

Statement on High Court ruling concerning 14 year old cancer victim's right to cryonics:

Who Decides What We Can Do With Our Body (and Brain)?

Our hearts go out to the young British woman whose battle with cancer ended sadly earlier this month at age 14, as well as to her parents as they cope with this very difficult time. And we commend the [British High Court Judge for his important ruling](#) enabling the girl to obtain her wish to be cryogenically preserved. While we have no comment on the specifics of this case, and do not ourselves offer services of this nature, we hope we can shed some light on the project of experimental medical biostasis / cryonics more generally.

Over the past decade, scientists have made [significant advances](#) in low-temperature biology, and scientists developing molecular machines will receive this year's [Nobel Prize](#) on December 10. Many, including scientists at places like Cambridge University, MIT, NASA and Harvard, now [openly support](#) cryonics as a legitimate scientific endeavor. Of course there is no guarantee that any cryonics patients will be revived in the future, but as discussed by four tenured professors in [this recent MIT Technology Review piece](#), the best evidence suggests that cryonics deserves open-minded consideration.

Coordinator of the [UK Cryonics and Cryopreservation Research Network](#), Dr João Pedro de Magalhães, when asked for his thoughts, observed that *“no matter the probability you assign to the procedure, we think it's important to give people the choice, just as we give dying patients the opportunity to try other experimental medical therapies to save their lives”*.

Cryonics is a similar experimental treatment, albeit one with different legal and ethical implications, and whose probability of success is unknown. Many parts of the world are now taking progressive stances towards the idea of death with dignity. It seems incongruous with these beliefs to stigmatize a procedure for what is at worst an over-optimistic belief about the state of the future.

Despite the many intermediate successes in low-temperature biology over the past few decades, no cryonics organization can currently revive a patient. Nobody has claimed otherwise, and arguments based on this premise are missing the point.

Cryonicists look at how medicine has progressed over the past hundred years, at the millions of people whose lives would have been cut short if not for advances in technology, and it fills them with hope about what might be possible for the future. The goal of cryonics is not to be able to revive someone with contemporary technology, rather the goal is to preserve a person and her brain well enough that future technologies may be able to (repair and) revive the person. One can think of this as transporting the body forward through time or as medical time travel. This depends on technologies that will be developed in the next decades or centuries, not on the world's capabilities today. All the major cryonics organizations in the western world are non-profits with the goal of surviving for centuries.

As Aschwin de Wolf, President of [The Institute for Evidence-Based Cryonics](#), explained, *“Cryonics is based on the premise that the neuro-anatomical basis of identity is more robust than folk wisdom suggests, and we envision future technologies that can infer the healthy state of the brain from the injured state - and even repair any damage that occurs during the cryopreservation process itself. As such, cryonics is not an act of faith, but an act of reason.”*

We will cure cancer one day, and it is reasonable for this girl, born too early through no fault of her own, to choose for herself the best chance to make it to that world where more is possible,

Contact / interviews:

Dr João Pedro de Magalhães

Coordinator, UK Cryonics and Cryopreservation Research Network

+44 151 7954517 / aging@liverpool.ac.uk

www.cryonics-research.org.uk

Aschwin de Wolf

President, Institute for Evidence-Based Cryonics

contact@evidencebasedcryonics.org

www.evidencebasedcryonics.org

Appendix of key supporting materials

- "The patient should participate responsibly in the care, including giving informed consent or refusal to care as the case might be...**The patient's right is based on the philosophical concept of respect for autonomy, the common-law right of self-determination**" [American College of Physicians Ethics Manual](#), 2016
- Open letter from 69 scientists (encompassing all disciplines relevant to cryonics, including Biology, Cryobiology, Neuroscience, Physical Science, Nanotechnology and Computing, Ethics and Theology) who support cryonics as a legitimate science: <http://www.evidencebasedcryonics.org/scientists-open-letter-on-cryonics/>

- Review of the science behind modern-day cryonics by four tenured professors: <http://www.technologyreview.com/view/542601/the-science-surrounding-cryonics/>
- 21st Century Medicine wins the Brain Preservation Prize for longterm structural preservation of a mammalian brain in 2016, finishing ahead of a team from Max Planck: <http://www.evidencebasedcryonics.org/2016/02/09/aldehyde-stabilized-brain-cryopreservation-announcement/>
- Peer-reviewed journal articles detailing the preservation approaches submitted to the Brain Preservation Prize: <http://www.nature.com/nmeth/journal/v12/n6/full/nmeth.3361.html>
<http://www.sciencedirect.com/science/article/pii/S001122401500245X>
- C. elegans shown to retain memories (and have offspring) after revival from cryopreservation: <http://www.evidencebasedcryonics.org/media/MBPP.pdf>
- Nobel Prize for Chemistry 2016 awarded “for the design and synthesis of molecular machines” https://www.nobelprize.org/nobel_prizes/chemistry/laureates/2016/press.html
- Excellent general overview on the pros and cons of pursuing cryonics in 2016: <http://waitbutwhy.com/2016/03/cryonics.html>