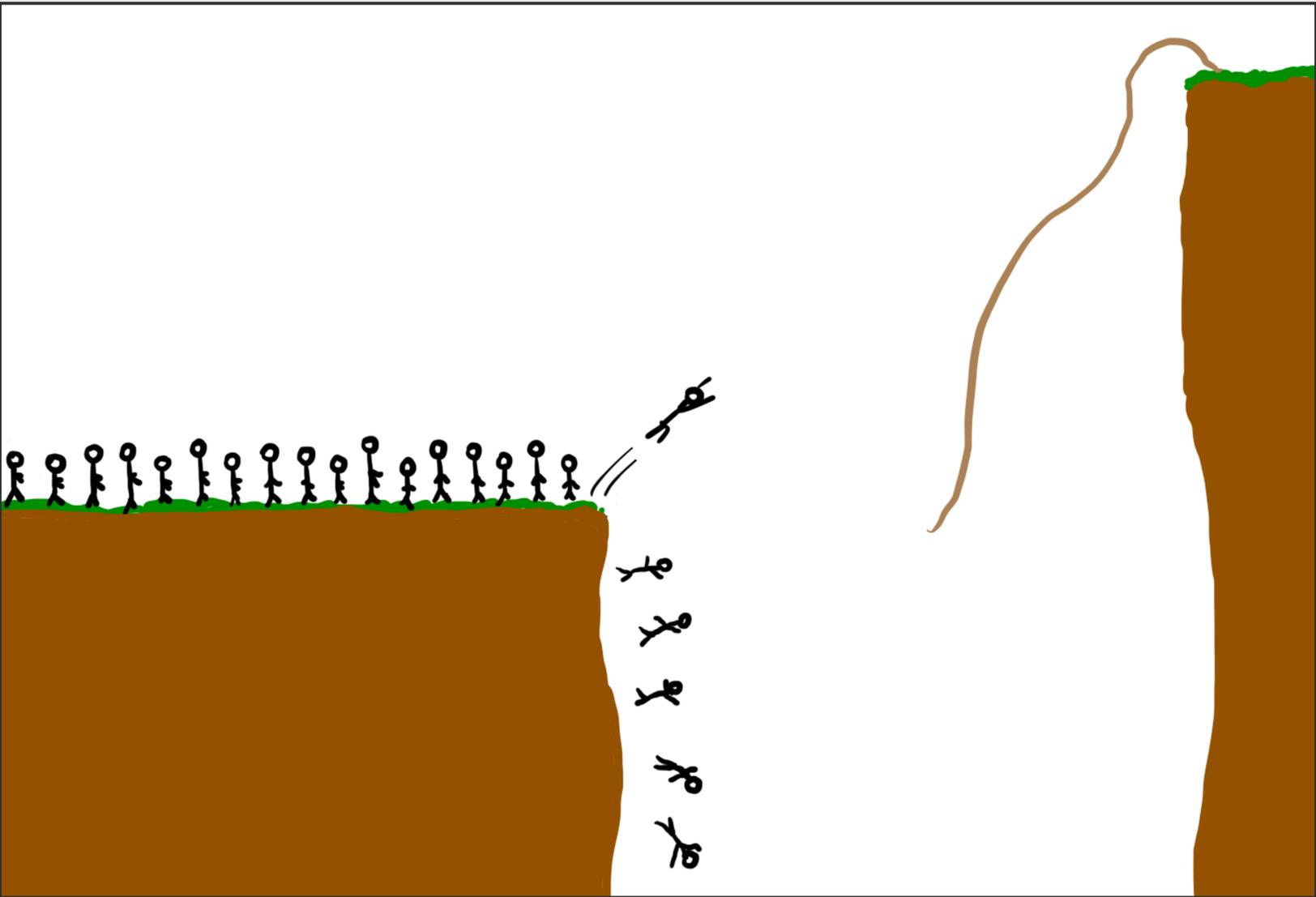


Why Cryonics Makes Sense

by Tim Urban



WAIT BUT WHY

You're on an airplane when you hear a loud sound and things start violently shaking. A minute later, the captain comes on the speaker and says:

There's been an explosion in the engine, and the plane is going to crash in 15 minutes. There's no chance of survival. There is a potential way out—the plane happens to be transferring a shipment of parachutes, and anyone who would like to use one to escape the plane may do so. But I must warn you—the parachutes are experimental and completely untested, with no guarantee to work. We also have no idea what the terrain will be like down below. Please line up in the aisle if you'd like a parachute, and the flight attendants will give you one, show you how to use it and usher you to the emergency exit where you can jump. Those who choose not to take that option, please remain in your seat—this will be over soon, and you will feel no pain.

What would you do?

When Robert Ettinger was a kid in the 1930s, he read a lot of science fiction, and he assumed that with the world advancing the way it was, scientists would surely have a cure for aging at some point during his lifetime. He would live to see a world where sickness was a thing of the past and death was something people chose to do voluntarily, at a time of their choosing. ¹

But thirty years later, aging and involuntary death were still very much a thing, and Ettinger, by then a physics professor, realized that science might not solve these problems in time for him to reap the benefits. So he started thinking about how to hack the system.

If, rather than being buried or cremated after his death, he could instead be frozen in some way—then whenever the scientists *did* eventually get around to conquering mortality, they'd probably also have the tools and know-how to resuscitate him, and he could have the last laugh after all.

In 1962, he wrote about this concept in a book called *The Prospects of Immortality*, and the cryonics movement was born.

The first person to give cryonics a try was James Bedford, a psychology professor who died of cancer in 1967 at the age of 73 and is doing his thing in a vat of liquid nitrogen in Arizona as you read this. Others slowly began to follow, and today, there are over 300 people hanging out in vats of liquid nitrogen.

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So here's the deal with notes. The blue circles are the fun/interesting ones you should read. They're for extra info or thoughts that I didn't want to put in the main text because either it's just tangential thoughts on something or because I want to say something a notch too weird to just be there in the normal text.

¹ Orange footnotes are boring objects and when you read an orange footnote, you'll end up bored. These are for sources and citations only.

Now let's pause for a second. A year ago, I knew almost nothing about cryonics, and my impressions of it were something like this sentence:

Cryonics, or cryogenics, is the morbid process of freezing rich, dead people who can't accept the concept of death, in the hopes that people from the future will be able to bring them back to life, and the community of hard-core cryonics people might also be a Scientology-like cult.

Then I started learning about it. It's your fault—cryonics is one of the potential-future-post-topics people email me about most, and it's something at least five readers have brought up in conversation when I've met them in person. And as I began to read about cryonics, I soon learned that a lot of the words in my italicized assumption sentence weren't correct.

So let's work our way through the sentence as we go over exactly what cryonics is and how it works. We'll start with this part:

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It turns out that this is like saying, "**Wingsuit flying**, or meteorology, is the sport of flying through the air using a wingsuit." Meteorology is the study of what happens in the atmosphere, which includes how wind works, and wingsuit flying is a process that harnesses the wind—and you'd be an odd person if you thought they were the same thing.

Likewise, cryogenics is a branch of physics that studies the production and effects of very low temperatures, while cryonics is the practice of using very low temperatures to try to preserve a human being. Not the same thing.

Next, we have a string of three misleading words to talk about:

Cryonics is the morbid process of freezing rich, dead people who can't accept the concept of death, in the hopes that people from the future will be able to bring them back to life, and the community of hard-core cryonics people might also be a Scientology-like cult.

We'll address these three words by going through how cryonics works, starting at the beginning. So you decide you want to be a cryonicist. Here are the steps:

Step 1) Pick a company

There are four major companies that provide cryonics services—**Alcor** in Arizona, **Cryonics Institute** (CI) in Michigan, **American Cryonics Society** (ACS) in California, and **KrioRus** in Russia. KrioRus is the newest option and quickly up- and-coming, but the two big boys are Alcor and CI (ACS doesn't have their own storage facilities—they store with CI).

From my perusing, it seems like Alcor is the slightly-more-legit and fancier of the two, while CI (which was started by Robert Ettinger, the guy who launched the movement) is more affordable and gives off more of a mom-and-pop vibe. Both are nonprofit, and each has about 150 people in storage. Alcor has a little over 1,000 "members" (i.e. people who will one day be in storage), and CI has around half that number.

Step 2) Become a member

To become a cryonicist, you need to fill out some paperwork, sign some stuff and get it notarized, and pay for three things: an annual membership fee, a transport fee to get your body to the facility after you die, and a treatment/storage/revival fee.

Alcor's **annual membership fee** is about \$700, and their transport fee is bundled together with the treatment/storage/revival fee—together they cost \$200,000. Alcor gives you the option of ditching your body and just freezing your brain (this is called "neuropreservation"), which brings the price down to \$80,000.

CI's **annual membership fee** is \$120 (or a one-time fee of \$1,250 for a lifetime membership) and the treatment, etc. costs \$35,000 (\$28,000 for lifetime members). This is so much cheaper than Alcor for two main reasons:

First, it doesn't include the transport. If you live near the facility, you can save a lot of money. If not, you'll need to go through their partner for a transport contract, which costs \$95,000 (\$88,000 for lifetime members).

Second, Alcor uses more than half of their large fee to fund what they call their **Patient Care Trust**. Back in the 70s, there were more cryonics companies, and some of them went bankrupt, which meant their frozen people stopped

being frozen, which was a not ideal outcome. Alcor's trust is a backup fund to make sure their "patients" won't be affected by something like a company financial crisis.

Step 3) Get a life insurance policy in the name of your new cryonics company

Sounds shady, right? But it also makes sense. Both Alcor and CI are small companies on a pretty tight budget and neither can afford to offer a payment plan to be hopefully paid out by your estate or your relatives. On the patient end, unless you're rich, cryonics fees are huge, and a life insurance policy guaranteed to pay your full cryonics fee forces you to save for this fee throughout your life. For young people, even sizable life insurance policies are pretty cheap— with CI, you could be totally covered for as little as \$300/year (\$120 annual membership, \$180 life insurance policy to cover the main fee). Even for Alcor's more expensive package, costs shouldn't exceed \$100/month.

Those fees aren't nothing, but the whole life insurance thing, at least when it comes to younger people, pretty effectively ejects "rich" from our black and red sentence. If it costs the same as cable or a cigarette habit, you don't need to be rich to pay for it.

Step 4) Put on your bracelet and go on living your life

Cryonics members are given **a bracelet and a necklace**, etched with instructions and contact info, and encouraged to wear one at all times, so if you suddenly die, whoever finds you will know to notify the company.

Step 5) Die

Okay here's where things get tricky. We think of the divide between life and death as a distinct boundary, and we believe that at any given point, a person is either definitively alive or definitively dead. But let's examine that assumption for a second:

Let's first talk about what it means when a person is "doomed" from a health standpoint. We can all agree that what constitutes someone being doomed depends on where, and when, they are. A three-year-old with advanced pneumonia in 1740 would probably have been doomed, while the same child with the same condition today might be fully treatable. The same story could be said of the fate of someone who falls badly ill in a remote village in Malawi compared with their fate if they were in London instead. "Doomed" depends on a number of factors.