Notable Women in Cryonics

By Taya Maki, President of Société Cryonics de France

I am from Vancouver Canada and have been living in France for the last 12 years. I am a mother of 2 girls, a Montessori school director, a bellydance teacher, a body artist, and a costumer. So in all my free time I try to advance the situation of cryonics in France. I have been a cryonicist for about 15 years and am currently a member of the *Cryonics Institute* and, more recently, *Tomorrow Biostasis*. I am also the president of the *French Cryonics Association* and have been trying to organise a community here in France with the goal of making local standby possible and eventually legalise cryonics in France!

As an avid cryonicist for over a decade, I am often surprised to see so few women as speakers at cryonics events, or in the public. That being said, there are some amazing women working in research, law, advocacy, public relations, and other various disciplines to support this ever-evolving field. In this article I will introduce you to a few of these outstanding individuals and see what their perspective is.

Linda Chamberlain

Linda is one of the first women to be involved in cryonics since the very early days. With her husband Fred, she was a founder of the *Alcor Life Extension Foundation* and one of the individuals who has contributed the most to the advancement of cryonics. See a more in depth look at her life here : https://www.alcor.org/library/alcor-member-profiles/linda-chamberlain/

1. How did you become interested in cryonics?

In 1969 I read the 1964 book *The Prospect of Immortality* authored by Robert Ettinger, a physics professor in Michigan. I was fascinated by the prospect that technology might offer a solution for the problem of death. I wrote to Ettinger and asked if there was a group of interested people in California, where I lived at that time. He responded with contact information for a group of people who were working on giving a conference on cryonics in California in 1970. I decided to volunteer to help with the conference as a means of learning more about cryonics and the folks in the local group.

During those working sessions, I met Fred Chamberlain III, who had just gone through the process as I had. We fell in love and a large part of our mutual bond was cryonics. As it turned out, Fred's father (Fred Jr) was not well and we knew he probably only had a couple years to live. The local cryonics group had a limited capability to freeze members, but all equipment and procedures were based on those used by the Ettinger group, which was mortuary practices and mortuary equipment.

Fred was a NASA engineer and I was in college. We just could not accept those limitations. We wanted to create capabilities that would be consistent with medical practices but the local group did not want to depart from their then current practices. So, Fred asked me to marry him and he would support us both financially while I worked full time to build Alcor. Even though it meant putting my education on hold, it was an offer I could not refuse. So, that not only answered how I got interested in cryonics, but also a little about how Alcor got started. My Member Profile goes into that at greater length.

2. What is the biggest challenge currently facing cryonics?

Alcor is still a very small organisation, even after 50 years. The most important thing we can do at this point is to dramatically grow the Alcor membership. With membership growth we will have more resources for all aspects of our mission.

3. What can we do to inspire more women to become involved in cryonics?

I have been asked this question for 50 years. I think the reason women have historically not been attracted to cryopreservation is because most women were not encouraged to seek a technical (STEM) education and therefore did not have the knowledge base to see the value Alcor offers. That has been changing over the last 5 decades, though. Today, we have a lot of female physicians, engineers, and professors. I think the best thing we can do as we work to build membership is to target professional women in these professions.

Carol Shaw

Carol Shaw is an electrical engineer and computer scientist who worked as a videogame designer for Atari in the 1980s. She is well known for being one of the first women in this male-dominated profession and designed the famous Atari and Commodore 64 video

game River Raid. She has been involved in cryonics and part of Alcor for many years.

1. How did you become interested in cryonics?

I had never heard of cryonics, but my husband, Ralph Merkle, had heard of it. He began going to some of the local restaurant dinners. Eventually, I went to the dinners, also. We both joined Alcor around 1988 or 1989. Eventually, Ralph became a member of the Board of Directors.

2. What is the biggest challenge currently facing cryonics?

Bureaucratic opposition.

3. What can we do to inspire more women to become involved in cryonics?

There are more women involved in cryonics than when I started. Meeting Linda Chamberlain at the Lake Tahoe Life Extension Festivals inspired me.

Natasha Vita-More

Natasha Vita-More, PhD is "an early adopter of revolutionary changes" (*Wired*, 2000), a "role model for superlongevity (*Village Voice*, 2001), and "advocates the ethical use of technology to expand human capacities" (*Politico*, 2017). She was awarded Space Camp Wings at the Space & Rocket Center in 1985. She authored the Transhumanist Manifesto, included onboard the NASA, ESA, ASI Cassini-Huygens spacecraft mission to Saturn in 1997. In cryobiology, she established a scientific breakthrough in cryopreservation of long-term memory in *C. elegans*. As an innovator, she designed the first future body prototype, which introduced the Metabrain concept. She appeared in more than two dozen televised documentaries, published numerous articles and books. Her experience in the field of foresight studies establishes principles and practices for assessing humanity's potential futures. Her proficiency as a professor of ethics has produced high-level scholarship toward understanding the challenges society faces. Natasha founded the Transhumanist Studies Program, is a Distinguished Senior Fellow at the Centre for the Future Mind a FAU, and Ret. Faculty and Chair of Graduate Studies Program UAT.

1. How did you become interested in cryonics?

I had been creating theatrical projects in the Amazon Jungle, Haleakala Volcano, Atlantic Ocean, Byzantine Architecture, Kyoto Kinkaku-ji Temple, and the Telluride Mountaintop Observatory. Each of these extraordinary yet remote environments caused me to wonder about the fragility of life. Through this fragility, humans have sought to evolve and to sustain and preserve life in all its forms. The idea of cryonics simply made sense to me. This common sense approach was heightened by advances in the field of infertility that used insemination protocols with frozen sperm and later freezing a healthy embryo in the 1980s. It was evident that the architecture of life was changing. I wanted to be a part of this change. I attended a cryonics event and signed up with Alcor in 1991.

2. What is the biggest challenge currently facing cryonics?

It is a daunting task to identify one single challenge or as you ask: "the biggest challenge"; however, in assessing the circumstances facing the challenges of human cryonic preservation within the larger field of cryobiology, I would settle upon society's inability to understand that death is not an absolute outcome. Death is a biologically programmed outcome resulting from the evolutionary architecture of our species from over 4 million years ago. Outside of the genomics of evolution that has barely advanced over this time frame; it is the vast and uncompromising issue of social perceptions and psychological attitudes. These perceptions and attitudes are exceedingly harmful because they blindly support the historical acceptance of death. This is the strongest and most adhered to belief among all of humanity. To counter this ingrained belief that so much of society is built upon and relies on is an arduous challenge. This challenge is far more serious than the need for investments in the science and technologies that will eventually revive cryonics patients. Further, and quite important to realize, is that the theoretical analyses of nanomedicine for being the necessary biomedical technology to re-engineer a person upon revival is no longer just a scrutinized fix to diseased bodies. Bar none, nanomedicine is the most important biocompatible technology being developed today. Second to this is AI systems to copy, transfer and store neurological activities that form the mind, consciousness, and personal identity.

3. What can we do to inspire more women to become involved in cryonics?

Ask those putting on events or writing about cryonics to please include the work and ideas of women who are doing scientific research, innovating technological systems, heading investment firms, and educating others about longevity.

The domain of longevity advocacy is saturated, and this is a very good thing. But what is missing? One area that I am focusing on is the secondary outcome of my published research that evidenced the persistence of long-term memory of *C. elegans* after cryopreservation and revival. This secondary outcome identifies a simple animal in the gestation period with embryos in-body during the cryonics and vitrification process and when revived laid eggs that hatched with healthy young nematodes.

This touches on the topic of reproduction and the survival of one of the most vulnerable of life forms, an embryo. How is this relevant to women? Because a strong and heartfelt connection can be made between cryonics and cryobiology's infertility field. The earliest forms of freezing cells were with sperm, embryos, and eggs. This helped many women who were dealing with infertility. Today millions of people walking around among us started life as a frozen embryo!

Carrie Radomski

Carrie is the President of the *Lifespan Society of British Columbia* and has successfully challenged Section 14 (anti-cryonics law) in the court and got a favourable ruling. The law remains unchanged but they were granted an exemption as a non-profit to offer cryonics services in BC. There is more about this here. https://www.lifespansociety.com/blog/anti-cryonics-law-challenge-resolution

The Lifespan Society of BC was incorporated as a non-profit in 2012. They are in the process of improving standby in Vancouver and the lower mainland now.

1. How did you become interested in cryonics?

I went to a presentation at UBC where Keegan Macintosh (Alcor member) gave a great presentation about cryonics. I signed up soon after. I signed up around the same time as my husband but we were not dating at the time.

2. What is the biggest challenge currently facing cryonics?

The biggest challenge facing cryonics is the extensive logistical challenges in getting people cooled down, vitrified and preserved in a timely manner to minimize warm and cold ischemia. I wrote about this extensively in the 2016 February Issue of *Cryonics* Magazine. *The Lifespan Society of BC* is working on improving standby, we purchased a *Cryonics Institute* Intermediate Kit and we had local member standby training in the fall of 2018. We intend to acquire more updated equipment from ICE and updated training in the near future.

3. What can we do to inspire more women to become involved in cryonics?

I am not sure if it makes sense to target women as a demographic since we have such a tiny number of cryonicists in general. I think if we get more people to join our cryonics cause then women will naturally come in. I know men outnumber women but if we increase our overall numbers then women will be better represented. In terms of strategy it makes sense to have better family-package plans. I believe that would help bring in family members of men who are signed up for cryonics and that would also potentially boost the number of women signed up.

Allison Duettmann

Allison Duettmann is the president of *Foresight Institute*. She leads various biotech and longevity groups, and has a high profile in the media sharing her research and insights. She co-edited the book "Superintelligence: Coordination & Strategy", and is collaborating on another book on Intelligent Voluntary Cooperation. She holds an MS in Philosophy & Public Policy from the *London School of Economics*, focusing on AI Safety, and a BA in Philosophy, Politics, Economics from *York University*. As a well versed scholar and public figure, Allison is also a longevity and cryonics enthusiast. Find her website here : https://foresight.org/

1. How did you become interested in cryonics?

I passively knew about its existence as a comforting plan B for a while. Only when my dog died when I was about 16, did I realize the urgency around creating working solutions and that you want to be better safe than sorry.

2. What is the biggest challenge currently facing cryonics?

(a) Better onboarding and user experience to make signing up and life insurance seamless.

(b) More basic research to improve the underlying science.

(c) Innovative companies to create a competitive industry; e.g., we just onboarded *Cryopets*, a pet cryonics company into our fellowship.

(d) Improved messaging, both public PR but also to increase support of immediate family members of patients.

3. What can we do to inspire more women to become involved in cryonics?

More female role models being outspoken about their cryonics support and integrating their positive experiences into everyday conversations, both in public and private forums.

Summary

As you can see, we have some outstanding and trailblazing women supporting cryonics, and this is but a short list of the

many more out there. I hope reading this may inspire and motivate other women to become involved either as advocates, scientists, lawyers, artists or in any field!

Often people think that if they don't have a scientific or 'tech' background there is not much they can do to help, but I disagree. No matter one's background, there is always a meaningful way to become involved. What seems clear to me is that we need more people in general to support this movement so that the choice of cryonics becomes widely acceptable internationally. As everyone said, prominent women showing their support for cryonics and being public about it could help other women consider this option and bring more members to the organisations worldwide. It could also create the heartfelt connection to reproduction that Natasha mentioned.

Feel free to reach out to me or any of these great women if you would like to talk about it. There are also many conferences and events where you can learn about the field and meet others with the same interest. The more we connect, the stronger we are to create change.

In hopes for a longer life in health and happiness,

Taya ■