

A Publication of the Immortalist Society

# LONG LIFE

## Longevity Through Technology

Volume 45 - Number 01

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2012 CI Election Results  
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IS Organ Cryopreservation Prize  
New Australian Cryonics Facility  
SPECIAL REPORT: Blood Substitution and Reperfusion Injury in Cryonics  
2013 Young Cryonicists Gathering

[www.immortalistsociety.org](http://www.immortalistsociety.org)

[www.cryonics.org](http://www.cryonics.org)

[www.americancryonics.org](http://www.americancryonics.org)



## 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 prices. CI was founded by the "father of cryonics," Robert C.W. Ettinger in 1976 as a means to preserve life at liquid nitrogen temperatures. As the future unveils newer and more sophisticated medical nanotechnology it is hoped that some day 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**

For a Lifetime Member, the cost of a Lifetime Membership for a spouse is half-price and minor children receive membership free.

### **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 in cryogenic temperatures.

### **6) Locally-Trained Funeral Directors**

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

### **7) Funding Programs**

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

### **8) Cutting-Edge Cryonics Information**

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

### **9) Additional Preservation Services**

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

### **10) Support Education and Research**

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

### **11) Member Ownership and Control**

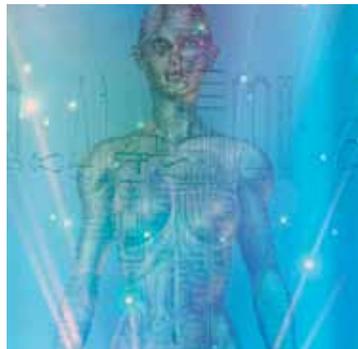
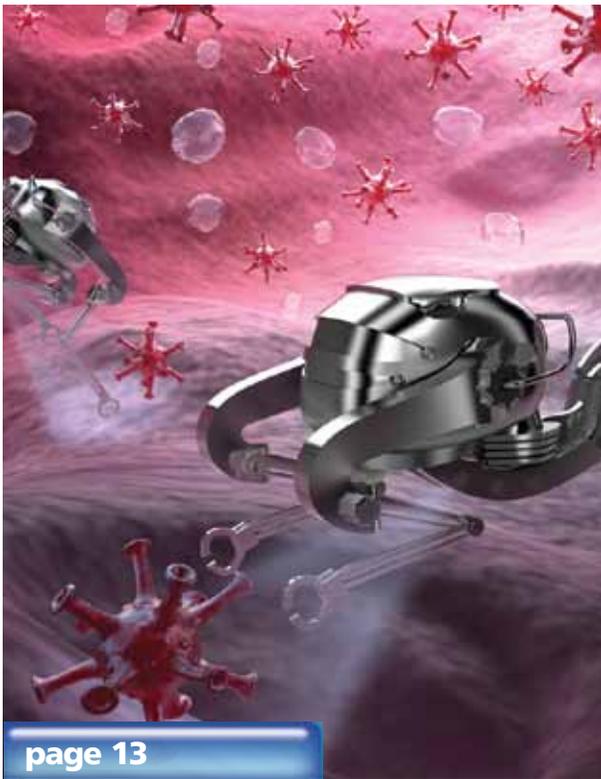
CI Members are the owners of all CI assets and elect the Board of Directors who choose our officers, and can change By-Laws (except for corporate purposes).

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:

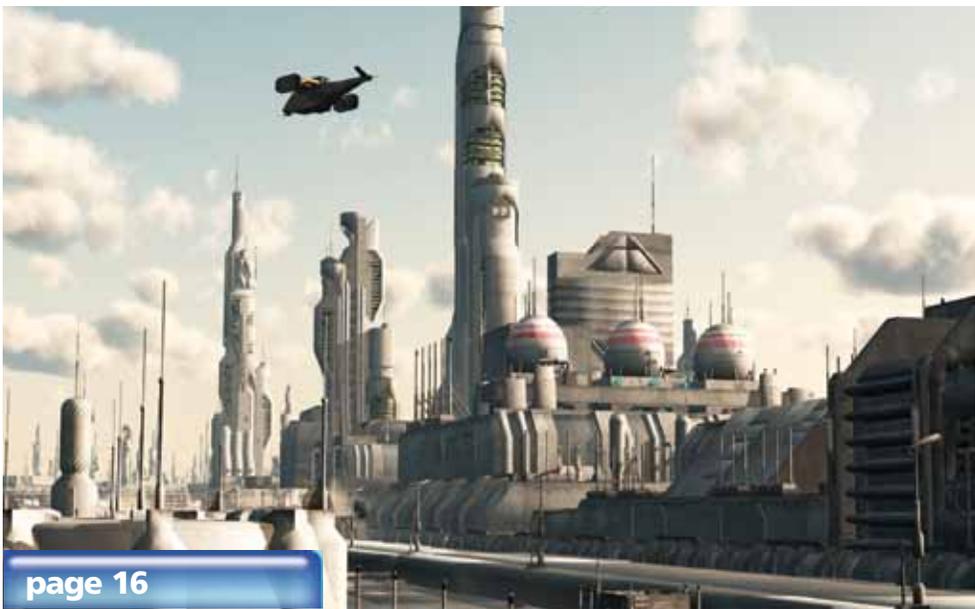
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Visit us online at [www.cryonics.org](http://www.cryonics.org)



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# LONG LIFE MAGAZINE

A PUBLICATION OF THE  
IMMORTALIST SOCIETY



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# INTRODUCING THE NEW LONG LIFE MAGAZINE

Hello to All and Welcome Back! Long Life has been “off line” for some time now but we’re back and, we hope you agree, “better than ever”. As the President of the Immortalist Society, I’m more proud than ever of the publication, which was put out before primarily through the hard work and very, very commendable efforts of John Bull, the IS Vice-President, with help from his daughter Debbie and others.

John and Deb decided to “hang up their shootin’ irons” and the duties in the future will fall to myself with assistance from other dedicated folks. In the future this space will generally be filled with the CI President’s report. This time, however, we decided to place in some remarks from Deb Fleming immediately below from a previously planned issue. This is our way of starting off this brand new launch of a great magazine in giving at least some credit (and, frankly, still not enough) to a person who worked for years on producing it with not enough recognition for his dedication and hard work. Thanks as well to Deb for being willing to help and “step into the breach” when needed to keep things going.

Thanks as well to Joe Kowalsky who checked a good deal of this issue for typos, paragraphing, grammar, etc. without being overly rigid where it would disturb the author’s writing style. Joe also double-checked many of the articles for clarity and, to the extent he could, accuracy. This issue is, however, somewhat of a “hybrid” of a previously planned issue with some new articles and involvement by various folks at various times. Neither Joe or John Bull or Debbie Fleming can be blamed for any errors that occurred. The good parts are due entirely to their hard work and any errors, inaccuracies, or poor appearance are my mistakes alone. Keep looking for us in the future and we’ll try to continue John Bull’s tradition of giving you useful and interesting information about cryonics!

## **York Porter**

President, Immortalist Society  
Executive Editor, Long Life Magazine

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## **Deb Fleming’s Comments** (from our previous draft edition)

I just want to take a moment to thank all of our Long Life readers for their patience and understanding as we make a very slow (and a bit painful) transition of our newsletter. As you have already heard, John Bull has asked to be relieved of his editorial duties. I have stepped in temporarily to keep things going. I have to tell you, it’s a time consuming and at times, daunting task. I give John (or in my case, Dad) and all those in the past much thanks for all the hard work and dedication they have given to the newsletter. I am learning first hand what it takes to gather material, format, and everything else that goes into it. Since I will not have a chance to write my Die Healthy column for a while I’d like to ask those that favor my column to help out! Please send any interesting health related material to me at: [dfleming10@cfl.rr.com](mailto:dfleming10@cfl.rr.com). Thanks again for hanging in there with us. We will have things straightened out here very shortly. And if you see John Bull around please shake his hand and say “Thanks!”



# LONG LIFE

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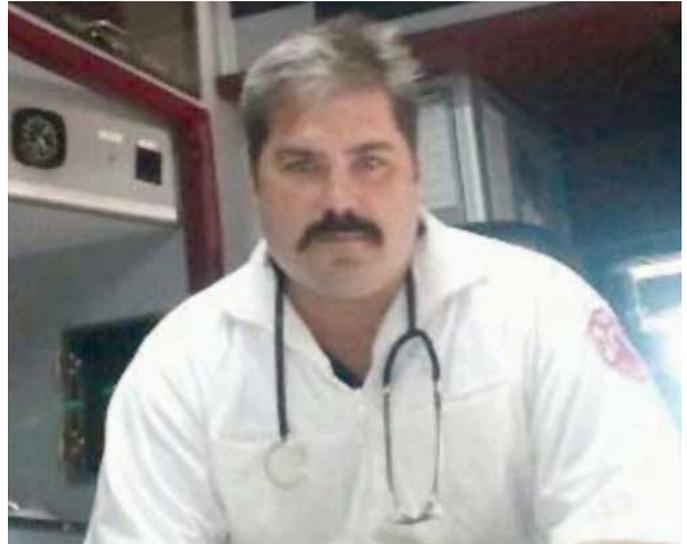
It's a privilege and an honor to have been named CI's 4th president, and I am truly humbled to be writing the CI Executive Report for this long-awaited edition of Long Life magazine.

I've been asked to introduce myself as CI's new president so I will try and let you know a little bit about myself. First and foremost, I have been a cryonics enthusiast for 26 years and a member of CI for nine years. I'm a firm believer, advocate and supporter of CI's goals and objectives [cryonics, life-extension, transhumanism] and I'm excited for this opportunity to be able to apply my enthusiasm and energies to leading CI as the new president.

On the personal side, I have been married to my lovely wife Maria for 16 years and we have 3 young boys. Professionally, I work in Emergency Medicine as a Nationally-Registered EMT Paramedic for the Milwaukee Fire Department in Milwaukee, WI. My credentials include experience and certification in Advanced Cardiac Life Support and Pediatric Advanced Life Support. I also teach CPR for the American Heart Association and teach Emergency Medical Technicians at the Milwaukee County Emergency Medical Center. As an EMT, I think it's fair to say that I have a significant amount of practical experience regarding life and death situations and the emergency medical process. My goal is to apply my knowledge and practical experience to our organization to help our patients survive the trip to the high-tech wonder hospital of the future we're all hoping will exist someday. A big part of that job is to make sure we're doing the right things here in the present, and I believe CI will benefit from my basic common-sense approach to operations, processes and procedures. I also believe in a frugal and mission-oriented cryonics organization with an emphasis on moving us forward logically and strategically.

One of those strategic ideas I'll be working on during my tenure is to make CI a leading resource to help provide basic emergency cryonics training for all who wish to learn. I emphatically believe a baseline degree of local standby planning is essential to successful suspensions, and sincerely want to see CI taking the leadership role in this type of training. Once our program is up and running, the next logical step will be to roll it out as a template for local support groups.

Regarding Long Life Magazine, a lot of changes have taken place here in the six months since our long-time editors John Bull and Debbie Fleming retired from the magazine. The Immortalist Society has certainly had its hands full filling their shoes to get this magazine



produced and into your hands, and that's a real compliment to John and Debbie who made it look so easy for so many years. I'd like to take this opportunity to thank them both for the hard work and dedication they've put into the magazine over the years.

York Porter has now stepped in to helm the magazine, and I'm confident he'll put the same dedication, effort and enthusiasm behind LL that we've come to expect, and that moving forward we're only going to get better. I think you'll like what you see starting with this issue. I'm excited to see the magazine back on track after its long delay and looking better than ever with a new design and more color pages. It's motivating to see a new team of dedicated and hardworking people at the helm here, and I'm confident York's work on the magazine will make us all proud.

CI has also been consulting with a website developer to upgrade and redesign our website to better serve our members and to more effectively promote and educate the public about cryonics, which is one of my key goals. I'm enthusiastic about what I'm seeing so far, and I hope you'll agree when it's done!

However, the magazine and web site aren't the only exciting change happening with our two sister organizations. CI itself has gone through some significant changes in the past six months as well. First, we've done some facility upgrades including a new roof and exterior painting - pretty much the whole exterior of CI has received a much needed makeover. In addition, I'm also proud to report the installation of a new integrated security camera system at our facility. Andy Zawacki installed the video system



which covers CI's perimeter 360° with several strategically placed cameras to ensure patient safety and security. All of the cameras are remotely accessible with video back up as an additional deterrent to supplement the existing security systems. Thanks to Andy for his hard work and dedication.

These changes and upgrades can and do take time and we appreciate the patience that our members have had during this transitional period. What's most important is knowing that we're moving in the right direction and that our labors are already starting to bear fruit. For example, after making improvements on CI's Facebook page, we saw an increase from 245 to 576 page subscribers, more than doubling our numbers in a period of only 6 months. Only time will tell if our Facebook numbers translate to real CI memberships, but the good news is that our actual CI membership numbers are already up. We're now up to 1,050 members, placing CI ahead of all other cryonics organizations in both membership and practical affordability.

That's exciting news, but while these numbers are promising we need to remind ourselves we still have significant work ahead of us. Membership numbers are only one small piece of the larger Cryonics Movement, and there are many other challenges we need to overcome. A chief obstacle is increasing awareness and understanding of cryonics in order to foster more popular support for cryonics and associated life-extension and transhumanist technologies. Increased public awareness, understanding and acceptance can only help stimulate interest and research that can benefit the cryonics movement. Increased support for cryonics from the public, academia and business sectors translates to increased R & D into cryonics-associated technologies and applications. Ultimately, that research will provide us with ever-more advanced tools and improved solutions for everyone. With this objective in mind, CI will be working with leading cryonicists and cryonics organizations to improve outreach, share information and advance the science and practical application of cryonics.

I'm passionate about this need to educate the public about cryonics and CI. There needs to be a push to really market the life-affirming concept of cryonics to the average person who thinks we're all mad scientists, simply because they don't understand or grasp what we do and what we're really about. I believe we've failed to effectively communicate the humanitarian aspect that is at the core of cryonics. We need to show that cryonics is ultimately about living, about hope and about the future, and not just about weird, creepy and impersonal scientific experiments.

Much has gone into the logical debate of why cryonics is reasonable and this is critical to keep in mind. It's our base. However it's evidently not enough. People often attack cryonics based on a knee-jerk emotional response because they don't understand it. The natural

human instinct is to fear the unknown, and when someone is afraid they react emotionally, not logically. Unfortunately, we haven't done a very good job of addressing that natural emotional response effectively, and we can't by being strictly logical and scientific.

I believe we've neglected presenting cryonics from the emotional, artistic and humanitarian points of view that are really our core objectives. Rather than avoid or ignore normal human emotions (logical or not,) we need to better understand, harness and use emotion positively. If people are afraid, we need to calm their fears and show them the promise of stepping out into the sunshine of a better tomorrow, rather than focus exclusively on the cold technical, and somewhat macabre aspects of getting there. We need to be more adaptable and more empathic if we want to reach beyond the left brain, hard science and cool logic crowd and make cryonics accessible, acceptable and non-threatening to the public at large. Logical and scientific folks already get it - to realize the amazing potential cryonics offers for everyone, we need to be successful in changing hearts and minds. There's nothing wrong with dressing up sound and established scientific logic and presenting a more humanistic face that average people can relate to.

If we expect to be more secure and to last long into the future we need some real growth. I think it's time to be a little more flexible and open to new ideas. Only this way can we learn to be better at what we do and evolve forward. Our goal is to see tomorrow, so let's take the steps today to help ensure we all have an opportunity get there!

Cryonics to me is reaching beyond conventional emergency medicine to a more profound level of respect and reverence for life - a respect that goes beyond the point when today's doctors and medical professionals have simply given up. Cryonics is venturing forward past common convention and into the sometimes ridiculed realm of dreamers, entrepreneurship and invention. When you reach into that realm you begin to explore what is best about being human. It's the dreamers that gave us the first airplane and drove us to build rockets to reach for the moon. History is filled with heroic examples of people who fought conventional dogma and dared to dream up new ideas. The world is a better place because there are optimists willing to take a stand and work for good ideas and make such dreams a reality. Cryonics is not just the personal dream of a better and longer life, it's a quest and hunger for what makes life worth living in the first place. It's our very own opportunity to engage in the good fight to make the world better. Believe me, there is no greater personal gift than the self-satisfaction of being a part of saving human lives. Cryonics gives its advocates this precious gift if they are willing to work hard and accept it. For this reason, I am grateful and proud to play a small role in this awesome experiment. Dreamers like Robert Ettinger gave us something very powerful. He lent us his dream. Let's make it a reality.



## Immortalist Society 2012 Annual Meeting Report

*York W. Porter, Immortalist Society President*

The Immortalist Society held its annual meeting at the Cryonics Institute's facility in Clinton Township, Michigan on Saturday, September 22, 2012. This was somewhat of a change from the usual Sunday afternoon meeting that has been the pattern in past years. Immortalist Society President York W. Porter called the meeting to order immediately at the end of the Cryonics Institute meeting.

Regrettably, due to various factors, the only officer that attended this year's meeting was the IS President. This greatly limited, of course, the length of the meeting and the presenting of reports during the meeting.

In what is a fairly regular explanation, some time was taken by the IS President to explain that the Immortalist Society began as the old Cryonics Society of Michigan, which was a full fledged cryonic suspension organization that was formed in the relatively early days of the history of cryonics. Later on, the emphasis of the organization became one of education and research in the field of cryonics.

A couple of renamings occurred through the years. The Cryonics Society of Michigan first became renamed as the Cryonics Association. The purpose of this was to indicate its more broad appeal than just to individuals living in or around the Michigan area. Later, a second renaming occurred in which it began to be called the Immortalist Society, in part to associate it with the title of Robert Ettinger's seminal book on the subject of cryonics. Mr Ettinger's book was entitled, of course, *The Prospect of Immortality*.

While initially it was true that the Immortalist Society served as an organization whose purpose was to engage in work involving full fledged cryonics suspension, its emphasis gradually changed over the years into one where, as mentioned above, the primary concerns are now education and research. At the present time, the educational part of the efforts of the Immortalist Society are carried out through the publication of *Long Life magazine* which comes out every other month. Recently, an Immortalist Society website has come online - [www.immortalistsociety.org](http://www.immortalistsociety.org).

The research program, for which donations are tax deductible under the U.S. Federal Tax Code, is presently being done through a contract that the Immortalist Society has through a company called Advanced Neural Biosciences, Inc. (ANB, Inc.)

ANB, Inc is a corporation based in Oregon. Research that is done

by this corporation involves experiments that are directly related to the implementation of cryonics. The research team of ANB, Inc., consisting of Chana and Aschwin de Wolf, were present at the IS annual meeting.

In view of the lack of presence of other officers, reports were very limited in their presentation. Comments from the floor included one from IS member and outgoing CI President Ben Best who expressed his appreciation for the efforts of John Bull, who served until recently as the editor of the regular Immortalist Society magazine publication *Long Life*.

Long time IS member Joseph Kowalsky was recognized during the meeting. Joe explained a relatively new project for the Immortalist Society, the development of an organ cryopreservation prize. This prize, whose initial amount will be set at a level of not less than fifty-thousand dollars, has been started to help spur research into an area that is both beneficial to cryonics and to society in general. That area is the ability to store specific individual organs at cryogenic temperatures for later use in transplantation. The ability to keep organs readily available for replacement of failing organs in individuals with various health problems has obvious implications in both present medical practices and in the furthering of the acceptance and advancement of cryonics itself.

John Besancon, who has served as the Immortalist Society treasurer for many years, had indicated previously his desire to make 2012 his last year as IS treasurer due to some health problems he has been having. Rich Medalie stated that he was willing to take the position pending some discussion with John Besancon as to the exact and particular duties and/or requirements of the position. Mr. Medalie was chosen as Treasurer-elect pending those discussions and the other officers were reelected to their respective positions. Thus, the officers for the year 2013 will be York W. Porter, President; John Bull, Vice-President, Royse A. Brown, Secretary, and Rich Medalie, Treasurer. These officers will serve from the first day of January of 2013 until the last day of December in 2013. The next election for their respective positions will be held at the annual Immortalist Society Business Meeting which will be held in the Fall of 2013.

Upon proper motion, the business meeting of the Immortalist Society was adjourned. Members then proceeded to engage in a prepared meal and individual friendship renewals and discussions.



# CRYONICS INSTITUTE MEMBERSHIP STATISTICS:



CI crossed an important milestone last may when it achieved an excess of 1000 members. We have since seen a membership increase of 5% in the last 6 months. As of January 19, 2013, the Cryonics Institute has 1,050 Members and 114 Patients. Of the 1,050 Members, 504 have funding and contracts in place for human cryopreservation. Of the 504, 136 have arrangements for Suspended Animation Standby and Transport. There are 93 pet patients. CI has thus pulled ahead as a leader in cryonics both in terms of membership and practical affordability for all.

## Cryonics Institute Membership by Country:





# Meet Rafi Haftka



In 1959, when I was 15 in Israel I realized that my generation could possibly be one of the last few to have a short life span, and I pondered how I could jump 200 years into the future, which was my estimate at the time of how long it would take to reach much longer life spans. I came up with either flying very near the speed of light, or being frozen.

The first looked more doable to a 15 year old, and so I decided to become an aerospace engineer, in the hope of getting on a space ship. By the time I got my PhD in Aerospace Engineering from UC San Diego in 1971, I realized that I would have to wait at least 200 years for a space ship that could fly fast enough. So I went to the UC library and found information on Bob Ettinger and cryonics.

After getting my PhD, I did a post doc at NASA, taught at Israel Institute of Technology, Illinois Institute of Technology, and Virginia Tech, and since 1995 at the University of Florida, where I am a Distinguished Professor of Aerospace and Ocean Engineering. (See [www.mae.ufl.edu/haftka](http://www.mae.ufl.edu/haftka)).

I got into aerospace engineering for the wrong reason, since I had very little interest in the field, and so I ended up as more of an applied

mathematician than an engineer. My research area is optimization algorithms for designing light weight aerospace structures. I was one of the founders and second president of the International Society of Structural and Multidisciplinary Optimization (see [www.issmo.net](http://www.issmo.net)).

I enjoy doing research and teaching. I have hoped that I could do research or help others do research that is useful to cryonics, but I have not found yet a way to do that, since my forte is algorithm development for problems that require a lot of computation to be solved. So far, I have not found a problem in cryonics that requires this kind of expertise.

I have been a member of CI for many years, and last year I also signed up with SA. My motto in life is that for every controversial topic, I can find somebody who is more intelligent and better informed than I am who has the opposite view. So if I am right and he or she is wrong, it is not due primarily to either intelligence or knowledge, but to luck. I apply that to my belief in cryonics.

So even though my family and friends aren't sold on the idea of cryonics, we don't get into serious arguments about it. I parry arguments against it but with the attitude that I am not trying to convince them to climb aboard. Unlike most cryonicists, I am ambivalent about recruitment. It is not clear to me that having one billion frozen cryonicists will contribute to our chances of being revived.

## CI Board of Directors - 2012 Election Results

The twelve Directors of the Cryonics Institute Board are elected for three years in groups of four every September at the Annual General Meeting held at the Cryonics Institute facility. The requirements for becoming a CI Voting Member can be found in Section 3.01(B) of the CI By-Laws. Six candidates threw their names in the ring for four Directors' positions for 2012: Royce Brown, Constance Ettinger, Paul Hagen, Pat Heller, Joseph Kowalsky and David Stodolsky.

Candidates Constance Ettinger, Pat Heller, Joseph Kowalsky, and new director Paul Hagen were elected for the next three years. Here is a little about CI Director Paul Hagen:

Paul Hagen is a Michigan native who has been living in Waupaca, WI for the past twenty years where he and his wife raise their two wonderful children.

Paul graduated from Northern Michigan University with a Bachelor's in Finance in 1986. For several years he worked in the

banking industry doing customer service and lending, including a Personal Banker position with Associated Bank in WI. Currently Paul works for the State of Wisconsin as a Financial Specialist assisting Veterans with financial counseling, Medicaid claims, and funeral trusts. Paul is also a licensed life insurance agent, which gives him a wide range of knowledge of multiple financial instruments. Although he no longer sells any products, Paul continues to be an avid private investor extensively studying the craft of protecting and growing assets.

In 1996 Paul was elected to his local city council. He is Chairman of Waupaca's Board of Public Works, also having served on the Finance, Judiciary, and Personnel committees. In 2008 he was elected to two terms as a supervisor on his County Board.

Paul has served in numerous civic and community organizations including the Red Cross, Lions, Jaycees, Loyal Order of

Moose, and the Knights of Columbus. He was appointed to serve on a regional tourism marketing board in 2008.

Paul grew up in Menominee Michigan where he spent countless hours working and contributing to his father's business Cory Laboratories. Although he has little formal scientific training, Paul learned much from this experience. Paul's Dad Jerry Hagen was a Chemical Engineer and is Patient #81.

With his Dad at CI Paul has a very strong vested interest in the long term stability, growth, and safety of the Cryonics Institute. He said *"I have a strong desire see CI prosper. I envision a vibrant and relevant organization bringing together many types of people toward the possibility of a successful future."*

Paul can be contacted at:

[waupacaman1@gmail.com](mailto:waupacaman1@gmail.com).



# Ben Best's Trip to Argentina

By Ben Best

## *Exploring cryonics in South America*

From May 31 to June 7, 2012 I was in Argentina - my first trip to South America. The purpose of the trip was to attend a Society for Cryobiology Conference (<http://cryo2012.org/>), but I arrived a few days early so that I could meet some people and engage in some tourism. I had two cryonics-related contacts in Argentina, Cryonics Institute member Rudy Goya, who was profiled on page 6 of the Nov/Dec 2011 issue of *Long Life* magazine and a woman named Maria who has been cryopreserving her brother's brain.

Rudy made some impressive efforts to exploit my visit to promote cryonics in Argentina. He also did a terrific job of being a host and making my visit to Argentina uncomplicated and enjoyable. He arranged for me to be interviewed by a journalist from one of Argentina's largest newspapers, but the journalist chose to interview me by telephone and by email rather than in person.

Rudy also arranged for me to meet with some Argentine Transhumanists and to give a PowerPoint presentation on cryonics at the school of medicine in La Plata where he works as a biogerontologist.

When I told Rudy of my desire to have a bus tour of Buenos Aires (BA), he arranged for me to be met at the BA airport by a fellow from La Plata who wanted to go on a bus tour of BA. My companion was to be holding a sign with my name on it.

Unfortunately, when I arrived at the BA international airport I saw many people with signs for other people, but none for me. After waiting and walking around quite a bit I finally despaired and went to the airport communications center where I tried phoning Rudy and sending him email messages to no avail. That failing, I found a booth renting cell phones for \$75 that would give me 100 minutes of outgoing call time anywhere in Argentina for a period of one month. I had considered renting such a phone before coming to Argentina,

but I did not think I would have a use for it. The airport booth would be going out of service at the end of the week, however, which meant I would have to return the phone to an address in Buenos Aires.

At the end of the tour we met Rudy at a coffee shop, at which time my companion left to take a bus back to La Plata. I was not quite finished being a tourist, however, and I requested that we go to Plaza de Mayo. During the dictatorship of the late 1970s and early 1980s up to 30,000 mostly young political radicals disappeared who were secretly tortured and murdered. Every Thursday at 3:30 p.m., mothers whose children had disappeared marched in the Plaza partly as protest and partly in the hope of gaining information about the fate of their lost children.

Rudy did not think the event would still be relevant due to the current government's prosecution of such crimes, but he reluctantly accompanied me to the Plaza and was surprised to see the marching mothers. He interpreted the event as an effort to ensure that others do not forget what had happened. He was a student at the time of the disappearances, but was not acquainted with anyone who had disappeared.

I was a bit disturbed at the thought that English speaking tourists might be badly treated visiting Argentina on the 30-year anniversary of the Falklands War. (I was prepared only to refer to the Falklands as Islas Malvinas). But Rudy told me that losing the war was really a blessing because the defeat meant that the dictatorship was no longer able to remain in power. I heard no other mention of the War during my visit.

The "taxi" Rudy had rented for the day had been a safe place to store my luggage during my bus tour of BA, and the driver was at Rudy's disposal to take us to the cafe where Rudy had arranged for us to meet with some Argentine Transhumanists and other cryonics-friendly people, notably a woman named Maria. Maria has been storing the brain of her brother at dry ice temperature. She does not want to keep her brother's brain in Argentina, but has been unable to find an acceptable alternative. Alcor wants \$155,000 to take the brain, the Cryonics Institute (CI) will only accept whole bodies. Maria has not felt comfortable sending the brain to KrioRus because of perceived instability of Russia and the newness of KrioRus. Maria had sent individual email messages to every CI Director trying to persuade them to accept the brain. At this time CI's directors have concluded that neurosuspensions would do more to harm the image of cryonics rather than help.

Also at the meeting were Santiago Koval, the author of a Spanish language transhumanist book *The Posthuman Condition (La Condicion Posthumana)* who has his own website <http://www.santiagokoval.com/> as well as a lawyer and his architect girlfriend, and another lady who was an economist.

All but the economist were interested in cryonics and life extension.



The economist kept probing me about the role of the unconscious in economic decision-making. I tried to incorporate this into the discussion by using the example of the decision to choose cryonics. I gave the example of two CI Members dying of cancer, one of whom canceled her cryonics arrangement on her deathbed because she was sick of the misery of life, and the other of whom refused to take pain killers because he wanted to savor every last moment of life with full awareness. The economist was more interested in the unconscious, so I suggested that she Google machine consciousness. The question was raised of how it could be confirmed, without experimenting on cryonics patients, that such patients could be reanimated without any loss or alteration of memory and identity. Animal testing would not be sufficient. I expressed the belief that full reconstruction of the original brain would completely restore memory and identity. The group parted company with the intention of meeting again, and Rudy was hopeful that this was the beginning of a cryonics discussion and support group in Argentina.

The driver of Rudy's taxi took us to La Plata where Rudy had graciously arranged for me to have a hotel room. The next morning Rudy picked me up from the hotel in his own car and drove me to his labs in the school of medicine. After a brief tour we went to the lecture hall where I was to give my PowerPoint presentation. We had no idea what the turnout would be. Rudy had at first been shy about publicizing the event among his colleagues, but eventually decided to promote to the fullest. The article about me and cryonics in the national newspaper meant that some journalists planned to attend. (See [Lancion.com](http://Lancion.com).)



~ Rudy, Ben, and Santiago Koval

I counted an audience of 27 people, most of whom were distinguished academics or researchers, and all of whom were respectful and attentive. There was some concern when I mentioned that the rabbit kidney vitrification had only been done once in 2003, in one rabbit, and had not been replicated. After the lecture I was interviewed by a La Plata newspaper journalist, (<http://bit.ly/KGaEpi>) and then both Rudy and I were interviewed by some TV journalists. That evening Rudy treated me to a dinner at a restaurant. Argentines eat dinner fairly late. Rudy and I arrived at about 9 P.M., and we were among the first. Rudy's wife works in his laboratory, and she sat beside him at the 2011 SENS conference because she would pick-up on things that he would miss. I am normally mostly vegetarian, but that evening I took the opportunity to have a plate of calf thymuses. It was fairly flavorful, although there was some sinew that I gave up trying to chew. When I parted company with the couple that evening, Rudy's wife presented her cheek for me to kiss, which I did. It is a practice of Argentine women to be kissed on the cheek by men, and it made me uncomfortable about appearing overly forward – as it would

be considered in North America. On the other hand, I did not feel comfortable foregoing the practice and appearing to be rude or cold.

The next day Rudy and I took a bus to Rosario, Argentina where the annual Society for Cryobiology conference was being held. Rudy's field is biogerontology, but he decided to attend the conference partly out of curiosity, and partly to spend more time with me. He discovered that a lot of cryonics-relevant technology could be learned from cryobiologists – and that cryobiological research has the potential to contribute much to cryonics, despite whatever hostility and/or skepticism cryobiologists may have toward the practice of cryonics. Like me, Rudy came to appreciate the pointlessness of being confrontational with cryobiologists over cryonics, and what a valuable learning experience these conferences can be.

Reflecting on Maria and her brother's plight, I gave her a call on my rented cell phone after I had been in Rosario a couple of days.

I pressed her for more details. Her brother was older than Maria, and they had been living together at the time of his death.

When she found him dead in the shower she called for help, but her brother was pronounced dead by emergency medical services. Her brother experienced 8 hours of warm ischemia in their apartment until he was taken to the morgue. Autopsy revealed the cause of death as an aortic aneurysm. The brain was removed, the cerebellum was severed from the cerebrum, and both were placed in the abdomen.

There was another 24 hours of warm ischemia during the funeral after which Maria's brother sat in a -4C vault for 3 or 4 weeks before Maria asked a pathologist to remove the brain from the abdomen so she could transfer it to her home freezer (-20C) and finally to dry ice temperature. Although Maria had outlined her brother's fate in a description sent to me, the document had not made it clear that her brother had suffered more than 30 hours of warm ischemia. Maria asked me if there was any point in continuing storage.

Despite my understanding that most neurons are necrotic after 12 hours of warm ischemia, I can't help but wonder what structure may be left in a brain that is still tangibly solid – and what future technology may be able to do with it. I told her that it is more conservative to save the brain. I told her that she is a pioneer by being the first person in Argentina to preserve a cryonics patient (her brother being Argentina's first cryonics patient). When I said I respect her efforts, she denied that there is anything other than desperation in what she had done.



## ACS Annual CI Inspection For 2012

*York W. Porter, Immortalist Society President*

On Sunday, Sept 23, 2012, York W Porter carried out an inspection of the Cryonics Institute on behalf of ACS. Mr. Porter, the writer of this column, is both a CI suspension member and a member of the Board of Governors of the American Cryonics Society.

Mr. Andy Zawacki, who is a key employee of the Cryonics Institute, as well as a member of the Board of Directors of the Cryonics Institute, greeted Mr. Porter at the door of the CI facility. Mr. Zawacki has been employed by CI for a number of years now, and is quite knowledgeable about the operations of and the business affairs of CI. Mr. Zawacki was, as has been the case in years past, quite pleasant to deal with and very forthcoming with any information which the ACS Inspector asked about.

Among items looked at were invoices pertaining to liquid nitrogen purchases. It was noted by the ACS inspector that the amount of liquid nitrogen seemed to be reasonably consistent with the number of cryostats presently in use at the CI facility. As in years past, the policy of CI has been that more than one liquid nitrogen supplier is utilized in order to decrease the chances of a disruption in the supply of liquid nitrogen.

In one case, a document was examined which came from one of the liquid nitrogen suppliers which indicated that the liquid nitrogen provided by them met specific quality assurance standards. The bulk tank, which stores the liquid nitrogen before CI employees transfer it into individual cryostats and which is located behind the CI facility, was inspected visually and appeared to be in excellent working order.

Further documents looked at were several written records of cryostat maintenance, the business license for the Cryonics Institute and copies of a recently published financial statement that was given out at the Cryonics Institute annual meeting the day before. All records examined appeared to be in order and the CI financial statement, which is prepared by one of the Cryonics Institute Board Members who is a CPA, showed an organization that was active in keeping up with its financial status.

It should be noted that in addition to the CI Board Member that prepares the CI annual financial statement, another CI Board Member, who also has a background in the area of finances, regularly comes by the CI facility for "surprise" inspections of CI financial books and records. To date, this individual has stated that zero irregularities have been found in these random visits.

No irregularities were noted in any paperwork looked at by the ACS inspector. The business records that were examined indicated that CI is a generally well-run organization and that the members of the Board of Directors are continuing to receive information that should be of assistance to them in carrying out the proper management of CI. A "walk through" of the physical plant was the next item on the inspection list.

An inspection of the physical plant revealed cryostats that were well organized in rows. A "catwalk" was present for the refilling of the cryostats with liquid nitrogen. Adequate provisions seemed to be being taken to insure that all cryostats that were in operation were correctly filled at all times at a proper level. No damage of any kind was noted to any cryostats in the building. Enough cryostats were present on site that would allow for approximately 20 more patients to be stored. Supplies and tools were noted to be readily at hand and sufficient in number for both normal work inside the building and for any transfer of patients received for immediate placement either into the so-called "cool down box" and/or any cryostats as needed.

The building itself was generally well maintained with recent painting done and Mr. Zawacki informed the ACS inspector that recent repairs to the roof had been carried out. Security cameras with 24 hr a day recording capability had been added since the previous inspection along with warning stickers for any intruder that they were under video surveillance. This was in addition to an already existing security alarm for which stickers also existed outside the building to dissuade possible intruders.

At the suggestion of the ACS Inspector, Mr. Zawacki cheerfully added a security alarm sticker to one or two to other areas outside of the facility. Again, all of these stickers indicate clearly to any passersby of the fact that an alarm company has been hired by CI to help maintain security. These are in addition to the "video surveillance" stickers.

In summation, while no inspection can uncover every conceivable problem, the annual ACS inspection of CI continues to indicate, as in years past, that CI is a reasonably diligent and conscientious organization that is striving to maintain itself and further its purposes in a businesslike fashion. Further ACS inspections will continue, of course, in the future to help ensure that continues to occur.



# Oregon Cryonics Symposium

THIS PAST JULY 7th THERE WAS A SYMPOSIUM HELD IN OREGON, SPONSORED BY CHANA AND ASCHWIN DE WOLF. SINCE SYMPOSIA ARE EXCHANGES OF THOUGHTS BY PROFESSIONALS IN THEIR PARTICULAR FIELD, WE HOPE THE PARTICIPANTS WILL MORE FULLY UNDERSTAND PROBLEMS (AND POTENTIAL SOLUTIONS), SOME OF WHICH ARE MENTIONED BELOW IN REMARKS BY CHANA DE WOLF:

“Like all other organs, the brain accumulates molecular and cellular alterations throughout life that are eventually deleterious to its function. Unlike all other organs, it cannot be replaced wholesale by a new one created in the lab; the damage must be repaired piecemeal. In this talk I will survey the current status of repairing the three major forms of damage seen in the brains of elderly people: the amyloid plaques that accumulate in the extracellular space in Alzheimer’s disease, the various intracellular proteinaceous aggregates seen in all the major forms of neurodegeneration, and the loss of neurons of various types seen in the advanced stages

of Alzheimer’s, Parkinson’s and in aging in general. **“Relevance to revival of cryonics patients and to certain schemes for uploading will also be discussed.”** (emphasis added by Long Life editors)

It should be noted that Chana de Wolf has a Masters Degree in neuroscience and is the President of Advanced Neural Biosciences, Inc. Aubrey de Grey, Ph.D spoke on Repairing the Aging Brain: The SENS Approach Other speakers were Ben Best, CI President and Max More, Alcor President.

Readers should also be aware of the fact that ANB, Inc. is a company which has carried out research directly related to the field of cryonics. Cryonics is not, as is frequently stated by its critics, either a religion or a cult. The founder of cryonics was an individual who had formal training in science and mathematics, and both he and his successors have a deep and abiding interest in using research results from scientific endeavors to improve the field of cryonics.

## Coming Soon to a Body Near YOU!

By John Bull



For years we’ve been told by Ray Kurzweil and many others not to worry about damage to the body caused by freezing (except the brain). Their theory was that 21st century medicine would send little nanobots through the body making repairs as they go, resulting in a rejuvenated younger body.

So it came as quite a surprise to read the headline in a recent

FLORIDA TODAY article, **“SCIENTISTS, SURGEONS WILL SOON LET NANOBOTS ROAM INSIDE BODY.”** I thought this was 20 to 30 years in the future! Most of this work is being done at New York Presbyterian Hospital, Columbia University’s Medical Center, and Pittsburgh’s Carnegie Mellon University.

Imagine a tiny snake-like robot crawling through your body, helping a surgeon identify diseases and perform operations. It’s not science fiction. Scientists and doctors are using the creeping metallic tools to perform surgery on hearts, in prostate cancer cases, and with other diseased organs. The snakebots carry tiny cameras, scissors and forceps. For now they’re powered by tethers that humans control. Dr. Michael Argenziano said, ‘It won’t be very long before we have robots that are nanobots, meaning they will be inside the body without tethers.’ He stressed that the new creations work best when they’re designed for very specific tasks. The robot is a tool. It’s no different in that sense than a scalpel. Manuela Velosa, a robotics expert at Carnegie Mellon, has been building robots that ask humans for help when they don’t know what to do, as well as teams of robots that play soccer against each other. She believes they are much closer to having robots be able to coexist with humans. “The beautiful thing is you see the robots learning.”



# Common diabetes drug promotes development of brain stem cells

*SickKids researchers suggest metformin helps produce new brain cells and enhance memory*

By: The Hospital for Sick Children (SickKids) - <http://www.sickkids.ca> July 5, 2012 \* Reprinted with permission

TORONTO – Researchers at The Hospital for Sick Children (SickKids) have found that metformin, a drug commonly used to treat Type II diabetes, can help trigger the pathway used to instruct stem cells in the brain to become neural (nerve) cells. Brain stem cells and the neural cells they generate play a role in the repair of the injured or degenerating brain. This study suggests a novel therapeutic approach to treating people with brain injuries or potentially even neurodegenerative diseases.

The study – led by Dr. Freda Miller, Senior Scientist at SickKids and Professor in the Department of Molecular Genetics at the University of Toronto – is published in the July 5 advance online edition of Cell Stem Cell.

“If you could take stem cells that normally reside in our brains and somehow use drugs to recruit them into becoming appropriate neural cell types, then you may be able to promote repair and recovery in at least some of the many brain disorders and injuries for which we currently have no treatment,” says Miller.

The research team says it was serendipity that led them to this

study. About a year and a half ago, they found a pathway known as PKC-CBP that signaled embryonic neural stem cells to make neurons. Around the same time their collaborators from Johns Hopkins Medicine found that the same pathway was activated by metformin in liver cells; this was how metformin controlled glucose levels. On the basis of these findings, Miller’s team thought that perhaps metformin would activate the same pathway in neural stem cells, and would provide a way to enhance neural stem cell function in the brain.

Their hunch turned out to be correct. The researchers found that metformin promoted differentiation of human and mouse neural stem cells in culture. In adult mice, metformin was found to increase the development of new neurons in the brain and when mice performed water maze tests, metformin was found to increase their ability to learn and remember.

Because metformin is already a commonly used drug, clinical trials may not be very far off. “As a next step, we would be interested to see if individuals with acquired brain injury might benefit from taking metformin,” says Miller.

## Progress on the IS Organ Cryopreservation Prize

As announced in a previous edition of Long Life, the Immortalist Society decided to proceed “full speed ahead” with a concept proposed by long time member Joe Kowalsky. Joe’s concept was to develop a cash award for an “Organ Cryopreservation Prize”. The purpose of the prize will be to award a minimum of fifty thousand dollars to any individual or group of individuals who are able to place certain mammalian organs at cryogenic temperatures and to transplant those organs for a period of nine months and to show, during that time period, proper clinical function of them. The organs in question are the heart, lung, kidney, liver and pancreas. Other organs may be the subject of research leading to the awarding of the prize if pre-approved by the Immortalist Society. Fundraising is underway now and some contributions have already

started to flow in. We need, however, your help as well.

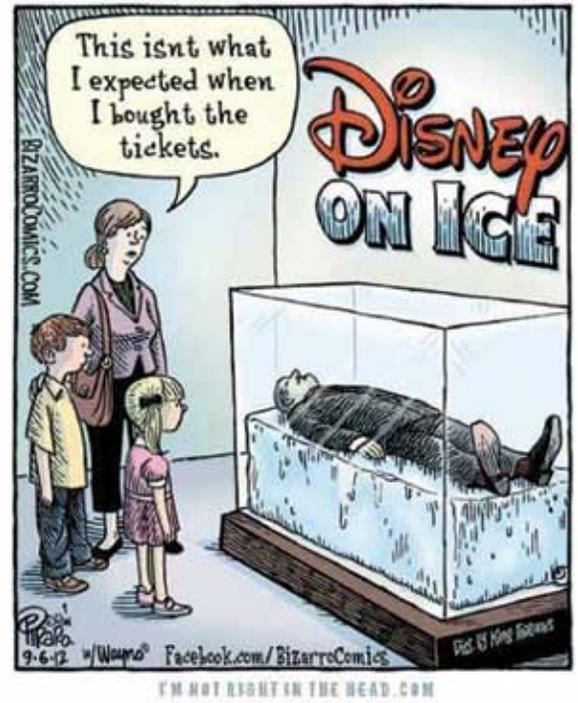
It is a regrettable fact that each year, the need among seriously ill individuals for organ transplants far exceeds the organs available. Any attempts to increase the capability of organ storage are directly applicable to this important problem. Further, even in the event to clone and/or grow individual organs, the problem of storage until those organs are needed is still an important one to solve. Any such work done in this area involving the use of cryobiology (low temperature biology) has obvious and direct implications in cryonics.

Prizes have been long used in many fields, from aviation to food service and other areas, to spur on research and development. The



IS prize is proposed at a floor of fifty thousand dollars and we are in the process of raising that amount now. If you'd like to contribute to a cause that should benefit both traditional medicine and the important field of cryonics, please donate by sending your contribution by mailing your money order or check to to the Immortalist Society at 24355 Sorrentino Court, Clinton Township, Michigan 48035-3229. You can also call The Immortalist Society by telephone by calling (586) 791-5961 with your credit card information (VISA, MasterCard, Discover, or American Express). Another way to donate is directly through PayPal itself by going to their website ([www.paypal.com](http://www.paypal.com)--make donations payable to [immsoc@aol.com](mailto:immsoc@aol.com)). Donations are tax deductible under the Federal Tax Code of the United States.

Thanks so very, very much for your help!! For more info on the Organ Cryopreservation Prize and other matters, please check out the Immortalist Society webpage at [www.immortalistsociety.com](http://www.immortalistsociety.com).



## Australian cryonicists plan new storage facility



A group of cryonicists plans to establish a deep-freeze facility in Australia by 2014. The facility will be able preserve up to 400 corpses to be brought back to life in the future, when medical science is able to restore them to good health. Stasis Systems Australia, an organization formed to build and operate Australia's first cryonic storage facility, has yet to choose a site. But the organization is being assisted by West Australian Marta Sandberg, 56, pictured above, whose late husband, Helmer Fredriksson, is already frozen at a Detroit facility. Ms Sandberg is a director of the US-based Cryonics Institute. She said it would be easier for

Australians to sign up for cryonic suspension with the opening of an Australian facility. Though it would operate on a not-for-profit basis, chilling out for possibly centuries comes at a cost of about \$200,000 for full body storage. Before clients can be revived, Ms Sandberg said cures had to be found for whatever killed them, as well as a cure for ageing. "We want the world to be better when we wake up," she said. "People who are cryonicists love living." Ms Sandberg, from Bridgetown in the South-West, said she refused to accept her late husband had left her forever. "My beloved Helmer could not be dead, I wouldn't allow it," she said.



# Time Travel & Cryonics

***“There ain’t no such thing as &\*\$@ time travel. Every man, woman, and child over the age of four knows it is impossible!”***

That was pretty much the majority opinion of the American Cryonics Society (ACS) board when a cryonicist recently proposed that ACS shepherd a cryonics trust, and — providing that time travel is possible — help guide a few selected folks from the past to the future. The majority of the board members thought that adding time travel to the mix of choices would tarnish our image: kind of like adding an option to our sign-up forms for living forever with the help of magic charms.

There was a minority opinion as well. Edgar Swank, for example, pointed out that the Reanimation Foundation lists time travel as a last-ditch possibility in its agreement with members. A few of our Governors or Advisors have studied the subject and have advanced theories based upon those studies.

The purpose of this article is not to broach the question of whether or not time travel is possible. Rather, I will suggest that there may be a kind of faux time travel going on right now. When Alcor co-founder Fred Chamberlin underwent cryonics preparation recently, Fred’s wife Linda (the other Alcor co-founder) expressed the opinion that she hoped to soon be able to join Fred in virtual reality. It is interesting that one of the Matriarchs of the cryonics movement sees virtual reality, rather than physical reanimation, as the most immediate pathway to reunite with a frozen loved-one.

The Terasem Movement Foundation advocates what I would characterize as a kind of virtual reality: “The common purpose of all of the Terasem Movement Foundation’s (TMF) projects is to

investigate the Terasem Hypotheses which state that:

- 1) a conscious analog of a person may be created by combining sufficiently detailed data about the person (a “mindfile”) using future consciousness software (“mindware”), and
- 2) that such a conscious analog can be downloaded into a biological or nanotechnological body to provide life experiences comparable to those of a typically birthed human.”

(The previous was taken from the TMF website of [www.terasemmovementfoundation.com](http://www.terasemmovementfoundation.com).)

Also of interest (from the TMF website) dated June 5, 2010: “[www.lifenaut.com](http://www.lifenaut.com), is a project of the Terasem Movement Foundation, aimed at offering a form of digital immortality. The Lifenaut project recently launched a fully new version of its award-winning website.”

“The new site focuses on helping users create an Artificially Intelligent based Avatar, that with some time and effort may one day be able to pass the Turing Test, where humans cannot tell the difference online whether they are interacting with the real you or your avatar.”

Featured in the June issue of New Scientist Magazine, [www.lifenaut.com](http://www.lifenaut.com) and its avatars were described as part of the next step of the internet revolution, the coming of intelligent avatars.” Of interest to cryonicists, who share common cause with people in the Terasem Movement, are the efforts by TMF to allow an individual to easily assemble and integrate detailed information about him or her. This information can be assembled during one’s lifetime, or by loved-ones and friends after the person is “on ice”. Whether or not there is ever an actual intelligent being that is a close analog of the





## By Jim Yount

“real” person, the information kept by way of TMF could be quite valuable should cryonics reanimation be possible.

Between you, me, and the gatepost, the reanimated version of yours truly may be missing a few neuron connections and the information that is so stored. So might other frozen guys have a few chunks missing.

Anyone who has played video games for a few years has seen some incredible advances in how real-seeming the games have become. Every gamer I have talked to has told me that the word on the street is that “we ain’t seen nothing yet” when it comes to realism. It may be that the competition to produce better and better video games will be the impetus that will eventually lead to virtual reality worlds for you and me, alive or in the tank!

Here is my own thinking on how this might work out in the short run. The live Linda could enter a virtual reality chamber, snap on some sexy head gear and have some electrodes attached here and there. The virtual reality world that Linda enters would be pretty hard to tell from the “real” world. Fred would be there, or a version of Fred that had been constructed from the information Fred himself provided while he was alive, plus Linda’s (and other people’s) memories of him.

Over time, the Fred version would attain better and better fidelity, plus he would have new memories. He would likely be able to extend himself onto the Internet to communicate and otherwise interact with new and old friends, and have new experiences.

All this could come about well before our knowledge has advanced enough to physically reanimate Fred. Which of course creates some apparent anomalies: “Will the real Fred Chamberlain please stand

up?” At which point all twelve of the Freds stand up in unison and say “I am Spartacus!”

So what has all this got to do with time travel? There is no reason that the virtual world inhabited by Fred full-time (initially) and by Linda part-time need be the world of the present. It could be any time in the remembered past of either of them, or in the past of mankind as put together from historical data. It could even be an imaginary world such as Tolkien’s Middle Earth, though I would probably not accept an invitation to join in an excursion. Who wants to take Gollum to lunch, arm wrestle surly Orcs, or argue politics with Wizards with bad attitudes?

So much for virtual reality and faux time travel. Most people in the cryonics community have probably thought about such possibilities at one time or another. Now, my wanna-be frozen friends, we come to the frozen frosting on the ice-cream cake: the point where my own thinking diverges from most in the cryonics community. Let us say that things progress pretty much the way we hope. Civilization holds together. The cryonics movement continues to grow at the same snail-pace rate it has been or even (perhaps) a little faster. Video games lead the way to a kind of virtual reality. Virtual versions of some of us are created and eventually flesh and blood versions as well. Fidelity of the virtual worlds gets so good that it is difficult or impossible for those in such worlds to tell that they are in a virtual world and not the “real” world. The coffers of the cryonics societies and other cryonics companies are brimming over with cash, so paying for the creating of such realities is spending chump-change.

Some of us from that future world, whether we be virtual people, reanimated people, or born into the future world the natural way



people, would want to visit our past, or the past of the planet. If actual time travel is available, and not too messy, we might opt for that.

If not, then faux time travel through virtual reality would be available. Being temporarily stripped of our memories would be an option. So the fact that we “came from the future” would be hidden from us.

For all intents and purposes we would really have traveled back in time. In advanced versions of our living in the past, we might choose to go through an entire apparent lifetime with all the good and bad times the real world offers.

It is, in the author’s humble opinion, likely that there will be thousands and thousands of such worlds each one so realistic that the people inhabiting it cannot tell it from the “real” world. Put 999 white marbles into a big jar. Add to the 999 just one black marble. Give the jar a shaky-shake-shake to mix the marbles well. Put a blindfold on and reach into the jar and pull out a marble. Is the marble white or black?

I have news for all of you who are holding a white marble. This IS a virtual world and because it is, time travel is not only possible but quite possibly right now you are living in the faux past! Given that possibility, which I contend is a probability, what are the rules? Are we limited to what we take as the laws of physics as the rules of the game in the game-playing scenario in which we live? If so, is there a reset button? Can we step out of the apparent reality in which we find ourselves to enter another apparent reality, perhaps more

to our liking, where we go back in time and rescue people who we love or admire? Are we ourselves sentient beings who have been rescued by others, or perhaps even created by others?

Is the virtual reality world in which we now live so sophisticated that it allows us to create other virtual reality worlds as subsets? If so, then whether or not there is a reset button we will soon be able to “go back in time” in one of the virtual worlds we create. Mind you, we do this creation even as we ourselves are creatures of a virtual reality world. If, on the other hand, we have (against all odds) drawn the black marble from the big jar and the reality in which I write this article is the real world we STILL may soon be able to create a virtual world where one CAN go back in time and rescue loved-ones. What, if anything, is new in this discussion?

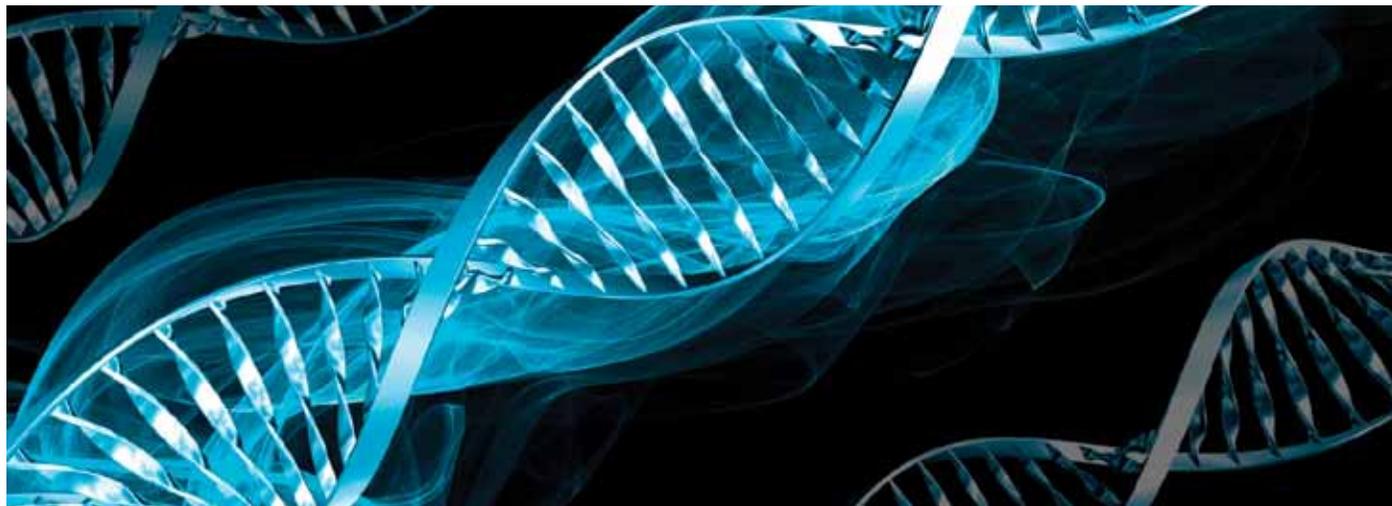
Questions about the nature of reality are common speculations. I submit to you, gentle reader, that what is new, at least in discussions in which I have participated, is the big jar. The big jar with 999 white marbles and just one black marble. The 999 white marbles make it just shy of a certainty that there is time travel in our own one out of 999 faux worlds.

Given all that, what can we do about it? Not knowing the rules of the game, we don’t know if everyone who appears to be a sentient being in our world, be our world faux or “real,” is going to get a free ticket to ride after the reset button is pushed, or after he or she deanimates. We can’t count on time travel for personal rescue. So, keep your eyes open, your powder dry, and your cryonics preparation arrangements in place!



# Secret Formula May Be Key To Reverse Aging: TA-65 Claimed To Be Based On Nobel Prize Winning Discovery

By: Mike Holfeld – WKMG TV – ClickOrlando.com \* Reprinted with permission



An extract from a Chinese plant called Astragalus is being touted as a potential key to solving the mystery of aging. It is sold in bottles of 90 pills under the formula name TA-65. Dr. Deborah Harding of the Harding Anti-Aging Center in Orlando says she has been aware of the product for some time but did not offer it to her patients until recently because it had been too expensive.

"The price has come down," she says, "But it's not \$22.99, it's \$200 for a month's supply." Harding says no one claims that the formula provides instant rejuvenation, but she has personally experienced "a big difference" in how she feels since she started taking the supplement. "The dose is anywhere between one and four pills," Harding said. "I was taking one a day now I'm taking two."

Harding says her patients report renewed vigor, better eye sight, better skin and in some cases thicker eyelashes roughly 6 months to a year after they start taking the supplement.

The science is based on the Nobel Prize winning discovery of telomeres and telomerase the key to the decay or aging

of DNA. Researchers say the telomerase enzyme actually lengthens telomeres which in theory could be a key to reversing illness, obesity, and aging. Three original clinical trials using TA-65 were conducted in 2007.

Patients reported "apparent improvement in certain immune system measures, eye sight, certain sexual function measures and certain skin properties." 63 year old Valerie Carnes of Winter Haven was one of the original test subjects.

"I'm going to say two to three years into taking it (TA-65) I looked back and said wow look what I did look what I accomplished," Carnes said. "I would call it the fountain of youth, I would."

Dr. William Andrews, one of the top researchers in the field says TA-65 is presently "the only potential cure for telomere shortening," however he concedes the data "are not overwhelming enough yet to convince scientists that TA-65 is, in fact, extending health span and life span."

Dr. Carol Greider one of the three scientists awarded the Nobel Prize for the telomeres-

telomerase discovery is one of TA-65's biggest critics. "People think this might actually change the life span of a person," Greider said. "That is not the case."

A study published in the September 2008 online edition of the prestigious journal Lancet Oncology shows that a healthy life-style increases telomerase and is beneficial in controlling the aging process.

Dr. Harding says that is consistent with what she is seeing at her practice. "Everything you do to keep yourself healthy is going to extend the telomeres, it's going to make those cells live longer," she said. For more information on TA-65 call the Harding Anti-Aging Center at 407-210-2101 or go to <http://www.tasciences.com/>

**Editor's Note:** As in other claims involving health, aging, and other subjects, the articles presented here are for informational purposes only. The information given and viewpoint or viewpoints expressed are solely those of the authors and the authors alone. Individual readers should, as in any subject, proceed "with caution" and certainly check with the appropriate professional individuals in these matters:



# Exclusive Report

## Blood Substitution and Reperfusion Injury in Cryonics

New research suggests  
blood substitution  
may provide improved  
cryoprotective benefits

# Introduction

Under ideal circumstances human cryopreservation procedures can be started and completed at the same location (such as a hospital). In reality, patients often need to be stabilized before long-distance transport to the cryonics facility for cryoprotective perfusion and long term care at low temperatures. Because a patient cannot be cooled below the freezing point of water before introduction of a cryoprotectant, the time between initial stabilization after pronouncement of death and start of cryopreservation procedures at a cryonics facility is a time of prolonged cold ischemia. Concerns about (ongoing) blood coagulation, cold agglutination, and recognition of the clinical benefits obtained with organ preservation solutions in conventional organ preservation has prompted some cryonics organizations to provide remote blood washout and replacement with a whole body organ preservation solution prior to transport.

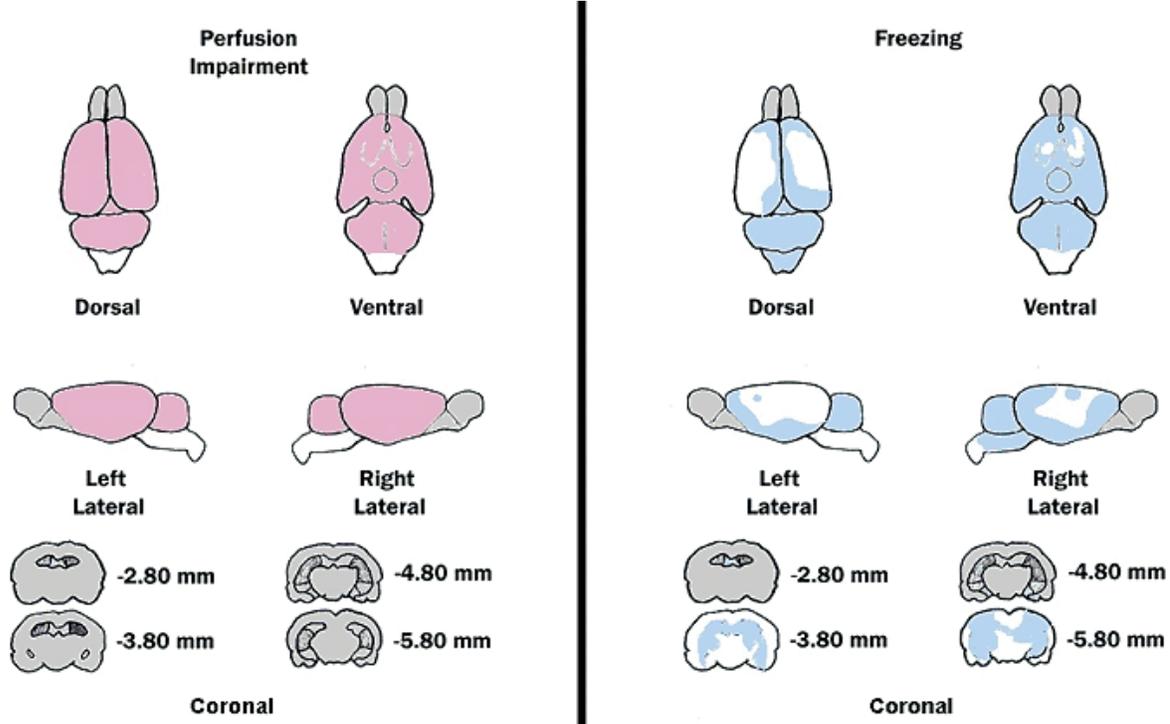
Remote blood substitution in cryonics has a number of important (theoretical) advantages. Replacing the blood with an organ preservation solution extends the period that organs can be

recovered from static storage in clinical organ preservation. The procedure also permits a faster cooling rate in the field than is possible with external cooling alone. MHP-2, the mannitol-based perfusate that is currently used by the Alcor Life Extension Foundation, was developed in a series of experiments in which dogs were recovered after up to 5 hours of asanguineous ultraprofound hypothermia (< 5-7°C).

## Blood Substitution and Cryopreservation

At the Cryonics Institute, Yuri Pichugin has questioned the value of remote blood substitution in cryonics because none of the organ preservation solutions that he tested (including MHP-2 and UW Solution) could maintain viability of hippocampal rat brain slices for periods that represent typical transport times in cryonics. Our own research, however, has been informed by the possibility that remote blood substitution may fall short in terms of preserving viability,

### Brains maps that document perfusion impairment and ice formation after cryoprotective perfusion and cooling to -130 degrees Celsius 30 minutes of warm ischemia prior to 24 hours of cold ischemia



Notes: Light impairment of entire cortical surface.

Notes: Moderate freezing of cortical surface, mostly ventral. Moderate subcortical freezing, particularly of white matter.



but could still confer benefits in terms of improving cryoprotective perfusion after transport.

We have compared controls (i.e., no blood substitution) against the following washout solutions: mRPS-2, RPS-2 and MHP-2; and observed that blood substitution does confer significant benefits in terms of improving cryoprotective perfusion and reducing ice formation in cryopreserved neural tissue (rodent). In particular, MHP-2 outperformed the other solutions and has allowed us to conduct cryoprotective perfusion after 48 hours of cold bloodless ischemia with no ice formation in the brain after cooling below the glass transition temperature of the vitrification solution. Even at 72 hours, ice formation is relatively minor compared to 72 hours of cold ischemia in which the blood is left in the brain, which produces severe perfusion impairment and severe ice formation. These experiments vindicate the practice of remote blood substitution in cryonics, but also emphasize that the composition of the organ preservation solution matters a great deal.

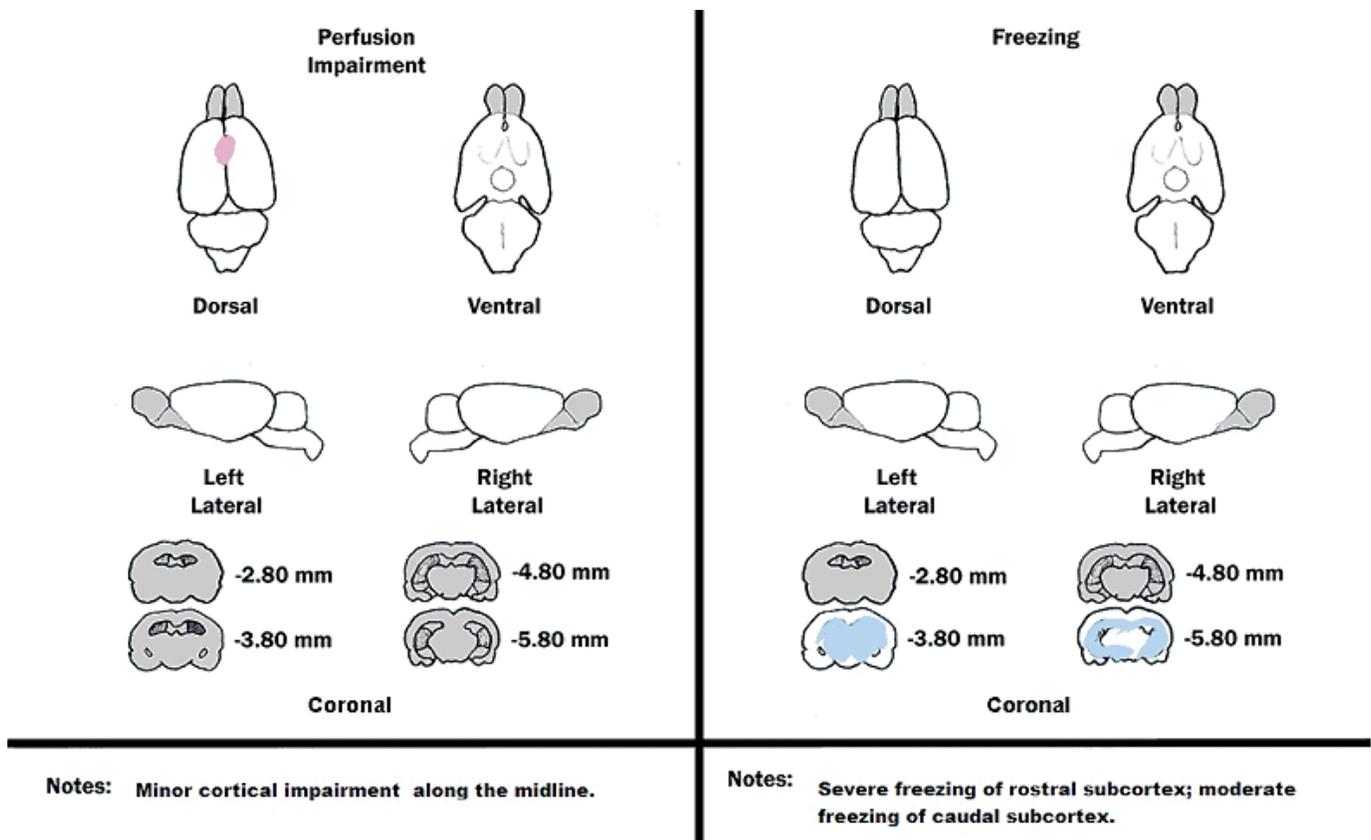
None of the organ preservation solutions we have tested (including more advanced recent formulations from colleagues) mitigate

the severe whole body vasogenic edema that is observed during cryopreservation after prolonged periods of cold ischemia. This phenomenon has been observed during both VM-1 (Cryonics Institute) and M22 (Alcor) cryoprotectant perfusion. We have designed a number of experiments to improve upon the formulation of MHP-2 but none of these variants has been successful so far in decreasing edema and, in fact, often fared worse than MHP-2 in reducing ice formation after bloodless cold ischemia.

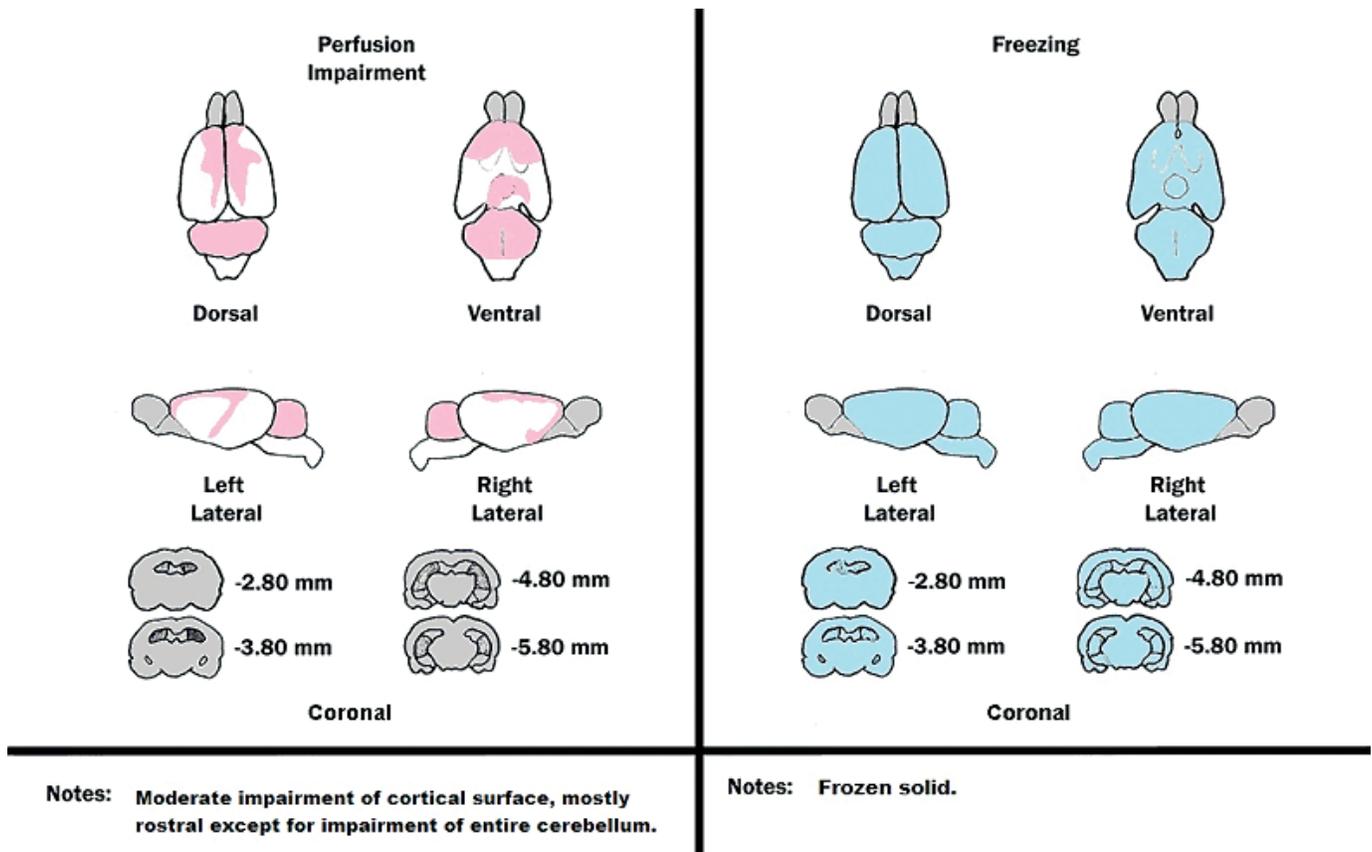
## Delayed Blood Substitution after Warm Ischemia

While our experiments provide further support for the practice of remote blood washout in cryonics, it should be recognized that these experiments were conducted in healthy laboratory rats that did not suffer noticeable warm ischemic injury prior to the start of blood substitution. In cryonics, however, warm ischemic delays are a common phenomenon. This raises the question of whether blood substitution is still effective in cases where there are extensive delays between pronouncement of legal death and the start of

### 30 minutes of warm ischemia prior to 24 hours of cold bloodless ischemia (washout)



## 60 minutes of warm ischemia prior to 24 hours of cold bloodless ischemia (washout)



blood washout. A related question is whether there is a point where blood substitution does more harm than good. To answer these questions, the Cryonics Institute and LongeCity have supported a series of experiments to get a better understanding of these issues. former CI President Ben Best proposed the initial experiments and collaborated on their design.

In our pilot experiments we investigated the effects of delayed washout, with cortical perfusion impairment and ice formation after cooling to -130° Celsius as endpoints. As the duration of washout delay (i.e., warm ischemia) increased, the degree of perfusion impairment and ice formation after blood substitution with MHP-2 followed by 24 hours of cold ischemia increased as well. After 60 minutes and 90 minutes of warm ischemia there was extensive perfusion impairment and complete freezing of the brain. These results suggest that the effects of warm ischemia cannot be reversed by subsequent blood substitution with an organ preservation solution and that the benefits of blood washout prior to cold ischemia and transport can only be obtained if aggressive external cooling is started promptly after pronouncement of legal death.

We followed these initial experiments with a series of 12 experiments in which we focused on the possibility that reperfusion injury produced during delayed washout could produce worse outcomes when compared to a protocol without blood washout. To that end, warm ischemic delays of 10, 20, 30, 40, and 50 minutes were followed by 24 hours of cold ischemia or 24 hours of cold bloodless ischemia.

A pair-wise comparison of the experiments revealed that the rats in which the blood was replaced with MHP-2 after warm ischemia and prior to 24 hours of cold ischemia had less ice formation than the rats in which no blood washout was performed. In both groups the degree of ice formation increased as the warm ischemic period increased, which indicates that blood washout cannot reverse the adverse effects of normothermic circulatory arrest but can still confer benefits during cold bloodless storage prior to cryoprotective perfusion. We observed no "tipping point" at which leaving the blood in the animal produces better outcomes than performing a washout.

There are a number of potential explanations for this:



- Decreased periods at warmer temperatures in the washout experiments delayed energy depletion and improved outcome (i.e., the 'cooling' explanation).
- Reperfusion injury is not present, or not present in sufficient magnitude to offset the benefits of blood substitution (i.e., the 'no reperfusion injury' explanation).
- Blood substitution confers independent benefits, aside from rapid cooling, that improve outcome during prolonged cold storage (i.e., the 'hypothermic blood substitution' explanation).

Concerns about reperfusion injury following blood substitution in patients with long periods of warm ischemia are reasonable in light of the published literature on cerebral ischemia and reperfusion injury. The small number of experiments we were able to conduct does not provide the statistical power to completely resolve these issues, but should be useful in the design of further experiments to establish indications and contra-indications for remote blood substitution in cryonics. We observed improved results in the washout protocols after up to 50 minutes of warm ischemia. In experiments where the warm ischemic period was extended to 60 minutes or longer, complete freezing of the brain was observed in both protocols, which indicates that there is a point in human cryopreservation where blood washout cannot confer any benefits,

even if it does not introduce additional damage.

## Future Research Directions

What distinguishes the use of cardiopulmonary bypass in cryonics from its use in conventional medicine is that the patient is usually not oxygenated during blood washout. This omission of oxygenation during perfusion could be hypothesized to actually prevent the kind of re-perfusion injury that we expected to occur during delayed washout. This hypothesis can be tested by not only comparing washout and no-washout protocols after various periods of warm ischemia but by further distinguishing between washout with and washout without oxygenation.

Another phenomenon that has not been investigated in these experiments is the presence of hypo-perfusion. In cryonics a typical patient undergoes a prolonged agonal period prior to succumbing to disease. Low cerebral perfusion pressures should be distinguished from anoxia and the effect of these conditions on subsequent stabilization procedures such as blood washout remains unknown.

Another concession that was made in our studies was to omit the administration of stabilization medications prior to the start of washout procedures. It is possible that the administration of such drugs would prolong the period of warm ischemia after which remote blood substitution is no longer beneficial.

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# TEENS & TWENTIES 2013 GATHERING

*by: York W. Porter, Immortalist Society President*

The Teens and Twenties Fourth Annual Gathering will be held April 5 through April 7, 2013 in Deerfield Beach, Florida. Hosted by Bill Faloon, this meeting provides an excellent opportunity for up and coming young people who will be the leaders of tomorrow in cryonics. Bill remembers well the time when he was a young man and other people introduced him to this life and world changing concept. Not only that, but Bill is willing to provide travel, lodging, and registration scholarships! Forty scholarships were initially going to be available to participants. You can check with the folks at the Life Extension Foundation for more info and the continued availability of those scholarships. It is necessary for you to pre-register for the event! ***You need to do this no later than February 15, 2013.***

The appropriate address and contact info is **Teens & Twenties, c/o Kathy Markell, Life Extension Foundation**, 3600 West Commercial Boulevard, Fort Lauderdale, Florida 3309. The phone number is **954-202-77-2** and the fax number is **954-202-7745**. You can also send an e-mail to [kmarkell@lifeextension.com](mailto:kmarkell@lifeextension.com).

If you are interested in a meeting where folks of the 16 to 30 age group can be introduced to each other, share information and viewpoints about cryonics and, in general, just have an enjoyable time increasing knowledge and making contacts, this is for you. The meeting is scheduled to begin on Friday, April 5 at 6:30 pm Florida time with a dinner and a "get acquainted" session.

For a full look at the event brochure, go to the Immortalist Society website and click on the link underneath the pictures at the top of the home page.

The Immortalist Society website can be found at [www.immortalistsociety.com](http://www.immortalistsociety.com).



*Options for Safe, Secure and Legal Asset Preservation for Post-Resuscitation Access*

**The Fourth Annual Young Cryonicists Gathering**

## **Teens & Twenties 4 2013: Getting to Know You - You Getting to Know Each Other**

Friday-Sunday; **April 5-7, 2013** Deerfield Beach FL Host: **Bill Faloon**

★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★★

Greetings to *Young Cryonicists*,

You are receiving this invitation because **you are among the future leaders in cryonics**. This focus group evolved out of a gathering of our Asset Preservation Group. **Bill Faloon** related his appreciation to those who had helped him to attend a meeting of life extension/cryonics pioneers when he was a young man. He noted the resulting payback benefits that both the cryonics and the life extension movements have received from his subsequent involvement, leadership and financial contributions. Now he would like to do the same for other young cryonicists. **Cairn Idun** proposed her idea for a “Teens and Twenties” gathering. Not only did Bill agree to host the gathering - he would also provide travel, lodging and registration scholarships through the Life Extension Foundation. **A few more of our members would also like to meet those cryonicists who possessed enough foresight to sign up at an early age.** And we would like you to start *meeting each other and forming supportive bonds*.

All attention will be focused on our getting to know you and you getting to know each other. Fully signed up young cryonicists from all cryonics organizations - and in their mid teens through age thirty (16-30) as of April 10, 2013 - may apply to attend. Those accepted to attend plus those receiving scholarships will be notified no later than March 1, 2013. **You MUST be registered IN ADVANCE to attend.** **There will be NO “drop in” participants.**

Some individuals are social butterflies. This is not so for everyone. And we want everyone to meet everyone. Therefore, I have designed a diverse range of “getting to know you” activities. *If* you would enjoy participating in these getting acquainted activities *then* this is for you.

**Forty (40) scholarships** to cover your U.S. airfare (or equivalent portion for origin outside the U.S.), lodging, registration, meals and refreshments are being offered by a generous education grant from the Life Extension Foundation.

I am looking forward to meeting you.

**Cairn Idun** Founder/Director: Teens & Twenties: Getting to Know You - You Getting to Know Each Other



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**The Fourth Annual Young Cryonicists Gathering**

**Teens & Twenties 4 2013: Getting to Know You -  
You Getting to Know Each Other**

**Friday - Sunday; April 5-7, 2013 Deerfield Beach FL Host: Bill Faloon**



**Registration Form for NEW Applicants**

*Last year's attendees will receive a separate application.*

This is **NOT a drop in event**. You **MUST be registered in advance** and already be **fully signed up** for cryo-preservation. **Application deadline: February 15, 2013.**

Name \_\_\_\_\_

Age \_\_\_\_\_ Birth date \_\_\_\_\_

Cryonics Provider \_\_\_\_\_

Mailing Address \_\_\_\_\_

e-mail \_\_\_\_\_ Phone \_\_\_\_\_

I heard about this from \_\_\_\_\_

My interest in cryonics: \_\_\_\_\_

\_\_\_\_\_

- I wish to register and apply for a full scholarship. Registration fee (\$350 - includes meals and refreshments), U.S. airfare (or equivalent *portion* for airfare outside U.S.) & lodging
- I wish to register and apply for a partial scholarship.  registration  airfare  lodging
- I wish to register and can pay my own way.  registration \$350

Mail to: Teens and Twenties; c/o *Kathy Markell*; Life Extension Foundation;  
3600 West Commercial Blvd.; Fort Lauderdale FL 33309  
Phone: 954-202-7702 FAX: 954-202-7745 e-mail: [kmarkell@lifeextension.com](mailto:kmarkell@lifeextension.com)

**I look forward to "getting to know you." Cairn Idun Director**



*Options for Safe, Secure and Legal Asset Preservation for Post-Resuscitation Access*

**The Fourth Annual Young Cryonicists Gathering**

**Teens & Twenties 4 2013: Getting to Know You -  
You Getting to Know Each Other**

**Friday - Sunday; April 5-7, '13 Deerfield Beach FL Host: Bill Faloon**



Registration Form for ***Returning Applicants***

*Potential new attendees* have received a separate application. This is **NOT a drop in** event. You **MUST be registered in advance**. *Thirty-one year olds* who have previously attended may attend for this one additional year at their own expense for travel and lodging - no registration fee.

*Application deadline: February 15, '13.*

Name \_\_\_\_\_

Age \_\_\_\_\_ Birth date \_\_\_\_\_

Cryonics Provider \_\_\_\_\_

Mailing Address \_\_\_\_\_

e-mail \_\_\_\_\_ Phone \_\_\_\_\_

My thoughts on Teens & Twenties 2010, 2011 and 2012: \_\_\_\_\_

- I wish to register and apply for a full scholarship. Registration fee (\$350 - includes meals and refreshments), U.S. airfare (or equivalent *portion* for airfare outside U.S.), and lodging
- I wish to register and apply for a partial scholarship.     registration     airfare     lodging
- I wish to register and can pay my own way.     registration    \$350

Mail, fax or e-mail this to: Teens & Twenties; c/o *Kathy Markell*; Life Extension Foundation;  
3600 West Commercial Blvd.; Fort Lauderdale FL 33309

Phone: 954-202-7702    FAX: 954-202-7745    e-mail: [kmarkell@lifeextension.com](mailto:kmarkell@lifeextension.com)

***Kathy will forward all returning applications to me. I look forward to our reunion. Cairn***



# CryoNet on Lawyers

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*I have for a long time felt that lawyers, and their fees, have had a large negative impact on individual cryonicists and the cryonics service providers themselves. In addition, the lure of a well paid career, in relatively comfortable surroundings, has attracted many highly intelligent people to the profession, whereas otherwise they may have studied science, medicine or engineering. On 19 April 2012 a CryoNet law student reader called Keegan criticized my negative viewpoint on the value of the profession. A number of well thought out and valuable articles followed. I have edited these very slightly to remove a few personal remarks, and append them below.*

- John de Rivaz

## **From: John David Galt**

To the extent lawyers are in disrepute, it's not about every lawyer personally. It's about the dishonest ones (probably much more visible than the majority, due to their own quite loud advertising); and it's also about the unfortunate fact that lawyers, like doctors, have been given both an oligopoly (= group semi-monopoly) and "gatekeeper" authority which forces the rest of us to use their services in order to accomplish a lot of tasks for which their expertise really isn't (or shouldn't be) needed. People should resent that fact. And unlike medicine, the law really doesn't need to be too complicated for the ordinary person to understand for himself; lawyer-legislators have made it that way to create work for themselves, like medieval priests who didn't want Bibles published in any language but Latin, lest we see that they were unnecessary. If I were a lawyer, I would try not to worsen the problem, but I and everyone else would still have to live with the fact that I profit because it exists.

## **From: m2darwin@aol.com**

a) there are vast cultural and procedural differences in these professions between the US and the UK; though they are rapidly shrinking.

b) finding a good lawyer is considerably more difficult than finding a good mechanic and vastly more difficult than finding a good plumber or "handyman"; neither of which is easy to do. A major problem is that in all these cases you don't get to try out the work product and the accompanying relationship before you commit. I've had plumbers who were discourteous pigs, but who were highly competent. I would not hire them if I had a courteous,

competent plumber who cleaned up after himself as an alternative choice. However, if I have no water, or the loo has stopped working - then I'll use the priggish plumber.

c) Lawyers, arguably much more than doctors, are a really inhomogeneous group. Statistically, in my experience in the US, criminal law tends to have a lot of scoundrels - but they also have some of the most interesting, aggressive and creative personalities in the bargain. Many are lazy bottom feeders, but those who are competent and motivated do a great deal of good, and are fascinating and potentially very useful people to know. Constitutional and high-end "academic" lawyers are usually very smart and able people and many go on to make good jurists.

Having said that, due to the growth in regulation, bureaucracy, government and irresponsibility on the part of the populace, the majority of lawyers are advisor/enforcers. Their job is to protect (mostly) institutions from both risk and loss. In a highly bureaucratic society that equates to being show stoppers for all but the most mundane of activities. In many ways, the US tort system is vastly less just than the UK system. Obviously, it is ridiculous that the lady who runs the Thai restaurant should even have to worry about being drug into court because a few of her patrons brought alcohol on to the premises, drank it and injured someone else in an accident. I could think of myriad simple and just ways to exclude people like her from having to face a tort case.

The system the UK uses is a fairly good one: if you sue someone and you lose - you pay their legal fees! The average retainer for defending against a case such as the one brought against the restaurateur in my story is between ~\$5,000 and 10,000 US - and that is NON-REFUNDABLE. The typical retainer for an average criminal lawyer these days is between \$15 and 25K - also non-refundable. So, before someone sues someone in the UK, it behooves them to consider the cost of losing. In the US, it matters not - the plaintiff doesn't have to pay a cent - not court costs, not the legal bills, not the lost wages - none of the harm done to defendant needs be recompensed - even if the plaintiff loses the case!

The kind of personality that is attracted to interpreting and enforcing regulations (or making new ones), is not generally the kind of mind that should be anywhere near a position of control in innovative enterprises. There are exceptions, but statistically, such people are damaging to innovation. In my considerable experience, I've encountered two fundamentally different types of lawyer. The first is the risk averse, cautionary bureaucrat. The



second, far rarer kind, is the guy who listens to what you want to do and, no matter how outrageous it is, sees his job as trying to figure out a way for you do it - and succeed. This is a dangerous breed - highly useful, but much like hiring a dare devil to fly you from New York to London, or vice versa. I've seen this kind of lawyer gainfully employed for the mob, for cults, for cutting edge technologies, and for maverick entrepreneurs. If Google has their wits about them, they have just such a person fighting the fight for the "driverless" automobile.

This kind of personality is dynamic, intensely curious, and willing and able to interact with anyone who can provide them with the information and insight they need to do their job. In fact, they are unable not to get the maximum amount of information, regardless of the social or other bureaucratic risks. One reason I can so confidently call the lawyers on Alcor's Board "little old ladies," is that they do not behave in the dynamic and voraciously information gathering way that such path breaking and "enabling" lawyers do. They are sessile and distant, and know very little about cryonics, per se. That might well be acceptable if one of them was on the board of a well established enterprise, because much or all of the required knowledge to their job well in that setting would be "built in" as a consequence of acculturation.

But cryonics is different, and 3 lawyers is at least 2 too many - in fact, it violates one the cardinal rules of good board composition for a non-profit organization such as Alcor, which is to have a competent, cryonics-knowledgeable and diverse directorate.

This is doubly important in a situation where the board is functioning as management, or plays a significant role in management (something it is not supposed to do, but sometimes - temporarily - must).

In short, there are good lawyers who are invaluable in a wide range of situations. They aren't easy to find, but when you need them, they are essential. And while lawyers bear a significant part of the responsibility for the choking state of affairs that currently exists, by far the most responsible culprit is an unreasonably risk-averse population that believes it bears no responsibility for

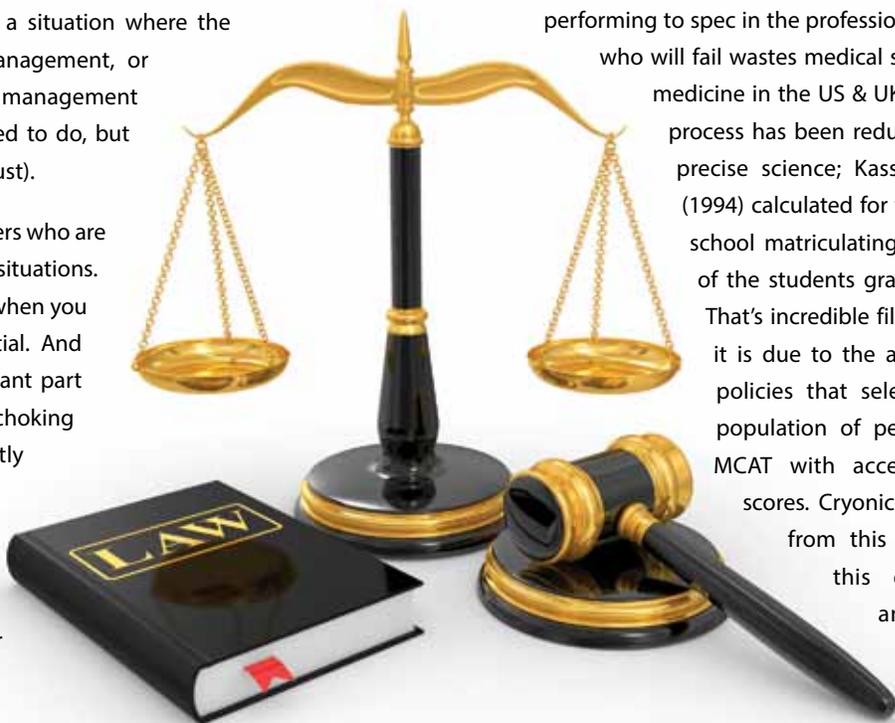
any adverse outcome; and that there must always be a party who can be made to pay. Lawyers did not create that situation, although they have certainly offered it an ample teat to suckle on.

*From: m2darwin@aol.com*

Getting a law degree selects for a certain kind of mind, just as getting an MD selects in a different way. The JD and the MD are very different than the Ph.D., because the Ph.D. is a very broad classification of educational achievement that embraces many very different types of disciplines; from sociology to arcane areas of advanced mathematics and physics. Both MD and JD programs are carefully structured on the intake end to select for a very specific type of mind and, what's more, for a very specific personality type to go with it. If you take a look at the LSAT and the MCAT, and then look further to the selection process used for admissions to the schools that produce these professionals, you'll see what I mean (hopefully).

There are many reasons for this filtering, one being that both are professions with guild-like origins, and thus can properly be thought of as quasi-unions who wish to limit the number of practitioners in order to maximize the revenue they will earn (supply and demand).

The other is that it is efficient to select only those who stand a good chance of not only completing the course of training, but of performing to spec in the profession (enrolling students who will fail wastes medical school re-sources). In medicine in the US & UK, this intake filtering process has been reduced to a remarkably precise science; Kassebaum and Szenas (1994) calculated for the 1988 US medical school matriculating class, 91.2 per-cent of the students graduated with an MD! That's incredible filtration, and much of it is due to the admissions screening policies that selects from the small population of people who pass the MCAT with acceptably (very high) scores. Cryonics has much to learn from this process. Even with this extensive filtration and post-filtration weeding, only a



## CryoNet (continued from page 29)

slim majority of physicians are (arguably) competent, and only perhaps 10% are excellent.

In recent years the process of filtration with lawyers has become much, much looser, much messier and much less rigorous on the intake end - that's why there are now too many lawyers - something any guild or union dreads. However, the bar exam is still a powerful final filter:

You'll note that the quality of the school is a powerful determinant of passing the bar. So, anyone with a JD from a good school is already a highly filtered product (LSAT + graduation from a demanding program). If they then subsequently successfully sat for the bar, they are more highly filtered still (some states have

much more demanding bar exams than others). Finally, if they have ever practiced law, they are a still more refined product.

Many years ago, Thomas Donaldson made a sage observation about people who put degrees after their names in contexts in where the degree is meaningless, or where the degree holder does not wish to be identified as being an expert, or better than a layman in a given field of endeavor: DON'T USE THE DEGREE - DON'T PUT THE LETTERS JD, MD or Ph.D IN BACK OF YOUR NAME. That's good advice, and if you don't want to be called a lawyer, then don't use the JD. In fact, Thomas practiced what he preached, and aside from articles in mathematics and related areas, he gave up the use of "Ph.D." after his name.

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## Wanted!! Writers!

It's no big secret that Long Life magazine, like all magazines, has at its core the folks that write for it. Dedicated and working for no pay, the folks that write here are folks that truly believe in the dream that Robert Ettinger founded. They continue, issue after issue, to try to expound on the topic of cryonics in ways that are hopefully informing, interesting, and entertaining. I know that each of them works hard in order to try to reach that goal.

What about you? Have you an idea floating around that you think should be covered in the pages of Long Life? Thought up a new way to express the ideas that are put forward here? Had a new thought entirely as to what the world changing and life saving concept of cryonics could mean to your fellow humans? Got a new approach to either how this idea should be carried out or how we might be better able to convince others of its usefulness and truthfulness? Friends, we're looking for you then. Though we can't automatically guarantee you space just because you send something in, we would love to hear your ideas. Drop us an e-mail today!!

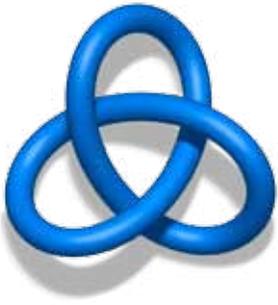
## General Guidelines for Writing for Long Life

Sometimes people ask what are the guidelines or requirements for writing for Long Life. The main answer that is given is, of course, that the topic has to be relevant to the subject of cryonics. It can be anything from the latest relevant developments in nanotechnology to research in cryobiology in general. One can write, for example, about specific information concerning cryobiological research into organ and tissue storage and revival. Reasonable conjectures about what future societies and governments may look like and how cryonics might have an impact on how mankind governs itself are also fair game. Just basically let your imagination be your guide. Again, though, the topic needs to be related, as closely as you can, to the subject of cryonics and the closer to that subject, the better.

Things we don't want to see are, however, articles with profanity/pornography, articles that are filled with tirades of a personal nature against an individual or group, or subjects that are so far a field from the topic of cryonics that one has a hard time making a connection between them and the main reason for the existence of this magazine. Our purpose is, of course, to inform and educate about Robert Ettinger's world changing concept.

We have to admit that the above guidelines (and others not listed here) aren't always "black and white". If you have any questions about whether something is useful to appear in Long Life, don't hesitate to get in touch with us. We're always looking for new talent.





# Final Thoughts

York Porter - Executive Editor

## *A New Beginning...*

I hate the winter. It seems strange for a cryonicist to say that, given our interest in ultralow temperature storage but it's so. Give me the good old Summertime, the beauty of Spring as Mother Nature reawakens for another year, or even the cool crisp evenings of a Fall day where I can be found sitting around our fireplace comfy as a bug in a rug. But when it comes to a time of year of snow and ice, freezing rain, and being cooped up all the time, well, frankly, I'm not very happy.

The one very good part, however, about the Winter is that I know, around the early part of January, which is when I'm writing this, that it will eventually come to an end and my thoughts begin to turn to the new beginning of another year and the fact that soon, the beauties of Nature will be on their full display. It gives me hope for the near future.

Of course, the concept of "new beginnings" is a part of everyone's life at various times. In the case of the Cryonics Institute, Dennis Kowalski was elected to succeed Ben Best as the CI President. Ben served for several years in what has to be one of the toughest posts in cryonics. Cryonicists, myself included, are an opinionated lot and it isn't easy trying to figure out how to compromise all the various honestly and very strongly held positions of a group of people that are all intelligent and all of whom mean nothing but the best.

In the Immortalist Society, yours truly has taken over as editor of the magazine. As Dennis Kowalski so accurately put it in remarks in earlier pages, John and Debbie made it look easy but it, most assuredly, is not. Hopefully, with the publication of this issue, the magazine is "back on track".

Another thing about this time of year is that it is one in which we all tend to make resolutions to make the New Year better than the previous one. One area that I try to do that in is in my dedication to the outstanding concept that Robert Ettinger developed. Although, just like all fallible human beings, I fall short in my goals, nevertheless it helps to try to rededicate myself to this outstanding endeavor. I would like for you to join me in this "new beginning" in your efforts in cryonics. Together we can and will make a difference in this world.



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# Longer Life starts with a Life Extension® membership!



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The Life Extension Foundation® is a non-profit organization that funds anti-aging research and reports medical breakthroughs in disease prevention. In fact, if you're taking a low-dose daily aspirin to help prevent a heart attack, you're already benefitting from us! We're the ones who first reported on the ability of low-dose aspirin to prevent heart attack way back in 1983, and our research continues to uncover new and better ways to live longer, so you'll be around to take advantage of future medical breakthroughs.

Become a Life Extension® member now for just \$75 and get all this!

- **FREE Disease Prevention & Treatment protocol book:** A 1,666-page book that contains novel therapies to prevent and treat 133 common diseases of aging.
- **FREE 1-year Subscription to the Life Extension Magazine®**, jam-packed with cutting-edge health news worldwide (\$59.88 newsstand value).
- Big savings on blood tests for prevention with our mail-order lab.



- **FREE Access** to an integrative team of knowledgeable Health Advisors (including naturopaths, nurses, nutritionists, even personal trainers) who can help you personalize a unique Life Extension program and provide reliable answers to your health concerns and product questions.



- **25%–50% off more than 300 science-based, premium-quality Life Extension nutraceuticals** (including vitamins, minerals, hormones, nutritional and diet supplements, even skin care) to help you achieve optimal health for as long as possible.

There are so many great reasons to join today — including our **No-Risk Guarantee!** If you're not **100%** delighted with your membership in the Life Extension Foundation, we'll promptly refund 100% of the unused portion of your dues. So call toll-free **1-866-595-6579** and start enjoying the benefits of membership for the incredible price of just **\$75** for one year.

Join Today!

# Life Extension®

For Longer Life®

Offer ends **May 1, 2013** • Discount code: **AVA103A** • Item Code: **MCL01A**

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