

A Publication of the Immortalist Society

LONG LIFE

Longevity Through Technology

Volume 47 - Number 03 - THIRD QUARTER 2015

VOTE!





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 free access to Long Life Magazine online or an optional paid print subscription, 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

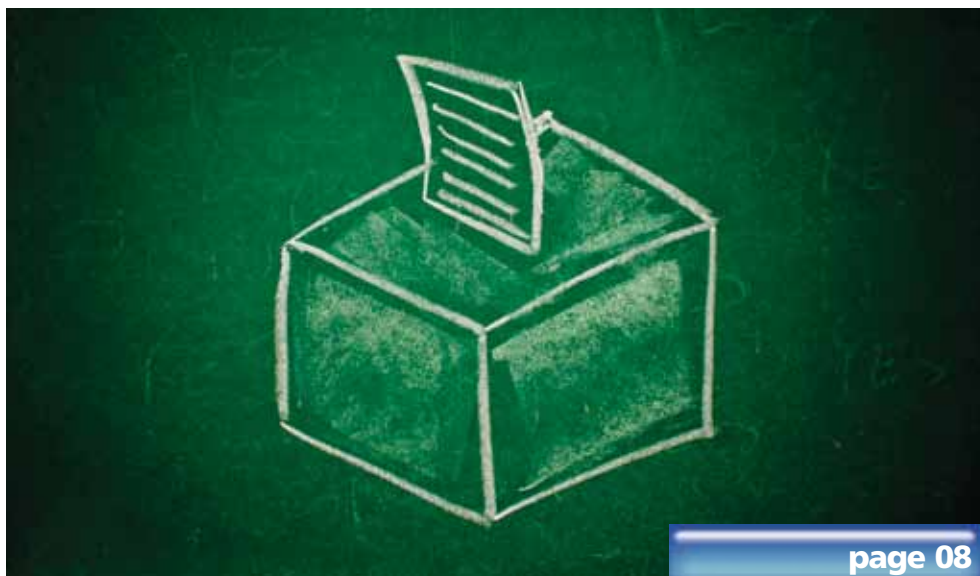
CI Members are the ultimate authority in the organization and own all CI assets. They elect the Board of Directors, from whom are chosen our officers. CI members also can change the Bylaws of the organization (except for corporate purposes).

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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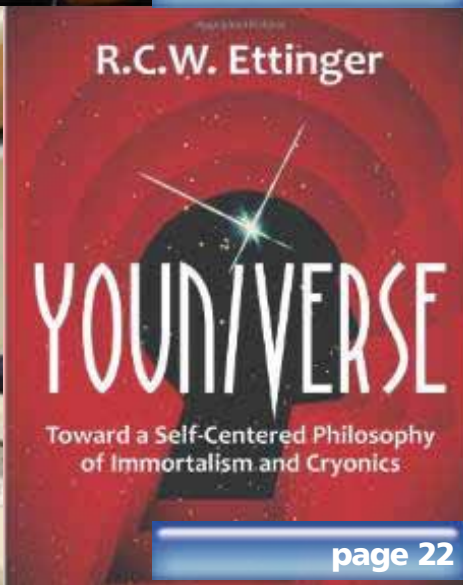
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3. Change PDF viewing settings / extensions on your browser (*advanced users only*)
4. Try a different browser (especially if you're using Internet Explorer.) We recommend Google Chrome.

You've signed up for Cryonics Now what should you do?

Welcome Aboard! You have taken the first critical step in preparing for the future and possibly ensuring your own survival. Now what should you do? People often ask "What can I do to make sure I have an optimal suspension?" Here's a checklist of important steps to consider.

- ☐ Become a fully funded member through life insurance or easy pre-payments

Some members use term life and invest or pay off the difference at regular intervals. Some use whole life or just prepay the costs outright. You have to decide what is best for you, but it is best to act sooner rather than later as insurance prices tend to rise as you get older and some people become uninsurable because of unforeseen health issues. You may even consider making CI the owner of your life insurance policy.

- ☐ Keep CI informed on a regular basis about your health status or address changes. Make sure your CI paperwork and funding are always up to date. CI cannot help you if we do not know you need help.
- ☐ Keep your family and friends up to date on your wishes to be cryopreserved. Being reclusive about cryonics can be costly and cause catastrophic results.
- ☐ Keep your doctor, lawyer, and funeral director up to date on your wishes to be cryopreserved. The right approach to the right professionals can be an asset.
- ☐ Prepare and execute a Living Will and Power of Attorney for Health Care that reflects your cryonics-related wishes. Make sure that CI is updated at regular intervals as well.
- ☐ Consider joining or forming a local standby group to support your cryonics wishes. This may be one of the most important decisions you can make after you are fully funded. As they say-"Failing to plan is planning to fail".
- ☐ Always wear your cryonics bracelet or necklace identifying your wishes should you become incapacitated. Keep a wallet card as well. If aren't around people who support your wishes and you can't speak for yourself a medical bracelet can help save you.
- ☐ Get involved! If you can, donate time and money. Cryonics is not a turnkey operation. Pay attention and look for further tips and advice to make both your personal arrangements and cryonics as a whole a success.



LONG LIFE

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CI EXECUTIVE REPORT

Dennis Kowalski - President, Cryonics Institute

Saturday, September 12th, the CI building will be the site of both the Cryonics Institute and the Immortalist Society Annual General Meetings. I look forward to seeing old friends and hopefully making some new ones. We have continued our facility's improvements with a new conference/tribute room. This room will serve several purposes. First, it will be a place of tribute for families to pay respects to those who have gone into preservation before us. It is a place to honor the hard work and sacrifices of past members who have selflessly donated time and money to our mission. Second, it will serve as a meeting place for official business and conference calls. Third, it will be a comfortable place to educate visitors, media and members of the public who wish to learn more about cryonics. I am confident that those who see it will appreciate the upgrade and the appeal it lends to our facility.

It is also election time and we urge members to think seriously about the type of director they want representing their interests now and into the future. I myself take our voting very seriously and I look at what those running for office have done in terms of dedicating their own time and effort to make CI a better organization. As I mentioned in my last report, it is one thing to make suggestions, point out problems, real or perceived, and another to actually be in the thick of it, putting forth your own time and money to make things happen. This is how I personally measure our directors, and also how I expect to be measured myself as CI President.

We also have some exciting news to share about our new smart phone app that we will be introducing at the AGM. We talked about it last year and we are now just finishing beta testing with a launch date of approximately Sept 12th if all goes well. This application will hopefully mark an important first step in addressing the urgent need for early emergency notification, both for Cryonics Institute members as well as for anyone who wishes to have an automated system for checking in on a loved one who may be alone and in need of medical help. Some of our members live alone or are older, and from time to time experience health issues. In the past, we have talked about building a device to detect when a member needs help. Pulse detec-

tion and motion detection are two front running methods of setting off an emergency cryonics alert. These technologies, however, can be both complicated and expensive to develop and deploy successfully.

The Cryonics Institute Emergency Check In app uses existing Android smart phone technology to provide our members with an inexpensive and effective early-warning solution. Once activated, the program will allow users to set a simple alarm check-in schedule based on their preferences. The alarm "checks in" to ask if you are all right several times during the day based on your selected schedule. If you don't respond to the alarm after 10 minutes, the app sends an emergency text message to a pre-selected list of contacts indicating you might be in trouble and need help.

You can also use the system as an immediate panic button - for example, if you feel severe chest pains prior to a heart attack. If you should lose consciousness or even slip into cardiac arrest before you can hit the panic button, the device will auto-alert a local friend or family member to your situation. The app also features a cancel button for false alarms and can be switched on or off as needed based on your circumstances. There will be a small charge for the app and all money will go to improved versions and upgrades to the existing program. After purchasing the app, users will receive future upgrades for free.

We feel that this is an important first step toward addressing the serious problem of a member having a medical emergency, or even dying, alone where there is no one around to help. We hope that this app will be an important step toward addressing the longstanding problem of providing early notification for cryonics patients. As with most of what CI does, we are "at cost and open source." Therefore, we are hoping that other cryonics organizations and their members will benefit from our new app as well. For this reason, we will be asking members to share this app with other cryonicists and even non-cryonicists who might like having a way to check in on family, friends and neighbors who may be older or in poor health. We expect later versions to have a GPS map component and compatibility with pulse detecting smart watches. If you don't already have a smart phone this may be your reason to get with the program and upgrade. The more people who use the app the better it will become.

Best wishes, and I look forward to seeing you at this year's AGM!



Cryonics Institute Membership Statistics

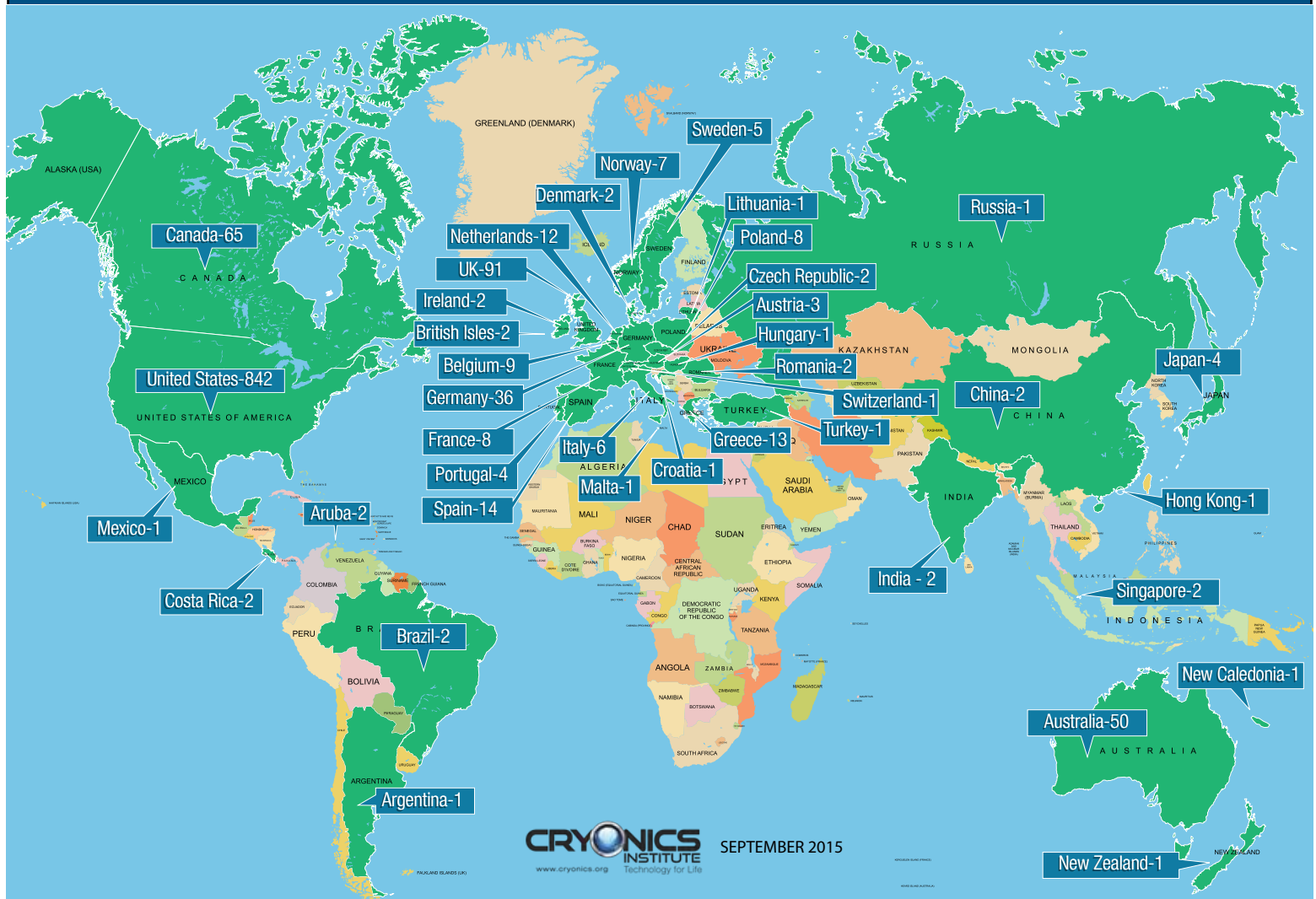


As of September 2015, the Cryonics Institute has 1,214 members, up 11 from our last report. Of the 1,214 Members, 185 have arrangements for Suspended Animation Standby and Transport.

There are 135 human patients and 112 pet patients in cryopreservation at CI's Michigan facility.

CI continues to be an industry leader in terms of both membership and practical affordability for all.

Cryonics Institute Membership by Country:



Worldwide Cryonics Groups

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. (New additions to the list are denoted with an asterisk).

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.

BHUTAN: Can help Cryonics Institute Members who need help for the transport & hospital explanation about the cryonics procedure to the Dr and authorities in Thimphu & Paro. Contacts : Jamyang Palden & Tenzin Rabgay / Emails : palde002@um.edu or jamgarnett@hotmail.co Phones : Jamyang / 975-2-32-66-50 & Tenzin / 975-2-77-21-01-87

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: cs4@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: SOCIETE CRYONICS de FRANCE Roland Missionnier would like to hear from cryonicists in Switzerland, Luxembourg and Monte Carlo, CELL: (0033) 6 64 90 98 41, FAX: (0033) 477 46 9612 or rolandmissionnier@yahoo.fr

Can help Cryonics Institute Members who need

help for the transport & hospital explication about the cryonics procedure to the Dr and authority in Toulouse Area. Contact : Gregory Gosselin de Bénicourt / Email : cryonics@benicourt.com Phone : 09.52.05.40.15

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/>

INDIA: Can help Cryonics Institute Members who need help for the transport & hospital explication about the cryonics procedure to the Dr and authority in Bangalore & Vellore Area. Contacts : Br Sankeerth & Bioster Vignesh / Email : vicky23101994@gmail.com Phones : Bioster / 918148049058 & Br Sankeerth / 917795115939

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 brunolenzi88@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>

NEPAL: Can help Cryonics Institute Members who need help for the transport & hospital explanation about the cryonics procedure to the Dr and authorities in Kathmandu. Contact : Suresh K. Shrestha / Email : toursuresh@gmail.com Phone : 977-985-1071364 / PO Box 14480 Kathmandu.

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

* Can help Cryonics Institute Members who need help, funeral home, transport & hospital explication about the cryonics procedure to the Dr and authority at Amsterdam with branches in other cities. Contact : Koos Van Daalen / Phone (24 Hours) +31-20-646-

0606 or +31-70-345-4810

NORWAY: Can help Cryonics Institute Members who need help for the transport & hospital explication about the cryonics procedure to the Dr, funeral home and authority at Sandvika. Contacts : Gunnar Hammersmark Sandvika Begegravelsesbyrå / Phones : 011-47-2279-7736

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.cronica.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

SWITZERLAND:
www.CryonicsSwitzerland.com or www.ria.edu/cs

UNITED KINGDOM: Cryonics UK is a nonprofit UK based standby group. <http://www.cryonicsuk.org/> Cryonics UK can be contacted via the following people: Tim Gibson: phone: 07905 371495, email: tim.gibson@cryonics-uk.org. Victoria Stevens: phone: 01287 669201, email: vicstevens@hotmail.co.uk. Graham Hipkiss: phone: 0115 8492179 / 07752 251 564, email: ghipkiss@hotmail.com. Alan Sinclair: phone: 01273 587 660 / 07719 820715, email: cryoservices@yahoo.co.uk

Can help Cryonics Institute Members who need help, funeral home, transport at London. Contact : F.A. Albin & Sons / Arthur Stanley House Phone : 020-7237-3637

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 caution in dealing with any organization and/or individual listed.





2015 ANNUAL GROUP MEETINGS

Meetings Scheduled for 3:00 pm - Saturday, Sept 12th, 2015

Cryonics Institute AGM

The Annual General Meeting (AGM) of the Cryonics Institute will be held on Saturday, September 12, 2015 at 3 P.M. at the main facility, 24355 Sorrentino Court, Clinton Township, Michigan 48035.

For more information including maps and available hotel accommodations, please visit cryonics.org. To RSVP, please email the CI Facility at CIHQ@aol.com or phone 1-586-791-5961. The meetings are open to the general public, but we do request that we be informed ahead of time if you will be to attending.

Meetings offer a great opportunity to see the facility, to meet other members, to get a sense of the status of the Cryonics Institute in operation and to see officers, directors and staff.

Immortalist Society AGM

The Annual General Meeting of The Immortalist Society immediately follows CI's AGM at the CI facility. IS will be electing the organization's 2015 officers at the meeting.

AGENDA:

- Call to Order
- President's Report
- Secretary's Report
- Treasurer's Report
- Long Life Editor's Report
- Old Business
- New Business
- Nomination and Election of 2014 Officers
- Adjournment



Vote, Vote, Vote!!

By: York W. Porter Immortalist Society President

(All readers should note that the following only offers a general explanation of the procedures of elections of the Cryonics Institute and of the Immortalist Society. For more specific information, concerned individuals should contact whichever organization they wish to know more about. It should also be noted that Mr. Porter is not an attorney and that in the information that follows, while he is trying to be accurate, any explanations about a matter of law and/or corporate procedure should be double-checked and/or clarified with a licensed and competent attorney, preferably with one well-versed in Michigan law).

Surprisingly, it's that time of year again when the Cryonics Institute (CI) and the Immortalist Society (IS) will hold a their annual meetings at the CI facility that is located in Clinton Township, Michigan. This year's meetings will be held on Saturday, September 12, 2015 and will begin at three p.m. local time. After the two business meetings, which normally occur "back to back", a free dinner will be held for all attendees. It's a time when all of us get a chance to renew old acquaintances, catch up on how things have been going for our friends and colleagues, and be educated and entertained about the wonderful concept of cryonics.

But it's also a serious time as well. The two organizations are "owned", if you will, solely by their membership and it is ultimately that membership and its involvement in organization affairs, and in particular organization elections, which make things work or not work. I urge you to attend these annual meetings if you can. It's a great time to, as I like to think of it, "get your battery recharged" about the field we are all so very interested and dedicated to. It's also a great time to meet folks who share the same viewpoint as you do about greatly extended lifespans and, in particular, the wonderful concept of cryonics.

And it is also a time of organizational elections. That means a time in which the voters in each group will have a chance to help shape the direction of each organization. What follows is an attempt to give a brief explanation of how these elections occur.

Let's start with the Immortalist Society. IS has the simplest method of the two groups. IS full members elect the entire Board of Directors at the annual meeting. Each IS officer serves for a one year term, from January of one year until January of the next year.

Nominations are taken from the floor and all the voting is done at the annual meeting. Voting is by those voting members who are present at the meeting at the time of voting. This is pretty much like the majority of organizations that most folks are familiar with. IS full members elect the President, Vice President, Secretary, and Treasurer all in "one fell swoop", so to speak.

The IS bylaws also provide for "Board Members at Large", if it is the desire of the membership to have them. Those positions are entirely optional in IS and even in the case of persons submitting nominations for them, unless the group agrees on the need for Directors at Large, no elections are held for that position. In the case of the four "regular officers", however, elections are held for all four every year. This lets IS make quick changes to its leadership, if the membership wills it to be done. Since IS' two major goals are education and research, this "quick change if need be" makes good sense.

In the case of CI, the situation is pretty different. There are twelve members of the Board of Directors. Only four of them are elected in any one year. This provides a measure of stability to the CI board. This makes sense since CI is an organization in which stability is somewhat fairly desirable, given that it is responsible for the long term care and storage of individuals who have actually undergone cryonics' procedures and who are in cryostats in the CI facility. The procedure still gives, however, the ability of the membership, if it so desires, to ultimately make changes of the entire CI board, but unlike in the situation of IS, just over a longer period of time. Ballots are mailed out ahead of the CI meeting and give voting members the chance to cast four votes for candidates. Voters can, if they wish, cast only one or two votes but that would be, of course, wasting the other two or three. *It is to your best interest, if you are a CI voting mem-*

ber, to use all four of the votes available to you.

Voters can cast all four votes for one person to try to help maximize that single candidate's chances for election. Voters can cast two votes for one person and two for another. Voters can cast one vote each for four different persons. *Any combination of votes is fine as long as they don't exceed four. If they do exceed four, then the ballot is considered "spoiled" and can't be used in the final outcome.* The combination up to a total of four votes is though, again, entirely up to the voter.

One of the important things on the ballot is a place for your signature. *Please make sure you sign the ballot, else it will also be considered "spoiled" and will not be used or counted!!* This doesn't happen very often but, in the case of the CI election last year, there could again be a tie for a Director's position and one of the spoiled ballots, if it was properly filled out, could make a difference in the final outcome.

Another help is to use well-written numbers instead of just "hash marks" (straight vertical lines) in order to vote for a candidate. Words will work as well. What I mean by this is that if you place any of the words one, two, three, or four in a box, instead of just a vertical line or a combination of vertical lines ("hash marks"), it makes our job easier to do as it's very clear what number the voter intended. Hash marks are OK to use and won't be cause for tossing out the ballot and, the overwhelming majority of the time, we can tell what the voter meant. If you use them, just try to stay within the box designated for the candidate, especially if you are casting all four votes for one candidate.

Again, most of the time we can tell the intent of the voter but a good general rule to use is to ask yourself whether someone who didn't know anything about the CI election, but simply looked at your writing, could easily tell what number you meant.

Elsewhere in this issue you should find a reprint of the page mailed out by the Cryonics Institute that had candidate statements/bios that were enclosed with the ballot. The one advantage of the page being reprinted here



is that if you are reading the online version of this magazine, you can simply do a mouse click on any web address that appears in Long Life Magazine that is associated with a particular candidate. This will let you read additional comments or viewpoints of the candidate and you should certainly consider doing so as it may provide you with information as to why to vote for or against a particular individual. **Please note, however, that we do not vouch for any statements made by any candidate, wherever they are made. We can also not guarantee the absence of any objectionable material on any website or on any link or links from the first website. The responsibility of the content of a website and any links from a website is entirely that of the candidates themselves as the Immortalist Society has nothing to do with the construction of any website other than such websites that the Immortalist Society itself may operate or authorize someone else to operate on the Immortalist Society's behalf.**

We have also indicated that candidates may provide an e-mail address or addresses (maximum of three), if they wish, where you may write to get additional comments and/or clarifications of any candidate's particular views.

Certainly feel free and we encourage you, if you have questions or concerns, to do so but, again, **any information exchanged with you by a candidate is entirely the sole responsibility of that candidate.** The e-mails and one web link are provided as the organization belongs to the membership and it is up to the membership to try to elect as good a group of individuals as it can to help run the organization on a day-in, day-out basis. We are trying to strike a balance between space limitations in our magazine and a total "free-for-all" where there is, generally speaking, very frequently "more heat than light" generated.

Finally, you should note that all CI vote counting will be in the morning of the day the meeting is held on. It generally starts between nine and eleven a.m. local time. Right now it appears that it will start at ten a.m. on Saturday, the day of the meeting. For a confirmation of this or for a more accurate time when the counting will be held, you can get in touch with the CI facility or myself at porter@kih.net at a time closer to the meeting if you wish to be present for this. Any CI member is more than welcome to observe the counting process. We only ask you to please be relatively quiet as the counting is a very tedious process and the

Teller's Committee works very hard to try to get an accurate count. It is also asked that if you attend the count, that you try not to go in and out of the counting room too much as this also is very distracting as well to the Teller's Committee. *We do ask, however, that whatever your views, and whatever your preference in particular candidates, that you take the time to vote.*

If you're not satisfied with the present slate of candidates, you or someone you have trust in should consider running as a Board Candidate in the future. If you have a preferred candidate in this election or in any future election, work for that person. Contact those you may know. Get on one of the cryonics groups that are online and act as an advocate for the candidate or candidates you prefer. There are no magic answers in the world, in cryonics as in anything else. Sometimes getting things done means getting involved, with all the work and hassles that generally entails. But, no matter what your preference in actions may be, at least make sure you cast a vote if you can at all. That vote is so important for you and the future of the organizations you and I are counting on to maximize our chances for successful revival at some future point.

CI Announces Board of Directors Election Candidates

The twelve Directors of the Cryonics Institute Board are elected from CI's voting membership for three year terms in rotating groups of four every September. The elections are held with the results announced at the Annual General Meeting hosted at the Cryonics Institute facility in Michigan. This year's meeting is scheduled for Saturday, Sept. 13.

All four of the CI Directors whose terms are up (the incumbents) are running for re-election. An additional candidate, David Stodolsky, is running as well. Statements by all candidates appear on the following page. (Candidate Statements are listed in alphabetical order.) E-mail addresses and, in the case of reading *Long Life* on-line, clickable web links for further candidate information may or may not be provided as well, depending on what information was available at press time.

Long Life Candidate Statements Disclaimer

On the following page, candidates for the Board of Directors' seats of the Cryonics Institute present information. Each of these individuals is a bona fide candidate as best as can be known by the Immortalist Society at the time of the publication deadline of Long Life magazine. **The information presented here, however, represents solely and entirely the view of the candidates themselves. The Immortalist Society cannot guarantee the validity of any individual's candidacy nor the validity of their statements and/or viewpoint as expressed here or elsewhere.** Other candidates than those who submitted information here may decide to run for a seat on the Board of Directors as well.

Further, in no way should the appearance

of the information here be considered an endorsement (or repudiation) of the viewpoint of the candidate of the information contained in each statement or as expressed elsewhere.

Voters should, in this election as in any election, read and consider carefully the information contained in these statements and, where applicable, try to verify, to the best of the voter's ability, statements of fact and the validity of candidate's viewpoints. The appearance here or elsewhere does not guarantee the factual or valid nature of statements of the candidates and it is up to each voting member to engage in a reasonable amount of due diligence in evaluating candidate's statements and in voting for candidates in this election.



CI DIRECTOR CANDIDATE STATEMENTS

(Candidates' statements are listed in alphabetical order)



cdettin@aol.com

Connie Ettinger (BGS, JD, 1977, 1979, respectively, University of Michigan) lives in Franklin, Michigan with her husband of 34 years, David Ettinger, CI's attorney and son of Robert Ettinger, founder of the Cryonics movement. She has been actively involved in CI since 1979 and is CI's longstanding Contract Officer. Her proudest accomplishment at CI to date was coordinating the end of life care and suspension of Robert Ettinger. "We were prepared for every imaginable contingency and gained the cooperation of local law enforcement and health officials so there was zero delay in his suspension. I learned that preparation and simple explanations about what Cryonics actually entails opened the doors to the cooperation we needed, a lesson I hope everyone heeds."



waupacaway@yahoo.com

Paul Hagen lives in Waupaca, Wisconsin and is employed as a Financial Specialist with the State of Wisconsin. He assists veterans with financial counseling, Medicaid claims, and funeral trusts. He is happily married with two wonderful children. Paul is in his tenth term serving on his city council. He has also volunteered in his community in numerous civic and charitable organizations. Paul has a strong connection to CI as his dad, Jerry Hagen, is Patient #81. "My only agenda is to foster the long term safety and prosperity of CI. I believe in respectful discourse and common sense solutions."



(no address provided)

Pat Heller I joined CI in 1979 and was elected treasurer in 1980 (when I worked as a CPA). At 35 years, I am the senior member of the board of directors and personally knew all 5 of CI's 6 founders who are now patients at CI. As treasurer, I prepare CI's financial statements and tax forms. I use my business skills to help CI's financial operations, freeing up others to handle cryonics-related matters. From 1981-2014 I owned Liberty Coin Service in Lansing, Michigan. Honors include 2012 ANA National Coin Dealer of the Year. I still work there as Communications Officer, mostly writing and speaking. I have been quoted in the Wall Street Journal and Lansing State Journal on cryonics. I currently host two radio programs, write Liberty's monthly newsletter, and regular collector/investor articles in multiple other venues. My wife Pam and I have five children and six grandchildren.



cryonicsjoe@yahoo.com

Joe Kowalsky I've been involved with the Cryonics Institute since the 1980's (high school). I am proud to have been part of CI's growth – in size, knowledge and worldwide respect – as a member, Board Member (over 20 years), vice-president (two years), and secretary (two years). I have learned from pioneers, including Robert Ettinger and Andy Zawacki, and from others who have championed cryonics for decades. I have spoken before groups and media from around the world about what cryonics is, and what makes CI a superior institution. Outside of CI, under the auspices of the Immortalist Society, I coordinate the Organ CryoPreservation Prize, an effort to make organ transplants safer, less costly and more available via short and long term cryopreservation of organs. I would be honored to serve for another term if you think I can be of further service.



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David Stodolsky While CI Bylaws specify democratic governance, CI is functionally a dictatorship. The dictator doesn't obey Michigan Law, the CI Bylaws, or even the Rules of Conduct specified by the dictator himself. Free exchange of information is a precondition for democracy. However, there is secret censorship of the media controlled by CI leadership. The Call for this Statement was made via a mailing list delivered only to those that the dictator supports, others are secretly deleted. CI must remain in continuous operation for hundreds of years. The dictatorial governance form requires, however, that over this time period there will not be a single person in power that is incompetent, dishonest, deranged, or for some other reason permits an operational failure. The Chatsworth Meltdown showed what can happen when responsibility rests upon a single individual. A vote for an incumbent is a vote for dictatorship and continuing law breaking. * On-line readers may click on the following link: <https://plus.google.com/+DavidStodolsky/posts> in order to read further writings of David Stodolsky. (Some scrolling down the page may be required to see CI related posts). Print readers will need, of course, to manually type the internet address given here into their web-browser.

Disclaimer: The Cryonics Institute does not agree with the statements of all candidates. However, in fairness to the election process the statements are being printed as they were submitted.

Hyperlink
Problems?
Please see instructions on page 3



Around the World in 80 Years

By Theo Rogers

A little while ago my cat had to have a tooth out. Or, as it turned out, two teeth out. He'd come through his annual check-up with flying colours, but there was some dental work that needed doing. It didn't come as a surprise. I'd been told at my last trip to the vet that this was something to keep an eye on, and which would likely need to be done after his next visit.

But my cat didn't bounce back from his dental surgery quite as quickly as expected. He was a bit off his food, and I noticed some droplets of blood in and around his food bowl. There were also a couple of bloodstains near where his mouth would have been on a few of the spots where he liked to curl up. I thought his gums hadn't healed properly.

On my next visit to the vet, I was told that his gums had healed fine, that the blood was coming out of his nostrils. The vet suspected either cancer or a fungal infection, and gave me a course of antibiotics. But things didn't improve and, on my next visit, I was referred to a cat specialist. It was a Friday, so I was given an appointment for the following Monday. Over the course of the weekend it became noticeably more difficult to coax him to eat.

When Monday came around, things were almost immediately looking very bad. He had a low red blood cell count, and it fell over the course of the day. His lungs and chest cavity had fluid in them, which itself had blood in it. They drained 140 mL of this fluid. For those who don't think in metric, that's a little over half a measuring cup, which is a lot if you consider the size of a cat's chest.

There was also an irregular mass in front of his heart. The specialist told me she suspected carcinoma or mesothelioma. I asked

how long he had if her worst suspicions were realized, and she said it was a matter of days or weeks. She looked as if she wasn't far short of tears herself. She referred me to another specialist practice where they had an intensive care facility where she wanted him under observation overnight. I took him directly there.

I suffer from chronic fatigue syndrome (or "CFS"). I typically spend around 80% of my waking hours lying in bed, so by the end of this particular day I was exhausted. Just as I was getting ready to go to sleep the



intensive care vet called. Despite the fact that transfusion had been discussed (and I'd had to sign for payment thereof), they said they couldn't do it. Any blood my cat got would mean one of the vets bringing their own pet in for a transfusion, which they said they couldn't ethically do, given how low the prospects for recovery were. They told me there was a pretty good chance my cat wouldn't last the night. I think I stalled for a bit, partly out of shock at the suddenness of it all, partly trying to figure out what to do.

I called back a little while later and spoke to the same vet. I told her that I wanted my cat placed in long term cryonic suspension in the hopes that he could someday be revived, and asked her if she would be willing to help.

She was openly contemptuous, declining to participate in what she sneeringly referred to as "your experiments". Nevertheless, they agreed to place him in their freezer in the event of death.

Of course, just sticking someone in a freezer is far from an ideal cryopreservation procedure. Under better circumstances, as much of the body's water as possible is first replaced with other fluids chosen to minimize the damage caused by the freezing process. That's what I wanted her help with. But the freezer was the best I could do under the circumstances.

I called back again, we discussed it some more, and things were still looking pretty grim. I said I wanted to come in to say goodbye. It was going to be a rough night in more ways than one. With CFS you can push yourself to do more, but if you do so more than very occasionally, there's going to be a price to pay later. In fact, successfully managing CFS pretty much means not pushing yourself: learning to recognize the earliest warning signs, and then resting immediately at the first hint of trouble. When you know you're pushing yourself, it usually means you've already screwed up and it's too late. You don't necessarily feel too bad in the moment, but boy it has a way of catching up with you the next day, or sometimes two or three days down the line. And when find yourself in a situation where you're already feeling like crap, even in the moment, it's a pretty infallible sign you're headed for total collapse.

I was also thinking of something a nurse friend once said to me about how selfish relatives are who want their human loved ones kept alive long enough for them to reach the hospital to say goodbye. Her husband, who was also a nurse, worked in intensive



care, and firmly held the view that the kindest thing is far more often to just let them slip away, goodbyes or no. But... for so many reasons I decided to go.

When I arrived, things were not good. At least a different vet was on duty. I don't know what she thought of cryonics, but she was obviously sympathetic to what I was going through. Throughout all my contact with her, she was certainly never anything less than compassionate and professional. Nor were any of the other staff members I encountered through the following week. At least, not until the end. More on that later.

My cat was in a special oxygen filled cage, lying flat and unmoving. I was told his red cell count was plummeting further – apparently he was bleeding out through the tumour in his chest.

Cat's blood, I was told, was like gold. It was that precious and hard to get and there are no cat blood banks. Yes, "heroic" measures could be tried, but they probably wouldn't work in any event, even if they had unlimited blood, which they didn't. It was just pouring out of him internally. So, in practice, there was nothing that they could do. We had the inevitable discussion about euthanasia.

There was no sign of pain as such, but my boy didn't move except for his eyes, which seemed as alert as ever. I was told he had hours, maybe a day left, and that his red cell count would continue to drop until he went into seizures. We discussed whether he was suffering. The vet told me he must be to some extent, bleeding out internally. I asked her what she would do if he was her cat. She said she'd be leaning towards euthanasia.

There was a brutal calculus: I could leave him lying alone and unmoving in the cage, which didn't seem to have any point to it. I could stay with him for as long as he had. Or we could end it quickly and I could save what little energy I had to get him the best possible chance at another life. If chronic fatigue

syndrome teaches anything, it's to prioritize ruthlessly. I decided to do everything I could to get him that chance at another life.

We discussed whether I could and should pat him one last time before the end. Again, I was mindful of what my nurse friend had said about the selfishness of relatives under such circumstances. I said I didn't want to increase his suffering in order to relieve mine. But... somehow we wound up taking him into a consulting room, with an oxygen tube coming out in front of his face to make breathing easier. The vet placed him on a table on top of a small, aqua-coloured blanket and left us alone.

I'd been having difficulty maintaining my composure for some time, sporadically choking up even as I discussed things with the vet. But I didn't want my cat's final experience to be me crying over him, so somehow I managed to pull it together. I stroked him just how he liked. After a while, he started purring. It seemed to go on forever. My shoulder ached. I switched arms for a bit. I broke into a sweat and had to remove my jumper. I kept stroking him. I kissed his paws and told him how beautiful he was. Finally, I was folded over, half seated, half lying down on the table myself. I kept stroking him. He was unable to move, but he purred.

After what seemed like a small shard of eternity, the vet came back in. I told her that seeing him lying here, purring as I stroked him, it was hard to believe that this was necessary. As I heard myself say it, I realized I was almost pleading with her, like a small child. "I know", she said, "but he's not coming back from this one". I accepted the inevitable and gave my assent.

She gave me a short talk about what to expect. She was going to use an overdose of anaesthetic to, as she put it, "stop" the brain. She said that sometimes they do a little wee or a poo. Sometimes they let out a final gasp. It was, I was assured, a reflex.

It was just after midnight when she gave the final needle, but technically Tuesday morning. He went quickly and peacefully with none of the fireworks I'd been warned about. We took him straight to their body freezer which was, so they told me, kept at -18 degrees C (-0.4 degrees F). I was also warned at some point, I forget exactly when, that they keep them for a week. After that, they need the storage space. Part of the reality of an intensive care practice is that body freezers fill up.

Over the following days, I spent a lot of time on the phone and in email. In the early stages, much of that was with Jim Yount from the American Cryonics Society. I remember at one point mentioning to him what an unbelievably demanding job he had – continually dealing with people who were doing what they considered the most important thing in the world. I forget his exact words, but he told me he actually appreciated having the chance to do something important, rather than always be consumed by the mundane slog we all so often get bogged down in. He also told me I was quite rational and that so many of the people he dealt with were so distraught at their loss that it was hard to make anything happen at all.

The truth is, I compartmentalized a lot. I did make times for myself to completely and totally break down. Most of the time though, I just didn't allow myself to think about what was happening on anything more than a procedural level. I focused on what I needed to get done each day, and put one foot in front of another. When it was done, I rested. Step by step, things slowly moved into place.

Jim had told me that -18 degrees C bought me some time. But I didn't know what bottlenecks might lie down the road, so after about four hours sleep (I don't know why I woke after only four hours, I just did) I got up, drove across town to pick up some dry ice, and went back and packed the body in it. They were helpful enough at the inten-

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Figure 2: Panel discussion with Ben Best, Aubrey de Grey, Max More and Peter Gouras

2nd Cryonics Symposium in Germany

by Dirk Nemitz, DGAB Board Member

Contact: dirk@naturecon.de

From 4 to 5 October 2014, the German Society for Applied Biostasis (DGAB) organized a cryonics symposium in Dresden, Germany. It was the second of its kind, the first scientific cryonics symposium was organized in 2010 in Goslar. As one of the organizers of both events, I would like to thank all presenters and participants for their contributions! I really think this is an important way of showing that cryonics is based on science, and not on any unjustified beliefs or that it is a scam.

In its two days, the 2014 conference covered a wide variety of topics relevant to cryonics and reflecting the interdisciplinary nature of the topic. These included biological and medical contributions related to cryopreservation and molecular repairs, organizational challenges given the long-term horizon of the activities, and also presentations related to the history of cryonics and the definition of death. Let me give you some flavor of the symposium's highlights:

On cryopreservation, Ben Best presented "Forms of Cryopreservation Damage and Strategies for Prevention" and covered several forms of damage, including cryoprotectant toxicity, osmotic damage, chilling injury, cold shock, dehydration injury, and thermal stress fracturing. He also introduced strategies to alleviate these forms of cryopreservation damage, with emphasis given to recent discoveries.

João Pedro de Magalhães went deeper into the topic of "Genomics of Cryoprotectant Toxicity". His research group is employing high-throughput gene expression profiling to study cryoprotective agents toxicity and cryopreservation with the aim to improve cryopreservation protocols to make long-term storage of stem cells, engineered tissues, organs and whole organisms more efficient. I

enjoyed this talk a lot, as it gives a lot of details from very promising research.

The presentation of Peter Gouras focused on another form of damage, namely age-related degeneration. As an already existing example of addressing degeneration he presented remarkable breakthroughs in addressing degeneration in the eye, including techniques such as the transplantation of healthy epithelial cells to stop the degeneration. Given that cryonics will need neural repair in order to work, the exciting part is that this really was the first exam-



Figure 1: Professor Peter Gouras and Professor Klaus Sames in a discussion

ple of transplantation stopping degeneration in the central nerve system. It shows that this part of the nervous system, the retina, which is part of the brain and one of the most highly metabolizing structures in our body, can be repaired.



Related to this, Nadine Saul asked “Anti-Aging and Pro-Longevity: What can We Learn from a Small Worm?” She explained how biogerontologists use the nematode *Caenorhabditis elegans* (*C. elegans*) to demonstrate initial successes in longevity research with at least four methods: hormone-sis, calorie restriction, targeted molecular modulation and deep freezing. Just as an example: The mutation of specific genes can lead to five-fold extension of lifespan in *C. elegans*, which hypothetically would equate to 400-500 years in humans.

In his talk, Klaus Mathwig left the causes of longevity and damage behind and turned towards potential repair mechanisms, asking the question of “Molecular Repair at Physiological Conditions?” He explained the differences between early experiments conducted with exotic molecules under extreme experimental conditions, and what would actually be needed to be accomplished for molecular repair of tissue, in particular due to changes in different environmental factors such as a substantially higher temperature and a liquid environment. He then gave a fascinating introduction to a state-of-the-art nanotechnology toolkit to probe single molecules at physiological conditions.

Igor Artyuhov and Alexander Pulver from the Institute of Biology of Aging in Moscow, Russia, gave a well-received and thought-provoking introduction into the possible mechanisms of the cryoprotective effect of xenon and presented a combined approach to the development of a protocol for the vitrification of bulky biological objects. In a third contribution, Dmitry Buslov from the same institution spoke about Uniform Heating of Multi-structural Biological Objects by Means of Electric and Magnetic Field Phased Emitters.

Forever surrounded by an inspiring aura of optimism, Aubrey de Grey discussed “Damage Repair for People Whose Hearts are Still Beating”. He explained that with

the SENS Research Foundation, he seeks to develop new medicines that will restore people to a state of full health before even needing cryopreservation. In particular, he elaborated on how they propose to perform this damage repair and why it is plausible that such medicines will be developed in the next few decades.

The talks also covered more philosophical and socio-economic grounds. It was especially fascinating to listen to Max More, who pondered the question “How to Sustain an Organization for Over a Century?” Watching this talk is highly recommended, especially for everyone not living in the US, where at



Figure 3: Alcor CEO Max More contributing to the panel discussion

least two cryonics providers have shown their long-term stability. Many mistakes can be made along the road, but looking into the past can help to avoid them.

My own talk on the “History of Cryonics - A Narrative Analysis of *Cryonics Magazine*” touched upon exactly this point. Based on ten years of *Cryonics Magazine*, I explored the question of what articles cryonicists write for cryonicists to read. Next to other interesting quantitative findings, a few outstanding events have been identified as remarkable turning points, such as the 1971 cryonics

conference, in which Peter Gouras already participated as a speaker on the important topic of developing improved human cryopreservation protocols. The most traumatic event was the 1979 Chatsworth disaster, which was touched upon in *Cryonics Magazine* quite often – in my view, frankly, this initial tragedy can’t be discussed enough, in order to remind all of us about the responsibility that cryonics providers are carrying.

The presentation of Aschwin de Wolf on “Identification, Validation, and Implementation of New Cryonics Technologies” skillfully connected aspects of history and technology. His particular focus was on multiple reasons why potential improvements in cryonics are not being recognized or endorsed. Based on his observation that institutional and financial obstacles can prevent timely experimental validation and introduction of promising cryonics technologies, he reviewed the history of technological progress in cryonics, discussed the reasons that delayed or postponed the introduction of superior technologies, and offered solutions that may enable faster adoption of new advances.

Finally, Klaus Sames, who with respect for his accomplishments and dedication to cryonics in Germany is often referred to as the “German Robert Ettinger”, gave an intriguing talk about the “Definitions of Death”. He touched upon both legal and medical definitions, but extended this to the consideration of death as a theme of philosophical and psychosocial consideration. His discussion of the question why so many people prefer “death” to cryonics gives food for thought for all of us.

A special treat was the panel discussion on the topic of “Acceptance of Cryonics in Science and Society”, with many remarkable contributions by the four panelists Ben Best, Peter Gouras, Aubrey de Grey and Max More. It really was an honor and an inspirational



moment to have all of these great minds with us and follow the evolving discussions on how the acceptance of cryonics could be increased.

Another point to make, just to add to your regrets in case you had to miss this event, is the framework program. First, after having awarded Robert Ettinger himself with the Robert Ettinger medal in 2010, the DGAB this time honored the achievements of Saul Kent with the Robert Ettinger medal. But there were also a number of social activities which provided the right environment to get to know each other and engage in more informal talks about cryonics and any related topics. This reached from a reception on Friday night to a guided Dresden city tour and a well-visited conference dinner on Saturday.

In case you've missed this event or would like to see one of the talks again, you're warmly invited to watch the videos on our Youtube

channel (find the link at www.biostase.de). Lastly, I would like to highlight that our DGAB honorary board member Klaus Sames is currently working on a conference proceedings book, which will be available in English likely by the end of 2015 or early 2016. The conference proceedings of the first cryonics symposium called "Applied Cryobiology – Human Biostasis" are also available from your local bookshop or online book store.

Let's stay connected on these topics, and in case you have feedback, ideas or potential contributions for a 3rd symposium in a few years, please let me know!

Before closing, let me express my special gratitude to two well-known cryonicists who have considerably contributed to my study on cryonics history by sharing their remarkable knowledge and data: Ben Best and Mike Perry, it was a real pleasure, thank you both!

Around the World in 80 Years - Continued from page 13

sive care vet practice to allow me to keep everything inside their body fridge. That slowed down the rate of evaporation. The veterinary nurse who helped out was very kind. She did most of the work involved in wrapping the body so it wouldn't get "burned" by the dry ice, and extended my deadline 'till the end of the month: an extra nine days.

Making everything that needed to happen happen was very hard on me physically. It was almost equivalent to a full time job, and there were all the usual little hiccups that happen any time you're doing something complex that you're not really an expert in. At the dry ice plant I found that they couldn't legally sell me more than 20 kg (44 pounds) of dry ice if I was transporting it in a sedan: I needed a ute (what you'd probably call a pickup truck) or a van. I hired what I thought was a van, but when I got it to the plant, they told me "That's not a van". What I had was the industrial version of a minibus. I needed a vehicle with a separate compartment for the dry ice. Otherwise, if too much dry ice evaporated I could suffocate. It seemed to me (and to Jim) that driving with the windows open would be all I needed to do to solve that problem. But

the law is the law, and I had to go back to the rental place. Fortunately they were very nice about it and let me swap the vehicle for a pickup truck.

One of the roughest points was late that Friday afternoon, when I had to carry 160 kg (352 pounds) of dry ice up three flights of stairs at a time when I was already exhausted. I'd been running around town all day – the dry ice plant is on the far side of the city. I was really worried that I might not be able to do anything at all the next day. It also didn't help that it had rained on my way home, and the boxes of dry ice, packed tight in the back of an open pickup, had partially frozen together. But even as that evening progressed, I slowly seemed to get at least some of my strength back. I ordered Thai. They got it wrong, and when the delivery guy kept claiming that the order was right because it matched the docket he'd been given, I blew my top and yelled at him.

Almost immediately I felt ashamed of myself. Yelling at the delivery guy is definitely "punching down". I apologised profusely and told him I'd had a hell of a day. He was quite apologetic too, and came back with the right order. I apologized some

more for yelling and gave him a tip. That might not sound like much, but it's not for nothing Australians have a reputation as the world's worst tipplers. Tipping is quite unusual here as the legal minimum wage is relatively high. So outside of top-end restaurants, tipping isn't typically a part of how people in service industries get paid.

Over the weekend, I used the dry ice I'd carried up all those stairs to do a "dry run" in the esky I was planning to use for shipping. This was Jim's idea. It was a way of seeing if the esky, packed with dry ice and some raw meat (as Jim put it, we really are all just meat) would survive without the plastic liner becoming brittle from the cold and cracking, or too much of the dry ice evaporating. Both held up well.

By Sunday I had everything tentatively in place: The pickup time was Monday afternoon at 3 PM. The esky, fully packed, would be shipped to the long term storage facility in Michigan where my cat would slowly be cooled to the temperature of liquid nitrogen.

Sunday night, once again just as I was going to sleep, I got another call from the vet. I had 'till the end of the next day to get my



boy out of their freezer. They said that with all the dry ice, he was taking up half the freezer. Actually it was probably less than a quarter, but they said they couldn't put anything else on top of him because of the dry ice. It was a shock, but not a surprise. I guess when that nurse had given me until the end of the month, it didn't count.

This is what I was talking about earlier when I said "until the end". Perhaps when you're humouring a madman, there's reason not to renege on your undertakings if they start to get too onerous. I couldn't help but think of the scene in *12 Monkeys* where an orderly at a mental asylum continuously promises one of the inmates astronomical sums of money in exchange for performing various mundane tasks.

So long as everything went according to plan the next day, there was no problem. But I now had a knot in the pit of my stomach that wasn't there before.

The next day was pretty busy. Not frenetic, but busy. I needed to print out some stuff, but my printer refused to function after the first two pages. Fortunately I got what I needed, if not quite everything I wanted. Around 10 AM, I got final confirmation that we were on for 3 PM that afternoon. I got to work ferrying all the necessary stuff around town on the back of the pickup truck. Again, 160 or so kilos of dry ice to haul, but at least

I didn't have to carry it up three flights of stairs this time.

I was so exhausted by the time I arrived at the vet clinic around 2:30 in the afternoon, that I just wanted to give up. I kept putting one foot in front of the other. The truck driver arrived a little early – around a quarter to, just as I was packing the dry ice into the esky for the real journey. Fortunately he didn't mind waiting. He even asked if he could help. I asked him if he had gloves suitable for handling dry ice. He said he didn't, so I was forced to politely decline. In the end, everything went exactly according to schedule. The body, securely packed in layers of dry ice inside the esky, left at 3 PM as planned. For the first time in days, my throat choked up a little as I saw them off.

There were two or three more rather tense days after that, but there was nothing I could do that couldn't be done in bed. I knew everything had been handed over to the people whose business this was. I just felt the need to track the journey to be sure my boy made it to the facility okay. He travelled from Australia to Hong Kong, thence to Chicago. In between emails, I blew off some steam by writing a scathing one-star review of my printer and posting it on Amazon. I considered it well deserved. The customs agents I used, who were recommended to me by the Cryonics Institute, were immensely helpful. They certainly

earned their fee. The final stage was by truck once more, from Chicago to the Cryonics Institute in Clinton Township, Michigan.

After that, I collapsed. My chronic fatigue got progressively worse for about three days, at the end of which I reached the state I dread most, where it's too much work to concentrate hard enough to follow a TV show. But I'd pretty much taken that endpoint as a given from the beginning. Three weeks later, I'm probably about halfway back to what I refer to as "my version of normal". Totally worth it.

On a side note, because mesothelioma had been suspected, just this morning I had my flat inspected for asbestos. Mercifully, I got the all-clear.

Of course, all of us involved in cryonics very much hope that this is only one half of the story. If I had to guess, I'd say I expect the technology necessary for resuscitation to arrive sometime towards the end of this century. I'm basing that on the idea that all we really need to undo the damage of freezing – to "turn hamburger back into cow" – is advanced nanotechnology and massive amounts of computing power. Sooo.. "Around The World in 80 Years". Call that what it is: a stab in the dark from a layperson. But for now at least, I've done all I can to give my cat another shot at life.

I hope he and I meet again.



Theo Rogers suffers from chronic fatigue syndrome, and so spends most of his time lying down. However, he's managed to complete a master's in wealth management by distance education. Prior to assuming his present horizontal state, he achieved a graduate certificate in banking and finance, as well as degrees in psychology and linguistics at the Australian National University.

*Theo currently has a short ebook out: *How to Get Good Reviews on Amazon: A Guide for Independent Authors & Sellers*. An outgrowth of his own reviewing hobby, it has been described by many of his fellow reviewers as a "must-read" for anyone who needs to navigate the*

reviewer subculture on the site.

His interest in cryonics is all-but lifelong: "I still remember the first time I heard about cryonics - I would've been just a toddler. I'm not sure exactly how old. There was a story on TV about a person who was being frozen. As you can see, it made quite an impression. Ever since then, it's always seemed to me that you'd have to be crazy not to have this done. Of course the future will see breakthroughs we can't even imagine. And if there's a chance, why on Earth wouldn't you take it?"

Prior to the events described in this story, Theo had already had two other much loved animal companions placed in stasis: a Labrador dog and his first cat.



Groundbreaking Report on Aging

Rodolfo Goya - CI Member, Argentina

I want to share with you a ground-breaking report published in May, 2015 by a Japanese group led by Prof. Jun-ichi Hayashi from the University of Tsukuba. They studied mitochondrial function (respiration) in skin cells (fibroblasts) from very young and very old individuals. Without going into details, let's say that mitochondria are bacterium-like structures within all of our cells. They have their own DNA that encodes a number of proteins necessary for mitochondrial function. The main role of mitochondria is to burn the oxygen that we breathe, a process known as cell respiration by which they obtain the energy that our cells and bodies need for all life-associated activities (metabolism, heat production, movement, etc.). It is well-known that in all animals, including humans, mitochondrial activity declines with age, which implies that old cells are less efficient at producing energy. Since energy production is essential for life, the progressive decline in mitochondrial function with age is thought to play a central role in human and animal aging. A mainstream theory of aging, the mitochondrial theory of aging, postulates that mitochondrial aging is caused by the cumulative damage that free radicals (which are a byproduct of cell respiration) and other toxic chemicals cause to the DNA of the mitochondrion over time. This theory has been generally accepted by the research community until now.

The study, published by Hayashi and collaborators, challenges this theory. They cultured skin fibroblasts from children and very old people and confirmed that mitochondrial respiration in the cells from the old donors was significantly lower than that of the fibroblasts from young donors. However, they found out that the amount of mitochondrial DNA damage was similar in the cells from both young and old donors. If DNA damage is not responsible for mitochondrial aging, where should we look for the cause? The answer is: at the epigenome. We now need to briefly digress from our main topic in order to explain what the epigenome is. DNA is a long chemical strand that constitutes the blueprint of an organism. The coding units are the genes. When a gene is decoded so that the cell can produce the protein the gene codes for, we say that the gene is expressed. In a given cell at a given time, only a set of all the genes are expressed, while the other genes remain silent. This selective control of gene

expression is achieved by a group of small molecules that attach to specific DNA regions in order to express or silence the appropriate genes. The set of organic molecules (including proteins) that attach (or otherwise interact) with DNA is known as the epigenome. Therefore, it is the epigenome, and not DNA itself, that regulates DNA activity.

Back to our subject, what the Japanese group did was to culture skin cells from young and old donors, next they reprogrammed the cells, taking them to a state in which they became embryonic-like cells, that is, the type of cells that we find in an embryo a few days after fertilization. In these embryonic-type cells (called induced pluripotent stem cells or iPSC) the epigenome has been fully reset to that of an embryo cell. In other words, the original skin cells were rejuvenated and converted to another type of cell, an iPSC. Then, the Japanese group turned these iPSC cells back to skin cells. And here is where the breakthrough comes: the mitochondrial function of the new skin cells was equivalent to that of skin cells from a baby, irrespective of their origin. In other words, by resetting the epigenome of the skin cells from very old donors, they effectively rejuvenated those cells.

It is difficult to exaggerate the significance of these findings concerning the feasibility of life extension and biological rejuvenation. The results from the Japanese group strongly suggest that the DNA of an old individual is not irreversibly damaged; on the contrary, it keeps the potential for supporting the function of a young individual. In this context, aging does not seem to be a hardware (DNA) problem but a software (epigenome) one. This should set a new goal in rejuvenation approaches. Rejuvenation researchers should try to find the right molecular switches in order to reset the cell epigenome to a younger condition. In fact, this is what was achieved by Shinya Yamanaka's group in 2006, who found that manipulating only four of those molecular switches (pluripotency genes), they could turn skin fibroblasts into embryonic-type cells.

Attached is a journalist's comment on the Hayashi study as well as the original publication.

Rodolfo Goya - CI member, Argentina





Professor Hayashi, who is called "White Lion" by his students because of his white hair and big voice.

Photo Credit: Image courtesy of University of Tsukuba

Scientists reverse aging in human cell lines and give theory of aging a new lease of life

26 May 2015 [University of Tsukuba Press Release](#)

Can the process of aging be delayed or even reversed? Research led by specially appointed Professor Jun-ichi Hayashi from the University of Tsukuba in Japan has shown that, in human cell lines at least, it can. They also found that the regulation of two genes involved with the production of glycine, the smallest and simplest amino acid, is partly responsible for some of the characteristics of aging.

Professor Hayashi and his team made this exciting discovery while in the process of addressing some controversial issues surrounding a popular theory of aging.

This theory, the mitochondrial theory of aging, proposes that age-associated mitochondrial defects are controlled by the accumulation of mutations in the mitochondrial DNA. Abnormal mitochondrial function is one of the hallmarks of aging in many species, including humans. This is

mostly due to the fact that the mitochondrion is the so-called powerhouse of the cell as it produces energy in a process called cellular respiration. Damage to the mitochondrial DNA results in changes or mutations in the DNA sequence. Accumulation of these changes is associated with a reduced lifespan and early onset of aging-related characteristics such as weight and hair loss, curvature of the spine and osteoporosis.

There is, however, a growing body of conflicting evidence that has raised doubts about the validity of this theory. The Tsukuba team in particular has performed some compelling research that has led them to propose that age-associated mitochondrial defects are not controlled by the accumulation of mutations in the mitochondrial DNA but by another form of genetic regulation. The research, published this month in the journal *Nature's Scientific Reports*, looked at

the function of the mitochondria in human fibroblast cell lines derived from young people (ranging in age from a fetus to a 12 year old) and elderly people (ranging in age from 80-97 years old). The researchers compared the mitochondrial respiration and the amount of DNA damage in the mitochondria of the two groups, expecting respiration to be reduced and DNA damage to be increased in the cells from the elderly group. While the elderly group had reduced respiration, in accordance with the current theory, there was, however, no difference in the amount of DNA damage between the elderly and young groups of cells. This led the researchers to propose that another form of genetic regulation, epigenetic regulation, may be responsible for the age-associated effects seen in the mitochondria.

Epigenetic regulation refers to changes, such as the addition of chemical structures



or proteins, which alter the physical structure of the DNA, resulting in genes turning on or off. Unlike mutations, these changes do not affect the DNA sequence itself. If this theory is correct, then genetically reprogramming the cells to an embryonic stem cell-like state would remove any epigenetic changes associated with the mitochondrial DNA. In order to test this theory, the researchers reprogrammed human fibroblast cell lines derived from young and elderly people to an embryonic stem cell-like state. These cells were then turned back into fibroblasts and their mitochondrial respiratory function examined. Incredibly, the age-associated defects had been reversed -- all of the fibroblasts had respiration rates comparable to those of the fetal fibroblast cell line, irrespective of whether they were derived from young or elderly people. This indicates that the aging process in the mitochondrion is controlled by epigenetic regulation, not by mutations.

The researchers then looked for genes that might be controlled epigenetically resulting in these age-associated mitochondrial defects. Two genes that regulate glycine production in mitochondria, CGAT and SHMT2, were found. The researchers showed that by changing the regulation of these genes, they could induce defects or restore mitochondrial function in the fibroblast cell lines. In a compelling finding, the addition of glycine for 10 days to the culture medium of the 97 year old fibroblast cell line restored its respiratory function. This suggests that glycine treatment can reverse the age-associated respiration defects in the elderly human fibroblasts.

These findings reveal that, contrary to the mitochondrial theory of aging, epigenetic regulation controls age-associated respiration defects in human fibroblast cell lines. Can epigenetic regulation also control aging in humans? That theory remains to be tested,

and if proven, could result in glycine supplements giving our older population a new lease of life.

Story Source:

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Epigenetic regulation of the nuclear-coded GCAT and SHMT2 genes confers human age-associated mitochondrial respiration defects

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Age-associated accumulation of somatic mutations in mitochondrial DNA (mtDNA) has been proposed to be responsible for the age-associated mitochondrial respiration defects found in elderly human subjects. We carried out reprogramming of human fibroblast lines derived from elderly subjects by generating their induced pluripotent stem cells (iPSCs), and examined another possibility, namely that these aging phenotypes are controlled not by mutations but by epigenetic regulation. Here, we show that reprogramming of elderly fibroblasts restores age-associated mitochondrial respiration defects, indicating that these aging phenotypes are reversible and are similar to differentiation phenotypes in that both are controlled by epigenetic regulation, not by mutations in either the nuclear or the mitochondrial genome. Microarray screening revealed that epigenetic downregulation of the nuclear-coded GCAT gene, which is involved in glycine production in mitochondria, is partly responsible for these aging phenotypes. Treatment of elderly fibroblasts with glycine effectively prevented the expression of these aging phenotypes.

The mitochondrial theory of aging proposes that age-associated overproduction of reactive oxygen species (ROS) and the resultant accumulation of somatic mutations in mtDNA are responsible for aging phenotypes including age-associated mitochondrial respiration defects¹⁻³. This concept is supported partially by subsequent findings that mtDNA mutator mice expressing a proofreading-deficient mtDNA polymerase show accelerated accumulation of somatic mutations in mtDNA, resulting in the expression of mitochondrial respiration defects and premature aging phenotypes⁴⁻⁶. In contrast, our previous studies proposed that the age-associated respiration defects found in human fibroblasts are caused

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To read the complete study, visit:

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Robert Ettinger: The Legacy Continues

The Philosophy of Robert Ettinger

Introduction and Comments Interspersed by York W. Porter, President of the Immortalist Society

The last book which Robert Ettinger wrote was entitled Youniverse. In it, he outlined his fundamental views on philosophy. Like his efforts in establishing the field of cryonics, the full blown book was preceded by years and years of in-depth thinking about the subject. In the article that follows, published in The Immortalist (the former name of Long Life Magazine) back in March of 1989, Mr. Ettinger addresses both traditional philosophical outlooks and gives his own viewpoint and answers to questions that have existed down through the ages. What follows can be thought of, in a certain sense, as a "preview and introduction" to the more lengthy work that followed quite a few years later.

Me-First & Feel-Good Foundations of Value by: Robert C.W. Ettinger

In 1962 I wrote a book (the preliminary version of *The Prospect of Immortality*) which filled a void--because the countless thousands of better-qualified people showed on signs of interest or understanding. It is still a mystery to me how so many people, so much brighter and better educated than myself, could be so dense--but there it was.

And there it is: I am in a somewhat similar situation again. In my (nearly nonexistent) spare time I am writing "the definitive book of philosophy", lurching in where angels fear to tread, because the big brains have defaulted. As far as I can tell, there is no full-fledged, integrated modern work of philosophy--only splinters and grotesquely failed frauds. Humanity is searching for a psychic compass (often in garbage heaps) and the professional philosophers, as well as the popular philosophers, including novelists, have not supplied it.

I intend to do so, with some of the draft sections appearing from time to time in *The Immortalist*.

The word *philosophy* of course is being used in the older sense, including "natural philosophy" (science) and such areas of classic philosophy as ethics and metaphysics; yet it will focus on the most modern area of *biophilosophy*; i.e., it will inquire how our perceptions and actions can best fit our fundamental natures--and to what extent those natures can and should be altered.

Minimal attention will be paid to areas where the moderns have done well and don't need my help, such as logic. The primary intent is to provide a philosophy in the sense of an outlook, a mental framework, a *Weltanschauung*, which can offer orientation; it will present insights into the riddles of existence and actually help the individual decide how to behave in real-life situations.

The working title is *Youniverse*.

In part, it will recapitulate work begun in *Man into Superman*, but will go well beyond that.

These draft segments will not necessarily be well ordered--sometimes presented here without the preparation they will have in the book--but I hope they will have some interest.

Me-First & Feel-Good: The Youniversal Motivator

Our values often represent merely habits or attitudes conditioned into us by society--often for our own benefit in some sense, but sometimes instead to our great harm or peril, even unto death. Very few of us have shaped our own set of values, or even recog-



nized that this is possible. To make it possible, we must first sort out our values from their jumbled mess.

What do we want, in the most basic and necessary and general sense?

We want to feel good.

Anything new about this? No, and yes. Ancient philosophies have been based, in whole or in part, on the “pleasure principle”; *hedonism* and *epicureanism* are still commonly (although often incorrectly) used terms. But hedonists and epicureans have from the start been in bad odor because of their naive and simplistic development. If we start by embracing feel-good, we are instantly catapulted into an immense thorny tangle, since there are so many different ways of feeling good, some of them mutually incompatible or even ultimately self-destructive. The problem—which many have regarded as hopeless—is to eliminate the apparent contradictions.

It is indeed difficult—but not hopeless. And there is really no alternative to facing up to the task—unless you choose to let some institution (which cheerfully regards you as expendable), or some archaic or infantile aspect of your personality, call the tune and pull your strings in a puppet dance.

“Me-First” --With Disclaimers

The most basic characteristic of life is *feeling*, which is the substrate of consciousness, hence the ground of being. (Consciousness is the integration of feeling and computing).

Feeling resides in the individual organism. (We leave aside for now the question of collective psyches, as in mob psychology; and fractionated psyches, as in “split personality” or conscious/subconscious disjunctions). This is why the one and only criterion of value is feel-good. From this follows the principle of ME-FIRST—i.e., *the only things that are important are the things that are important TO ME*. If it isn’t important (or potentially important) TO ME, it isn’t important AT ALL.

Most people will bristle with indignation at such a sentiment—and partly with good reason, hence we must introduce a disclaimer here. The words ME-FIRST and FEEL-GOOD have in recent years become associated with a superficial selfishness, a life style that disregards the welfare of society as a whole and even the long-term and fundamental welfare of the individual. We disassociate ourselves completely from that. The “me-generation” and the “now-generation” are in most respects more alien to the present philosophy than are traditional outlooks. Nevertheless, we retain the words ME-FIRST and FEEL-GOOD: viewed in the right perspective, after

appropriate preparation, they convey plain and simple (!) truths that perhaps cannot be better expressed.

Classic Precursors

Before continuing, let’s remind ourselves that recognition of me-first and feel-good, as the natural starting points of philosophical structures, has some respected antecedents.

Socrates, the first of the Greek big three, posed very nearly the right question: What is man, and what can he become? He was also very near the mark in equating virtue with enlightened self-interest and wisdom. He tended to think that “sin” is just error or skewed vision, i.e., misjudgement.

In the end, however, he remained understandably the prisoner of his social and intellectual environment. The “enlightened self-interest” he theoretically espoused turned out to be nothing other than obedience to (his) current standards of conduct. He was unable to build anything on his supposed foundation of enlightened self-interest.

Baruch Spinoza—whose *Ethics* Will Durant has called the “most precious production in modern philosophy”—did better but not much.

His original ambition was “...to inquire whether I might discover and attain the faculty of enjoying throughout eternity continual supreme happiness”. Can any honest person deny that this is the natural quest, the self-evident starting point of philosophical investigation?

(In modern terms, this goal has been stated by Art Quaipe and others as the attempt, by logical and scientific means, to maximize life and its satisfactions. There is exactly one problem in life—What should I do next?—and the (series of) solution(s) to that problem is essentially “just” a matter of decision theory, maximizing the expected gain).

Spinoza had some excellent classic modern concepts. The universe is deterministic in the Laplacian sense of a great machine—the same motion (on a classical level) as Gell-Mann’s “totalitarian principle”; whatever is not prohibited is compulsory. Spinoza saw a unitarian world of perfect order, in the best scientific spirit of the 17th Century.

He put psychic drives in an evolutionary context of self-preservation: “Everything...endeavors to persist in its own being”. Every instinct is a device developed by nature to preserve the individual... (or, we would add, the group or species)...Pleasure and pain are the satisfaction or hindrance of an instinct; they are not the causes of our desires, but their result; we do not desire things because they





give us pleasure, but they give us pleasure because we desire them; and we desire them because we must.

Thus, free will is an illusion. “Men think themselves free because they are conscious of their volitions and desires, but are ignorant of the causes by which they are led to wish and desire”.

In some passages he makes fairly clear the basic prime motivation, which I have called ME-FIRST and FEEL-GOOD. He says the goal of conduct is happiness; happiness is the presence of pleasure and the absence of pain: “...each man must love himself and seek what is useful to him, and desire whatever leads him truly to a greater sense of perfection...”

This is excellent, but he soon becomes confused by the complexities of defining and measuring pleasure and pain, happiness and sorrow, and before long, like Nietzsche, he has done nearly a complete about-face. He finally concludes that we are to find satisfaction in some abstract sense of communion with the universe, or sense of contribution to something greater; we are to settle for some symbolic immortality (even though he acknowledges that memory ends with our bodies). He accepts at last the pabulum of happy-little-cog: “Men who are good by reason...desire nothing for themselves which they do not also desire for the rest of mankind”.

We know--perhaps the high esteem for Spinoza among philosophers arises for just this reason: that he starts with determinism, me-first, and feel-good, and somehow ends with state-sponsored conformist morality.

We shall gradually show the path he should have taken--or might have taken if he had had the advantage of a 20th Century background. First we need to clear away some underbrush.

Ends and Means

One way that might suggest itself, to begin unraveling the motivational tangle, is to separate objectives into ends (goals in themselves, pure feel-good) and means (tactics for advancing toward goals). But this doesn't work very well.

“Feel-good” in the simplest and most obvious sense, for example in enjoyment of beauty, might be called an end in itself, as distinguished from enabling values or means to ends. But more enabling values, or means, are much more important than some ends, and have also acquired their own accompanying good feelings, such as in doing one's duty. (We may, of course have to redefine “duty”). Indeed, all good feelings have preconditions, including the universal precondition of being alive.

Satisfaction of hunger is an end in itself, since it feels good, and also a means, since it keeps us alive. Staying alive doesn't feel good at all times, but as the universal precondition it necessarily takes first place in the hierarchy of values--subject to an implicit premise to be noted later.

Thus it is a nearly empty and hopeless exercise to try to separate values into the categories of ends and means. The real task is to separate the wheat from the chaff, the basic/desirable values from the accidental/destructive ones, in order to rebuild ourselves on solid foundations.

Our task is to extricate ourselves from the “human condition”--which means not only defeating death, but also, and more immediately, identifying the warring, disparate elements of our psyches and reconciling them. This may be done partly by imposing orderly hierarchies of priority on our jumbled instincts, drives, or habits. This will be painful for most, and impossible for many, but let's try to lay it out. It helps to recognize the evolutionary origin of many of our psychic underpinnings--but before getting to that we should probably lay another two-by-four alongside the heads of the alleged altruism

The Selfishness of Altruism

I have said that the only criterion of value is feel-good. I did not say the only “valid” criterion--but the only criterion, period. In other words, I assert--as many others have done--that everyone, at all times (insofar as his thoughts and actions are motivated, rather than random or accidental) is necessarily and inescapably governed



by consideration of me-first and feel-good. This follows from the simple fact that what matters to you--the only thing that matters to you--is what happens in your head. In other words, everything we do is to please ourselves, or to please the currently dominant aspect of the psyche.

Of course, we understand that "pleasure" includes disruption of pain or avoidance of a worse alternative, i.e., a choice of the lesser evil. We also understand that the choice of action will not necessarily succeed in advancing the individual's interests (and could even be counterproductive), but any *intent* is *always* to please oneself. There are no exceptions.

Even intelligent traditionalists will balk stubbornly at this, claiming that they do not make sacrifices to please themselves, but to please God, or to uphold the right, or out of pure love, and so on. They will squirm a long time before admitting that they want to please God because that is a notion important to *them*; that their versions of "right" (their consciences) are in *their* heads; that the guiding love is what matters to *them*. They do it because they are convinced (at some level of the brain) that that is what it takes, at the moment, to make them feel better, or to prevent them from feeling worse.

What it boils down to is that there is no such *thing* as altruism in any proper sense. We do not give to others because we put others ahead of ourselves, but because we find satisfaction (or reduced discomfort) in giving or in "sacrifice", in light of our circumstances and indoctrination.

...But having said this, have we really said much?

Not just Word-Games

Sometimes people have an initial negative reaction to the notion that they always act from self-interest, but after reflection will say something like this:

"All right, we act to please ourselves, in the sense you have indicated. But so what? Someone who acts to satisfy higher ideals is

still noble, and one who acts to satisfy base impulses is still ignoble. Your views will not make me feel kinder toward liars, cheats, and bullies; it will not give me any less respect for kindly and reliable people. Nothing has changed really, except maybe some terminology".

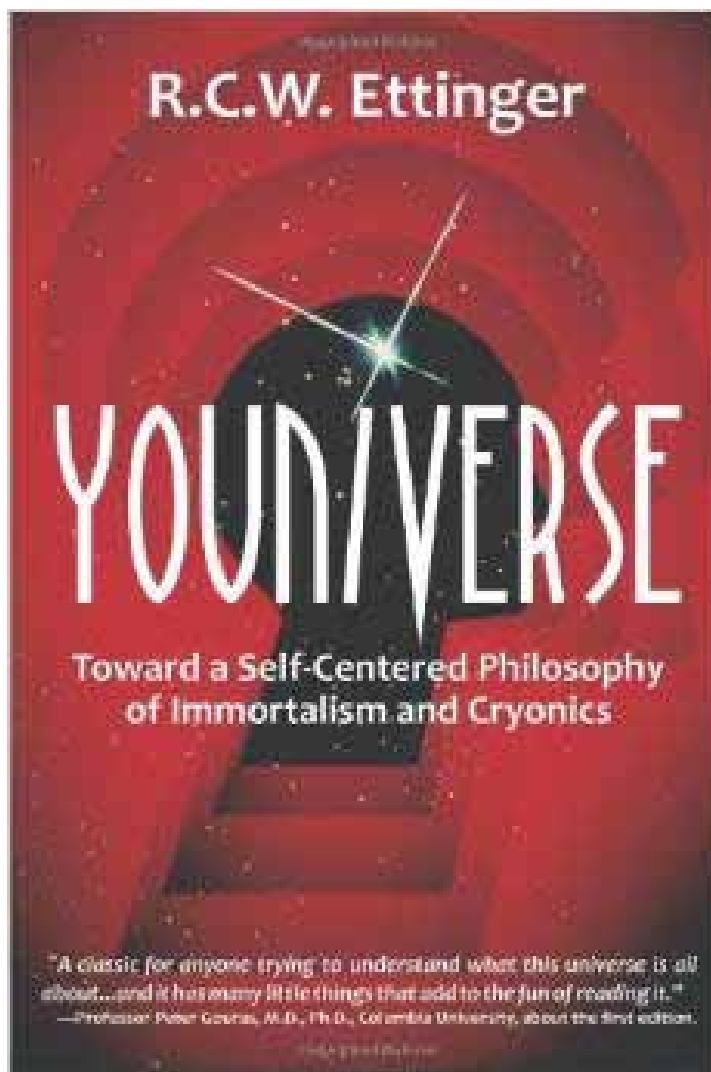
Wrong: A great deal has changed. At the simplest and most obvious level, there is no longer any automatic virtue in placing institutional interests above your own.

Want a gut-level example? Consider the famous words of President John F. Kennedy: "Ask not what your country can do for you; ask rather what you can do for your country".

Taken literally, this is merely absurd--an inversion of values. No sane person will ever place national interests (or any other) ahead of his own. On the other hand, such statements are often not intended literally: Kennedy's remark

could be interpreted to mean only that some of us (labor unions, for example) had become too shortsighted in our selfishness, and by disregarding the larger picture and the longer term we were undermining our future.

The kind of problem is more or less typical: A clear-eyed self-interest will often rule out the reflex obedience of the brain-washed, but charting a more rational course will seldom be easy or simple, because of the feedbacks and complications that must be factored



in. We are faced over and over with the necessity of making *calculations*.

The Niceness Factor

Many will grimace with distaste at any notion that we should live by calculated self-interest. It suggests cold, aloof, robotic people. Wouldn't we rather be warm, open, nice people?

Mammy Yokum said, "Good is better than evil, because it's nicer". Most of us like "nice" people--those who are considerate of the feelings of others and do not bully or take unfair advantage. We tend to want to be "nice" ourselves, so we can like ourselves. Furthermore, niceness has developed through evolution as a survival trait.

As already noted, families and tribes need the spirit of sacrifice in individuals, and this is really the essence of niceness: the cheerful willingness, under certain circumstances, to give up some degree of immediately personal benefit for the greater good.

It never *feels* like total sacrifice, and at some level we always get satisfaction out of it; otherwise we wouldn't do it. The satisfaction can be the exaltation of the martyr; it can be merely the resigned recognition of a great evil avoided; or it can be the genuine minor pleasure of making jokes and other small-talk with a boring neighbor.

Any fool can plainly see--in the words of Mammy Yokum again--that niceness tends to have survival value, because people who are liked, and who deal fairly with others, tend to get on in the world. It is no paradox that viciousness and hoggishness also tend to promote survival; the circumstances are crucial. Every person, and every society, needs more than one arrow in the quiver.

Elsewhere we discuss some modern approaches to the "niceness" question, involving computer games and the "Trader's Dilemma", showing how niceness evolves and how it is possible to be hard-nosed yet nice.

It is possible to be a nice, warm, friendly person, yet coolly calculate your self-interest. To calculate correctly, we first need an approach which is alien to almost everybody--the *scientific* approach.

Science As Savior

Science is flourishing as never before--yet so is superstition! (I won't list the superstitions just yet, for fear of giving offense too soon).

Intellectual *chic* finds science oversold and empty of salvation. We are told (even by "scientists") that technology has only means and no ends; that ultimate answers can be found or generated only in

the soul and not the brain; that the world of matter and of the spirit are separate and the latter cannot be explored through gadgetry.

Some of the brightest and best believe this drivel--as do almost all of those who are not so bright. Yet it is just a tiresome misunderstanding based mainly on carelessness with words.

As in most great controversies, the insights are on one level extremely simple, and in retrospect mere truisms; but on other levels there are subtleties and complexities that will give even thoughtful people a struggle.

On the level of words, there is no contest, no possibility of "science" being oversold, unless we accept a definition of "science" that is mere caricature. I'll go into more detail later but just note for now that science properly is just sense, as in common sense--but common sense applied with uncommon care, patience, and consistency.

Science is not a procedure, or an occupation, but an attitude; and its most important characteristics are honesty and *resourcefulness*. The scientific attitude--and *only* that--is appropriate for *all* areas of life and thought.

The realm of science has no inner bounds and no outerbounds; it includes you and the universe. Science will provide you map and compass--not necessarily the kind you might hope for, but the best available. Science will save you--not from all your fears, and not from all your doubts, but from useless or treacherous alternatives. Science, mixed with sweat, will provide a mortar for your sanity.

You will still have to follow rules--but by obeying the real rules of the physical world and your own basic structure, rather than ordinary dictates of archaic societies or imaginary authorities, you will win such freedom as exists.

You will not escape duty--but you will learn how to do your only real duty, which is to your past and future selves.

You will not entirely escape guilt; but you will learn to feel guilt only when it is appropriate and useful--when you have offended your own nature (as it should become) and compromised your own future.

You will not escape pain, but you will learn not to inflict it on yourself.

You will not escape work, but you will escape despair.

In short, you will learn rational strategies in the pursuit of happiness...which you may even catch.

(Note: To read Youniverse in its entirety, you can buy your very own copy through Amazon.)





Final Thoughts

York W. Porter - Executive Editor

"Westinghouse..."



Back in my years of growing up, my Dad made his living by working on electrical devices. Everything from air-conditioners and heat pumps to electric stoves and refrigerators were "fair game" in his repair business. Unlike his only son, Dad was a very talented person in terms of machinery. He had been trained or gone to school for various trades, ranging from welding, diesel mechanic, union pipe fitter, to working on refrigeration equipment. He could do plumbing and carpentry work but didn't hire himself out for any of that. If the scourge of mental illness hadn't struck him in the prime of his life, we probably could, as he liked to put it, "have lived in the biggest house in town". Even though riches in material wealth escaped he and my Mom, we were deeply, deeply blessed in the riches of living in a loving home that no amount of money can ever buy.

As I began to grow up, I started to notice and remember certain things about his business. I found out early on that the word "freon" was just a trade name for various types of refrigeration chemicals. I used to get a kick out of the fact that there was (an still is) a refrigeration company that proudly displayed its label of "York" on its equipment. Another label that I noticed was "Westinghouse". While I finally figured out that the York heating and air conditioning got its name from its beginning in York, Pennsylvania, for the longest time I didn't really associate Westinghouse with any particular place or person. And, of course, I was dead wrong. (Wasn't the first time, won't be the last). George Westinghouse, the man whose name stood behind several of the myriad products that my Dad came in contact with down through the years, was the son of a man who spent his time making farm machinery in a modest shop.

Born in 1846, George took advantage, unlike myself, of the opportunity that was in front of him and spent a good deal of time in his father's machine shop. That time was apparently "worth its weight in gold" to him in terms of his basic education in machinery and its application to real-world problems. After taking some time to serve in the Civil War, enlisting originally in the New York National Guard at the age of fifteen, George came home and began his life of invention and industriousness.

One of his early inventions was a device to help automatically "re-rail" railroad cars that had become derailed while in use. Another invention involved railroad switches. The railroads were, in the 1800's, the "Internet" of their day, new and exciting and, within limits, they were considered to be "high-tech" endeavors. It is, of course, quite understandable how a man like George Westinghouse would become enamored with them, especially given his background in his father's machine shop.

Forming his own company at the early age of 22, Westinghouse was on a trip to Troy, New York to sell some of his company's wares, when he became aware of a railroad accident in which two trains had collided on



straight and level track in broad daylight. When asked what happened, he was informed that, due to the primitive braking systems on trains of the day, there wasn't enough time to stop.

Westinghouse immediately pondered the situation and came up with the air brake system now more or less universally used on railroads to this day. Instead of working like hydraulic brakes do in a car, where the pressure of the fluid engages the brakes, the Westinghouse system works by applying brakes when air pressure is decreased. If the air pressure goes to zero, due to some sort of air-leak or malfunction, the brakes fully engage and the train comes screeching to a stop until air pressure is restored.

Westinghouse definitely had a "winner" on his hands and he went to various railroads with his concept for stopping trains with what seemed to be nothing more than "air". In one case, the use of the new braking system resulted in a train stopping just a few feet short of a man who had fallen on the tracks and been knocked unconscious. With the previous system, his misfortune would have meant the fallen man's certain death.

But not everyone was impressed. In a meeting with Cornelius Vanderbilt, of the New York Central Railroad system, Westinghouse was told, "Do you mean to tell me that you could stop trains with wind? I'll give you to understand, young man, that I am too busy to have any time taken up talking to a (expletive deleted) fool!" In time, of course, even the "Commodore" would have to capitulate and have his railroad use the new and much better system of safely braking trains. Facts are stubborn things and one man's ignorant opinion couldn't stand in the way of progress, even a man as rich and powerful as Cornelius Vanderbilt.

In the 1960's, another man of intelligence and insight proposed a concept where individuals formerly thought to be beyond help by present day technology could be offered an "ambulance to the future" through his concept of cryonics. Like the Westinghouse air-brake system, acceptance and interest in some quarters but skepticism and disdain in many others met Robert Ettinger's thinking. Early critics thought of it as similar to Vanderbilt's belief that Westinghouse was trying to stop railroad cars with "wind". Other folks thought of it as another of the myriad scams that have been introduced down through the centuries. In one article this author remembers, cryonics was stated to be at the point of its imminent demise.

Fortunately, none of these critical thoughts are true. Robert Ettinger's concept was (and is) based on rational thinking and the evidence for it, particularly since the development of Eric Drexler's concept of nanotechnology, has only gotten stronger and stronger. In the particular case of the organization Ettinger founded, the Cryonics Institute (CI), as well as in cryonics in general, the thought of "scam" is laughable. In the case of CI, a basically volunteer group runs it. In the case of the other cryonics organizations, it can safely be said that no one, but no one has gotten wealthy by getting involved in this field. In some cases, it's been just the contrary, with dedicated cryonicists spending thousands of hours of their own time and thousands of dollars of their own money trying to push this outstanding concept forward. Finally, as far as cryonics' "imminent demise", the reality is plain and simple: Cryonics is here to stay! Since it is, why don't you join us today and help us in this world and life-changing endeavor? You'll be very, very glad that you did!



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