderly woman whose son wanted her head frozen cryonically. Alcor staffers were accused of hurrying the woman's impending death with drugs, an allegation they successfully rebutted.

Refreshingly, the article lets an Alcor Member (Alcor Treasurer Dave

Pizer) speak to the strangeness of cryonics:

"We poke fun at ourselves, sometimes," Pizer said. "But dying is serious: your own personal mortality and mortality of people you love."

"We're not just a bunch of crazy people who want to be frozen. Matter of fact, we have a saying in cryonics that dying and getting frozen is the second-worst thing that can happen to you, the first being dying and not getting frozen."

The article goes on to describe Dave as "a familiar face to longtime Valley residents," having appeared in a series of commercials for Fitwell Seat Covers with his Great Dane "Little Woofie" a decade ago. The article closes by quoting Pizer's remark that Woofie died before he knew enough about cryonics to have him frozen, and then mentioning that when Dave's next dog "Pandora" succumbed, "he had her preserved cryonically, banking on the day when he and Pandora could be together again."

On another positive note, Alcor President Steve Bridge and Director Mark Voelker had an opportunity to meet with Mark Scarp and one of the *Progress* Editors a couple of weeks ago. Both Steve and Mark felt that Mr.

ALCOR LIFE EXTENSION FOUNDATION

LETTER TO THE EDITOR, SCOTTSDALE PROGRESS TRIBUNE — PLEASE PUBLISH

Dear Friends,

The October 27 *Scottsdale Progress Tribune* contained several articles by Mark J. Scarp colorfully describing both the history and the present state of the Alcor Life Extension Foundation, a cryonic suspension organization of which I am Vice President. (Cryonics is the ultra-low-temperature preservation of persons who require still-undeveloped medical technologies for revival.) As noted by Mr. Scarp, Alcor will soon be moving its main facility to Scottsdale.



I wish to correct Mr. Scarp on a few points. Mr. Scarp makes reference more than once to "several California legal challenges to the practice of cryonics." Actually, neither the State of California nor anyone else has ever initiated legal challenges against Alcor. Rather, Alcor has on occasion found it necessary to initiate legal challenges of its own to elicit fair treatment from government agencies that are unaccustomed to change. Take for instance the *Roe v. Mitchell* case, Alcor's successful suit against the California State Health Department. Here, the Department of Vital Statistics was arbitrarily refusing to issue Disposition Forms for the cryonic suspension patients stored in our facility, while simultaneously urging Riverside authorities to prosecute us for not possessing these same forms. This kind of "Catch-22" treatment could not—and did not—hold up in a court of law.

Mr. Scarp also mentions Riverside County Assistant District Attorney Don Inskeep's belief that "no settlements were ever offered or paid" in the false arrest suit filed by six Alcor members after Riverside officials raided Alcor's facility—removing all equipment and arresting everyone present—and then failed to show due cause. Mr. Inskeep is not correct. Settlements totaling almost \$100,000 were offered and paid to all six individuals.

Mr. Scarp states that "Before their deaths, Alcor members pay up to \$120,000 as a down payment...". Actually, this is *payment in full*, not a down payment, and it is not collected by Alcor until *after* the cryonic suspension is performed, usually in the form of a life insurance policy death benefit. Our members are encouraged to specifically designate who should receive this money if Alcor is for some reason unable to perform the suspension.

Lastly, I wish to question Mr. Scarp's frequent referrals to Alcor's "stock of bodies and heads," the "frozen body parts," the "accusations of homicide and assisted suicide," and the "controversy, skepticism, even revulsion" cryonics engenders in some people, most notably Mr. Scarp. Despite the literally hundreds of newspaper and magazine articles written about Alcor and cryonics in recent years, we've never before seen such lengthy reporting completely devoid of any scientific arguments either supporting or opposing the technical feasibility of cryonics. Despite the "shock value" of the statements referred to above, surely the ultimate issue is that of the scientific feasibility of the service we offer, and this therefore should receive at least *some* attention?

In essence, Mr. Scarp's articles are a recapitulation—and a re-enactment—of the sensationalism and innuendo that abounded at the time these matters were in fact "news." Alcor was accused of doing several things that we had not done, and several perfectly legal and reasonable actions that we *had* taken were mistakenly or maliciously labeled as "illegal" by certain authorities. These authorities were later firmly refuted and rebuffed; some of them even lost their jobs at least in part because of their irresponsible actions in harassing Alcor. It is not responsible journalism for Mr. Scarp to "pick up the torch" of sensationalistic reporting on topics that were laid to rest in courts of law years ago.

In the 21 years since the Alcor Foundation incorporated, we have consistently striven to be an ethical, responsible organization. We have always been cooperative with governmental agencies, except when they make arbitrary decisions intended to stifle or destroy our freedom to operate. Our dealings with officials in Scottsdale, Maricopa County, and the State of Arizona have been almost uniformly congenial and cooperative. We are looking forward to moving to Arizona and contributing our ideas to the scientific and cultural life of Scottsdale. Alcor is a non-profit scientific research and public education organization. I encourage your staff and your readers to call us at (800) 367-2228 to receive information on the principles and procedures that comprise cryonic suspension.

Sincerely,

Ralph Whelan
Vice President, Alcor Foundation

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Scarp's assessment of Alcor and cryonics was much more benign after meeting and conversing with some real live cryonicists.

I should point out as well that the articles published in the *Progress* are not at all in line with the general attitude of receptiveness and friendly curiosity

we've encountered in most other aspects of this move. Steve and Mark also had a very positive meeting with the Mayor of Scottsdale.

I'm sure that the *Progress* will be keeping a close eye on us and doing some follow-up reporting. So I'll do the same, and keep you posted.

The Turkey Story

S. Garret Smyth

Once upon a time there was a farm, and on the farm were some turkeys. They lived in a great big barn. It was warm and cozy, and the turkeys were looked after well.

One day a young turkey, whose name was Tommy, was waddling about and making those odd noises turkeys make that sound a bit like the stomach juices of a large animal rearranging themselves. He was fairly contented. He'd just stuffed himself with grain and felt like stretching his legs. He decided to go outside and waddle a bit in the open air. There was a sort of enclosed run outside, which allowed the birds to mill about in the air and be safe from foxes and other predators which might infringe upon their liberties. Although far too small to allow all the turkeys out of the barn at once, it did allow the farmer to call his birds "Free range." In fact most did not go out at all, for they felt far more secure in the barn.

"Hello Tommy," said Tina, a friend of his who liked going out in the open air. "How are you today?"

"Oh, fine thanks, Tina, and yourself?"

"Well, pretty good all 'round, I must say."

"Are you out here for a stroll, Tina?" inquired Tommy.

"Yes indeed," replied Tina.

"Well fancy that, so am I!"

"Goodness me Tommy, so great minds think alike after all!" And they both made that vaguely impolite, sort of water-down-a-plughole noise.

"I say, Tina, how would it be if you accompanied me on my walk?"

"Well I don't mind if I do Tommy, don't mind if I do."

So they both set off for the Far

Fence. Usually, when they reached it there didn't seem a lot else to do but turn round and go back, but this time they lingered.

"Tina," mused Tommy, in a far away sort of voice, "Do you ever wonder what's Beyond The Fence?"

"Oh, Tommy, you dreamer." Tina smiled at Tommy (as much as is possible when you've only got a beak). "I mean, you may as well ask if there's life after Christmas."

"No, really Tina, there must be something Beyond The Fence. Where does the farmer live?"

"Well I'm sure there's an answer, but it's beyond me. Perhaps Aunty Trish knows, she's been around a bit. Let's go in now."

So the two young turkeys returned to their quarters and Tommy made a mental note to ask Trish about Beyond-The-Fence next time he met her.

Inside the barn there was a commotion going on. Everyone was very amused. A group of turkeys was standing in one corner, looking sheepish (no mean feat since they'd never seen a sheep). An old turkey cackled, "Must've eaten some grain that had started to ferment."

Another, who wasn't so amused, said, "Well, it's disgusting if you ask me. The thought of it. It... well it's... it's just plain wrong. Shouldn't be allowed."

Tommy waddled over as fast as his short, fat, feathery legs would carry him. "What's going on?"

"Oh," said a bystander, "this silly lot have announced that they've formed an Escape Committee. It seems they think that they can escape from Christmas! Har har!" His laugh had a slightly hollow ring.

What a good idea, thought Tommy. He decided to wait until the hullabaloo died down, and then find out more.

Later that day he mentioned his plan to Tina.

"Oh, they're loopy, or trouble makers, or both. Don't have anything to do with them."

"How do you know, Tina?"

"Everyone says so."

"Have you spoken to them?"

"No, I've got better things to do with my time. It seems to me that they're just scared of Christmas."

"Aren't you?"

"No... of course not. It's part of life. It's quite natural."

"You sound a bit afraid."

"Well, naturally the process of reaching the state of Christmas worries me. I don't want it to be painful or messy, but Christmas itself holds no fear for me."

"You mean you want to reach Christmas with dignity?"

"Yes, exactly"

"Well I don't bloody well want to reach it all."

"Chicken."

"Cluck bleedin' cluck."

"I think you need some Christmas counseling."

"Christmas what?"

"Christmas counseling. I learnt about it in my consciousness-raising course. We live in such a Christmas-denying society that people need counseling to come to terms that they're going to have to face Christmas one day. In the old days, before centrally heated barns and so on, Christmas was part of daily life. Christmas came and the farmer would just walk amongst the turkeys, pick out the big fat juicy ones,

grab them by the neck, and one by one twist their heads round until there was a snapping sound, and then pluck, gut and truss the turkeys there and then."

"Er..." Tommy whispered, "and that was good?"

"Well at least everybody knew what was happening, even the little ones, and could come to terms with it. Much healthier. And of course the souls of the turkeys went to a far better place. If you believe in that sort of thing."

Tommy was silent.

"Listen," said Tina, "I could arrange for you to have a course of Christmas counseling, if you like. Aunty Trish does it."

Tommy thought. He wanted to talk to Aunty Trish. "Okay then, you arrange it and I'll go along."

But that night, when others were as-

leep, he tracked down one of the turkeys everyone had been laughing at, and joined the Escape Committee. After a whispered discussion with some of the committee members, he went back to his roost and thought some more. Turkeys had said things about Christmas that he'd been hearing all his still-short life. Maybe it *was* inevitable, like some claimed, but he didn't know that. If it wasn't, then maybe escaping it *would* lead to too many turkeys. Some thought so, but again, how could they know? Maybe life without Christmas would be insufferably boring, like others were so sure. (Some of those turkeys were pretty boring themselves.) Tommy mused awhile longer.

Suddenly the thought occurred that most turkeys probably *wanted* Christmas to happen. Not right this minute; they

were afraid of the chopping block, but overall they really seemed bent on "getting it over with." Why? Why, if this seemed all right to them, did it seem wrong to him?

Tommy thought harder. Wasn't there something more to life than just the farm? At least, there *ought* to be. What about Beyond-The-Fence? Tommy imagined trees and sky and no fences. Maybe the escape wouldn't work, of course, but what did he have to lose? If it did work, no doubt there'd be more problems. But he'd be *free*, free of this Christmas thing, free to try to be something else.

He was thinking these last, happy thoughts when he fell asleep, knowing he needed rest. From now on he'd have work to do, and with the opposition, he'd have to be careful.

Barcode Inventory System

Alcor implements new "hospitalesque" inventory control system

Scott Herman

Inventory of consumable items is a sizable and complicated task for a complex organization like Alcor. Each time a member is suspended, there are approximately two hundred to two hundred and fifty items expended. These include syringes, sample containers, perfusate chemicals, etc. Over the past years, this has created several major problem areas.

First is the difficulty of being able to control information regarding the inventory on hand. If too few items are in stock, there is the risk of not having specific items when they are needed. Purchasing stock in quantity can yield discounts, but it also creates the need for additional storage capacity. Also, many items have a limited shelf life. Overstocking can thus be both wasteful and costly.

A second problem involves the

necessity to accurately invoice the costs of a given suspension. In the past, it has been difficult for Alcor to accurately determine the actual costs of performing suspensions and promptly be compensated for these expenditures.

It is hard for those who have never visited the Alcor facility to fully appreciate how extensive the stockpile of expendable items has become. Now that our new inventory program is installed and functional, we find that there are over 500 different items and approximately 20,000 individual pieces!

Until recently, this enormous inventory was not separated into different groups. While struggling with the problem of how to develop an efficient inventory system, it became apparent that Alcor needed to divide this diverse and specialized collection of items into

smaller and more concise inventory categories. The best solution was found in Tanya Jones' suggestion that Alcor incorporate the use of a barcode system. Valuable consultation and development of this idea was provided by Joe Hovey and Hugh Hixon.

With this type of system, Alcor could now break its heretofore undifferentiated general inventory into three specific categories: (1) ambulance supplies, (2) operating room/suspension inventory, and (3) transport/remote kit items. This system also gives Alcor the capacity to add additional categories when needed.

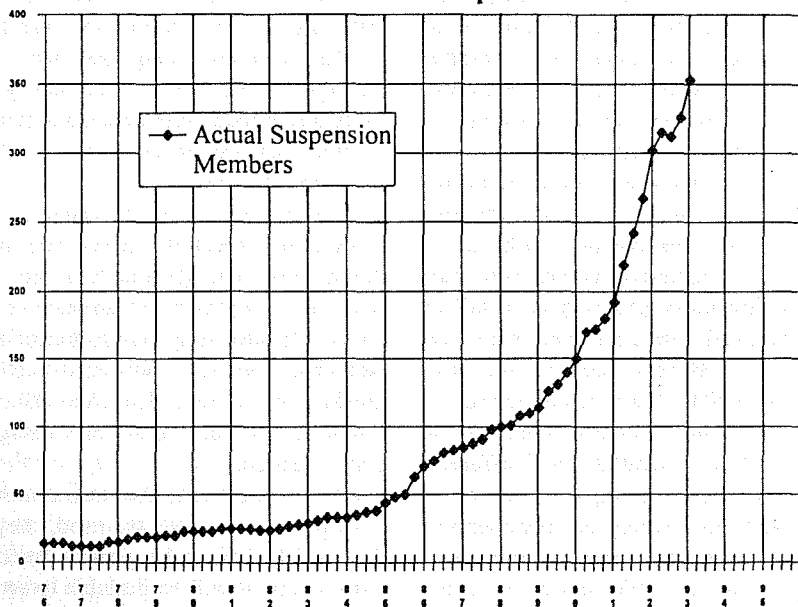
As items from the suspension and transport inventories are used, they can be restocked from the general inventory. Ultimately, it will be possible to set up a separate department to handle inventory

How Many Are We?

Alcor has 369 Suspension Members, 523 Associate Members (includes 100 people in the process of becoming Suspension Members), and 27 members in suspension. These numbers are broken down by country below.

Country	Members	Applicants	Subscribers
Andorra	0	0	1
Argentina	0	1	1
Australia	13	1	4
Austria	1	0	1
Brazil	0	0	1
Canada	11	5	50
Costa Rica	0	0	1
Denmark	0	0	1
Estonia	0	0	1
Finland	0	0	2
France	0	0	2
Germany	2	1	1
Holland	0	0	2
Ireland	0	1	1
Italy	0	2	1
Japan	2	0	2
Lichtenstein	0	0	1
Lithuania	0	0	2
New Zealand	0	0	1
Russia	0	0	4
Spain	6	2	0
Sri Lanka	0	0	1
Sweden	0	0	1
Switzerland	0	0	1
U.K.	13	3	7
U.S.A.	321	84	332
Ukraine	0	0	1

Total Alcor Suspension Members
Linear Graph



control. At that time each department will be able to use this system to manage their inventory needs and restock from the general inventory control department.

Another primary benefit of this system is its capacity for modification as needs change. One of the main features of this new system is its use of barcodes. (Yes, Alcor will soon be able to handle its inventory in a manner similar to that of major hospitals!)

Barcodes, in general, allow an enormous amount of useful information to be placed in a compact and efficient manner. Currently, Alcor's barcode system provides us with four different pieces of information, giving us a vastly improved method of inventory and cost control. Alcor's barcode system tells us (1) the category of use (such as "sterile suspension consumable"), (2) supplier identification information, (3) the part number, and (4) the lot processing code.

The efficiency and control afforded by this new barcode inventory system has been needed for some time. Unfortunately, readily available software would never address Alcor's special needs, and Alcor's financial situation prevented the possibility of hiring a programming consultant to write a customized inventory program.

About a year ago, Bill Seidel, working with Tanya Jones, took a first step toward minimizing our inventory problems by writing a basic inventory program. This allowed Alcor, for the first time, to start keeping track of inventory in a more organized way than was possible before. However, demands for even greater inventory control have resulted in further improvements to the system.

Since Bill Seidel's program was a DOS-based application, we were unable to link information in his database program to other applications. Despite the advance Bill's system gave us, we needed to import data from the inventory database into Windows applications like Microsoft Word and Microsoft Excel. This additional capability would improve our accounting and report generation.

When I joined this effort, it was my duty to take Tanya's and Bill's primary conceptual design and turn it into a more practical and better functioning system.

Having a background in computer technology and database programming, I was able to select the hardware that was needed and write the software to implement the system. Using Bill Seidel's original database structure, I converted the program to a Windows environment and enhanced the system design.

The program is now more compatible with other systems in use at Alcor. It also provides the ability to keep track of what we have and is used during a suspension or transport. The program development application of the current barcode system is based on Superbase II by Software Publishers. This is a relational database development system. Superbase II is a robust system that will handle Alcor's inventory needs for some time to come. It is upwardly expandable with things like the sequential query language (SQL) system, which is an industry standard for maximizing efficiency of tasks such as indexing, sorting, and retrieving information without long waiting times.

Superbase II is a useful and elegant system for Windows which incorporates

a number of particularly useful features. A unique design feature allows us to make the specialized forms and reports we need. A dialog box editor provides flexibility and ease of database manipulation that are critical in designing the specialized forms used in Alcor's system. Further, the inventory can be photographed and scanned and the images are immediately accessible to the inventory software.

This new barcode inventory system will be particularly useful during suspensions and research projects. With the barcode reader set up in the operating room during suspensions and in the laboratory during research experiments, inventory control will be automated for the first time. As items are removed from the supply cabinets, their labels will be read by the barcode reader. Those items will then be subtracted from the appropriate (ambulance, transport, or operating room) inventory group.

This system will also give Alcor far greater accuracy and control than has ever been possible in the past. A report can be generated which details the in-

ventory used during experiments or a particular suspension, the accurate cost of those specific items detailed, and exactly how much we need to charge the research budget or the patient. We also know precisely what items need to be replaced. This is an important step forward in Alcor's ability to provide its members with a sophisticated and state of the art organization.

The programming software which is the basis for this new barcode inventory system was completely paid for by Alcor members Scott Herman and Walt Parkman. Alcor appreciates both the monetary contribution and the programming effort. This barcode inventory system will be a tremendous asset to the organization.

Surviving the Suspension of Someone You Love

Or — Alone, No Longer Needed, Spent

Linda Chamberlain

I know something about how a person feels when one of their loved ones is placed into cryonic suspension. I am one of the founders of Alcor and have participated in about ten suspensions over the past two decades. Two of those suspensions were the standby and suspension of my father-in-law in 1976 and my mother in 1990.

It is comforting to know that a loved one has gone into suspension rather than suffering burial or some other form of total and final cellular death. But it is still a tremendous loss.

For me, the "after" experience was far more difficult than the "before." In spite of the stress and sorrow of preparing for my mother's suspension, it was still easier than those first few hours and days after the suspension.

Three suspensions stand out in my mind. One is the experience of having my own mother frozen. One was the suspension of a total stranger, and one was the wife of someone I have known, although not well, for almost twenty years. In all of these cases, the experience was similar.

When we froze "Marsha" (a pseudonym, of course), she and her husband flew in to California from out of state. "John" was exhausted from the trip as well as from the ordeal. As the Alcor suspension team threw itself into the suspension, John was taken to his hotel to get some rest. Although I have never discussed that evening with him, I doubt John slept well in spite of his fatigue.

I remember how John looked as Marsha was wheeled into the operating room. His job was done. There was nothing more he could do for her now.

That picture of loneliness and helplessness stands out in my mind even today. Now that I have stood there, I can understand even better how he felt.

When "Larry" had his mother frozen, I was part of the standby team at the hospital. This was the first and only time I met Larry. Nonetheless, we felt a kinship because I too (by that time) had suspended my mother. We embraced in the parking lot as his mother was placed into the Alcor ambulance. I made some feeble attempt to assure him that he had done all he could and she was in good hands. As the ambulance pulled away, Larry remained standing in the empty parking lot. The loss, the emptiness, and the helplessness on his face was like that I had seen on John's face and like what I felt when my mother was frozen. I have often wondered just how long Larry stood there... alone.

When my own mother was frozen, my own emotional experiences surprised me. Because of my years of involvement in building Alcor and participation in many suspensions, I did not expect to feel the things I felt. And yet the days

and weeks and months that followed brought many surprises. I found that I was not just a cryonicist who would be able to view the suspension of a parent in strictly an objective and rational way. Instead, I found that I was no more immune to my DNA and my biochemistry than anyone else.

When Arlene's (my mother) suspension was over, those of us on the standby had been awake for almost forty hours. As usual, the whole team was exhausted and when we left for the airport many had already departed before I had the opportunity to say thank you. Sitting in a plane seat and looking out at the landscape fly by below, I felt empty and spent. The previous six months had been hell. The stresses of trying to hold my own business together while also taking care of my mother and making all the arrangements for her standby had been exhausting.

Now I finally know how John felt that night in his hotel room — alone, no longer needed, spent. Now I know how Larry felt as he stood alone in the parking lot and watched the Alcor ambulance

drive away with his mother. Since my partner is a cryonicist, I had support that many others may not. In spite of that I felt... isolated. I realize now that other Alcorians were probably reluctant to talk about Arlene's suspension when I was around unless I brought it up — not wanting to bring up a painful subject. But, instead, it was as if Arlene somehow just had not existed.

For each of us "survivors" there is a period of loneliness. For each of us the experience is different. But we share a lot, too. Only those of us who have placed a loved one into suspension can really empathize with others going through the experience. I wish I had been able to help John and Larry more during those very lonely times. I hope Alcor will soon have a network of support available for family members. For now, my phone number is available to Alcor members who would like to talk to a "survivor" and I have asked Alcor to give a copy of this article to family members before a suspension.

Cryo-Lunacy

Andrew J. Clifford



The phone rings at the Alcor UK facility, which is not manned all the time, and is diverted to my home number 80 miles away.

AJC: "Hello?"

Caller: "Hello. Who am I speaking to?"

A: "Andrew Clifford."

C: "May I speak to Andrew Clifford please?"

A: "Speaking!"

C: "What airline do you use?"

A: "Pardon?"

C: "I called Gatwick Airport to find out which airline Alcor uses and they didn't know."

A: "Well. Whichever is the most direct flight at the time."

C: "I'm interested in some insurance."

A: "Insurance??"

C: "Freezing insurance."

A: "It's not exactly insurance."

C: "Yes. I know. I would like some information about it. Like, what you do, how it works, know what I mean? My

friend [JF] wrote to you six months ago and never got a reply."

A: "That's strange. We would have replied to him. Where did he write to?"

C: "Alcor Industrial Estate, Sussex, E5."

A: "That's completely wrong. We wouldn't have received it. I'll send you some information. What's your address?"

C: "I don't have an address — can you send it to my mother's address. [repeats it 4 times]. Does it matter if I'm

dyslexic? Can I still join?"

A: "Yes. Of course."

C: "You see. I can't read or write. You don't hold it against me?"

A: "Of course not."

C: "I respect you for it. Does the magazine have a lot of pictures?"

A: "Some. Can't your friend read it to you?"

C: "He can't read either. Can you read it all down the phone?"

A: "Isn't there anyone —"

C: "I'm running out of coins in the call box — click."

Sad but true! I have come to the realization that cryonics attracts loonies like a jar of honey attracts bees. In England the term "loony" is reserved for those people who are usually harmless, have a poor grip on reality, and are somewhat amusing to those of us who are generally "normal." Homegrown loonies are always coming out of the woodwork so it makes a small change to be challenged by the U.S. variety. The other day on my answering machine in s_l_o_w monologue:

"This is JD [spells it] calling from Utah, United States. My phone number is [5-5-5 etc] I can be reached 24 hours a day. Shortly I will be coming to London, England and want to meet you and U.K. cryonicists. My address is [repeats it twice, spelling it out]. I would like some information from you. A list of the

members in the U.K. and contact numbers. I am interested in cryonics and also in superconductivity as I have a idea worth millions. I am interested in the London subway system and also in a sperm bank. I am interested in the European royals, Princess Diana, Prince Charles, Princess Stephanie... [10 more omitted] most of which are based in London, England, Monaco, Princess Diana, I — "Click. (The answerphone had run out of tape!)

Needless to say this message was a great source of amusement to long-standing active Alcor members Mike Price, Garret Smyth, and myself. Thank God I wasn't in to receive the call. But what to do? SM was about to come *here*. Amazingly the answer presented itself the following day.

A: "Hello?"

K: "Hello. This is KC. I'm phoning you as you are listed in the business pages as a research institute. I have recently come over from the US and I have an invention for use in the nuclear power industry which is an incredible breakthrough. Do you supply much equipment to the nuclear power companies?"

A: "I'm sorry but we don't. We specialize solely in cryonics."

K: "Perhaps you can help anyway. My invention is a safety device for use in a nuclear reactor. I have a US patent

and am getting world patents too. I've come over here because the nuclear companies in the US refuse to consider my invention which is far better than what they are using. For political reasons I cannot make any progress there. Do you have any contacts for suppliers to the nuclear companies?"

A: "I can tell you that there is only one company that owns all nuclear reactors in the U.K. It is called Nuclear Electric and is owned by the government."

K: "Where is it."

A: "Almost certainly in the London phone book."

K: "Thank you [gives number] if you think of anyone who can help me and I make some sales I will give you a commission."

A: "Thanks. Bye"

Obviously the concept of cryonics has flown straight past KC. But an idea! I give KC's number to SM and they can meet up and witter away to each other for years never bothering Alcor again. Two loonies neutralized at a stroke.

Phone rings.

A: "Hello?"

X: "I'm looking for Andrew Clifford."

A: "Speaking."

X: "Is Andrew Clifford there?"

A: "Aaaaaaaaarrrrgghhh..."

A Visit From Saint Assembler with apologies to Clement Moore

J. Storrs Hall

'Twas the night before breakthrough,
and all through the house,
Not a memory was stirring,
nor even a mouse.

The smocks were hung up
in the lab for the night
In hopes that a rest
would bring new insight.

The hackers were nestled
all snug in their beds,
While visions of atoms
danced in their heads.

Ma in her kerchief, and I in my cap,
Had just settled our brains
for a long winter's nap.

When logical inference struck me so hard
I let down my everyday commonsense
guard.

The mind, on the crest
of this new point of view
Took wild flights,
and made them seem true.

My wondering eyes,
as I stood there agape,
Saw a miniature robot,
complete with a tape;

Of such a micronic molecular mass,
I knew in a moment
It must be Saint...
well, it must be a molecular assembler.

More rapidly than I
could figure it out,
He built more of himself,
from stuff lying about.

He built Dasher and Dancer;
then Prancer and Vixen;
and then Comet and Cupid and Donner
and Blitzen.

Now faster than I
could match each with his name,
they doubled and doubled
— and they all were the same.

As dry leaves that before
the wild hurricane fly,
(or more rather like smoke)
they took off to the sky.

And I could imagine
I heard on the roof
the prancing and pawing
of each tiny hoof.

Down the chimney they came,
eating all of the soot,
as carelessly,
diamonds were dropped on my foot.

Another small cloud
of atomic erectors
Was turning the roof
into solar collectors.

I looked at one closely,
a jolly old speck,
He had plenty of arms,
and a bivalent neck.

His tape told him what
he was programmed to do;
He was fast and efficient
— self-referent too.

He looked like a gang
of maniacal boys
Had been put in a room
full of wee tinkertoys,

And making a mechanical jest of their
teacher,
Allowed it to mutate
into an odd creature.

Benzene rings on his fingers,
propellers for toes,
Buckyball for a belly,
and lithium nose.

His arms moved like twinkling
magical wands,
and his ears were connected
by hydrogen bonds.

A wink of his eye
and a twist of his head,
soon gave me to know
I had nothing to dread;

Though New Jersey,
the previous hour or two,
had melted to form
a sweet, sticky grey goo.

He said not a word,
but went straight to his work,
built three more just like him,
and turned with a jerk.

It was hard to see whether
he gestured or beckoned.
For he did it a million
or more times a second.

Not a bit of the household
escaped from his hustle,
Even the doors got a set
of eyes, ears, and muscle.

I'd just gotten used
to a toaster with brains;
I must now contend
with intelligent drains.

Then most of them went into
the skin of my hands,
to do a refurbishing
job on my glands —

But I heard them exclaim,
ere they dove out of sight,
"Happy Future to all,
and to all a good night!"

Cryonics One Decade Ago *Edited and Abstracted by Ralph Whelan*

From the December, 1983 issue of *Cryonics*:

Too Much Optimism: Reflections on The Work of Paul Marias Malisoff

by Thomas Donaldson

A couple years ago, interested by Friend Stuart's citation of Malisoff's book *The Span of Life*, I spent some time trying to find a copy. None of the local libraries had one. I finally approached a

book search firm, which after quite minimal delay offered me a copy for the (relatively) trivial price of \$25. I accepted this offer with alacrity and soon possessed what may well be the only copy of William Marias Malisoff's book *The Span of Life* in all of Australia.

Malisoff was a chemist at the University of Pennsylvania. He published his book in 1937, 7 years before I was born (that will certainly place *me* quite precisely!). It is a fascinating and also a very sobering book. It is both fascinating and sobering because it is an

Immortalist book, quite explicitly, and written 30 years before Harrington (author of *The Immortalist*). Not only that, but is even far superior to Harrington in everything which matters. While Harrington begins with ringing declarations, Malisoff is very low-key; but Harrington concludes from all his ringing declarations that we should be patient and cherish little children, while Malisoff presents an explicit *plan of action*. Here is Malisoff:

"Mark you, how different is the

prophesying scientist. His argument runs somewhat as follows. The practical aim of science is the control of nature and ourselves. We set up our goals and study nature for the means. Of course, we wish to prolong life indefinitely. We look for clues. We expect repeated failures, and keep on bravely. Occasionally a clue turns up. We dwell on its possible consequences. How else can we pick our way? We do not know whether we are right, but we want to make every effort to trace the secret. Come, help us."

The chapter from which I take this quotation begins: "Thesis: the hope of prolonging life indefinitely is the proper faith for science. All research should be organized with that as the supreme goal."

It is very sobering to learn that these radical and deep goals, the most modern and advanced, were already clearly set out by people 30 years before us. Not only that, but Malisoff can even describe the psychological reactions involved:

"Alas, very few of us can quite avert ourselves from this civilized mess. We who are about to die, oh, so soon, salute the prophets of longevity. No longer do we scorn them, for what can we gain thereby? We let them speak in strange tongues, we gladden their hearts by rounds of warm applause, and... we let the matter rest."

Malisoff describes the experiments of H.C. Sherman, who found a 10% gain in the lifespan of rats fed more milk than controls and the normal diet for rats. And Sherman also found that the "active, productive period of rats" also lengthened. We are still very early; after all, it is only 1937. But Malisoff describes the work of McCay, notes that study of hormones may prove ultimately a major means of lengthening life, and describes the possible importance of "macrophages" and the immune system to our longevity. A close reading of Malisoff will in fact reveal, in embryo, most of the ideas now getting research

attention. Low temperature to lower metabolic rate and increase lifespans? He mentions that too. He also speculates that tobacco might prolong life (well, we know better now!).

In Chapter I, much like [Alex] Comfort he presents a summary of what scientists then knew about lifespans of animals and plants, that is, the comparative theory of lifespans. You will have heard this all before, too. We know a little more now, too: our comparative data is more precise. Malisoff quotes a Dr. Raymond Pearl, of Johns Hopkins, who finds that reptiles live up to 175 years, mammals have lifespans from 1.5 years to 100 years.

In his Chapter II Malisoff presents a capsule summary of all of these conditions as seen from 1937. Parts of these chapters read very much like an earlier precursor of Comfort. Most of Malisoff's characterizations, though, depend less than ours would upon a knowledge of fine physiological detail. The bones become weaker. The aged tend to arteriosclerosis. But there were certainly attempts at measurement and specification in Malisoff's day: Malisoff quotes a study of blood pressure in army officers and its changes with age. It seems that studies of possible health-promoting effects of alcohol have a long history, for Malisoff cites one which discovers that moderate alcohol prolongs lifespans. By 1937 they knew the correlation between relative brain weights and longevity; Malisoff presents a table from Brody and Ragsdale.

Seen from this distance, we can begin to see just how much progress has taken place and perhaps even more important how much has *not* taken place. In Malisoff's terms, McCay's experiments should have met with close study. They did *not*; it is only now, 30 years after the event, that gerontologists have started to look at this work as a serious clue. This neglect may quite possibly mean that everyone reading this will either be suspended or buried; it is a scandal, but nevertheless it happened. It is not as if the problem, and the urgency, didn't exist 30 years ago.

Many popular commentators claim that our times are times of very rapid scientific change and discovery. I do not believe that is so. What we do have is a

vast expansion of the *publicity apparatus* of science, the opportunity for scientists to puff themselves up and strut about telling us their many wonderful discoveries. *Gosh wow! Black holes! Recombinant DNA!* When we scrutinize these advances more closely what we find is that our *real abilities* haven't increased nearly as much as the hype would suggest. The *possibilities* raised by the discovery are identified with *actualities*. A handful of men walk on the Moon, and suddenly every child on the block has a rocket toy and computer space games abound. We can expect that someday when the public decides that cryonic suspension is *possible* they will also decide that it is *actual*, and believe all the problems are solved. Meanwhile cryonicists will continue their struggles.

Has there been any *real* progress toward immortalism and immortality over the last 30 years? Yes. We know of a larger number of drugs which can prolong lifespan in animals. Some of these do much better than a 10% increase; L-Dopa can produce an increase of as much as 50%. Second, and far less important (but still real), we can specify what goes wrong in aging much more precisely than before: our disease is much better characterized. These are *real* changes, even though when we look at them coldly they seem very small.

Perhaps the biggest change since Malisoff's time hasn't consisted of actual achievements but of the simple growth of an immortalist movement. I would myself say seriously that the growth or even the simple existence of a cryonics movement is probably the most fundamental change since Malisoff's time. Thirty years ago there were gerontologists, gerontological societies, and people specializing in the problems of the aged; what did not exist was a body of people, however small, who were explicitly immortalist and organized. Malisoff was only a voice in the wilderness; after more than 30 years, people who believe as he did have actually got together, they exchange ideas, think, and plan. However, we should be clear about it; that change is not a change in real scientific knowledge, but an increased appreciation of the *problem*. Furthermore, cryonicists or even immortalists are hardly a dominant voice, or even a

very audible voice.

Many people have also pointed out the widespread public interest in anti-aging therapies. I am not heartened by this interest, because on reading old books such as Malisoff it becomes quite clear that this interest ("we gladden their hearts by rounds of warm applause, and... we let the matter rest...") has gone on for a *very long time indeed*. That most doctors refuse to listen to this in-

terest, and spend all their time arguing for the forces of death, constitutes another scandal: but it is a very old scandal hallowed by tradition. It really isn't enough to see that smart people are "interested" in longevity and immortalism; we have no reason to believe that attitudes have fundamentally changed until these people actually start reaching into their pockets and funding a March of Dimes against aging.

I know a woman now aged over 50. She says that she has always believed that *something would be discovered* to prevent her from aging and give her immortality. She still believes this; when she was in her teens weren't they talking about the discoveries which were to come? Things happen slowly. If you want to live forever, it is better to look to suspension.

Reviews

The Making of Memory

By Steven Rose, Anchor Books, 1992

Reviewed by Thomas Donaldson

To prepare you for what you will find if you read this book, I will point out that as Rose tells the story of his experiments on memory, he also inserts many side comments which will cause many cryonicists disdain or even anger. On his very first page, for instance, he mentions: "Advocates of crionics [his error!], the Californian fantasy of quick-freezing the dead..." And in his side comments he continues in that vein. He spends some time trying to exculpate himself for heartlessness because his research requires slicing up animal brains. We hear his opinion about society and science, about the rights of women, the faults of free enterprise (big business, especially) etc. etc., all quite painfully PC (or "Politically Correct"). None of these comments relates to the study of memory, except by the most tenuous of inferences.

Moreover, for those who don't like stories of science told in the context of the life of the author, this book will cause exasperation. As such books do, it tells a great deal about its author, his opinions, and his history. (To be fair, he

also tells a good deal about the *history* of studies of memory — it's not just Rose's contributions.) By reading it you can also find out about current understanding of memory, particularly the author's contributions to its study, but you get to learn a good deal of other stuff too.

With all this baggage attached, readers of *Cryonics* might justly ask: why should I bother to read this book at all? The reason is that in between his political activities Steven Rose has carried out a prolonged and very worthwhile study of how memory develops in young chicks. His results provide some of the best evidence for the processes by which we may store memory. This raises the very serious possibility that we will soon be able to test for its survival *without* having to revive the brain which carries them.

It's important to understand that Rose did almost the whole of his work on memory by examining the brains and behavior of newly hatched chicks. For cryonicists who have followed the development of these studies, I can state

his main result very simply: He has provided very strong evidence that in his young chicks, true long-term memory storage occurs by the multiplication of synaptic connections between preexisting neurons in the chicks' brain. (Recall that the *synapses* are sections of a neural cell that release chemical messengers into the space outside the cells. The sending side of a synapse, in one neuron, and the receiving side, in the target neuron, occur very closely bound to one another, to pass these messengers easily).

To actually prove that multiplication of synapses stores memory requires many different experiments, and one of the charms of his book is that it describes these experiments and their motivation. For instance, we must show that the new synapses do *not* grow simply in response to the growth of the chick. We must show that their growth occurs specifically because of new learning rather than some other chemical event. We must show that removing the brain part where these synapses appear first will prevent the chick from learning...

while at the same time not disrupting its behavior so much that its failure to remember might be attributed instead to an inability to use that memory. To prove that multiplication of synapses stores memory in chicks requires many other experiments to prove all the alternative explanations false.

It's particularly interesting here that Rose does *not* focus on LTP (Long Term Potentiation). He does discuss Kandel's experiments on *Aplysia* and LTP itself, but his own experiments center on the biochemistry, behavior, and brain anatomy of his chicks. The first evidence for his theory came not from directly observing growth of new synapses (a very difficult experiment!) but from observing the biochemicals which accompany growth of new synapses. The most outstanding is fucose, a sugar which attaches to proteins in the chicks' cell membranes (the name for the combination of sugar and protein is *Glycoprotein*). From that observation, we might go on to examine brain regions synthesizing such biochemicals right after learning, and then ultimately examine micrographs of chicks' brains, both for chicks that have learned and those control chicks that have not.

The important point to remember in all such studies of memory is that we want *objective* evidence of memory separate from a proof that the animals remember. Rose addresses that problem by setting out six criteria which experiments on memory must prove (in his Chapter 9). And through the course of the book, and his discussion of his experiments, he does indeed show that his theory of memory satisfies these criteria. Most important, the criteria seem to be good ones.

In discussing history Rose also discusses other theories, all the way back to the Greeks. The most prominent and recent such theory is the one put forward by George Ungar, that memories correlated with particular brain molecules. By now it's quite clear that Ungar was wrong; however, reading Rose's account of the matter I also had a distinct sense of an unfortunate contempt for the past: Ungar's ideas captured the imagination of many researchers, and ultimately were proved wrong because they did so.

They also took place at a time in which Minsky and Papert had (wrongly!) killed off the alternative theory, neural nets, and by doing so, the basic Hebbian idea of how synapses play a role in learning. Even though his *theory* was wrong, Ungar's observations remain. We may learn something valuable by retracing old ground with our new feet.

Readers must judge this point for themselves, but at many points, in fact, I felt that Rose's account of history or the theories of other workers such as Kandel was not as fair-minded as it might have been. For LTP he decides, on the basis of *one* experiment, that it cannot underlie memory.

The most outstanding issue on which he takes such an attitude, and may even throw himself into confusion, is that of the value of computer models of memory. Basically he argues that we cannot simulate the kind of memory shown by living animals with computer systems, and denigrates work on neural nets which aims at that purpose (and does so with little serious discussion, too). In one sense he's actually right: in most neural nets, "synapses" become *stronger*, they do not multiply. A full computer simulation of our neurons could easily run up against a wall caused by the limitation in the number of synapses each computer simulated neuron can have. On the other hand, before we reach that wall, we might learn some valuable points about the behavior of living neural nets from our simulation. He cites Gerald Edelman as another researcher who agrees with his opinion of computer work on memories. Yet at the same time he neglects to mention that Edelman, too, has spent some time working with computer simulations of his own (Edelman's) theory of memory.

How could this put him into confusion? Because the action of neural nets, even using synaptic multiplication, becomes identical to their "read-out" process. In his last chapter, when Rose talks about further questions which need a solution, he discusses the problem of how our brains decipher these memories caused by multiplication of synapses — a nonquestion for neural nets themselves. I do not mean that his last chapter lacks all value: there is a good case for

his claim that memories cannot really be localized. But I think he wanders off into philosophy.

If I were to suggest just what most needs doing with his theory of memory, I would not question the issue of retrieval. Instead I would address one central question which he never addresses in his book. He did all of his experiments on newly-hatched chicks. To what extent do his memory processes occur in *adult animals*? We all have seen how fast very young children learn about the world around them. Newborn animals often show such abilities. Do neurons in older chickens *also* multiply their synaptic connections? We already have evidence for several different kinds of memory, both depending on the time since learning, and the content. For instance, people who have lost their "memory" can still learn new activities, even though they cannot afterwards recall where and when they learned them. Why not yet another which happens only in very young animals? Adult memories may happen quite differently.

At the same time, Rose himself has done some very good work on memory. It deserves the attention of any cryonicist concerned with survival. It even suggests one test for survival of memory: do most of the synapses on frozen neurons retain their attachment to their original cell? Just how hard would it be to reattach them if they do not? These questions, however, would not interest Rose himself.

Business Meeting Report by Ralph Whelan

The November 7 meeting of the Alcor Foundation Board of Directors began at 1:17 pm at the home of Virginia Jacobs in Rolling Hills Estates, California.

Resolved: The Board of Directors approves without change the October 3 meeting minutes. (6 in favor, 1 abstention)

There will be no Business Meeting in December, though most Directors and many members will attend the Alcor Turkey Roast on December 5. The January meeting will be at the Alcor facility, thought at the moment it's not clear whether that will be in Riverside or in Scottsdale (Arizona). Please call Alcor for an update if you plan to attend.

Steve Bridge reported the following:

1. The empty spaces in the Acoma Building are now occupied by companies with three-year leases. 102-103 is leased to a lighting contractor and 104 is leased to an upholstery contractor. Sterling Johnson found the lighting contractor and gets a commission only on that. Dave Pizer got the upholstery company for free, no commission to anyone. If Dave and I, as LLC Managers, had waited another week or two, we might have gotten one firm to take all three; but we wanted to get them rented and these looked like solid businesses. The electronics assembly company which was earlier interested found other space, since Cryonics Property LLC waited so long to purchase the building.

2. Alcor has been receiving a lot of press about the move recently. The Scottsdale Progress published a friendly article several weeks ago; but two weeks ago the same reporter wrote a huge article documenting just about every single public problem Alcor has ever had. The article contained a number of misrepresentations and errors, so Ralph Whelan and I wrote a careful letter to the editor of the paper. This produced a

somewhat more reasonable and cautious editorial a few days later. The Arizona Republic and the Phoenix Gazette each published friendly articles on the move. The Riverside Press Enterprise also published a neutral article on our probable exit from Riverside County.

3. Until we get full permission for the move to Arizona, we have continued to work with Riverside Planning Department on fulfilling our CUP requirements, especially those dealing with interior construction. Our architect, Jim Fillerup, has turned in the remodeling plans for plan check, and that should be completed this week.

I had an excellent meeting with the Riverside Planning Department, with the help of our advisor, Trip Hord. Present were Ken Gutierrez (Deputy Director of Planning), J. Craig Aaron (Principal Planner), and Richard Heitman (Senior Planner). I explained to them that we almost certainly would be moving to Arizona and giving up the Symbex building, making the CUP requirements unnecessary; however the last details had not been worked out with Arizona. Ken Gutierrez said that since Alcor had been showing good faith in continuing with the planning, filing all of the forms, and generally attempting to comply with the CUP conditions, they would not squeeze us on our deadline. He did suggest that we complete the planning and permit process; because even if we are moving, some things will have to be done to bring the construction up to standard building code.

Ken also said he appreciated the prompt information that Mike Darwin and Carlos Mondragón had given him over the last six years, and he was even sorry to see us go after all of the time that he worked on this project.

As part of the plan-check process, an inspector from the electrical division recently visited our facility. He was a young guy, half-terrified at the stories about frozen heads he had been told. He said everyone else was afraid to come. He also thought he was looking for giant

motors and air conditioners to keep the people frozen. After a tour and some pleasant conversation, he calmed down and even got interested. I invited his co-workers back for a tour.

4. On October 21, we finally received our refund of personal property taxes. This was money we had been paying over the years, while waiting for a ruling from the State Board of Equalization as to whether we really owed it. We received a positive ruling last spring, but it took several months to get the refund of \$6,047. It was less than we had paid because some years our submissions were late, and there is a non-refundable penalty for that.

Tanya Jones reported the following:

1. The construction of an improved mobile life support system for the ambulance is now well underway. The catalyst was the removal of the Cryovita mobile advanced life support system (MALSS), due to its being required by BioPreservation during the standby provided for a northern California individual. Further, Paul Wakfer, Cryovita's President, has informed Alcor that this MALSS will no longer be available for Alcor's use as of 17 November, 1993. As a result, Hugh Hixon has been well motivated to complete the new model by this date. Hugh has completed the welding necessary to begin securing equipment to the frame. Design modifications should enable easier access to some of this equipment, enabling more efficient set-up during transport. Hugh expects to have completed the construction of this system by the imposed deadline.

2. In addition to removing the MALSS, Cryovita has exercised the option to remove the Pulsatile Flow Pump. This item will not be replaced in the immediate future due to the high cost of a replacement (at least \$5,000). The removal of the pulsatile pump does not compromise Alcor's suspension capa-

bility, as a roller pump will be used in its place during patient perfusion. Research into the efficacy of pulsatile flow over continuous flow in cryonics patients has not yet been conducted.

3. The removal of the Cryovita MALSS does not impair Alcor's emergency response capability. All of the equipment mounted in the MALSS is available in the remote standby kit generally deployed for non-local transports. Further, an improved patient ice bath has recently been made, and it is stocked with many of the other components necessary for the completion of transport preparations. The only significant deficiency in this lack of a MALSS is that while the patient ice bath has wheels which may be locked in place to prevent unnecessary movement of the bath, it cannot be secured to the frame of the ambulance while the ambulance is in motion. (Hugh's Mark II life support system will have this capability.)

4. The inventory system implementation is nearing completion. Scott Herman and Joe Hovey inventoried a significant portion of the capital equipment this month, and full implementation of this system is expected before the

end of the year (and any move to Scottsdale).

Derek Ryan reported that owing to the imminence of Alcor's move to Scottsdale, Mark Plus has worked even harder this month to finish the membership file assessments. Mark and Derek are now approximately 70% done with this effort, and Derek is now sure that they will be done before Alcor moves. Once in Scottsdale, (or after the turn of the year, if the move doesn't happen within the next few months) Derek will begin the process of repairing suspension funding problems first, and when that is done, issuing new paperwork for everyone whose documents are outdated. Thanks for your continued efforts Mark!

Because the Patient Care Fund Investment Advisory Committee was set up three months ago as a temporary committee scheduled to automatically dissolve in 90 days, a vote to determine its continuance or dissolution was necessary at this meeting. Laurence Gale replaces Courtney Smith, who resigned from the committee to prevent conflict of interest issues from arising.

Resolved: That the PCFIAC be made a permanent committee, with Michael Riskin and Lau-

rence Gale acting as committee members and Linda Chamberlain acting as committee Chairperson. (Unanimous)

There was extensive discussion on the topic of "grandfathering" members — keeping the suspension minimums unchanged for existing members while occasionally (every few years) raising them for new members. Ralph made the below motion, which Dave and Hugh opposed on the basis of the unpredictability of inflation over the next few years.

Resolved: That the Suspension Minimum charges for all persons who are Alcor Suspension Members by January 31, 1994 are guaranteed NOT to be increased before January 1 of the year 2000. Any person entering the sign-up process by January 31, 1994 will also fall under this "grandfathering guarantee," provided that they complete their suspension arrangements by July 31, 1994. (5 in favor, 2 opposed)

The meeting was adjourned at 4:30 pm.

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Meetings & Announcements

Meeting Schedules

Alcor business meetings are usually held on the first Sunday of the month (July, Aug., & Sept.: 2nd Sunday). 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, DECEMBER 5** meeting is the Annual Turkey Roast at:
10106 Sunbrook Dr.
Beverly Hills, CA

Directions: Take the 405 to the Santa Monica Blvd. offramp and go east on Santa Monica Blvd. to Beverly Dr., in Beverly Hills. Go left (north) on Beverly to Benedict Canyon Dr./Canon Dr. at Will Rogers Mem. Park. Bear left onto Benedict Canyon Dr., with the park on your right, across Sunset Blvd., with The Beverly Hills Hotel on the right. Go up Benedict Canyon Dr. to Angelo Dr. Go left up the hill on Angelo past Hillgrove Dr. to Sunbrook Dr. Turn right onto Sunbrook and go about 100 yards to the top of the street. 10106 is on the right, just short of the top.

The **SUN, JANUARY 4** meeting will be at:
ALCOR
12327 Doherty St.
Riverside, CA 92503

Directions: Take the Riverside Freeway (State Hwy 91) east toward Riverside. Go through Corona, and get off at the McKinley St. exit. Go right (south) on McKinley. Turn left (east) on Sampson (1st stop light). Go about 1 mile along Sampson to Granite. Go left on Granite to its end, and turn right on Doherty. Go about 200 yards on Doherty and turn left into the industrial park just short of the street end. Alcor is the third building from the back, on the right.

As previously noted, there will be no regular February Business Meeting.

ALCOR NORTHERN CALIFORNIA MEETINGS: Potluck suppers to meet and socialize are held the second Sunday of the month beginning at 6:00 PM. All members and guests are welcome to attend. For those interested, there is a business meeting before the potluck at 4:00.

The **SUN, DECEMBER 12** meeting will be held at the home of:
Dave Kreiger
500 Chiquita Ave., #18
Mountain View

Directions: Mountain View can be reached via Hwy 101 or Hwy 280.

101: from the south: Take the Shoreline Blvd. exit and proceed west (right at the light after the J-curve). Continue on Shoreline past the Central Expressway (Shoreline goes over the C.E. on an overpass.) and make a right onto California Ave. (there is a stoplight). Proceed approximately five blocks along California. Chiquita Ave. is a left turn, one block after the center islands on California Ave. end. 500 Chiquita is on the right side of the street; the apartment building is called "The Luzern."

280: from the north or south: Take the El Monte exit. Proceed east on El Monte to El Camino Real. Make a left turn onto El Camino, then a near-immediate right onto Escuela. The next stop sign is Latham; make a right on Latham. Chiquita is the second left from Latham. 500 Chiquita is on the left side of the street; the apartment building is called "The Luzern."

The **SUN, JANUARY 9** meeting will be held at the home of:
Ralph Merkle and Carol Shaw
1134 Pimento Ave.
Sunnyvale, CA
Tel: 408-730-5224

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.

Las Vegas Area: Alcor Laughlin meets the third Sunday of the month at 1:00 PM at the Riverside Casino in Laughlin, Nevada. FREE rooms at the River-

side Casino on Sunday night are available to people who call at least one week in advance. Take 95 south from Las Vegas, through Henderson, where it forks between 95 and 93. Bear right at the fork and stay on 95 past Searchlight until you reach the intersection with 163, a little before the border with California. Go left on 163 and stay on it until you see signs for Laughlin. You can't miss the Riverside Casino in Laughlin, Nevada. The time and place of these meetings sometimes changes, so before you come, please call Eric Klien at (702) 897-4176.

Alcor Midwest is in full swing. It produces a monthly newsletter and holds monthly meetings. It has a state-of-the-art stabilization kit and responds to six states: MI, IL, OH, MO, IN, and WI. For meeting information or to receive the Alcor Midwest Newsletter, contact Brian Shock at (317) 769-4252, or; 670 South State Road 421 North; Zionsville, IN 46077.

Boston: There is a cryonics discussion group in the Boston area meeting on the second Sunday each month. Further information may be obtained by contacting Walter Vannini at (603) 889-7380 (home) or (617) 647-2291 (work). E-mail at 71043.3514@Compuserve.com.

The **Alcor New York Group** meets on the third Sunday of each month at 2:00 PM. Ordinarily, the meeting is 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. If you're in CT, NJ, or NY, call Kevin Brown, at (201) 347-1695.

Meeting dates: **Dec 19, Jan 16, Feb 20, Mar 20.**

New York's members are working aggressively to build a solid emergency response capability. The Alcor New York stabilization training sessions are on the second Sunday of every month, at 2:30 PM, at the home of Curtis Henderson. The address is: 9 Holmes Court; Sayville, L.I. For details call Kevin at the above number.

District of Columbia: Alcor DC is a new cryonics group with members from Washington, D.C., Virginia, and Maryland. The Alcor DC Board of Directors meets once a month. Alcor DC also sponsors discussion groups, speaker's bureaus, and seminars. Call Mark Mugler at (703) 534-7277 (home), or write him at 990 N. Powhatan St.; Arlington, VA 22205 for directions or to find out upcoming activities.

There is an Alcor chapter in **England**, with a full suspension and laboratory facility south of London. Its members are working aggressively to build a solid emergency response, transport, and suspension capability. Meetings are held on the first Sunday of the month at the Alcor UK facility, and may include classes and tours. The meeting commences at 11:00 A.M., and ends late afternoon.

Meeting dates: **Jan 2, Feb 6, Mar 6, April 3.**
The address of the facility is:
Alcor UK, 18 Potts Marsh Estate, Westham, East Sussex
Telephone: 0323-460257

Directions: From Victoria Station, catch a train for Pevensey West Ham railway station. When you arrive at Pevensey West Ham turn left as you leave the station and the road crosses the railway track. Carry on down the road for a couple of hundred yards and Alcor UK is on the trading estate on your right. Victoria Station has a regular train shuttle connection with Gatwick airport and can be reached from Heathrow airport via the amazing London Underground tube or subway system.

People coming for AUK meetings must phone ahead — or else you're on your own, the meeting may have been cancelled, moved, etc etc. For this information, call Alan Sinclair at 0323 488150. For those living in or around metropolitan London, you can contact Garret Smyth at 081-789-1045 or Garret@destiny.demon.co.uk, or Mike Price at 081-845-0203 or price@price.demon.co.uk.

**Alcor Life Extension Foundation
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1-800-367-2228 (toll-free, non-members only) or 1-909-736-1703 (members).
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