

CRYONICS
THE NEWSLETTER OF:

The Institute For Advanced Biological Studies, Inc.
2901 N. Pennsylvania St.
Indianapolis, IN 46205
317-924-9886

#9 April, 1981

YOUR PROSPECT OF FUTURE ISSUES

This will be your last issue of "Cryonics" unless you are a member or you have given us money to remain on the mailing list. The status of your subscription is show below.

_____ Your (membership) (donation) is good through_____.

_____ This will be your last issue unless you respond with a membership or a donation.

_____ Because of your special status as _____, you will continue to receive this publication free, as long as you do reply in some manner to indicate that you do want it. Donations will still be gratefully accepted of course.

BOOKLET AVAILABLE

Copies of "Cryonics: Threshold to the Future" are still available from IABS for \$1 each. These attractive bound booklets are a basic introduction to cryonics, and they are especially valuable for giving to interested or dubious friends.

IABS SUSPENSION COVERAGE

We now have available the complete package of documents necessary for making cryonic suspension arrangements through IABS. Our approach is a bit different from and, we believe, more complete than that of other groups. The complete set of documents may be obtained from IABS for \$7.00 paid in advance.

If you thought of arranging for your suspension but have never "gotten around to it," we urge you to delay no longer. Death can come upon any of us without warning and, as many sad and well-publicized experiences have shown us, we cannot depend on the sense or generosity of relatives to make sure we are suspended. Nor can

(2)

we depend on our relatives' future financial stability to keep us suspended. There is no substitute for personal commitment.

As we discussed in the previous issue, IABS and Soma have not been able to develop a fully dependable and qualified suspensions team in Indianapolis. Until such time as an IABS and/or Soma team is assembled, we have contracted with Trans Time to provide suspension and storage services for IABS members who have completed their suspension documents. Trans Time currently has the best perfusion and storage facilities available, as well as a solid track record of competence, dependability, and integrity. In addition, Michael Darwin, Soma President and IABS Staff Researcher, is

moving to California and will assist with suspensions.

In the past year we have recommended that our Donors purchase \$55,000 of life insurance for whole-body preservation or \$25,000 for neuropreservation. Those amounts still may be sufficient, especially if the insurance is of a type which will increase in value through the years. However, since price estimates on problem cases (based on the new Trans Time Fee Schedule) already run slightly over those amounts, we feel that policies of \$60,000 (whole-body) and \$30,000 (neuro) may be more realistic.

-----A summary of Trans Time charges:

Cushion to cover charges for remote-standby		
personnel and transportation (IABS estimate)		\$5,000
Perfusion and reduction to dry ice temp.		\$9,500
Transfer to liquid nitrogen container (whole-body)	\$5,700	
	(neuro)	\$1,200
Storage	(whole)	\$2,600/yr
	(neuro)	\$ 900/yr

These fees are only for Donors who have paperwork through a nonprofit cryonics society. Charges for independent Donors are significantly higher.

In addition, IABS Suspension Donors must give annually to IABS:

Suspension Donation	\$300 (whole-body)
	\$200 (neuro)

This includes money for paperwork, research, communications, and a standby fee of \$80/yr to Trans Time. (A portion of the Suspension Donation may be waived in return for services to IABS.)

COMING SOON !

In 1964, Robert C.W. Ettinger estimated that a person could be placed in cryonic suspension for a total of \$8,500. Now the recommendation is \$60,000! Why the huge increase? Where does the money go? Next month in "Cryonics" we begin "The Cost of Cryonics," a series which will examine these questions. Assure yourself the opportunity to read this important discussion by sending your donation or membership to IABS today.

(3)

As some of our readers may already know, Trans Time, Inc. recently purchased a large open-mouth dewar to serve as a multiple storage unit (MSU) for eight to ten whole-body patients. The dewar was delivered in the summer of 1980 and subjected to static testing for thermal efficiency. Unfortunately, the dewar failed these initial tests. Subsequent evaluation of the vacuum jacket on both the container and the lid revealed the vacuum to be substandard and not suitably "hard" for effective insulation. After months of efforts to remedy this situation by extensive pumping and heating to promote outgassing from the superinsulation, an acceptable vacuum in the range of 10^{-6} was achieved. The dewar was then subjected to another static test to evaluate the effectiveness of the repairs. According to Art Quaife, President of Trans Time, the container still has not met the specifications set for it prior to manufacture. Initial specifications required that the dewar not boil off more than .7% of its liquid nitrogen per day. The most recent static test, following reevacuation and

fabrication of a foam lid (additional insulation), demonstrated a boil off rate in the range of 2% per day. It appears that it may not be even marginally feasible to use the dewar under these conditions. Trans Time is currently negotiating with the manufacturer.

The difficulties Trans Time has encountered with their MSU underscore the need to persuade a reliable cryogenic manufacturer to make whole body storage units. In any case, just as important a question is that of whether or not the multiple storage unit approach should even be considered this early in the cryonics program. At this time there are only seven whole body patients in storage in the United States, only six of those in liquid nitrogen. So far as we are aware, none of those patients now in liquid nitrogen have any long term trust arrangements to provide for their care beyond a year to year basis. Past experience has demonstrated that this situation is NOT a stable one and that such patients will probably not remain frozen indefinitely. Until a number of "stable" patients with adequate trust arrangements exist, MSUs represent a considerable gamble.

Additionally, as is pointed up by Trans Time's current difficulties with their MSU, the cost of evaluating, handling, repairing, and transporting these big tanks is much greater than comparable operations on single or dual-patient storage units. We understand that a single fill for a static test on the Trans Time MSU cost approximately \$2,000. In actual use as a storage unit, the risks become even greater. Failure of a smaller dual-patient tank is not nearly as likely to represent the catastrophe that failure of an MSU does. We believe that the modularity and easier handling and transportation of the smaller units are well worth the trade-off in slightly less thermal efficiency.

Several years ago, the Cryonics Institute indicated that they believed they had an alternative to high vacuum superinsulation for liquid nitrogen storage. We would be very happy to publish any updates from CI on their progress.

(4)

CRYOVITA LABORATORIES - EQUIPMENT PURCHASE

High Pressure Chamber---

Recently Jerry Leaf's Cryovita Laboratories in Los Angeles was fortunate enough to acquire at auction a custom-made high pressure chamber designed especially for organ freezing work. The chamber was initially built in the 1960's for Armand Karow, a cryobiologist working at the Medical College of Georgia. The chamber is large enough to accommodate a canine kidney or heart, can withstand a pressure of up to 45,000 psi and can be pressurized to 20,000 psi in 60 seconds. The chamber was employed by Karow to rapidly thaw dog kidneys by applying high pressures. As far as we know this is the only chamber of its size and convenience anywhere in the world. Cryovita, The Institute for Cryonics Education (ICE), and IABS were extremely interested in acquiring this chamber in order to evaluate some recently suggested approaches to cryoprotection. It has been demonstrated that with appropriate pretreatment it is possible to completely circumvent ice formation all the way down to liquid nitrogen temperature by the judicious application of high pressure cooling. There are still many obstacles to be overcome before this technique can be clinically applied with any real success. For example, Karow's original work with dog kidney's ("Cryobiology": 7, 122-7, 1970) showed that high pressure itself was very damaging to the dog kidney and that exposure to 15,000 psi for as little as five minutes resulted in failure of the organ to support a dog as the sole kidney. In spite of the problems, the potential of high pressure freezing is tremendous, and the acquisition of

this much needed tool was greeted with much enthusiasm by everyone.

Unfortunately, what happened to the chamber after it was acquired in Savannah was greeted with a total lack of enthusiasm. During shipment of the chamber, the truck which was carrying it was involved in an accident at more than 60 miles per hour. The chamber was torn free from its housing, the housing was badly crushed and much of the fragile monitoring equipment was totally destroyed. Luckily, the chamber itself (which weighs in excess of 400 pounds) appears to have emerged unscathed. Jerry Leaf has managed to pick up the pieces and at last report is preparing to send them to the manufacture in Erie, Pennsylvania. With any luck at all, someday we should have another exotic research tool at our disposal.

Electron Microscope---

Hopefully with less attendant catastrophe, Cryovita will be acquiring yet another high technology research tool. Jerry Leaf has taken an option on an electron microscope which is in working order and is complete with all accessories, including vacuum pumps and cameras. The purchase price is expected to be \$2,500. Because this tremendous opportunity has to be taken immediately, Dr. Thomas Donaldson has with his usual incredible generosity loaned Cryovita the money required for immediate acquisition. This does not, however, solve the problem long term, and the loan from Dr. Donaldson needs to be repaid as soon as possible. We are asking ALL of our readers, members, and nonmembers alike, to send any contributions they can to Cryovita Laboratories c/o Jerry Leaf, 13152 S. Blodgett, Downey, CA 90242.

(5)

The presence of an electron microscope in a CRYONICS laboratory opens up all kinds of amazing research possibilities. We will now be able to document the ultrastructural changes associated with dying and freezing processes, as well as more fully evaluate the effectiveness of our perfusion and freezing techniques. YOUR support is urgently needed.

CRYONICS LAWSUIT

A lawsuit brought approximately five years ago by the relatives of some of the patients formerly cared for by the Cryonics Society of California is expected to go to trial in Los Angeles on March 27. Along with Robert F. Nelson, former CSC president, several individuals who appear to be innocent of wrongdoing have been named in the suit. Among these are Fred and Linda Chamberlain, formerly of Manrise Corporation. The Chamberlains were only briefly involved with CSC and they left the organization immediately after they were unable to satisfy themselves with Nelson's integrity and after

they were additionally unable to determine the conditions under which CSC patients were being stored.

From the reports we have seen both in the press and from first-hand communications, it appears that the attorney for the plaintiffs, Michael Worthington, is less interested in obtaining justice for his clients than he is in demonstrating cryonics to be "consumer fraud." We will report on developments as we learn of them. In the meantime, we wish the Chamberlains well, and we remain confident that they will be found to be in no way culpable for any of CSC's misdeeds -- real or imagined.

NIA BUDGET CUTS

We quote from a letter from Alvin Steinberg on an issue which is important to all of us:

"The federal government is considering making major cuts in the National Institute of Health budget...Of particular importance to cryonicists is the cut that is contemplated for the National Institute on Aging, which is one of the National Institutes of Health. They support some significant research into the basic mechanisms of aging. This could lead to a major breakthrough in life extension, if they realize it or not. While it is true that our major efforts should be put into advancing cryobiology, we also have an interest in gerontology.

Please ask your readers to send letters to the President (White House, Washington, D.C. 20500); their senators (Senate Office Building, Washington, D.C. 20510); and their representatives (House of Representatives, Washington, D.C. 20515) telling them that even in this austere time the bio-medical research of the national Institute on Aging should be increased, not cut."

(6)

WATER AND OIL

by Michael Darwin

"'It is easier for a camel to go through the eye of a needle than for a rich man to enter the kingdom of God.' And they were astonished out of measure, saying among themselves, 'Who then can be saved?'" (Mark 10:25-26)

Anyone who know anything at all about cryonics will immediately tell you it isn't conducive to making a living. There is no profit to be made in "doing" cryonics; and informing friends, relatives, and employers personally (or worse yet, through the media) that your passionate interest in life is to freeze dead bodies, or better yet -- severed heads, just isn't likely to impress them with your sanity, let alone your competence. While I can attest to the fact that it is possible to make a living at something else, while spending every waking moment immersed in thought about cryonics; it is impossible to make the kind of progress that large sums of money and freedom to pursue the idea full time would allow.

Since finding large numbers of rational people to support research on a reasonable scale seems hopeless (sometimes I feel like Lot or the Marines -- looking for a few good men, and not having much luck), the logical alternative which is endlessly suggested by the naive is to find a few rational people of great wealth to support the research that so urgently needs to be done.

Some half dozen times or so in the past seven years I have sat in the same room with one or more of those nine-digit commodities known as millionaires, for the express purpose of selling them on youth, health, and eternal life via the miracle of cryonics research. Some came to my presentations already convinced that the cryonics premise was a workable one; other had never heard of the idea. Thousands of words and seven years later I have come to this conclusion about talking to men of great wealth about cryonics: When given the choice between crossing the street to talk with a millionaire about cryonics research or staying home and masturbating -- stay home and masturbate. The latter isn't any more productive than the former, but it is a lot more satisfying.

My observations on wealthy men I have encountered are enough to make the average man rejoice at his overdraft notices. It seems that when you bank balance exceeds you IQ by very much, you are apt to turn into a total ass. Strong words, I know, but true nonetheless. I have been told that money talks. This statement is true but frequently incomplete. Money not only talks, but talks loudly and almost never has anything meaningful to

say. An example of this is a man I'll refer to only as the Pancake King (PK). I met PK when I was working in Los Angeles with Fred and Linda Chamberlain of Manrise Corporation. Through various machinations too complex for me to remember, let alone repeat here, a meeting was set up between this young millionaire in his thirties, the Chamberlains, and myself. PK was reportedly not too keen on the idea of getting old and even less enthused about dying. Score one for PK. PK was living proof that money talks. We scrambled like hell to put

(7)

together a really comprehensive presentation. Fred had a tape-slide show organized that made Kennedy's selling line of putting a man on the moon look like sandbox antics. We put careful thought, hours of calculations, and planning for every contingency into the presentation. It was a work of art. I learned more than I would have though possible about the psychology of selling from Fred's presentations. Not hype, but careful attention to detail and thorough, honest descriptions of risks and benefits.

Unfortunately, what PK was not was bright. True, he walked in attired in the best fitting cotton summer suit I've ever seen, looking cool as a cucumber in pastel yellow while the California sun blazed outside. I could feel my polyester double knit suit and my two hushpuppies with shiny toes give up their last bit of dignity in abject embarrassment. But style and intellect are not necessarily related. We gave the presentation and PK sat with eyes staring straight ahead, giving the impression that he was trying very hard to stay awake. He didn't say much after it was over, but it was clear that a) he didn't understand most of what we had to say, and b) he wanted to pay his \$179.95 and pick up Immortality at the door on the way out. Being frozen, a chance at coming back? -- in exchange for tens of thousands of dollars of HIS money? Not on his life, and certainly not on yours. Looking like so much melted butter, he gathered himself up and hurried along to Griffith Park, as there was a Laser Light Show he simply couldn't miss and we had overrun horribly and since he found science so compelling...

I have seen several since, more or less like PK, usually surrounded by an entourage of yes men striving always to listen to the voice of all that money talking, talking, talking. Trying always to be "up" and amusing and full of interesting things to do to while away the hours like laser light shows, or women, or boys, or whatever the Voice was shouting it needed.

Of course, not all wealthy people are PKs. Some are self made. Some climbed their way up the gritty ladder of financial success, shedding a layer of sensitivity with each new rung. These men are certain that their bank accounts are their IQs. I have found they can be classified almost immediately by their patronizing use of the word "boy." I now understand why black men do not like to be called "boy," not ever. I have learned what it feels like to be a nigger in the privacy and comfort of my own home. This class of the wealthy, while interested in cryonics, is certain that you have nothing of significance to communicate to them. If you were worth anything, why, you'd be rich too.

The truth, I think, is that the Voices of Power and Money speak so loudly, along with the rumble of the Yes-Men, that they drown out everything else -- including what may seem to be by comparison the Whisper of Reason. This type of wealthy person has ceased to listen to anything outside his own mind. It is also possible that Wealth and Power have made this person feel omnipotent -- above everyone and everything, including Death. This kind will never be frozen.

Finally, there is money's capacity to twist and warp the psyche. I've seen more than my share of abject poverty. I grew up in a white "ghetto"

and now live in a black and gay one. I've seen alcoholism, brutality, and crushing depression. All of these are bad, but I've never seen poverty even come close to twisting people

(8)

as badly as money can. Paranoia and warped emotional states coupled with the money to make the fantasies they produce become real is a condition only wealth can achieve.

All of this is not to say that there are not people of wealth who are balanced, sensitive, aware, and intelligent human beings. However, they are exceptionally rare in a breed of people who are by and large as jaded and conceited as they are boring. It has been all of our misfortune that none of these exceptional wealthy people has been interested in cryonics. They are usually already too committed to other ideas and causes. Give the impossibly small number of people interested in cryonics on the whole, I don't think our chances of significant help from millionaires are exactly good.

Still, I confess I fantasize about the prospects of rescue by a millionaire as I trudge to work through the Indiana snow, my mind occupied with where the next dollar for animals or chemical or instruments is going to come from. And I still listen for the phone to ring with that ONE INCREDIBLE CALL. Because after all, everyone know that money talks...and it's hard not to listen.

NEW CRYONICS MERGER

Congratulations to IABS Director of Research Dr. Corey Noble and former IABS Membership Chairperson Anna Schoppenhorst, who have announced that they will be married late this spring. They will continue to live in the Washington, D.C. area. These two dedicated cryonics researchers have been good friends and workers for IABS for several years. We take great pleasure in seeing these two fine people locked in mutual motivation and happiness -- 'til deanimation do them part, temporarily.

FOLLOWING THROUGH

Name.....

Address.....

.....

- () I would like to join IABS as (please check one)
- () an Associate Member, for \$15.00 per year.
- () a Supporting Member, for \$50.00 per year.
- () a Life Member, for \$750.00 within a two-year period (please enclose at least \$50.00).

Please check one:

- () Renewing member
- () First-year member

Periodicals:

I (do) (do not) wish to subscribe to "The Immortalist."
(Free to first-year Supporting and Life Members only. \$5.00 for

for renewing members and all Associate Members.)

Donations (Tax-exempt):

() I wish to make a donation to the General Business fund of \$__

() I wish to make a donation to the Research fund of \$__

Mailing List:

() I would not like to join at this time but do wish to be kept on your mailing list. I enclose a donation of \$5.00.

Totals:

Membership fees	\$_____
Subscription fees	_____
Donations	_____
Total remitted	\$_____

Please send check or money order; no cash please. Make all checks payable to the Institute for Advanced Biological Studies, Inc. Mail to:

The Institute for Advanced Biological Studies, Inc.
2901 N. Pennsylvania
Indianapolis, IN 46205

TYPIST'S NOTES (Richard Shock, 1991):

1) In reference to the article on page 4, the High Pressure Chamber would have allowed a cryoprotection approach known as "vitrification," conversion of tissue to a glass-like state. Research into this intriguing possibility has continued for the last decade, almost exclusively by Dr. Gregory Fahy. At the present time, Fahy has vitrified dog kidneys with an encouraging rate of success. (see "CRYONICS," Jul.81, p.8-12, etc., and "Cryobiology" Vol.21, 1984, p.407-426.)

2) The "CRYONICS LAWSUIT" mentioned on page 5 was in conjunction with what is generally known as the "Chatsworth Incident," (though stronger words than "Incident" are often used for it). The Cryonics Society of California's for-profit associate, Cryonics Interment, maintained an underground storage facility in a Chatsworth, California cemetery. At some time in the late 1970's, olfactory evidence suggested that the Cryonics Interment patients had not been maintained with sufficient liquid nitrogen. By the time David Walker, a reporter for the "Valley News" gained access to the facility in May 1979, he found only empty storage tanks. All that can be confirmed is that the nine Cryonics Interment patients have been conventionally interred. (For specifics on these nine, see "The Chatsworth Patients" by R. Michael Perry, "Venturist Monthly News," Aug. 1990. For the original notice of this situation, see the article "Cryonic Interment Patients Abandoned" by Art Quaife in "The Cryonicist," Oct. 1979.)

3) The "Pancake King" incident Michael Darwin refers to on page 6 would have taken place within a period of approximately eighteen month from 1974 through 1975, the time Darwin worked for the Chamberlains.

4) The "Cryonics Merger" mentioned on page 8, the intended marriage between

Dr. Corey Noble and Anna Schoppenhorst, did not occur.