In the midst of a hotly contested re-election campaign, the U.S. President breaks from debates and media events to attend a private retreat of kingmakers and oligarchs in the mountains of Northern California. Among the topics discussed are cryonics and age reversal. Later in the evening, there is a presentation on the use of “mind files”—how one’s thoughts, personality traits, mannerisms, likes, and dislikes are downloaded so that the individual can achieve technological immortality.

So what if the President is the fictional Francis Underwood and the scenario is played out in the Eighth Episode of the Fifth Season of Showtime’s House of Cards. This scenario in various forms is reality for real-life movers and shakers, as well as members of the general public. Estate planning for those who intend to be cryonically preserved or achieve mind file immortality is no longer novel, although to say it remains “cutting edge” is an understatement. “Revival trusts”—a term used in this article to describe a trust created to hold assets for a person upon his or her legal death pending the individual’s revival to life—have been around for decades. Grantors have created revival trusts that currently hold assets and that will receive significantly greater assets upon their deaths. Well-known and well-regarded institutions are serving as trustees of these revival trusts, and more institutions are coming on board.

The question is not whether revival trusts can be created or if they are necessary, but rather how to create a revival trust to last for decades, centuries, or in perpetuity. The premise of this article is that estate planning professionals, institutions, and advisors must prepare to meet the demand for revival trusts and the planning that goes with them. And just as science and medicine continues to expand, also must the legal profession.

The article presents a necessary perspective for those unfamiliar with the world of cryonics and the science and medicine supporting it. It also provides an overview of key provisions of revival trusts, as well as suggesting specific revival trust provisions.

Cryonics and mindfiles: a primer on the science and medicine
Cryonics is the science of using ultra-cold temperature to preserve human life with the intent of restoring good health when technology becomes available to do so, according to Alcor Life Extension Foundation (“Alcor”), the leading company in cryopreservation.1 The first Alcor patient was James Bedford, 50 years ago.2 There are now a 154 Alcor patients, and another 1,444 “members” who intend to be cry-
opreserved. In recent years, five to seven new patients have been added each year. According to the Alcor webpage, the cost to be preserved in Alcor is around $200,000 (or less if the head versus the full body is preserved), and members can expect to pay as much as $500 in annual dues.

Many believers in cryopreservation do not want to put all their revival eggs in one basket. For them, a separate and distinct path to revival is through “mind-files.” Mind-files proponents believe that (1) a conscious analog of a person may be created by combining sufficiently detailed data about a 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 being.

The Terasem Movement Foundation (TMF) maintains the Life-Naut mindfiles program, where individuals may create a free mind-file account and upload pictures, videos, and documents, organize information through geomapping, timelines, and tagging, create a computer-based avatar to interact with and respond to the user, and connect with other users. Thus far, more than 56,000 people have signed up and supplied information. TMF also operates the Life-Naut BioFile Project, which offers DNA and gene storage with a one-time minimal cost for the bio collection kit. TMF also continues to evolve and work with Bina48, the world’s mindfile-animated, humanoid robot who has been interviewed by, among others, Morgan Freeman (for a National Geographic documentary “The Story of God”) and Whoopi Goldberg of “The View.”

In recent years, Cryonics and mindfile uploading has also been featured prominently in popular culture. Author Don DeLillo’s book Zero K was a New York Times fiction bestseller. In the book, Ross Lockhart is the primary investor in Convergence, a cryopreservation facility in central Asia. Ross’s second wife Artis, suffering from multiple sclerosis, will have her body preserved at the facility upon her death. The book is narrated by Ross’s son Jeffrey and explores themes of human relationships and mortality. Another example is the HBO television drama Westworld, set in the near future in a technologically advanced, western-themed amusement park. The show explores the development of artificial consciousness in the android “hosts” who were created to allow park’s guests to indulge in fantasies. One of the hosts is based on the park’s deceased co-founder, and all are implanted with narrative “memories” created by the park staff.

Is there reason to believe? Do those thousands of people who believe they will be preserved and

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1 Alcor was founded in 1972 and based in Scottsdale, Arizona. Alcor’s main competitor is Cryonics Institute, formed in 1976, in Clinton Township, Michigan. Also, KrioRus, founded in 2005 and based in Moscow, is the only active cryonic storage company outside the U.S. KrioRus, www.kriorus.com/en (last visited 4/18/2018); see also Dean, “Decapitate and Freeze Now. Figure Out Immortality Later,” Bloomberg Businessweek (11/2/2016), www.bloomberg.com/features/2016-decapitate-and-chill/ (“As of the end of September, KrioRus had preserved 51 humans (26 full bodies and 25 heads) and 20 pets (mostly cats and dogs but also three birds). Statis Systems: The Project, http://stassisystemsaustralia.com/project.html (last visited 2/13/2017).

2 Starr, “Cool Dude James Bedford Has Been Cryonically Frozen for 50 Years,” CNET (11/1/2017), www.cnet.com/news/cool-dude-james-bedford-has-been-cryonically-frozen-for-50-years/. Bedford was preserved on 1/19/1967, and the anniversary of the event is known as “Bedford Day.”


8 The View, “Whoopi Goldberg Talks to Bina Rothblatt’s Al Robot BINA48,” YouTube (8/3/2016), www.youtube.com/watch?v=1vBT0He4EA. In a related project, in October 2016, The Verge, a multimedia website which “examines how technology will change life in the future,” profiled Eugenia Kuyda, the co-founder and CEO of Luka, an artificial intelligence start-up, and her project to create a digital avatar of her deceased friend Roman Mazurenko. Newton, “Speak, Memory,” The Verge (10/6/2016), www.theverge.com/a/luka-artificial-intelligence-memorial-roman-mazurenko-bot.


ultimately revived have any basis? Do the famous, such as Paris Hilton, Larry King, Simon Cowell, and Britany Spears who have expressed interest in cryonics know something we do not? What about the tech giants and geniuses who believe medicine and science will ultimately make death itself obsolete?  

In February 2016, scientists achieved a “significant breakthrough” in the field of cryonics using Aldehyde-stabilized cryopreservation, which enabled researchers from 21st Century Medicine to preserve and recover the brain of a rabbit. The authors published their findings in the journal Cryobiology and wrote that the “results [of the new process] show exquisite preservation of anatomical details in both [rabbit and pig brains] after vitrification and rewarming, with virtually no identifiable artifacts relative to controls.”

Also in 2016, doctors from India and the U.S. working with Revita Life Sciences (based in India) and Bioquark, Inc. (based in Philadelphia, Pennsylvania) received approval for a clinical trial in India which will use multiple therapies and techniques, including injecting the brain with stem cells and using nerve stimulation, to attempt to bring “back to life” 20 patients who have been declared dead from traumatic brain injury. The first stage of the trial, named “First In Human Neuro-Regeneration and Neuro-Reanimation,” will be conducted at Anupam Hospital in Rudrapur, Uttarakhand in India. Although declared dead, the participants are being artificially kept alive through life support. During a six-week period, researchers will administer peptides into the spinal cord daily via a pump and give stem cells bi-weekly. The doctors will then monitor the central nervous systems of the test subjects for several months watching for signs of regeneration, particularly in the upper spinal cord, “the lowest region of the brain stem which controls independent breathing and heartbeat.” Dr. Ira Pastor, the CEO of Bioquark, stated, “This represents the first trial of its kind and another step towards the eventual reversal of death in our lifetime.”

And of hope for mind-files, brain research through the “Advancing Innovative Neurotechnologies (BRAIN) Initiative” may also one day provide the advances that lead to successful reanimation. Launched on 4/2/2013, by President Barack Obama, the BRAIN Initiative is modeled after the sequencing of the human genome, and aims to “accelerate the development and application of new technologies that will enable researchers to produce dynamic pictures of the brain that show how individual brain cells and complex neural circuits interact at the speed of thought.” The Initiative aims to create a comprehensive map of the human brain, enabling efforts to understand interactions between the brain’s 86 billion individual neurons and funding the treatment, prevention, and possible cure of brain disorders including Alzheimer’s and epilepsy. On 12/6/2016, President Obama signed the 21st Century Cures Act which allocates over $1.5 billion to the BRAIN Initiative over the next ten years.

What is a revival trust? In traditional estate planning, death triggers distributions to family, friends, and charity (and sometimes the IRS). But with a revival trust, clients preserve their wealth for their revival. Scientists, doctors, and futurists will ultimately determine whether cryonic or mind-file immortality is viable. However, the challenge for lawyers is how to draft a revival trust to last for 100 or 1,000 years, or perhaps forever.

The revival trust chassis is a “dynasty trust,” i.e., a trust created to last in perpetuity for future generations. Dynasty trusts can be created in many states, with South Dakota, Delaware, and Nevada often mentioned as favorable juris-
dictions. The typical dynasty trust passes assets through generations as long as financially viable, free of estate tax and protected from creditors. So too the revival trust, except the sole or primary beneficiary is the client during his or her “biostasis” until his or her revival. (“Biostasis” describes a person after legal death, pending revival from cryonics or mind-files.)

Because the client’s descendants are disinherited, it is easy to envision a challenge from a disgruntled heir. Also, a revival trust, with assets held perhaps forever for investment and accumulation, may be challenged as an abuse to public policy by a state attorney general.

**How to rebut legal challenges.** To address these potential legal hurdles, the following provisions are recommended:

First, the Revival Trust must be a “purpose trust.” As background, except for charitable trusts, a trust must have beneficiaries to be enforceable. If assets of a client in biostasis are placed in a revival trust to hold until his or her revival, arguably the revival trust has no beneficiary and is unenforceable. Hence, a successful challenge from an heir or state attorney general is more likely.

Purpose trusts are now allowed in most states, which are valid despite the absence of a human beneficiary. Typical purpose trusts include trusts to care for pets, maintaining grave sites, and the retention of real and personal property. A less common but ideal purpose trust use is for revival trusts. And in choosing a state that allows for purpose trusts, such state must allow the purpose trust to continue in perpetuity, or at least 1,000 years.

Second, in addition to being a purpose trust, the revival trust should include as many of the following provisions as the client can accept:

1. If real property is included in the revival trust, such as a beach house or mountain retreat, consider allowing descendants limited use.
2. For liquid assets inside the revival trust, consider allowing descendants discretionary income and principal distributions. These distributions could be for ascertainable standards such as “health, maintenance, support, and education,” as determined by the trustee. Alternatively, all the income could be paid each year to beneficiaries. If such distributions are allowed, they should be capped at a certain percent or amount to ensure the vast majority of the assets are available for the client’s revival.
3. The client may also consider permitting one or more charities the use of real property or discretionary distributions. This serves the dual purpose of ensuring distributions are permitted prior to revival and satisfying a public good, which may mollify a state attorney general’s concerns.

Assuming the revival trust has been drafted with distributions in mind to withstand legal challenges, what other distribution provisions are important? A “no contest” (or *inter terrors*) clause should be included, which disinherits the challenging beneficiary from the pool of eligible beneficiaries. And although the primary purpose is to provide assets for the client’s revival, trust distributions should be allowed if they would enhance the client’s revival or contribute to technological and scientific advances.

Revival trust funds could also be available to monitor whether the cryonic facility has maintained state-of-the-art science; whether the facility is providing the proper level of care for the client; and whether the facility is financially sound. Trust funds may also be authorized if litigation is necessary to protect the client, either regarding the cryonic facility or against a family member or state attorney general. Similarly, distributions for lobbying at the state or local level could be allowed.

It is conceivable that, despite science and technological advances, revival is not an option. For example, the storage site could be destroyed by fire or an act of God.
In such an event, provision should be made for the dissolution of the trust to named beneficiaries, such as descendants or charities.

**Who decides?** Similar to any trust, there must be a trustee to carry out the trust provisions and invest the trust assets. Here, an institutional trustee is necessary to provide the permanence and institutional management necessary to protect and invest the funds for an extended period. But the reasons for selecting an institutional trustee—a strong institutional fiduciary—with permanence and financial resources—cut against the other tasks necessary by a fiduciary of a revival trust.

Institutional trustees are not equipped to monitor the cryonic facility, check state laws, hire scientific advisors or other experts, apply criteria for the grantor’s revival, and exercise the necessary general oversight. Just as significantly, there is not an institutional trustee who would be willing to serve with these responsibilities. Institutional trustees, with their strict regulations and fiduciary duties, want to barricade themselves from the unique needs of a cryonic beneficiary described above.

Thus, the revival trust will be a “directed trust,” where the institutional trustee takes instruction from a “trust protector” or a “committee of guardians.” In a traditional directed trust, the trust protector provides flexibility to accommodate legal or factual changes. The trust protector may amend the trust under specific circumstances. The trust protector typically has the authority to hire and fire the institutional trustee. A trust protector may change the situs of the trust if another state becomes friendlier to cryonic preservation or the client’s objectives.

Another common task performed by the trust protector is to direct the trustee regarding investment or distribution decisions. With a revival trust and an institutional trustee, there may or may not be an investment advisor under the direction of the trust protector. However, it is certain that there will be a trust protector directing distributions under the criteria above.

The trust protector may be a committee of three to five people, comprised of descendants, lawyers, and officials of cryonic organizations, or just one person. Obviously in view of the duration of the trust, succession planning for the trust protector is critical.

**Drafting a revival trust**

Most revival trusts are created as irrevocable trusts during lifetime. The revival trusts may consist of gifts of liquid assets, closely held business interests, and real property. Grantors use their gift tax exemption—about $11.2 million per person, at least until 2026 absent a law change—to fund the revival trust. They may leverage the gift through common estate and gift tax strategies, such as grantor retained annuity trusts or gifts and sales to intentionally defective grantor trusts claiming market and minority discounts.

**Common provisions.** The trusts are designed to last in perpetuity—such as a “dynasty trust” or “generation-skipping trust.” The hope and expectation is that the assets transferred into the revival trust are worth significantly more in the future. Because a gift tax return is filed at the time of the gift, with an appraisal reporting the transferred assets’ value to support “adequate disclosure,” there is no further estate tax consequence.

As described above, this revival trust is no different than a “typical” dynasty trust, except the grantor is focused on the assets’ growth and protection for the grantor’s benefit, upon the grantor’s revival, not the benefit of the grantor’s descendants. Therefore, the revival trust and dynasty trust contain similar provisions. Both trusts include provisions pertaining to:

1. The name of the trust.
2. Whether it is a grantor trust.
3. The name of the trustee, trustee successors, powers, compensation, bonding, liability, and indemnification.
4. Whether it is a directed trust with a trust investment advisor.
5. Whether there is a trust protector for flexibility with powers such as appointing and removing the trustee.
6. Fundamental provisions pertaining to situs, choice of law, and definitions.

**Revival trust provisions.** With a revival trust, the above provisions are only the starting point. To address the grantor’s unique objectives what provisions are added to a revival trust?

**Purpose trust.** A basic and longstanding trust principle is that a valid trust must have a beneficiary. In a revival trust, arguably under trust law there is no beneficiary because the intent is to maintain assets primarily for revival, without distributions during the grantor’s lifetime. Thus, the revival trust must be created in a state...
which recognizes “purpose trusts,” i.e., a trust that does not require distributions and that does not have a beneficiary, at least for a time.

Suggested sample language in South Dakota or Delaware, two states which recognize purpose trusts, is the following:

The Grantor intends to be placed in Biostasis via Cryopreservation. It is the Grantor’s intent that the Trustee maintains the Trust Fund during the Grantor’s lifetime, until his Revival subject to the provisions herein and under [South Dakota Codified Laws 55-1-20] [12 Del. C. Section 3556].

Distributions during lifetime. As alluded to above, revival trust assets are intended primarily for the grantor’s revival. Creating the revival trust in a jurisdiction that allows purpose trusts allows assets to grow indefinitely without distributions. A revival trust provision should specifically state the grantor’s intent to leave assets inside the trust until at least legal death.

Suggested sample language is the following:

In creating this Trust Agreement, the Grantor intends to provide funds for the management of the Trust Fund during his lifetime and more particularly upon his legal death. Accordingly, the Trustee will hold the Trust Fund in Trust to be used for the management of the Trust assets until the time that the Grantor has been repaired and revived to a condition as will allow him to again be considered legally alive, functional, and independent through the Cryonic Process and such repaired and revived Grantor demands termination of the Trust Fund. Thus, after transfer of assets into the Trust there shall be no distributions until the death or legal declaration of death of the Grantor into biostasis, and the Trust assets shall only be used for general administrative expenses and management fees as provided herein.

Distributions after legal death, during biostasis, and after revival. Upon legal death, the revival trust’s primary purpose is to maintain trust assets for the grantor’s revival. However, the grantor’s revival could be years into the future. Often de minimis distributions are allowed for two reasons: First, it is in the grantor’s best interest to use trust assets if the funds could enhance the grantor’s care during biostasis or expedite his or her revival. Second, even with the statutory authorization of purpose trust, de minimis distributions to charity or descendants during the grantor’s biostasis may mollify lawsuits by a greedy family member or activist state attorney general. 28

Suggested sample language is the following:

The maximum percentage of Revival Trust assets to fund scientific research to revive Grantor or to attempt to revive Grantor is 5% of the Revival Trust liquid assets as of the 25th anniversary of the date on which Grantor is placed into cryopreservation, and as of each 25-year period thereafter. Whether to pay such funds shall be decided within a reasonable time before or after each 25-year period by the Trust Protector in its sole discretion, keeping in mind the Grantor’s primary objective that there shall always be sufficient funds remaining in the Revival Trust to insure its existence. The Grantor acknowledges and approves that these funds may provide ancillary benefit to other patients in cryopreservation.

Also, by March 1 of each year, the Trustee in its sole discretion, may distribute up to 25% of the Revival Trust net income from the prior year, measured on December 31 of such prior year, to the Grantor’s descendants, for their health, maintenance, support and education, without any requirement of equality of treatment.

Trust protector. As mentioned above, the trust protector in a revival trust has a range of duties beyond those within the typical
purview of trust protectors. The duties pertain primarily to the revival trust’s need for an individual, or committee of individuals, to address scientific and revival issues an institutional trustee is ill-equipped to handle.

To deal with the scope of these unique tasks, suggested sample language is set forth below, with the caveat that the duties listed are comprehensive but not exhaustive.

The primary objective of the Trust Protector is the following:

(1) Serve as the patient advocate of the Grantor during the Grantor’s Biostasis and until Revival.

(2) Ensure that the Grantor is Cryopreserved and maintained in a Cryopreserved state in the best way possible, using the best methods available at the time of his legal death.

(B) The Trust Protector may appoint a Scientific Advisory Board or other advisors to facilitate the Grantor’s intent.

(C) The Trust Protector shall oversee funding scientific research aimed at restoring Grantor along with all other cryonic suspension patients in similar condition back to life, health, and youthful vigor after they have been placed into cryopreservation. The research funded may include but is not restricted to the following fields: Cryocons and suspended animation, resuscitation, interventional gerontology, neurobiology, artificial organs, transplantation, regeneration, genetic engineering, cloning, DNA transplant engineering, cell colony cloning, immunologic engineering, time travel, and molecular engineering (nanotechnology). Funding may also be utilized for research aimed at the uploading Grantor’s deanimated identity and memory into a computer, electronic or other type artificial system that would enable the Grantor to be fully or partially restored to some level of consciousness.

(D) To assume fiduciary oversight of the perpetual maintenance of Grantor in cryopreservation (and/or improved preservation). In the event [Cryonic Facility] is no longer able or willing to fulfill their contractual obligation, Trust Protector may research and remove Grantor within biostasis to a different [Cryonic Facility].

(E) The decision concerning when to revive Grantor shall be made by the [Cryonic Facility] entrusted with the care of Grantor, subject to the approval of the Trust Protector.

(F) If the foremost experts in the world (as selected and relied on by the Trust Protector) in the revival sciences do not unanimously agree that the person who has been revived is the Grantor, then the person who has been revived and, in the opinion of the Trust Protector, is reasonably believed to be the Grantor, should be given up to 5% of the assets of the Revival Trust, permitted to go on to live his life, and be given an all the legal rights accorded to any citizen of the United States, or any other jurisdiction in which that person has been revived. Notwithstanding the real possibility that this person will consider himself to be the Grantor, and others may agree with him, further attempts to revive Grantor shall continue until all the criteria described herein are met. Once at least two versions of Grantor have been revived, the Trust Protector shall make every effort to gather all such versions at an annual meeting of all existing people who claim to be the Grantor. If any version of the Grantor is too far away to attend one or more of these meetings, he (or they) should be urged to attend telephonically if possible. These meetings shall be presided over by the Trust Protector. The purposes of these meetings shall include, but not be restricted to, attempts to determine who the real Grantor is; attempts to determine if it is possible to be more than one real Grantor; discussion and research about whether any more attempts should be made to revive Grantor; and attempts to help revive any relations or friends of Grantor in cryopreservation who have not yet been reanimated successfully in good health and of sound mind.

Conclusion

The groundswell of life extension and age reversal science, medicine, and public desire is proceeding at an accelerating pace, backed by entrepreneurs used to positive results. A close cousin is cryonic preservation or mind file downloading designed to allow the legally dead to return to life.

Whether this is an attainable goal, like eradicating polio or putting a man on the moon, or an indulgent expensive pipe dream is irrelevant to this article. What is relevant is that numerous individuals across all economic and geographical borders have committed to cryonic preservation. The legal and financial community needs to be aware of how to meet their objectives. Revival trusts are but one of the necessary tools and considerations to do so.

As mentioned above, distributions to charity and descendants also supports a “no contest” clause, providing that any beneficiary or party contesting the validity of the revival trust or any provision of the revival trust, regardless of whether such proceedings are instituted in good faith and with probable cause, waives all benefits. Further, the clause would say any contesting party pays all attorneys’ fees and costs associated with such proceeding.