

A Publication of the Immortalist Society
LONG LIFE

Longevity Through Technology

Volume 45 - Number 04

LIVING THE LEGACY
The people advancing the cryonics movement



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Why should You Join the Cryonics Institute?

The Cryonics Institute is the world's leading non-profit cryonics organization bringing state of the art cryonic suspensions to the public at the most affordable price. CI was founded by the "father of cryonics," Robert C.W. Ettinger in 1976 as a means to preserve life at liquid nitrogen temperatures. It is hoped that as the future unveils newer and more sophisticated medical nanotechnology, people preserved by CI may be restored to youth and health.

1) Cryonic Preservation

Membership qualifies you to arrange and fund a vitrification (anti-crystallization) perfusion and cooling upon legal death, followed by long-term storage in liquid nitrogen. Instead of certain death, you and your loved ones could have a chance at rejuvenated, healthy physical revival.

2) Affordable Cryopreservation

The Cryonics Institute (CI) offers full-body cryopreservation for as little as \$28,000.

3) Affordable Membership

Become a Lifetime Member for a one-time payment of only \$1,250, with no dues to pay. Or join as a Yearly Member with a \$75 initiation fee and dues of just \$120 per year, payable by check, credit card or PayPal.

4) Lower Prices for Spouses and Children

The cost of a Lifetime Membership for a spouse of a Lifetime Member is half-price and minor children of a Lifetime Member receive membership free of charge.

5) Quality of Treatment

CI employed a Ph.D level cryobiologist to develop CI-VM-1, CI's vitrification mixture which can help prevent crystalline formation at cryogenic temperatures.

6) Locally-Trained Funeral Directors

CI's use of Locally-Trained Funeral Directors means that our members can get knowledgeable, licensed care. Or members can arrange for professional cryonics standby and transport by subcontracting with Suspended Animation, Inc.

7) Funding Programs

Cryopreservation with CI can be funded through life insurance policies issued in the USA or other countries. Prepayment and other options for funding are also available to CI members.

8) Cutting-Edge Cryonics Information

Members currently receive a free subscription to Long Life Magazine, as well as access to our exclusive members-only email discussion forum.

9) Additional Preservation Services

CI offers a sampling kit, shipping and long-term liquid nitrogen storage of tissues and DNA from members, their families or pets for just \$98.

10) Support Education and Research

Membership fees help CI to fund important cryonics research and public outreach, education and information programs to advance the science of cryonics.

11) Member Ownership and Control

CI Members are the ultimate authority in the organization and own all CI assets. They elect the Board of Directors, from whom are chosen our officers. CI members also can change the Bylaws of the organization (except for corporate purposes).

The choice is clear: Irreversible physical death, dissolution and decay, or the possibility of a vibrant and joyful renewed life. Don't you want that chance for yourself, your spouse, parents and children?

To get started, contact us at:

(586) 791-5961 • email: cihq@aol.com

Visit us online at www.cryonics.org



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Those decisions to your...
best choice is not willing, able, or reasonably available to those receiving...
employees of a community care facility or a residential care facility where you are receiving care, or your supervisor...

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Indian Health Service

FORM APPROVED (08-10-1000)
Expires Dec 31/2013
The OHSU Summer in Science

AUTHORIZATION FOR USE OR DISCLOSURE OF PROTECTED HEALTH INFORMATION

COMPLETE ALL SECTIONS, DATE, AND SIGN

I, _____, hereby voluntarily authorize the disclosure of information from my health record.

And is to be provided to:

NAME OF PERSON/ORGANIZATION/FACILITY _____

ADDRESS _____

CITY/STATE _____

ZIP _____

DATE _____

III. The purpose or need for this disclosure is:

☐ Further Medical Care ☐ Research ☐ Insurance ☐ Disability ☐ Other (specify) _____

IV. The information to be disclosed from my health record: (check appropriate box(es))

☐ Only information related to (specify) _____

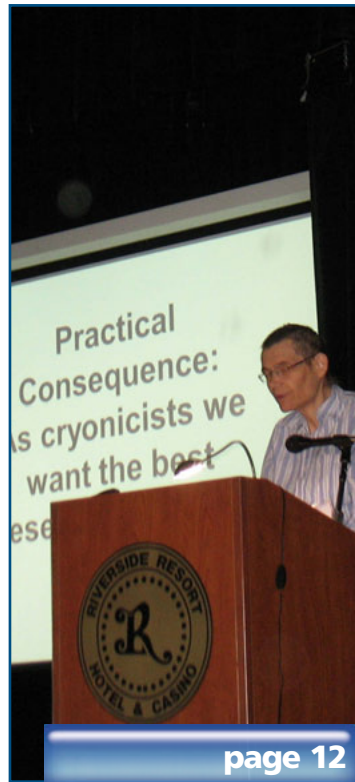
☐ Only the period of events from _____ to _____

Use applicable box(es) below:

☐ Treatment ☐ Other than Psychosurgery (NHS) ☐ Other than Patient Privacy (NHS)

Signature of Health Information Management Department, subject to the applicable Health Information Management Department coverage or other applicable conditions of obtaining information, provided, it is for me:

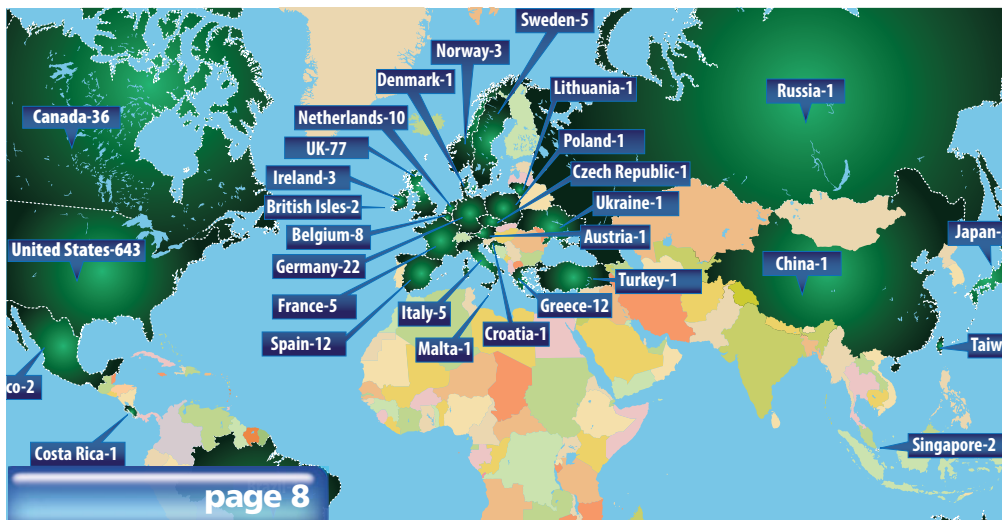
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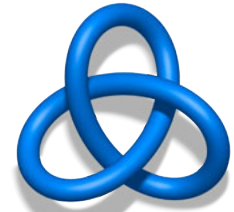
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LONG LIFE MAGAZINE

A publication of the Immortalist Society



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2013 and Beyond

Depending on when you receive this copy of Long Life, (ironically, last issue we had magazines reaching the UK before our very own editor York Porter's copy arrived here in the Continental US!) it's an appropriate time to either make or revisit New Year's Resolutions. That said, we have a few suggestions for you to consider.

This issue features two columns that point out the importance of being prepared. Dennis Kowalski reminds us that it's never too early to begin planning for your standby / emergency preparations and Jim Yount gives us examples of two critical forms that can make a world of difference in a cryonics emergency. "Be Prepared" is a mantra here at Long Life, and both articles should give you food for thought about making your own "Be Prepared" resolutions for 2014.

Cryonics advocacy is another favorite topic here at our virtual offices, and we're pleased to offer some great examples of getting the word out about "The Prospect of Immortality" that cryonics offers. Both CI and IS have reports in this issue on their Annual General Meetings, both of which enjoyed great attendance and participation.

Joe Kowalsky also helped "get the word out" about CI and IS with a presentation at The Venturist Society's Cryonics convention in October. In addition to his own remarks, Joe also provides a great rundown of the conference, which featured a wide range of notable speakers covering a variety of important cryonics topics.

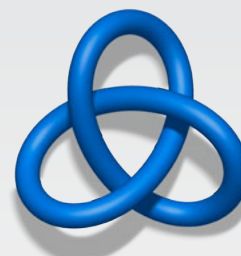
Back to the topic of advocacy, we'd like to point out that promoting cryonics doesn't necessarily require presenting at a major conference, writing white papers or otherwise getting up on a soapbox and "preaching the gospel." One of our chief objectives at Long Life is to help you educate not only yourself, but your friends and family about cryonics. Joe's articles this month provide a great framework about the state of the movement and some excellent particulars on two major cryonics organizations. We think it's worth sharing with the people you know as a discussion starter that can help give them some insights regarding the cryonics movement.

Wishing you and yours a happy holiday season and an extraordinary 2014. With the rate technology is progressing, the optimist in me believes there's even more incredible news to come in the year ahead. We're excited to be here to share it with you!

Douglas Golner - Managing Editor, Long Life

Note to Overseas Members:

We're aware there are mail delays for our overseas members and are trying to address those as best we can. To help us sort the problem out, we'd appreciate if you could send an email to immsoc@aol.com letting us know when you received this issue. Thank you!



LONG LIFE

A quarterly publication of the **Immortalist Society**

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CI has gone through a lot of changes over the last year. I believe changes for the better.

We have seen facilities upgrades, social media upgrades, a new website, cooperating on a new look for Long Life magazine, and the start of an ambitious local standby training program. As a result of these and other outreach efforts, we have seen greater interest in cryonics and a substantial increase in our membership rolls. We had a fantastic AGM where many exciting new proposals were discussed, including a proposal to do further research into vitrification formulas. We also had seven motivated people step up to the plate for the Board of Directors election. Although the result was that we retained our hardworking incumbents, it's very encouraging to see that kind of interest from members wanting to take on a more active role in the organization.

Cryonicists are can-do people, so I'm happy to note that rather than feel discouraged by the election results, the majority of the candidates still expressed a sincere desire to participate and volunteer. I'm proud to see such spirit and dedication, and it's encouraging and invigorating to see the enthusiasm and motivation CI members display wanting to help build up our organization. While not everyone in cryonics agrees on the best ways we can achieve that growth, what's most important to remember is that we are all in the same boat and really just one great big family.

We all want what's best for the organization and the movement, and it's very rewarding to be part of an organization that encourages the healthy and respectful exchange of ideas and opinions

that CI does. Unfortunately, no organization with finite resources, especially financial resources, can implement every proposal or idea presented. Therefore, our job is to decide on the most effective and efficient use of those resources in order to benefit everyone. I think we can all agree that we want to get the most "bang for our buck." Strategically, that means minimizing overhead and maximizing revenues so we can do more.

With this in mind, I want to stress the critical importance of the positive results we've been seeing at CI to date. In particular, our upward trend in membership numbers, which is one of our most important measures of success (see page 8). Outreach and marketing efforts are so very important because with continued progress on those fronts we have, and will continue to increase, our exposure and our membership. This strength in numbers adds additional revenues to do more of the things we want to - more outreach and education, increasing membership numbers, improving operations, enhancing our long-term stability and constantly improving the quality of our services.

Our efforts are working. I'm pleased to report that in the same year that our revenues have increased our expenditures have dropped.

This is all great news, and I have no doubt that we will continue to grow into the future. That's definitely a good thing, but addressing the cover of what CI is simply isn't enough. We can't forget about the inside workings of the machine. What matters most is the here and now, and that means setting up the best chance we can at our own suspensions today for when the need arises tomorrow.

I hear a lot of talk about large global ideas - considering future scenarios like how best to protect ourselves financially, avoid legal challenges, or survive potential natural disasters and the like. As futurists, obviously future scenarios and "what-if's" are a big part of who we are and what we're striving for, however we shouldn't focus on these often contentious issues to the point of missing what's right in front of us in the here and now. As much as we want to be ready for every unknown future scenario, the fact is that sort of discussion often comes down to debating educated guesses where only the future can judge whose idea was right and whose was wrong.

I don't disagree that it's important to consider big global issues, but I do believe we have bigger issues that need to and, more importantly, can be effectively addressed right here in the present. One of



the biggest is that many cryonicists have done very little to actually plan and prepare for their own standby situations.

As much as I may sound like a broken record, I honestly cannot stress enough the importance of the one thing everyone of us can and should be addressing right now, because it is literally the single most important “to-do” item for a successful suspension.

Standby, Standby, Standby.

Many people have different ideas and definitions of what standby is and there are many answers and strategies out there. But whatever the specifics, in the end, it’s precisely what we make of it. We are making or not making our own beds.

CI passes substantial savings on to its members so that we as individuals can decide what we want to spend, how we want to spend it, and who and what we want incorporated into our own personalized standby situations. We have the freedom of choice, but with that choice is the responsibility to make informed decisions, to ask questions, to read and to discuss. Ultimately it’s about rolling up our sleeves and doing what needs to be done.

Realistically, neither CI nor any cryonics organization can perfectly predict and absolutely meet all of a person’s cryonics needs in every circumstance, so as future patients, we have the responsibility to help organizations like CI help us by doing some planning of our own. I absolutely recognize, however, that as a world leader in cryonics, CI has a vital responsibility to provide our members with the tools they need to successfully plan, prepare, and ultimately conduct a solid standby procedure.

I’m pleased to report that we’re developing these essential materials now.

What we have in development includes information on how to contact and speak with involved professionals, basic and advanced planning guidelines, equipment suggestions and much more. There’s a wealth of excellent standby information currently available, so we’re working to collect and present that information in

a comprehensive, yet easy-to-use, template for our members to follow should they choose a local standby option rather than contracting with Suspended Animation Inc. or another professional provider.

The concept is to provide our members with step-by-step resources for both basic and advanced procedures, including manuals, checklists, and even a “how-to” video, allowing the individual user to customize their standby program to best fit their own situation. A key strategy is to ensure the materials are accessible to both the experienced professional, and especially the layman, allowing members to share this vital information with their own personal standby team, who will most likely include friends and family in a local situation. It’s critical that the people who will ultimately be responsible in a cryonics standby emergency feel comfortable with their responsibilities and confident in their training. That makes it important to have the right resources available. Our goal is to provide you with those materials.

In closing, I’d like to come back around to my initial comments about getting involved by extending an invitation for any members interested in helping out with the Standby Training Program to contact me for details. We’re looking for member feedback as the program comes together, so please let me know if you’d like to help by reviewing the materials before the roll-out. CI has an obligation to lead the way in Standby Training, and I’m absolutely convinced with the intelligence, talent, and enthusiasm of our members, we have the right people here to make that happen.

Visionary dreams aren’t realized by accident, they require dedicated people like us to take action. One of the downsides to a future-based concept like cryonics is the feeling we can’t really do much about it in the present, but standby preparations offer each and every one of us the perfect opportunity to do something active, essential, and beneficial here and now.

Make a commitment today to actively start developing your own standby arrangements, and let’s start bringing our shared dream a little closer to reality.

Ask yourself this:

“What would happen if I had a standby emergency right this instant?”



What's happening in the worlds of the Immortalist Society with our associates at CI, ACS and elsewhere.

Immortalist Society 2013 Annual Meeting Report

By: York W. Porter — Immortalist Society President

The Immortalist Society (IS) held its Annual Meeting on Sunday, September 8th, 2013. The meeting was held, through the courtesy of the Cryonics Institute (CI), at the CI facility located in Clinton Township, Michigan. York W. Porter, President of the Immortalist Society, called the meeting to order immediately after the conclusion of the Cryonics Institute's Annual Meeting, a quorum of IS members being present.

After the meeting was called to order, the general history of the Immortalist Society was explained to the assembled group. IS started as the old Cryonics Society of Michigan back in the 1960's. While beginning as a full fledged cryonics organization with the intent of preparing and storing patients, it later changed its mission to one of education and research. The educational part of the organization is carried out primarily through the publication of the magazine Long Life as well as, relatively recently, the Immortalist Society website. Both of these activities have as their primary purpose the furtherance of the concept of cryonics and the dissemination of accurate information about the subject.

In addition, the Immortalist Society has a longstanding interest in research related to the field of cryonics. It was explained by President Porter that while, at the moment, the IS research efforts were at a pause, discussions were in progress with Aschwin and Chana de Wolf through their Oregon based company, Advanced Neural Biosciences, Inc., in the hopes that IS research efforts can begin again in the near future. It was noted by President Porter that the Immortalist Society remains very proud of the fact that IS was instrumental in "jump starting" the efforts of these two fine individuals and their company through an IS/ANB research agreement negotiated a few years ago.

President Porter also noted that, due to the absence of Secretary Royse Brown, a Secretary's report would not be given this year. Treasurer Richard "Rich" Medalie then presented the IS Treasurer's report, a copy of which should appear in the next edition of Long Life magazine.

The next agenda item was a brief tribute to long-standing IS Treasurer John Besancon, who is now under the care of the Cryonics Institute. John was a pillar of strength for our organization and both his intelligence and integrity served us well. John's wife, Verna, was in attendance and both she and John's memory were recognized with a hearty round of applause.

Longstanding IS member Joseph Kowalsky was asked to say

a few words about one of our continuing efforts to stimulate research through sponsorship of the IS "Cryoprize". The "IS Organ Cryopreservation Prize", aka "The Cryoprize", is an IS initiative spearheaded by Mr. Kowalsky to raise a minimum amount of fifty thousand dollars prize money. The prize money is to be awarded to the first individual or group that successfully places certain mammalian organs at cryogenic temperatures and restores them to a functioning state. (For further info, please check out the IS website).

Mr. Kowalsky showed a short film clip currently in development to promote the IS Cryoprize. While indicating that the film was far from finished, the work that was shown received a generally good reception from those present. Mr. Kowalsky also shared the exciting news that Leonard Nimoy, the famous actor of "Star Trek" fame, was among the contributors to the award fund. Mr. Nimoy had also been kind enough to agree that it would be perfectly acceptable to publicly share the news of his contribution.

Mr. Porter then brought up that an IS member had expressed an interest in serving on the Board of Directors. Mr. Porter explained to the group that the number of members of the Immortalist Society Board of Directors was flexible, and an effort was made to explain the possible types of Board members as allowed under the IS bylaws.

A discussion then ensued in which the consensus seemed to be that, at the present time at least, there was no need to expand the number of members of the Board of Directors of the Immortalist Society beyond the four members that are presently serving. Mr. Porter indicated clearly to the members assembled that if anyone had a contrary opinion or wished to make a motion to increase the number of directors, they were more than welcome to do so. Since no motion was forthcoming, an election was then held for the positions of President, Vice President, Secretary, and Treasurer. In that election, the present officers were re-elected and will serve through the year 2014. Officers of the Immortalist Society are as follows:

President York W. Porter

Vice Pres: John Bull

Secretary: Royse Brown

Treasurer: Rich Medalie

As a final note before the meeting was adjourned, Mr. Porter invited everyone to attend a social gathering scheduled for later in the evening at the home of Jennifer and Joseph Kowalsky.

There being no further business of the organization, the meeting was adjourned.



Cryonics Institute Membership Statistics:

CI's membership numbers are up again, making us cryonics' leading organization in terms of members. As of December 2013 we have 1,123 members (23 new members since our last report) and 118 patients, up one from 117.

Of the 1,123 Members, 539 have funding and contracts in place for human cryopreservation, an increase of nine. Of these 539, 151 have arrangements for Suspended Animation Standby and Transport, up five from last issue. There are 100 pet patients, up two from our last report. CI continues to be a cryonics industry leader in terms of both membership and practical affordability for all.



Cryonics Institute Membership by Country:



Worldwide Cryonics Groups

The cryonics movement needs your help! We're looking for your input to update and create a master list of cryonics organizations and resources world-wide. If you know of, or are considering starting a support, standby or other cryonics-related group in your area, please send details to immsoc@aol.com. We'll be using Long Life to list existing groups of interest as well as help spread the word and encourage new organizations.

AUSTRALIA:

The Cryonics Association of Australasia offers support for Australians, or residents of other nearby countries seeking information about cryonics. caalist@prix.pricom.com.au. Their Public Relations Officer is Philip Rhoades. phil@pricom.com.au GPO Box 3411, Sydney, NSW 2001 Australia. Phone: +6128001 6204 (office) or +61 2 99226979 (home.)

BELGIUM: Cryonics Belgium is an organisation that exists to inform interested parties and, if desired, can assist with handling the paperwork for a cryonic suspension. The website can be found at www.cryonicsbelgium.com. To get in touch, please send an email to info@cryonicsbelgium.com.

CANADA: This is a very active group that participated in Toronto's first cryopreservation. President, Christine Gaspar; Vice President, Gary Tripp. Visit them at: <http://www.cryocdn.org/>. There is a subgroup called the Toronto Local Group. Meeting dates and other conversations are held via the Yahoo group. This is a closed group. To join write: csc4@cryocdn.org

QUEBEC: Contact: Stephan Beauregard, C.I. Volunteer & Official Administrator of the Cryonics Institute Facebook Page.

For more information about Cryonics in French & English: stephanbeauregard@yahoo.ca

DENMARK: A Danish support group is online. Contact them at: david.stodolsky@socialinformatics.org

FINLAND: The Finnish Cryonics Society, (KRYOFIN) is a new organization that will be working closely with KrioRus. They would like to hear from fellow cryonicists. Contact them at: kryoniikka.fi. Their President is Antti Peltonen.

FRANCE: Roland Missionnier has formed SOCIETE CRYONICS de FRANCE. He would like to hear from cryonicists in Switzerland, Luxembourg and Monte Carlo, CELL: (0033) 6 64 90 98 41, FAX: (0033) 4 77 46 9612 or rolandmissionnier@yahoo.fr

GERMANY: There are a number of cryonicists in Germany. Their homepage is: www.biostase.de (English version in preparation.) if there are further questions, contact Prof. Klaus Sames: sames@uke.uni-hamburg.de.

GREECE: Greek Cryonics Support Group. Sotiris Dedeloudis is the Administrator. Find them at: <http://www.cryonics.gr/>

ITALY: The Italian Cryonics Group (inside the Life Extension Research Group (LIFEXT Research Group)) www.lifext.org and relative forum: forum.lifext.org. The founder is Bruno Lenzi, contact him at bruno-lenzi88@gmail.com or Giovanni Ranzo at: giovanni1410@gmail.com

JAPAN: Hikaru Midorikawa is President Japan Cryonics Association. Formed in 1998, our goals are to disseminate cryonics information in Japan, to provide cryonics services in Japan, and eventually, to allow cryonics to take root in the Japanese society. Contact mid_hikaru@yahoo.co.jp or <http://www.cryonics.jp/index.html>

NETHERLANDS: The Dutch Cryonics Organization (<http://www.cryonisme.nl>) is the local standby group and welcomes new enthusiasts. Contact Secretary Japie Hoekstra at +31(0)653213893 or email: jb@hoekstramedia.nl

PORTUGAL: Nuno & Diogo Martins with Rui Freitas have formed a group to aid Alcor members in Portugal. Contact: nmartins@nmartins.com or visit www.cryonics.com.pt/

RUSSIA: KrioRus is a Russian cryonics organization operating in Russia, CIS and Eastern Europe that exists to help arrange cryopreservation and longterm suspension locally, or with CI or Alcor. Please contact kriorus@mail.ru or daoila.medvedev@mail.ru for additional information or visit <http://www.kriorus.ru>. Phone: 79057680457

SPAIN: Giulio Prisco is Secretary of the Spanish Cryonics Society. Website is <http://www.crionica.org.sec>. He lives in Madrid and he's a life member of CI and is willing to serve as a contact point for Europeans. He can be contacted at: cell phone (34)610 536144 or giulio@gmail.com

UNITED KINGDOM: Cryonics UK is a nonprofit UK based standby group whose website is: www.cryonics-uk.com and who can be contacted via David Styles (Organizer) at: +44 7706 149771 or ds@cryonicsuk.com or via Alan Sinclair (President) at +44 1273 587 660 cryoservices@yahoo.co.uk

INTERNATIONAL: The Cryonics Society is a global cryonics advocacy organization. Website is www.CryonicsSociety.org. They publish an e-newsletter FutureNews. Phone: 1-585-643-1167.

** Please note, this list is provided as an information resource only. Inclusion on the list does not constitute an endorsement by Long Life magazine or our affiliated organizations. We urge our readers to use this list as a starting point to research groups that may meet their own individual needs. We further note that readers should always use their own informed judgment and a reasonable amount of prudence in dealing with any organization.*





Cryonics Institute 2013 Annual Meeting Photo Gallery

*Photos Courtesy of
Stephan Beauregard*



CI President Dennis Kowalski poses with CI's Facebook page administrator, Stephan Beauregard in front of the cryostats at the Michigan Facility



A group of happy attendees at the annual meeting are (standing from left to right): CI Director candidate Stephan Beauregard, CI President Dennis Kowalski, Immortalist Society President York W. Porter, Advanced Neural Biosciences President/Researcher Chana de Wolf, CI Board of Directors Member/Contract Officer Connie Ettinger, and CI Board Member/Treasurer Pat Heller. Kneeling in front are (left to right): 2013 CI Teller's Committee Member Michael Carter, CI/IS Attorney David Ettinger, and CI Board of Directors member/Chief Operating Officer Andy Zawacki.





CI Director Candidate Kevin Doyle, Edward M and Pata Luna Llano & Magali Beauregard



Richard Pennington enjoys a break during the meeting

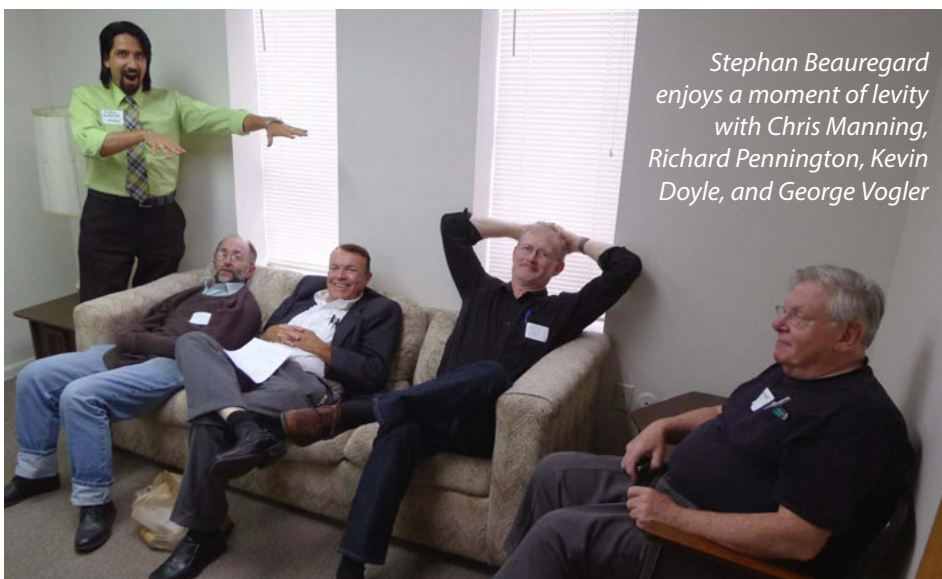
Rudy Goya came all the way from Argentina to give his presentation



Connie Ettinger addresses the crowd on CI Facility Improvements which she cleverly entitled "CI Gets A Facelift". Connie ended her talk with the so true statement of "End of the presentation but just the beginning of our progress"



The 2013 AGM gets a "thumbs-up" from Lilitu Roark, Chana de Wolf, Magali Beauregard & Amber Tracy



Stephan Beauregard enjoys a moment of levity with Chris Manning, Richard Pennington, Kevin Doyle, and George Vogler



CI Director/COO Andy Zawacki addresses the membership



Venturist Society Cryonics Convention

- A Report by Joe Kowalsky



I recently had the pleasure of attending the Venturists conference in Laughlin Nevada, including the opportunity to present talks on both CI and IS.

Although “thank you’s” typically appear at the end of an article, they are the first thing that came to my mind about these fine people and I think that they deserve top billing: Thank you (from all of us) to David Pizer, Mark Plus, all of the other members of the Society for Venturism and others who worked to make this conference run so smoothly that it seemed to run itself! Thanks to Don Laughlin who made his hotel available for the conference. Thanks to the varied and interesting presenters. And thanks to everyone who came to the conference and made it what it was.

In total there were approximately 100 people in attendance, of whom about ½ are Venturists. About 60 Alcor members were present; some 20 Cryonics Institute members; and perhaps 10 from other organizations such as KrioRus and the American Cryonics Society. In addition to Cryonics organizations’ members, there were representatives from the SENS Research Foundation (“Strategies for Engineered Negligible Senescence”), the Life Extension Foundation, 21st Century Medicine, the Timeship Project, Suspended Animation, Inc., Advanced Neural Biosciences, Nutrition World, the Church of Perpetual Life and probably 5-6 other groups. (As you can see if you do the math, there were some who are members of more than one organization.) Most of the groups had a representative presenting at the conference and had a table with literature, as did C.I. There were people at the conference in attendance from (or who were originally from): Russia, England, Lithuania, Japan, China, Sweden, Germany, the Netherlands and the United States.

The Society for Venturism is an interesting group of very nice people. To quote from their website:

Venturism is a ‘secular religion’ in the sense that the Praxis might be considered one, but very minimalistic and targeted specifically to the needs of the cryonics community.

One of the things it does is to help cryonicists optimize their suspensions, by giving them “religious” grounds to object to autopsy (which would greatly harm their chances of repair and reanimation). Another thing it has done is fundraising for cases where last-minute funding was needed for a terminal patient who could not obtain life insurance.

The Society does not preach the existence of God or miracles, but does have two principles that members must agree to:

- 1) To advocate and promote the worldwide conquest of death through technological means,**
- 2) To always try to do what is right.**

In addition, members agree to try and help fellow members to be reanimated if they should be reanimated first.

They created, in this conference, a forum for the many different cryonics and cryonics related groups that generally work on their own. Meeting like this was encouraging to me and also gave me food for thought as I heard the many other ideas that people have. Most significantly, **I felt that everyone really wants this to work.** When you work with a particular organization, there can be a feeling of isolation – sometimes even a feeling that others are working for their own best interests rather than that of cryonics in general. This meeting gave us all an opportunity to hear from each other professionally, and to hang out after hours. Everyone there was good natured, courteous, thoughtful, and kind. These are people that I enjoy hanging out with. And whom I trust.

The following are my summation of the comments of the presenters. These do not necessarily represent the views of IS or of me. I have tried to be accurate, and apologize if I have made any errors or if my synopses left out items of significance.

Due to a later-than-expected flight and other slowdowns, I missed the orientation meeting, buffet luncheon and the first three speakers: Cairn Idun, Mike Perry and Ben Best, who spoke about Peaceful Tolerance, the History of Venturism & Creating a Cryonics Hall of



Fame, and the struggle to have Cryonics represented accurately on Wikipedia, respectively. I read a synopsis of Cairn's talk and found it a hopeful discussion of her perception that human culture is moving towards peaceful tolerance. Mike's talk and Ben's talk both got good reviews from others with whom I spoke. I'm sorry that I missed them.

The Affordable Immortalist, Maybe you CAN defeat death and taxes: *Rudi Hoffman*

I did arrive in time to hear the inimitable Rudi Hoffman in eye-burning fluorescent blue suit jacket and highlighter pink gym shoes discuss how insurance can cut the cost of cryonics down to size!

He mentioned Arthur C. Clarke's amicus brief in the Alcor case in which Clarke said that Cryonics will probably work. He spoke about being a good human being; the costs of Alcor (\$80,000 for neuro or \$200,000 for whole body) and for CI (\$28,000 for whole body; an additional \$82,000 for Suspended Animation and Air Ambulance services, if chosen.); and that we should focus on Cryonics not as pseudo-science, as some do, but rather as proto-science.

He then went on to discuss that there is a lot of focus on Cryonics itself but that there needs to be more focus on funding so that people will realize how affordable it can be with the use of life insurance. He mentioned that death benefits are almost always tax-free; that sometimes one can get low cost loans while alive (with no tax issue), that they are creditor protected, that there are policies which waive premia if one becomes disabled and that some have accelerated death benefits in the case of terminal illness.

Cryonics and Culture: *Dan Davis, MSgt, USAF*

Dan's talk was on Cryonics and Culture: Every idea is strange at first and society does not use logic to decide which ideas are best.

"Why do things have staying power?" he asked. Why do people get involved and stay involved? He looked at a few examples. Christianity: each person has contact with God. The United States: each person has a say in government. Space: it took off when it became a matter of pride to us. From this we should learn that when speaking about Cryonics we should be humble, loving, and not talk a lot about ourselves.

Dan's premise is that perception is reality – and that makes policy. Right now we have problems that come from being a small group. There are also problems that come with being big. (But we would like the opportunity to deal with those!) It is difficult to be on the "cusp of humanity. Only in memory are most past heroes heroes." We see this in science, art, and elsewhere.

Here are some more of his thoughts:

- We do not want to be the "arrogant cryonicists." No one likes arrogance and that won't get the politicians, scien-

tists and cultural icons on our side.

- It is a good idea – from a societal or evolutionary standpoint – to hold ideas at arms length until proven. Otherwise we would have done lots of stupid things!
- It is not science that convinces us to do things, it is such things as patriotism and ego. (Examples that support this thesis include the travels of Columbus and others from Europe to the Americas, and going to the moon.)
- Our decision-making process is at first emotional, and then backed up with logic and with what "other people" think. (And those "others" are our social, generational, or other circle in which we feel that we are a part.)
- A video has just as much power as doing something in real life.
- There is a "tipping point" – when people latch onto a concept it happens quickly.
- And finally: What are the emotions that matter most in decision making? Avoiding pain and providing pleasure. Cryonics does both. When it stops being "weird", it will grow quickly; exponentially.

To move this process forward, we should validate others: if you want honey, don't kick over the beehive.

He went on to state that Cryonics is compatible with multiple religions and philosophies.

In conclusion: We have seen throughout history that forced involvement in a cause or movement does not work for any length of time. If a culture, activity or project is to be permanent, people have to want it. To make people do something for any length of time, they have to want to. We must think about what other people want. He lauded the concept of "peaceful tolerance" which Cairn Idun discussed and took it one step farther. He believes that we should work on peaceful convincing. And finally, he noted that there are no "barriers to entry" for cryonics. This is not an ark of limited size. The powerful do not have a stranglehold on this.

A Biologist's View on Why Cryonics is Feasible: *Aubrey de Grey, PhD*

At 8 PM Aubrey de Grey, PhD, of the SENS Research Foundation spoke on "A Biologist's View on Why Cryonics is Feasible." To quote the summary of his talk: *"Many non-biologists presume that cryonics must be fantasy because it is not mainstream. This is a reasonable inference for those who do not appreciate how appallingly balkanized biology is, with almost all biologists being expert in only a very narrow area and having no time to study other areas. Since a field's reputation for infeasibility is a reason not to pay attention to it, this parlous situation is self-fulfilling. In this talk I will seek to rectify it."*

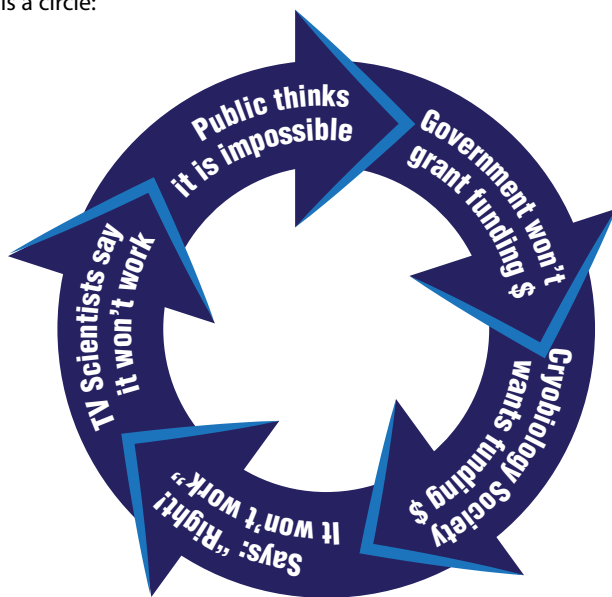


There are similarities between cryonics and his work: there are advocacy challenges. Why don't people sign up?

- 1) There is a small proportion of the general public that gets the idea of cryonics but thinks that current freezing methods won't allow for revival. Research to make cryopreservation better deals with this, so these people might support that research.
- 2) The majority of people have a "knee-jerk reaction – they can be divided into several groups
 - a. Those who think cryonics is creepy and unnatural
 - b. Those who do not want to think about it – they say things like "none of my friends will be there," and other dystopic comments
 - c. People who think cryonics is science fiction, per se. They think that people are dead and that is that. It cannot happen – like perpetual motion.

Why would they think this? Because scientists that they respect and trust--often "TV scientists"--say that. Well, why do the "TV Scientists" say that? Because the TV Scientists know what they do not know and the TV Scientists look to the Society for Cryobiology "who are anti-cryonics". The Society for Cryobiology has a vested interest in being "mainstream" to keep funding coming in.

It is a circle:



So, how should we respond?

To those who say, "it can't work because these people are dead" and stop thinking about it: Tell them that the medical definition of death has changed over time as we learned more. It used to be when the heart stopped. Now it is generally brain death. And so the definition of death may change again. As with Schrodinger's cat, we do not know if a person is dead.

To those who raise the "hamburger" argument [the damage caused by freezing is so severe that bringing someone back from cryonic suspension is as likely as bringing hamburger back to life]: Cryopreservation of organs is a respectable area of research! It is only trying to freeze a brain that you get in trouble for! Indeed, the brain is different from other organs: it has constant electrical activity. When it freezes that electrical activity stops. . . . but it stops at 18° C and many people have been that cold for an hour and revived without ill effect! That does not prove that a cryopreserved brain does not have damage, but it does cast doubt.

To those who say, "if we wake people up they will be in the state that they were in when they died and will just die again soon. Aging isn't a disease so we cannot fix that!": Until recently anti-aging work was focused on slowing it down. Research done by Dr. de Grey and his organization indicates that repair of cellular damage will be easier than slowing down of the aging process. So the question becomes: how near to death can one be and still be able to be helped? Initially, probably not so close since the process will first be very invasive – organ replacement, etc., which is strenuous on the body. Over time he thinks it likely that it will become less invasive so people could be closer to the brink and still get fixed.

Suspended Animation Inc: *Catherine Baldwin, C.O.O.*

SA offers Standby and Stabilization. 1/3 of CI members and all Alcor members in the US but outside of Arizona are contracted with SA.

"Mainstream" studies about cooling: The International Liaison Committee on Resuscitation ("ILCOR") and the American Heart Association both came to the conclusion that if someone is cooled (hypothermia) shortly after a heart attack survival is improved and there is brain damage less often.

During heart surgery they do vascular cooling – cooling fluids are put through the blood vessels.

SA's process achieves "deep rapid hypothermia". For surgery and perfusion they regularly utilize four doctors from PDC Perfusion Resources and Perfusion.com. These groups have doctors on call to do perfusions at hospitals when staff surgeons are on vacation and for small hospitals which have no vascular surgeon on staff.

SA also provides premier home health care. This includes:

- Patient database assistance
- Hospice care
- Nursing care

SA has doctors on call 365 days per year, 24 hours per day in 14 states.

It has portable equipment and 2 fully equipped surgery vehicles (one in Florida and one in California.)

SA has facilities in Florida and in California.



- SA's people are trained in its facility in Florida on the same type of equipment that they use everyday.
- SA's East Coast response team is headquartered in Florida
- SA's Research and Development center and Headquarters are in California
- As is its West Coast response team.

What is SA working on?

For 15 years they have been working on portable liquid ventilation. They think that they are close to making it a practical reality. This is a method of rapid cooling that does not require surgery. It can be used at a hospice -- or wherever the patient is -- right after pronouncement of death. It needs a heartbeat/cardiopulmonary device. Cold perflurorcarbon fluid is moved in and out of the lungs. Experimentation on a dog has brought cooling of up to 1½ degrees per minute which is much faster than other methods.

They are also working on technology for keeping tabs on patient health.

And they are developing a smaller, less heavy perfusion device (that can still withstand baggage handlers!). They are in the process of building a new machine which will reduce the current 75 lb. corded unit to a 10 lb battery operated unit that works for 5-10 hours. Life Extension Foundation ("LEF") pays for all of this research. LEF also subsidizes the cost of patient care.

Cryonics Research: Chana de Wolf, President of Advanced Neural Biosciences ("ANB")

At 11 AM Chana presented work being done by Aschwin de Wolf and herself. She began by discussing some problems that come post mortem in cryonics cases:

- Low blood flow to the brain
- Ischemia
- Transport delays
- Third parties hostile to cryonics

Ischemia

Problems are caused by greater than one hour of warm ischemia or a longer period of cold ischemia. Sometimes perfusion is not possible in those cases. We intuitively know that a straight freeze is better than nothing. But their experiments indicate that it may be better than we think it is.

Attempts to perfuse ischemic brains using higher pressures causes more edema, more ice formation and worse freezing. Longecity and the Cryonics Institute supported research on whether a delayed washout is worth doing at all after warm or cold ischemia. The longer the warm ischemia, the worse it gets. Over sixty minutes there is the same amount of ice formation with or without perfusion.

New things ANB is working on includes whole brain cryobiology.

Under a grant from the Life Extension Foundation they are working to recover EEG (organized electrical activity) after cryopreservation. "That would shut up the critics!"

Also, their studies have shown that after one month of cold ischemia there is more structure than they expected.

The Cryonics Institute and The Immortalist Society: Joe Kowalsky

After lunch I was up to speak first about the Cryonics Institute and then the Immortalist Society. (see page 19)

Unfortunately, I tend to use a lot of energy when I speak and am pretty wiped out afterwards. So although we had several speakers after me, my notes are nearly non-existent. I will give a very brief comment on each and invite these speakers to submit more complete articles to Long Life themselves, as I feel I'm not doing them justice.

The Timeship Project: Steven Valentine

Steven gave specifics of architecture, protection, etc. He included many slides and diagrams. The presentation was great, though I thought it was longer than it should have been as it cut into the time of the following presentation.

Venturism Society: Mark Plus

Mark Plus, Secretary for the Society for Venturism and one of the conference coordinators, spoke about the Venturism charity programs and recipients. He discussed several people including Kim Suozzi, Bill O'Rights, and the current efforts for Aaron Winborn, who has ALS and is trying to raise funds for his suspension. He went into each of their personal experiences. He noted that Kim, especially, brought positive interest given her youth and her social media activities.

Alcor: Max More, CEO

Max More, PhD, Chief Executive Officer of Alcor, gave us an overview of Alcor today and tomorrow, including its procedures and ongoing research and improvements. I was very impressed by the efforts of Max and his Board of Directors in their ongoing work to improve cryonic suspensions as well their efforts to maintain and develop a strong financial position. One of my favorite lines from his talk was that Alcor does not (and that cryonicists in general should not) rely on "magic friends in the future" to fix our problems. But rather we must give the best possible cryopreservation so that damage is minimized or, eventually, non-existent. He went on to describe the methods that Alcor uses to do this.

(On a personal note, I really like all of the people that I met at the conference, and think that the friendly competition of CI and Alcor will make both organizations stronger. I also see many areas in which we are effectively cooperating or could cooperate without taking away from the differences that make each of our organiza-

Continued on page 27



CI Makeover

Renovations at the Michigan Facility

One of the most visible symbols of the Cryonics Institute is the Michigan facility, particularly the cryostats which are a popular image for the news media and a natural point of interest for the public. Adding logos is a small touch, but a vitally important one for CI's public image.

Equally critical is the appearance of the building, perfusion room and the grounds, all of which have been upgraded to better reflect on the professionalism of the organization.



Perfusion Room





Bulk Tank Area



Logo Cryostats



Cryonics Research: Past, Present, and Future

By Chana de Wolf, President/Researcher - Advanced Neural Biosciences, Inc.



Photo by Stephan Beauregard

*Chana de Wolf presents
at the Cryonics Institute's
September 8, 2013
Annual General Meeting*

INTRODUCTION

The one absolutely necessary component of the human body that must be preserved in order to be successfully resuscitated from cryopreservation is the brain. And while plenty of work has been done in mainstream cryobiology research to develop methods for cryopreserving cells, tissues, and even some organs, traditional cryobiologists have largely ignored the brain. Because of this, we cryonicists must endeavor to seek out information and to run experiments that focus specifically on the brain.

Fortunately, the results of such investigations have been promising. In 1988 we were already able to state that “wherever either brain structure or brain function has been evaluated after freezing to low temperatures and thawing, robust preservation has almost always been demonstrable provided at least some minimal attention was paid to providing cryoprotection.” This is remarkable, and is backed up by numerous examples ranging from the landmark hamster-freezing experiments of Lovelock and Smith in 1956 to the cat-brain EEG studies of Suda and colleagues in the 1970s, both demonstrating a return to function in living adult animal brains after freezing.

Lovelock and Smith used no cryoprotectants in their experiments, freezing and then resuscitating hamsters from high subzero temperatures of around -3 to -5°C. Suda et al., on the other hand, used low concentrations of glycerol (~15%) to cryoprotect cat brains before freezing at -20°C, -60°C, or -90°C and storing them for peri-

ods ranging from 5 days to 7.25 years. Amazingly, Suda reported recovery of single-unit and EEG activity in these brains. In general, neural function was better when brains were stored at higher temperatures for short periods of time, and worsened when stored at lower temperatures for longer periods of time.

Later on in the 1980s, Fahy and colleagues reported excellent histological preservation of the cerebral cortex and hippocampus after cryoprotection with 3M or 6M glycerol and slow freezing to dry ice temperature (-79°C), demonstrating that cryoprotection and freezing is capable of preserving the cellular structure of the brain as well.

HISTORICAL RESEARCH

In the earliest days of cryobiology (the 1950s), cells and very small tissue samples were cryoprotected by diffusion – literally, soaking the sample in glycerol or DMSO. But larger systems, such as organs and whole organisms, are difficult to cryoprotect in this way and cells are damaged by rapid exposure to high concentrations of cryoprotectant. It was quickly recognized that the first obstacle can be overcome by utilizing the circulatory system of an organ to more rapidly introduce cryoprotectants to cells (i.e., perfusion). Osmotic shock can be overcome to some degree by introducing the cryoprotectant solution in a controlled fashion, starting with a low concentration and gradually moving to higher concentrations, and toxicity can be reduced by doing these procedures at low temperatures.

There were many reasons to believe that results from tissue and organ experiments could be applied to whole organisms, so Alcor began employing such a “cryoprotectant ramp” protocol in cryonics cases in the 1980s. In 1993, Darwin, et al, performed a series of experiments to validate the new protocol’s effectiveness in improving cryoprotection (and minimizing freezing damage) of patients. In these experiments, the researchers carried out simulated cryonics cases on dogs, followed by cooling and storage at -90°C. A cryoprotectant ramp was used in one group of dogs, while another group was perfused according to an older protocol. After 18 months, the dogs were rewarmed and brain samples were examined using light and electron microscopy.

In general, a higher degree of ultrastructural preservation was observed in the brains of dogs that underwent a longer, gentler perfusion of cryoprotectant. Though there was still evidence of



damage in these animals, it was considerably less than that observed in those treated with the simpler protocol. The results were published in the article "Effect of Human Cryopreservation Protocol on the Ultrastructure of the Canine Brain" (Darwin, et al., 1995), in which very detailed descriptions and photographs are provided.

In the meantime, progress towards ice-free cryopreservation of cells, tissues, and organs (including the brain) was made during the 1980s and 1990s. Most notable was Dr. Gregory Fahy's development of vitrification as an approach to cryopreservation. Vitrification, which means "turn into a glass," occurs when water is cooled too fast to form ice crystals. Fahy proposed that vitrification can also occur when a tissue is loaded with so much cryoprotectant that the entire volume of the tissue becomes a glassy solid during cooling, without any freezing at all. The advent of vitrification was a major leap forward in cryopreservation technology.

Though it eliminates mechanical freezing damage caused by ice crystals, the very high concentrations of cryoprotectant necessary for vitrification are toxic to cells. Over time, the composition of cryoprotectant solutions has also changed considerably from monoagents like glycerol to solutions consisting of multiple cryoprotectants, polymers, and synthetic "ice blockers." Much of this work was done with the goal of reducing cryoprotectant toxicity and relaxing the cooling rates necessary to vitrify and rewarm complex organs.

Vitrification as an approach to cryopreservation of various cells and tissues has now been validated in numerous experiments

and peer reviewed papers. Of greatest interest to cryonics is a study published by Pichugin, Fahy et al., in 2006. In their paper, "Cryopreservation of Rat Hippocampal Slices by Vitrification," the researchers vitrified thin slices of rat brain using an advanced vitrification solution, VM3, containing penetrating cryoprotectants, non-penetrating polymers and "ice blockers" in a carrier solution designed to maintain viability and mitigate chilling injury. Slices treated with VM3 showed excellent ultrastructural and histological preservation after vitrification as compared to frozen-thawed slices. But, more importantly, the VM-3 vitrified tissue also exhibited a K⁺/Na⁺ ratio in the same range as control

long-term potentiation (LTP). Starting at the first Suspended Animation conference in May 2007, researchers at 21st Century Medicine, indeed, began disseminating preliminary results showing that organized neural activity has been recovered in previously vitrified brain slices.

PRESENT RESEARCH

In 2009, Advanced Neural Biosciences (ANB) began to investigate cryonics protocols under real world conditions. Because actual cryonics patients must be pronounced legally dead prior to the start of cryopreservation procedures, all patients will experience some period of ischemia (lack of blood flow). The fundamental question to answer in cryonics cases is: How well do our protocols and vitrification solutions perform under such conditions? Obviously, we cannot assume that vitrification solutions preferred for non-ischemic tissues are preferred for ischemic tissues as well. To answer this question, we must model our laboratory experiments after the various

conditions of actual cryonics cases.

To that end, we aim to investigate the effects of varying periods of cold and warm ischemia on subsequent cryoprotective perfusion of the brain and, ultimately, ice formation in the brain after cryopreservation. It is most important to keep in mind that the ability to protect the brain against ice formation is not an independent challenge. It depends on the state of the brain at the time of cryoprotective perfusion. There is a serious lack of knowledge about the efficacy of cryonics stabilization pro-

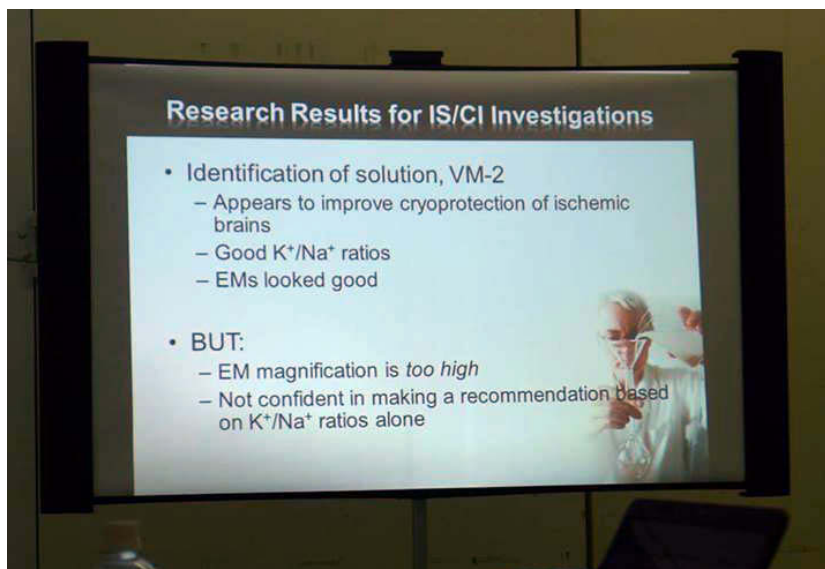


Photo by Stephan Beauregard

(untreated) slices, providing evidence of retained cellular viability.

This progress in cryopreservation of brain slices goes a long way toward establishing the credibility of cryonics as a legitimate scientific and medical endeavor, but an even more convincing statement could be made if we are able to provide evidence of functional recovery of previously vitrified brain tissue. Such evidence would include recovery of spontaneous and/or organized neural activity, or maintenance of a previously trained neural response, such as



protocols on reducing ice formation under various conditions. By conducting the appropriate experiments, we endeavor to improve outcomes (i.e., reducing perfusion impairment and ice formation) in ischemic patients.

Beginning with India ink perfusion experiments, we observed the following patterns: (1) perfusion impairment increases with duration of ischemia; (2) rapid induction of hypothermia after cardiac arrest mitigates the no-reflow phenomenon; and (3) blood substitution reduces perfusion impairment. Moving beyond perfusion impairment as an endpoint and looking at ice formation after cryopreservation, we observed that the duration of ischemia is positively associated with ice formation and that the areas of ice formation correspond with areas of perfusion impairment. Blood substitution prior to cold ischemia reduces ice formation, but it is important to point out that the composition of the solution also mattered a great deal, with some washout solutions improving perfusion and reducing ice formation better than others. Another approach to overcome perfusion impairment and ice formation is cryoprotective perfusion with a high viscosity solution – a finding that gave rise to formulating new cryoprotectants for use in ischemic brains.

FUTURE RESEARCH

In a specific set of investigations supported by Cryonics Institute and the Immortalist Society, we identified a solution, VM-2, which appears to improve cryoprotection of ischemic brains. Electron micrographs (EMs) of VM-2 cryoprotected tissue also indicated reasonable ultrastructural preservation.

However, the magnification of an EM is so high that it is difficult to get a “big picture” idea of the integrity of the whole network. Additionally, we are not confident in mak-

ing a recommendation of VM-2 based on K⁺/Na⁺ ratios alone. We therefore propose to conduct additional sets of experiments aimed at supporting and extending our findings, including light microscopic techniques and viability assays including slice electrophysiology (using a multi-electrode array, or “MEA”) and whole brain electrophysiology (electroencephalography, or “EEG”). A secondary aim is the publication of a peer-reviewed paper in a scientific journal.

Having such powerful research models available will enable us to screen for better agents but also to move us closer to our goal of validating cryonics. Recovery of whole brain electrical activity (EEG) after vitrification and storage at cryogenic temperatures would further provide strong empirical evidence that cryopreservation is a means of saving human lives. In 2012, ANB developed, to our knowledge, the first small animal EEG model for cryobiology research and we have been successful in recovering EEG activity after cooling and rewarming from 0°C. Our next, and more difficult challenge will be to extend these results to high-subzero temperatures and, ultimately, to cryogenic temperatures. More than any other advances in cryobiology to date, the functional recovery of a whole brain, either isolated or within an organism, will allow cryonics organizations to stand on solid scientific ground and to focus more energy on improving preservation methods for at-risk patients and less energy on arguing whether cryonics is a viable technology.

Another major research direction that we have started exploring is detailed characterization of the damage typically incurred during human cryopreservation. More specifically we aim to use computational tools to infer the original state of the brain from the damaged state “in-silico.” Such “reconstructive connectomics” would constitute necessary element for the resuscitation of

cryonics patients.

We are excited to continue this work, and to announce that **ANB will finally engage in cryonics research as a full-time endeavor in 2014.** We have procured new and larger laboratory space in Portland, OR, and are in the process of gearing up for a very productive year. We have appreciated the support of the Cryonics Institute and the Immortalist Society since our first days in 2009, and we look forward to a continued relationship into the future.

Donations help fund research

This excellent article by Chana de Wolf points out things, past, present, and future, that have been/will be done to make the field of cryonics better and that’s something we all want. In every endeavor, from medicine to aerospace, improvements have only come through research by dedicated individuals. That research, for good or bad, costs money. This is where you come in! We don’t do research to make money but we have to have money to do research! That’s just the plain reality of things.

The de Wolf’s are going to be able, for the first time, to work full-time in 2014. This is great news and we’d like to help them as well as other work that may come up.

Any amount, however small, is greatly appreciated! And remember, donations to the Immortalist Society are tax deductible under the U.S. Federal Tax Code. Please help all of us, including yourself, by donating what you can today! Thanks!!

York W. Porter
President,
Immortalist Society



CI's Joe Kowalsky Talks Cryonics at Venturist Conference

By Joseph Kowalsky - CI Chief Investment Officer/Asst Secretary.



Cryonics veteran Joe Kowalsky spoke at the Venturist Conference in Laughlin, NV on October 26. Joe is an active member in both CI and IS, including serving on the CI Board of Directors. The organizers of the Venturist Convention invited Joe to speak to their audience about two subjects he's intimately familiar with - The Cryonics Institute and The Immortalist Society.

Both talks were well-received by the audience, with many people commenting it was the best presentation at the conference. According to Joe, one attendee even made a point of texting himself a quote from the presentation in order to remember it!

For those of us who weren't able to attend the event, Long Life is pleased to publish the following transcript of Joe's remarks.

"My name is Joseph Kowalsky. I have been involved with the Cryonics Institute since 1981 and on the Board of Directors for about 20 years. I am not a scientist so I am not going to go into detail about the procedures which CI uses. Rather, I want to pass along some of what CI stands for and its general ethos. I am going to speak for only about 10 minutes because I know how long my attention span is! After that I would be happy to answer questions.

The Cryonics Institute

The Cryonics Institute was founded in 1976 by Robert C.W. Ettinger "the father of Cryonics" – does anyone know what the CW stands for? [responses] Mr. Ettinger's premise was that we are doing a public service as well as working on our own behalves. We want to be an "ambulance to the future" for as many people as we are able to. All of us now involved with the organization are volunteers with the exception of two paid employees and some contracted employees as needed. However, we have a large endowment - and no debt; we can add to our employment rolls on a moment's notice if necessary. A small staff + our dedicated family of volunteers = low costs which we pass on to members.

CI has never had a price increase. It was \$28,000 in 1976 and it is \$28,000 today. This is important because it shows long term stability and allows for more people to be saved.

How can we do this?

We have been able to do this since our costs have regularly declined, despite inflation, due in part to economies of scale. Additionally, many people substantially overfund beyond the standard \$28,000 which we charge for whole body cryopreservation.

Our Goal

Our goal is to provide the best cryonics services, at the lowest prices responsibly possible, so as to open cryonics to the general public. Substantial overfunding and endowments by those who can afford it have allowed us to keep our prices low for those who cannot. As Rudi Hoffman discussed in his talk, he (and I, in my "day job" as a financial advisor) assist people to use life insurance to reduce those costs even further, when possible.

Additional member services

- Members can choose to use the excellent services of Suspended Animation, Inc., with which we have an agreement. Their services and support staff were discussed earlier by Catherine Baldwin.
- Our members also have the option to plan other customized local methods of pre-suspension preparation with money they save by contracting with CI. Some have made arrange-

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Two Forms to Get You Cold Quickly: don't deanimate without them!

By Jim Yount - Chief Operating Officer, American Cryonics Society

People who help others to prepare for future cryonics preparation are often asked: "How much time can go by before you start to freeze me?" The questioner means, of course, "freeze me with some chance of my future reanimation." We don't have a good answer for that since we don't know what technology will be available for "reanimation." Technologies that can pretty-much rebuild a patient from minimal information or "best guess" of encoded memories may be able to treat advanced cases of damage and even decay. However, such technology may not develop or even prove possible.

To add to the confusion is the question of just what constitutes *the self*? Robert Ettinger discussed that question in his book *The Prospect of Immortality* and again in *Youniverse*, without (in my opinion) arriving at a definitive answer which most people find satisfying. How much replacement of cellular material or even information can be tolerated in a patient without destroying the patient's identity? If, in order to reanimate the individual, it is necessary to replace a lot of biological material or if a lot of the information stored as memories is lost, is the reanimated individual really the same person as the one who signed up for cryonics many years ago?

We do know that following cessation of the vital functions which pump oxygenated blood through the body, the biological material quickly degrades. Without being able to answer the question on how soon the process need be started, there is good agreement among cryonicists that the sooner following legal death the cryonics

team can start to work, the better. Quickly starting the oxygenation and cool-down of the body may well mean less information is irretrievably lost. When it comes to cryonics preparation: time is of the essence.

If we are to perform a cryonic preparation (cryonic "suspension") It helps us considerable to know when a patient is apt to die

("deanimate"). The patient's own doctors and other medical specialists are the best judge of that. Even where the patient's doctor would like to cooperate with the cryonics preparation team, the doctor is often deterred by perceived or actual prohibitions against the release of medical information.

Provisions of the 1996 Federal Health Insurance portability Act ("HIPAA") attempted to provide security and privacy of health data. (HIPAA has been amended several times since 1996). There are similar or supporting statutes in many states to protect such privacy. For example California statutes aimed at protection of privacy are identified as California Confidentiality of Medical Information Act (CMIA). These laws may well be the natural response, or perhaps "backlash", to the ready availability of electronically encoded health data. Depressing one stroke on a computer keyboard can send information, which many regard as personal and private, to multiple sources which may well not have a duty to guard the privacy of such information.

A cryonics provider or cryonics society may or may not fit the legal definition of a Health Care Provider. It could be argued that as a recipient of an anatomical donation, the Cryonics Institute or the American Cryonics Society is or should be such a provider. However, our experience is that hospitals and doctors generally don't think of our organizations as proper health care providers. Even if we can successfully argue that CI or ACS do fit that category, it is apt to require that our lawyers get involved, which is very likely to require considerable time.

HIPPA provisions allow for individuals to execute an Authorization for Release of Protected Health Information wherein individuals are appointed as Authorized Recipients. Such a recipient is privy to medical information about you from the doctors and hospital. These can be people who you trust and who are friendly (or at least



not hostile) to your desire to be frozen. The form of the authorization is standardized; I found several examples on-line. However, this is NOT a proper do-it-yourself project. Consult a lawyer who is familiar with how the form should be used in your state.

An Authorized Recipient, in California at least, may be: "Any other named agent under my advanced health care directive." This brings us to the second form that can be used to allow the information on your health condition to be made available to your cryonics provider: the Advanced Health Care Directive or Statuary Form Durable Power of Attorney for Health Care.

The Advanced Health Care Directive

Most people think of this form as giving instructions as to when and whether the hospital is to "pull the plug" on machines that are keeping a person alive. It is that, but it also allows a designated person, the "Health Care Agent," to make medical decisions for you if you are not capable of making them for yourself (for example, when you are comatose). The Advanced Health Care Directive includes a Living Will (in California, at least) wherein the patient can specify the disposition of his body after death.

Under the Advanced Health Care Directive, the patient may name an agent and several alternate agents to make these health care decisions (including cryonics preparation). Apparently the usual purpose for naming more than one agent is to cover the contingency that your named agent may not be available. Each of the named agents has the authority to get the same medical information that is available to the patient himself. The first named agent can be a good friend or relative. You may be convalescing a good long time and many medical care questions are likely to be posed to the agent.

At least *one* of the successor agents should be a person who is very supportive of your desire to be frozen. That person can notify the cryonics society that you are near death, and be your advocate during the cryonics procedure.

The Advanced Health Care Directive is a very important tool to help your cryonics organization to know when you will soon need services. Since the use of this form is being urged upon everyone who is hospitalized, the medical personnel who treat you will be familiar with the form and are apt to honor it.

There are several provisions related to cryonics you may wish to add to the form:

1. Specifically forbid autopsy.
2. Decide when you want to have the plug pulled (life support systems withdrawn). My own form says that the plug should be pulled if my Health Care Agent determines that maintaining me on machines is doing harm to my brain.
3. Specify that the plug only be pulled when a suspension team is in place and ready.
4. Decide if water and/or nutrition may be withheld as a means to hasten your death. If your brain is deteriorating, then a sooner rather than later death may be better. However, you might suffer if food or water is withheld. There is no agreement amongst cryonicists as to whether water and food should be (may be) withheld. For what it is worth my own form reads:

"If in the opinion of my Health Care Agent continued artificial life support is causing deterioration of my brain, such as in respiratory death, I then direct that such pro-

cedures be withheld or withdrawn. I am then to be permitted to die naturally, with only the provision of appropriate nutrition, hydration and the administration of medication and the performance of any medical procedure necessary to provide me with comfort care or to alleviate pain."

I don't know of any data that has been collected on this subject, but based upon discussions with many other cryonicists, I think that I am in the minority opinion in my desire that food and water NOT be removed. However, I have reviewed cases, including a video record of a cryonic preservation where the subjects, by force of will, did not take water. My conclusion is that these people suffered significantly, especially from dehydration. I am not willing to undergo probable suffering for the chance that hastening my own death will result in a better cryopreservation.

That brings up another subject, that I will add as an aside: cryonic preservation is the prospect of immortality, not the *assurance* of longer life through cryonics. It is reasonable to devote a reasonable amount of energy and money to that prospect. However, being so committed to cryonics that one is willing to sacrifice an inordinate amount of present time and wealth or undergo suffering in the prospect of a better suspension that may not make any difference in the end is for the fanatics, not for me.

Finally: I am not a lawyer. Nothing in this article is legal advice. State laws vary considerably. Please consult a lawyer in your state who can guide you to determine if the use of these forms is appropriate for you.



Joe Kowalsky Conference Speech

continued from p19.

ments with friends, family, volunteers, hospice, private nurses and morticians, among others. The Cryonics Institute will provide information and training materials on request. By contracting with CI our members have financial flexibility to customize, localize, and bring family along on this tremendous journey.

- We have a member who owns a house near CI and rents rooms to people who want to live near CI.

None of these additional services is overseen by CI – not Suspended Animation, not private assistants, not morticians, and not the home near CI. CI is not responsible for their actions and members must do their own “due diligence”. But we do our best to work with members who want to use these or other services.

We hope that cryonics will one day be just another medical technique. In the nearer term we want people to understand its goals, recognize its potential, and see it as a serious attempt (by scientists and others) to help people, and not something grotesque or bizarre. Several other speakers have espoused the same goal, and made some really good suggestions for getting us to that point.

So how do we at CI work towards this goal? Here are a few examples:

- We provide only whole body cryopreservation.

The cost would not decrease dramatically for neuro-preservation and it would not provide a better suspension of the brain than what we do now. On the other hand freezing a head is just not viewed positively by the public. It is not that we disagree with the neuro option in principle but simply that it is hard enough trying to sell the idea of cryonics to the public without the unfortunate negative perception that head-only suspensions inevitably bring.
- We encourage tours of the facility. (These must be scheduled in advance.)
- We invite high school classes in regularly for a tour and “class” on cryonics. Most recently, we had a Catholic High School science class. (It is really important to present cryonics to high school and college students, who tend to be open-minded to new technologies and ideas.)
- Our annual meeting is open to the public. (And for the last three years we have had a marshmallow roast at my

house after the meeting. [Rudi Hoffman, Mathew Deutsch and other marshmallow roast attendees cheered]).

- We regularly meet with the media from around the world. There have been articles and news stories about CI in the media of several European, Asian, North American, and South American countries, as well as in Australia, and CI has been featured in several documentary or other films.
- And, of course, we have an online presence.

Among other things.

What do we say to these people, to the general public, to ourselves?

One thing we do not say -- nor do we believe -- is that we are trying to raise the dead. Some 16 years ago CI and IS member John Besancon “died” in a shopping center parking lot. He was revived with a defibrillator and lived until just a few months ago. Had this happened to him even five years earlier the store would not have had a defibrillator and this story would likely have had a different ending. Although I said that he “died” in the parking lot, we know today that he was not really dead yet. Dan Davis and Dr. Grey did an excellent job discussing this point earlier.

Is anyone here a Monty Python fan? (quoting, in high and low pitched voices:) “I’m not dead yet!” “Yes he is!” “No I’m not!” “Well, he’s almost dead!” . . . [Laughs]

I like to tell the story of someone who dies of a heart attack in the 1800s. You are walking down the street in 1803 and a man drops to the sidewalk. A doctor is there and declares that the man had a heart attack and has died. You happen to have a defibrillator with you and run up screaming “I can save him! I can save him!” You proceed to shock the man, making his body jump. You start pounding on his chest. You squeeze his nose and breathe into his mouth... and you are arrested for desecrating the body. All they see is you kissing and pounding on a dead body. Today we know that he might not actually have been dead.

We say in honesty and humility that we are ignorant: we do not know when death occurs. The best we can do in some cases is to try to keep the person in stasis, to keep the body as it was when the heart stopped beating and the breathing stopped, so that perhaps a doctor in the future may say, “Cancer? That’s not a big deal. We can fix that. This person was not really dead yet!”



How is CI organized?

We have a diverse Board of Directors and a larger and more diverse Board of Advisors. We try to keep it that way as there are many different facets to running an effective organization. Our Board Members have differing interests and work in various fields including medical, sciences, the arts, writing, health, law, public relations and, like me, finance, among others.

Most of our Directors live in the United States. One lives in Australia and several people on our Board of Advisors live on other continents. In the past we have had several Board members from outside of the US. Since our membership now reaches 35 countries on 5 continents, we expect that that will continue.

Following Robert Ettinger's Vision

How many people here knew Robert Ettinger? [Several people raised their hands.] As those of you who raised your hands know, Robert Ettinger was a visionary; he was brilliant, kind, giving . . . and a curmudgeon. He was a pragmatist with no interest in, or patience for, glitz or glamour. He focused on what would work, to the best of our knowledge, least expensively and most simply. The simpler the mechanism, the less chance of mechanical breakdown.

The site itself is a nondescript warehouse building, modified to suit our needs. It is clean and well-kept.

We have often been referred to as the cheaper, family run, mom and pop type cryonics operation. We would have it no other way. We are proud to serve our members as such and do consider ourselves one big family.

As I said, Mr. Ettinger and CI always had -- and the Cryonics Institute still has -- sights set on what would work, to the best of our knowledge. This means a strong focus on research. For several years we had on staff Dr. Yuri Pichugen, one of the top cryobiological researchers of the former Soviet Union. He developed the vitrification solution that is now in use at CI. More recently we have contracted with Aschwin and Chana de Wolf - who spoke earlier and who continue to move us forward on the research front.

The Process itself

Our methods are standardized, methodical, and practiced. Within the parameters of these rules, and because our people have trained and trained, they can still be flexible if the situation demands it.

Our President - Dennis Kowalski - (who refuses to spell his name with a "y" no matter how much I prod him!) is a paramedic. His work

daily demands that he live in the world of what can be done most practically and efficiently to help patients. But it also demands regular assessment of how those processes can be improved. He emphasizes this ethic in his role as President.

Our website is cryonics.ORG - again, cryonics.org. And I have materials here on the table for anyone who would like some. Please also feel free to list your name and contact information on the sheet if you would like us to contact you.

The Cryonics Institute, its members, its president, Dennis Kowalski, its Board of Directors, and I want to thank the Venturists and all of you in attendance. In this regard, Dennis wrote the following eloquent words which I would like to read to you verbatim:

"We'd like to thank the Venturists for inviting us to this event and look forward to working together to unite cryonics under one common banner. The Venturists' charitable efforts illustrate what is best about cryonicists. Our propensity to reach into our hearts and help one another in times of need and suffering makes me proud to be a part of this awesome endeavor. We also would like to show our support for Alcor and our other sister organizations, and all that they do to help push cryonics ahead into the future."

[I paused here to look up and inject a comment of my own:] As in any family of strong willed individuals we have differences of opinion and sometimes heated competition. This keeps us on our toes, and thinking, and benefits us all.

Dennis' comments continue:]

"We all have a vested interest in seeing each other improve and prosper. As they say we are all in the same boat and we sink or swim together. Being the less expensive sister organization to several other cryonics companies places us in the unique position of back up organization to many people -- or as some have called us "their reserve parachute." We truly need one another and we are stronger when we learn and grow as a family. For this reason and others I thank the Venturists for bringing our organizations together as an even bigger family."

I want to close by reiterating something I said before: We are ignorant. We do not know when someone is truly dead. When someone's heart stops, when disease damages the body beyond what we can now repair, when illness overtakes our medical skills and a person lies silently on the bed the person may be screaming to us in silence "I'm not dead yet!" It is up to us to hear him.

Catherine Baldwin said that sometimes religious people - family



members, people in position of authority, etc – tell her that what we do goes against God's will and try to stop her. I think - and now I speak for myself only – I think that it is an affront to God to pronounce and declare that without question a person has died. We have seen too much in the past 40 years of organ transplants, heart bypass surgery and defibrillators to have the hubris to say that!

And so we do what we can. We are ignorant but we are also smart, curious, and resourceful. (Atheists can stop listening here) If there is a God or Creator that made us in its image, I think that Creator would be – to anthropomorphize – its equivalent of proud that we use the gifts that we were given, to save lives, to make the world a better place, and to try to improve the human condition.

And now, please bombard me with questions!

Part II - The Immortalist Society

The Immortalist Society is a volunteer-run, 501c3 non-profit charitable organization. It was formed as the Cryonics Society of Michigan by the same people who started the Cryonics Institute, i.e. Robert Ettinger and others. Many of us old-timers (I love to think of myself as an "old timer". I remember when I was the youngest one at the meetings!) – many of us old timers are members of both organizations. But its mandate is different. It has a separate Board of Directors and different goals. And over the past 40 years it has developed into the totally separate organization that it was intended to be. The Immortalist Society's charter is for education and research. It is a non-sectarian cryonics organization. It has no agenda of its own other than research and education that is helpful to cryonics.

The Officers:

IS elects its officers annually. York Porter has been the friendly face of IS for several years as its President. John Bull is Vice-President. (In addition, John almost single-handedly put out Long Life magazine for years), R.A. Brown is Secretary and has taken meticulous notes for twenty years or more; and Richard Medalie is Treasurer since the death and cryopreservation of long-time Treasurer John Besancon. These fine people volunteer hours and hours of time – most have been at this for many years. They work quietly with few accolades, on things from which we all benefit. . I encourage you to get to know York and the rest of the IS Board members.

Some specifics

So what are the things that the Immortalist Society does (through these capable officers and other volunteers)?

Education:

Its magazine, Long Life, on which I do some volunteer work, covers stories from every cryonics and cryonics related source that we can find. We have had articles about many people in this room and about virtually all of the presenters. We welcome submissions from anyone. York Porter, the President of IS, who does the majority of the work putting together the magazine, with graphic designer Doug Golner, would be extremely grateful for anything you wish to submit. I intend to write a short piece about this conference but if anyone else wants to write about it that would be terrific!!!

Research:

IS gives grants to the extent that its funding allows. It accepts applications from any person or organization that is doing research on things cryonics or cryonics related. Donations to IS are tax deductible. We are very proud that IS was able to "jump start" the initial work of conference presenters, researchers Chana and Aschwin de Wolf, whose work then and since could benefit us all. We expect to be working with them again in the near future, perhaps before the year is out.

Most recently IS has initiated the Organ Cryopreservation Prize. Thanks to the several people here whose advice was so helpful to us in getting this started. The prize is still in its early stages but is expected to begin at \$50,000. It will be awarded to the first person or group to successfully freeze and restore to full function one of several mammalian organs. Details are on the Immortalist Society's website: ImmortalistSociety.Org and also at Cryoprize.Info.

I recently had the pleasure to have a 30 minute private meeting with Leonard Nimoy – I made a donation to a charity of his and he made a donation to mine – the Organ Cryopreservation Prize. More importantly, he said that we could tell people that he had donated. To my knowledge, this is the first time that a celebrity of his stature agreed to have his name associated with something even tangentially related to cryonics!

I told him that he could use my name for his charity . . . but he did not seem quite as interested.

A common concern is that the prize may be too small to make a difference. But the goal here is not just research gains but also edu-



cation and an effort to affect the zeitgeist of our world as Dan Davis and Dr. de Grey discussed yesterday. People have come to accept that sperm, ova and even embryos can be frozen. There is nearly unanimous acceptance of organ transplantation. In my discussions prior to starting work on the Cryoprize project I spoke with a large array of people from different walks of life about organ transplants and without exception, everyone I spoke with was enthusiastic about that, but also knew someone or knew of someone that had difficulty getting a transplant. The concern about the time factor – organs do not last long once out of the body – was a common concern. When I then mentioned the idea of freezing an organ to make transplants safer, less costly, more available – I again received an enthusiastically positive response.

The goal with the Cryoprize was to seize upon something that could help people but also which people which will, one, accept, and which, two, is just a step away from cryonics. Just as the freezing of embryos gives people a stepping stone to consider the freezing of organs, if people accept freezing of organs, they will, I think, be more inclined to give cryonics a second look. Over time. To paraphrase a favorite movie of mine, baby steps can work wonders; great and thoughtful arguments and reasoning can cause walls to come up.

Closing Remarks

I should close with a reminder that:

- The Immortalist Society is a 501c3 charitable organization
- run entirely by volunteers
- to promote education and research in cryonics and cryonics related matters.

It welcomes:

- your membership,
- written submissions for [Long Life Magazine](#),
- volunteer assistance
- suggestions,
- and your donations which you can specify to go to education, to research, or to the Cryoprize

The website is WWW.ImmortalistSociety.Org. Information on the CryoPrize is at www.Cryoprize.Info and on Facebook. And I have information on our table at the back of the room by the window overlooking the river.

And now, are there questions?

Venturist Society Cryonics Conference Report

continued from page 15.

tions what they are. These include supporting the research of ANB and working on legislative issues should they arise (lobbying)).

David Pizer, President of the Society for Venturism:

Pizer discussed how the Venturist “No Autopsy” card might prevent autopsy - and how to get one. He also discussed how the Venturists, and the Venturist back-up trust, might provide protection to people in suspension. I enjoyed his comment about cryonicists being strong willed people. He said with a laugh that “we join a cryonics organization then try to start our own!” This is a very powerful and positive point: we are determined and persistent.

Bruce Cohen, of Nutrition World:

Bruce wrapped things up, discussing new ways of doing cryopreservation and some old thoughts on being preserved, such as Ben Franklin’s comment about wanting to be preserved in Madeira wine.

That’s a Wrap!

After dinner, at 8 PM, Don Laughlin took the stage to answer questions on all topics. Don is an interesting and down-to-earth man with practical experience in making things happen while not overreaching.

Later that evening a group of us went to the Karaoke Bar in the hotel to celebrate what we all felt was a successful event. The following morning we had a group discussion with many good ideas presented. After closing, a bunch of us went to lunch together and the conversations continued informally. In my opinion, these informal meetings were as important as the presentations. The discussions were stimulating, and raised many ideas (and questions) that I hadn’t thought about before. Just getting to know these people -- cryonicists from around the world -- was enlightening and encouraging!



Robert Ettinger's Legacy

Robert Ettinger in the earlier years of CI at the CI Facility

*Long Life magazine continues to feature thoughts from the prolific pen of Robert Ettinger, the Father of Cryonics. Ettinger's thought-provoking writings from years past continue to be relevant to today's cryonics movement, giving a glimpse into how far we've come today and where we can go tomorrow. This particular submission is from the September 1986 issue of *The Immortalist* (which was the former name of *Long Life* magazine).*

It's Peachy Keen To Be A Machine

by Robert C.W. Ettinger

Materialists have no monopoly on the physical approach to immortalism. The last person to call CI with a freeze-my-relative request said she would pray for our help. This is another example of the praise-the-Lord-and-pass-the-ammunition approach, or casting two nets for the sweet bird of youth.

Needless to say, we have no quarrel with the belt-&-suspenders approach. In immortalism's house are many mansions. If you will share the work and expense, your philosophy is almost irrelevant.

But not quite. There is probably a tendency for a coherent,

materialist outlook to promote effective thought & action. In particular, it probably improves honesty and mental health, and reduces the tendency to self-deception. Hence we would like those on the borderline to understand the appeal of mechanism.

Many people, brainwashed by cultural infusions of dualism, don't want to be "merely" mechanisms, or cogs in the universal machine. They want autonomy and special consideration from the powers that be. But they already have this, on the level of consciousness, and they are not going to get a better offer.

We don't have space here to review previous efforts to sanitize the red herring of "free will". But the bottom line is that--as far as I know--only two reasonably coherent concepts have ever been proposed to frame human experience.

One we might call the "Mech" hypothesis, or determinism--every event, including our thoughts and impulses, predetermined in finest detail by previous conditions and the laws of physics. (Of course, this leaves the origin of the universe and its laws a mystery--but no greater mystery, and in some ways less of a mystery, than if we postulated a Maker.)

Presently dominant is the second concept, which we might call "Randomech"--a universe mainly deterministic, but with random elements, in the form of quantum indeterminacies, manifest mostly at the atomic level.



This amounts to positing a zillion tiny miracles every second in every milliliter of space or God's hand, as it were, continually reshaping the clay. Instead of being ruled strictly by law, we are ruled partly by law and partly by chance or luck. As noted elsewhere, luck leads us no more dignity than law, and may even rob us of the fruits of our decisions, thus giving us less control on a conscious level.

So it boils down to this: you can be a Mech—a perfect machine—or you can be a Randomech, which is a machine with loose nuts. No other scheme has even been proposed, except in terms so vague as to merit no consideration.

Part of the problem is merely linguistic: machine or mechanism may sound unpleasant to some, but that's just cultural bias. The true essence of mechanism is neither more nor less than this: to be made of matter and to obey the laws of nature. If any readers do not fit in this category, they must be pretty strange.

Since mechanism is all there is, you may as well learn to like it, and indeed there is much to feel good about. For example, if you are sufficiently well made, you will function dependably and well, and will not run amok nor self-destruct.

Above all: If you are not well made, you can be improved when technology has advanced enough. If you have been damaged, and even if you are worn out, you can be repaired, if you are preserved until the technology is ready.

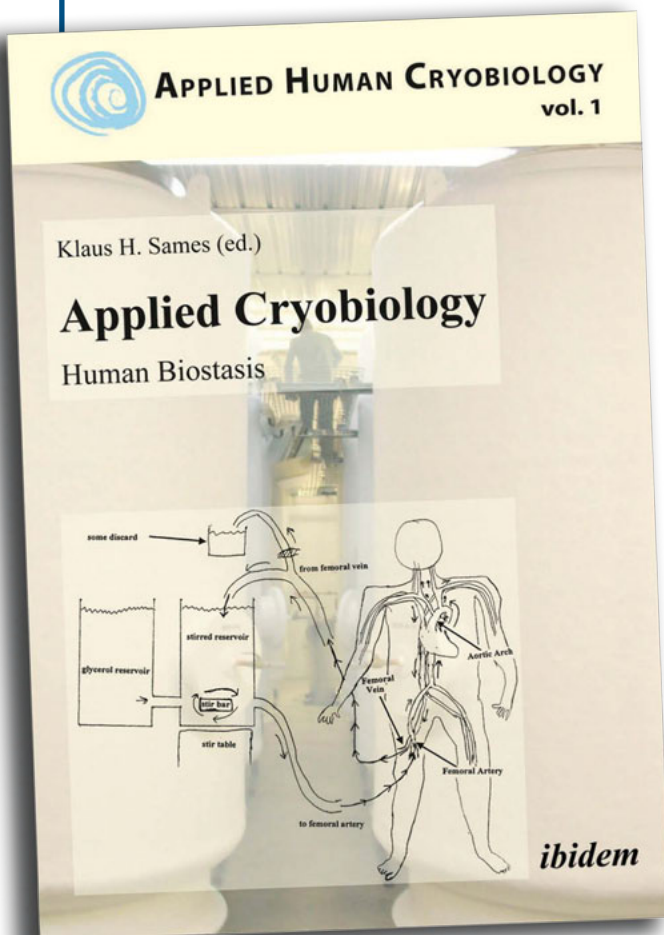
It doesn't require a miracle to resurrect a "dead" machine or rejuvenate an old one or improve one that is unsatisfactory; all it takes is skill, knowledge, resources...and the will to preserve the old clunker until these are available.

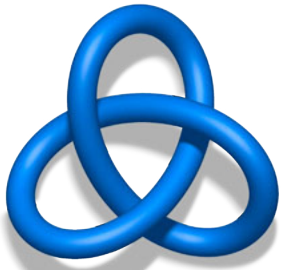
So cheer up, old clunkers. It's peachy keen to be a machine.

Applied Cryobiology: Book Review

By York W. Porter, Immortalist Society President

This little volume is basically a delight to read. It is chock full of interesting and thought provoking articles by a number of folks from various parts of the cryonics community. From articles that are somewhat technical by noted researchers Greg Fahy, Brian Wowk, Aschwin and Chana de Wolf, and others, to excellent articles by former Cryonics Institute President Ben Best, Dr. Peter Gouras, and other fine contributors, this volume is a very good summary of much present day thinking and information in cryonics. It will be a delight to own by anyone seriously interested in the subject of cryonics. It would also make an excellent present to folks that are already actively involved in cryonics or to someone who is open minded enough to read a book full of excellent information and informed viewpoints on the topic. The technical articles may, in some cases, require a bit of patience by those who don't have a technical background, nevertheless, they are quite approachable and understandable with just a minimum of effort. Dr. Klaus Sames has done an excellent job here and I'm proud to have this book on my shelf. Those interested in buying a copy should note that it is readily available at amazon.com.





Final Thoughts

York W. Porter - Executive Editor

Courage...

In addition to the word "integrity" mentioned in this column in the last edition of this magazine, another word that comes to mind in the pursuit of cryonics is the word "courage".

It is easy in this world to be one of the folks who, for various reasons, decides not to rock the boat. "Going along to get along" seems to be the path of least resistance in this world. Anyone who questions the status quo or who deigns to speak questioningly of the established order, tends to be someone who is destined to be scorned and ridiculed and who will, at least generally speaking, live a life of trouble.

At some times, I suppose, the scorn and ridicule may be justified. Just because an idea is off the beaten path or is different from the regularly established and long standing order doesn't, automatically, make it a good idea to follow. A lot of crackpot thinking has occurred down through the ages and continues to arise today. Scams continue to occur even in this so-called "modern age". One network, CNBC, has even made a reasonably successful television program called "American Greed" out of the topic of fleecing people.

But occasionally someone is standing his or her ground for very good reason. One such person was the Catholic priest, Antonio de Montesinos. Montesinos was a Spanish Dominican friar on the island of what was then known as Hispaniola. We know the island today as comprising the Dominican Republic and Haiti. The rule of Spain over the indigenous people in the areas of the New World was, at least from the view of the Spainards, supposed to be humane and enlightened. Given the fallibility and corruptibility of humans, it too often turned out to be inhumane and unenlightened. Part of the reason was the search for gold and other riches that motivated many of the explorers and settlers. The CNBC program "American Greed" has lots of sources of material to choose from, apparently even including material from previous centuries.

Montesino first came to Hispaniola in September of 1510. Only a little over a year later, he apparently had seen enough and he gave his sermon in December of 1511. Among other things, he is reported to have said:

"Tell me by what right of justice do you hold these Indians in such a cruel and horrible servitude? On what authority have you waged such detestable wars against these people who dealt quietly and peacefully on their own lands? Wars in which you have destroyed such an infinite number of



them by homicides and slaughters never heard of before. Why do you keep them so oppressed and exhausted, without giving them enough to eat or curing them of the sicknesses they incur from the excessive labor you give them, and they die, or rather you kill them, in order to extract and acquire gold every day.”

Needless to say, the conquistadors and the other folks interested in the riches of the New World were not well pleased. Initially, even the King of Spain, Ferdinand II, denounced Montesinos preaching. On a return trip to Spain, however, Montesinos and his companions convinced the King otherwise, leading to the first set of laws that attempted to offer some sort of protection to the indigenous people of Hispaniola. Sometimes having the courage of your convictions pays off big.



Statue of Antonio de Montesinos at the seafront of Santo Domingo (Dominican Republic)

In the 1960's, another man with the courage of his convictions began to speak out. Robert Ettinger, having thought of the concept of cryonics, wrote a book about it and began a life-long quest to help spread this outstanding concept to his fellow humans. Initially, it appeared that he was going to have great success and that his efforts were going to bear fruit far and wide.

Alas, it was not to be. After a lot of initial enthusiasm, even among some members of the professional organization known as the Society for Cryobiology, came years and years of “three yards and cloud of dust” as the folks playing football sometimes say. It wasn't easy, it was tiring, it was, at times, quite discouraging, but Ettinger kept at it, day after day, year after year. He had, like Montesinos, the courage of his convictions and the willingness to suffer the criticism, skepticism, and sometimes outright ridicule that came his way. Frequently that criticism, skepticism, and ridicule came from folks that didn't have a clue what they were talking about but who seemed to have the ear of the people. Media coverage, for instance, was frequently notoriously poor.

But Robert Ettinger kept on. I think it fair to say that all the organizations, equipment and all the personnel existing and working in the field of cryonics today can be traced back to that one man and the courage he showed. It has and will continue to bear fruit.

Each of us needs to show that same courage, that same determination and tenacity, until the cause of cryonics is finally won.



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