

CRYONICS
THE NEWSLETTER OF:

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YES, WE'RE STILL HERE!

We apologize for the long delay and irregular schedule in publishing newsletters. IABS, like all other cryonics organizations, has a very small staff, most of whose efforts are spent just trying to keep the organization afloat. We intend to become more regular in providing you with news and hope to be more comprehensive, too.

To give you a chance to find out we are serious, the first two issues will be sent out free. After that we need to know that you are serious; so you will need to send us a membership or donation to continue receiving the newsletter. Memberships are the same price as in the past: Associate (non-voting) \$15; Supporting (voting) \$50. A minimum donation of \$5 will keep you on our mailing list for one year.

Current IABS officers are Joe Allen - President; Michael Darwin - Vice President and Staff Researcher; Steve Bridge - Secretary-Treasurer; Dr. Corey Noble - Director of Research. IABS will hold a very important annual meeting in June to select new officers and discuss a new organizational structure (see next item).

IABS AND SOMA MOVING TO LOS ANGELES

After much careful consideration and long hours of agonizing discussion, it has been decided that IABS and Soma, Inc. (a local for-profit cryonics company run by Mike Darwin and Allen Lopp) will relocate to the Los Angeles area sometime this summer. It became clear in the latter part of 1980 that the response to our promotional efforts here in the midwest was not sufficient to warrant a continued effort. More importantly, it was seen with increasing clarity that personnel with appropriate training and skills were simply not available in sufficient number to allow for a reliable suspension team to be assembled or for proposed research to be properly conducted.

Mike Darwin, Soma President and IABS staff researcher, participated in two cryonic suspensions last year at Jerry Leaf's Cryovita Laboratory in Los Angeles. Following the suspensions, Darwin

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became convinced that the fastest progress and best physical facilities would be made possible by combining the efforts and equipment of the Indianapolis groups with that of Cryovita. Eventually, the Board of Directors for IABS also were convinced that this was the best possible move. Most of the research and suspension equipment and supplies of both Soma and IABS have already been moved to Jerry Leaf's Los Angeles facility. (A large amount of duplicate equipment was donated to Cryonics Institute in Michigan). One immediate result of this co-operation will be that the IABS rabbit perfusion project, which is more than half completed, will be continued with the excellent technical support of Jerry Leaf and the other southern California people.

IABS will continue to maintain an Indianapolis office with Steve Bridge as resident agent. New addresses and telephone numbers will be provided when the switch takes place this summer. Until then, you may continue to correspond with IABS at the usual address.

IABS ACQUIRES EQUIPMENT

IABS recently acquired a used Ohio anesthesia machine complete with Fluothane vaporizer, fail-safe feature, and sphygmomanometer. The unit is a "deluxe" model and is still in clinical use in many U.S. hospitals. Its replacement cost would be in the vicinity of \$5000 to \$7000. The unit was purchased at a V.A. auction. Our thanks to Mike Darwin and Steve Bridge, whose contributions and efforts made purchase possible, and to Joe Allen, who hauled the unit for us.

LLM DEANIMATES

It is with sincere sorrow and deep regret that we must tell you about the demise of "Long Life Magazine." For several years LLM has been practically the sole effort of Pat Dewey and Hugh Hart in Chicago. At great personal expense Pat Dewey has put out a fine magazine which was the only open and free voice for the cryonics community. Pat was willing to listen to and more importantly publish all views which were set forth clearly, responsibly, and reasonably. All of us at IABS are grateful to Pat for the opportunities he afforded us to express our views.

Pat's tremendous personal and financial sacrifices were above and beyond the call of duty. It is a sad commentary on the state of cryonics that he was unable to get any significant help with either the financial or physical aspects of putting out LLM. We sympathize with his situation and wish him well in all future endeavors.

CALIFORNIA ATTORNEY GENERAL ON CRYONICS

The Attorney General of California recently rendered a decision on two questions posed to him by John Gill of the California State Cemetery Board. Mr. Gill asked the Attorney General to rule on

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1) Whether operation of a cryonics storage facility constituted operating a cemetery, and 2) Whether cryonics was qualified to operate under the Uniform Anatomical Gift Act (UAGA). The answer to question #1 was no, cryonics storage facilities were not cemeteries and therefore not under the purview of the Cemetery Board. This answer upset Mr. Gill so much that he has called out in the press for regulation of cryonics operations by the state legislature.

The answer to question #2 was less reassuring. The Attorney General stated that it was his opinion that having one's remains placed in cryostasis does not qualify as an anatomical donation under UAGA. This means that California corporations will probably have to execute new paperwork utilizing "death care contracts." Fortunately, California law also specifies in the Public Health and Safety Code that an individual does have the right to dispose of his remains as he chooses, without regard to the wishes of next-of-kin.

While the California decisions do not have direct bearing on cryonics corporations in other states, they do pose possible problems which may occur in the future. In the long run, the solutions required for California corporations may be also more usable for other cryonics groups. There have always been problems with the use of the UAGA, such as the

inability to maintain separate donor accounts, which some people find highly desirable. Obviously much legal work needs to be done and Trans Time is blazing the trail on this front. Already Trans Time has temporary paperwork utilizing the new approach, and more permanent documents are expected shortly.

GENETIC ENGINEERING PROGRESS

Researchers at Genentech in San Francisco recently announced that they have succeeded in transferring the gene for human interferon production to baker's yeast. This development would allow for cheaper and more rapid production of interferon than if the traditionally-used E. coli were employed. Cryonicists can take this small piece of progress to heart. It is just the beginning of what is going to be a truly profound and revolutionary explosion in human development. Not only will genetic research aid in creating longer life-spans, but the quality of that life will be altered just as dramatically. It will probably be not too far in the future when virtually our entire industrial activity could be carried on by custom-engineered living systems. In the future, homes, buildings, and even most furniture and appliances may be replaced by living organisms created specifically for these functions. These living systems will be self-maintaining, capable of indefinite service and will extract the energy they require from sunlight and the material from the soil. In the near future (the next 20 to 30 years) it is not unlikely that existing life forms such as lichens and mosses will be genetically altered to serve as replacements for exterior coatings such as paints and varnishes. Certainly, the production of industrial chemicals and solvents will become exclusively a biological phenomenon. The development of these life forms will eliminate the odiferous and polluting

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factories which currently consume huge amounts of energy and produce unwanted bonanzas of waste heat and toxic materials.

RECOVERY FROM SENILITY

There is mounting evidence of increasingly higher quality that aluminum is at least a co-factor in the genesis of Alzheimer's disease, more commonly known as senile dementia. While most elderly people escape this disastrous indignity, perhaps as many as 20% of them do not.

Unfortunately the elderly are not the only persons to suffer the scourge of Alzheimer's disease. Patients undergoing artificial kidney treatments are exposed to high concentrations of aluminum, both from occasional water contamination and orally in the form of massive doses of aluminum hydroxide. At this time, antacids containing aluminum hydroxide are the only means known to prevent dangerous and even fatal phosphorus intoxication in patients whose kidneys are no longer capable of excreting excess phosphorus. This massive exposure to aluminum occasionally results in a syndrome known as dialysis dementia. It was not long after this condition was first reported until it was determined to be none other than Alzheimer's disease.

It is with great interest that we report on a paper recently published in "Dialysis and Transplantation" (Mittal, et al. Vol 10, 1981, pg. 41-42) documenting complete recovery from dialysis dementia following kidney transplantation. The researchers reported on two reversals of this type. In one case the kidney was rejected and the patient was forced to return to hemodialysis. The return to dialysis resulted in onset of mental deterioration and full recurrence of the Alzheimer's disease.

These case histories indicate that the cause of Alzheimer's disease may be not only aluminum intoxication but also a decreased ability of the kidney to remove aluminum or other co-factors responsible for production of the disease. Perhaps the reversal of this form of senility will not be as complicated as once thought.

A QUESTION OF TIME

by Michael Darwin, President of Soma, Incorporated

Recently, personnel from Soma were called upon to assist in removing two patients from cryonic suspension. We are in the business of freezing people, not burying them; nevertheless, the special circumstances of this situation induced us to participate. The patients involved had been privately maintained by relatives following the dissolution of Cryonics Interment in Southern California. Much of the horror which we encountered and many of the poor decisions which had been made regarding patient care were directly traceable to Cryonic Interment and its president, Robert Nelson.

It is not possible here to detail the circumstances which led up to our involvement. We had not been involved in placing these patients into suspension, and we were not aware of their condition until we were contacted a few days before our participation began.

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When we arrived on the scene, we found a mass of foil, paper and organic debris in the bottom three feet of a large, open-mouth cryogenic dewar. The supporting ropes which had originally held the bodies suspended in the container now held aluminum foil and skin which had slipped off of the bodies as they decomposed. A further discussion of the condition of the remains is not appropriate for this publication. Suffice it to say that it took a crew of six Soma and mortuary personnel approximately 24 hours of more or less round-the-clock effort to successfully remove the remains of two "suspension patients" from the bottom of the container. Special isolation equipment and an outside oxygen supply were required in order to enter the container. Despite these precautions, Soma personnel were repeatedly contaminated with DMSO from the decomposed remains.

This was the first contact the mortuary personnel had had with cryonics. They were disgusted, outraged and hostile. As one mortician remarked, "This is the most undignified conscious handling of human remains I have ever encountered."

The first question which comes to mind is how did it happen? That is not an easy question to answer. The story is a long and complicated one and for many reasons cannot be told here in full. In large part, it appears that Robert Nelson's harsh criticisms (in retrospect, unjustified) of other commercial cryonics firms, coupled with completely unrealistic technical advice, was a prime contributor to the situation described above. One of the patients involved had been removed from competent cryogenic care due to Nelson's insistence that storage could be pursued more cheaply under his management. There were no dialer alarms on the container; there were no back-up dry ice or liquid nitrogen containers available in the event of an emergency. When the relatives at last took over storage following collapse of Cryonic Interment, the patients were maintained in a remote, poorly accessible area literally a hundred miles away from the nearest caring individual. The container was filled every seven weeks instead of every seven days. What is even more unbelievable is that the container was serviced by a welding supply firm whose personnel knew little or nothing about the handling of high vacuum cryogenic equipment. Unfortunately, the relatives themselves knew even less about

the safe use of such equipment.

Due to gross mishandling, the vacuum on the dewar was compromised. Under such circumstances repair is difficult, and most often it is necessary to disassemble the container and in effect "reinsulate" it. Short of this, an extended period of outgassing on the vacuum pump at an elevated temperature is required. None of this was done. The container was hastily repaired and pressed back into service without a quarantine and with the same fill schedule as previously employed. Due to this carelessness, another vacuum failure soon occurred and, combined with a whole layer of other equally mindless errors, resulted in the situation we have previously described.

It is difficult for me to describe my emotional state as I write this. Two human being who loved the present and wanted the future have lost their chances. As I handed them into drab gray Ziegler cases for burial, I was enraged by the wrongness of it all.

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There are a million excuses for what happened. Not a one of those excuses is worth a damn. What happened to those two poor souls was inexcusable, avoidable and unnecessary. The amount of unthinkable stupidity required to produce the mess we found still awes me as I sit here at the typewriter. My experience with this case has filled me with anger and has further broken down my tolerance for those who would pursue cryonics with anything but good sense and complete commitment. A man whose judgement I admired said, "This is not a hobby or conversation piece. It is the principal activity of this phase of our lives." That statement is still true. Cryonics is very unforgiving of errors. A miss is as good as a mile. This experience should galvanize every cryonics organization to make absolutely sure that they can deliver the services they contract for, that they have the capabilities they advertise and that they are not unrealistically undercutting or minimizing the real cost of undertaking suspensions properly. To fail to insure that this is the case is not only a fraud on the public but also one on ourselves. With action comes responsibility. Those of us who are offering cryonics services owe it to ourselves, to our current and future patients and to the memories of those several unfortunate people who have permanently lost their chance, to insure that minimum standards are set and enforced.

I cannot know what motivated the freezing of these two people in the first place. I presume they were loved and needed. I find it difficult to understand how they could have been, with time, handled so carelessly. Perhaps there is a lesson for us there about human nature, love, need and the passage of time. For the hundredth time it must be said and said yet again that we cannot rely on friends or relatives, not even on loving, caring relatives, to maintain us in suspension. The passage of time, one way or another, may rob us even of those. The agonizing thing for me about this most recent loss is that it represents the first time to my knowledge that two people have thawed out and lost their chances not because of lack of money, but because of lack of sense.

A FOOTNOTE

The cryogenic dewar from which these two patients were removed has been repaired by its manufacturer and sold to Trans Time by Soma, Incorporated. This container will be used to place one of Trans Time's patients in liquid nitrogen. At least not all of the money, time and effort involved in the suspension of those two individuals was lost.

TYPIST'S NOTES (Richard Shock, 1991):

1) The two suspensions in which Michael Darwin participated during 1980 (both in the same January weekend!) were of a 79-year-old male, "W.D." and a 36-year-old female, Janice Foote. (see R. Michael Perry's "Table of Suspension Patients, CRYONICS, Oct. 1990). The transport preparation of W.D. was a cooperative effort between IABS and Cryovita, with Michael Darwin preparing the deanimated patient for transport and accompanying him to California, where the suspension was performed. When Cryovita received a call to suspend a another patient even as the previous one was cooling, Darwin remained in California to help with the procedure. Both patients are currently being maintained with Trans Time, Inc. (For further details, see CRYONICS, Jan. 1984)

2) For California Attorney General's arguments, see "Opinions of the Attorney General of California," Vol. 63, Opinion No. 80-710 -- December 11, 1980.

Recent legislation has overturned these decisions, though appeals continue. (see CRYONICS, Nov. 1990, etc.

3) This issue's foresight in the possibilities of genetic engineering is interesting to note, in view of its similarity to the current speculative vogue of nanotechnology. Michael Darwin presented another farsighted, semi-nanotechnological idea, the "Anabolocyte," in the July/August 1977 issue of "Life Extension Magazine" (later "Long Life Magazine").

4) While I am unable to cite evidence against the role of aluminum in Alzheimer's disease, the continuing mystery of the affliction would suggest a divergent hypothesis from the one presented in this issue.

5) According to Stephen W. Bridge, the patient conventionally interred in the "Question of Time" incident was Ann DeBlasio, who deanimated January 4, 1969 and was suspended by The Cryonics Society of New York. (see "Cryonics Reports," Feb. 1969)

I have no access to information on the second patient mentioned here.