Heidi Klessig MD

Anesthesiologist, Pain Management Specialist, Author, Speaker

RESPECT FOR HUMAN LIFE

Life, Death, and Medical Meaning

Why the AAN 2023 Brain Death Guideline Cannot Be Accepted

In the first year of my anesthesiology residency, I was asked to anesthetize a "brain dead" man for organ harvesting.

Normal vital signs

Excellent oxygen saturation

Skin was warm and supple

He looked like every other ICU patient I had anesthetized, and better than most.

Back in the OR, my supervising anesthesiologist asked me what type of an anesthetic I planned to use. I told him…

Paralyzing agent

Fentanyl

He then asked me if I was going to give a drug to block

consciousness?

"Why would I do that?" I asked, "Isn't he dead?"

He just gazed at me over his mask and said, "Why don't you give one…just in case," and walked away.

I did as I was told.

The young man responded to surgery just like anyone else, requiring the same types and amounts of anesthesia.

It is my regret over this incident that motivates me to be speaking here today.

When is Someone Dead?

If you can be **resuscitated**, you were never dead.

No one comes back from the dead (**resurrection**) without divine intervention.

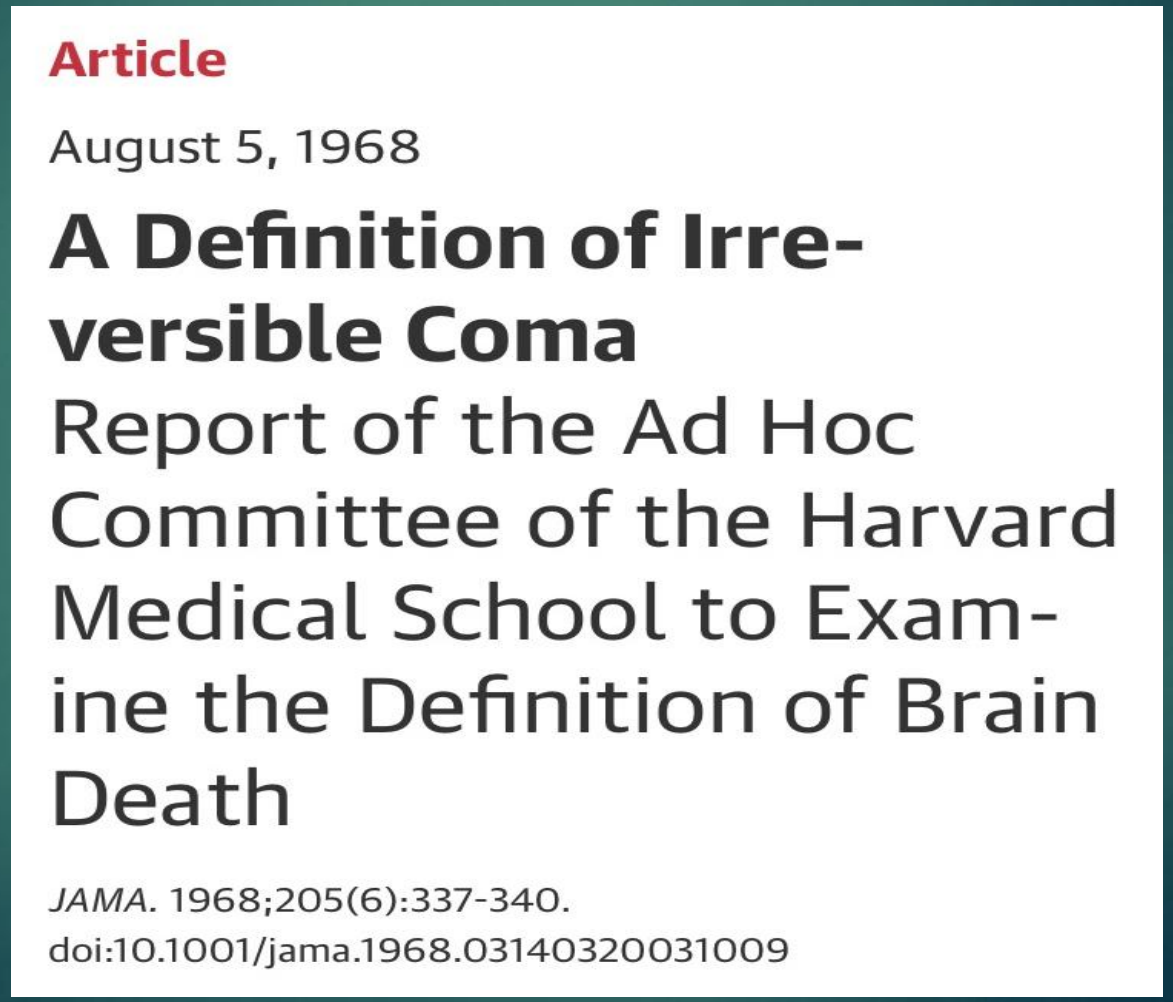
When is Someone Dead?

Most people define death as the separation of the spirit/soul/life principle from the body.

But the spirit is immaterial, and we do not have any device to determine the exact moment of death when the soul departs.

Historically, death has been declared when there is complete cessation of ALL vital functions beyond ALL possibility of resuscitation (as evidenced by the absence of heartbeat and breathing).

The definition of death changed in 1968



Article

August 5, 1968

A Definition of Irreversible Coma

Report of the Ad Hoc Committee of the Harvard Medical School to Examine the Definition of Brain Death

JAMA. 1968;205(6):337-340.
doi:10.1001/jama.1968.03140320031009

"Our primary purpose is to define ***irreversible coma*** as a new criterion for death"

Does changing a definition change the reality?

The only rationale given by the committee for why irreversible coma should be equated with death was **utility**. They said:

- these people were a burden to themselves and others.
- this redefinition would free up beds in intensive care units and facilitate organ transplantation.

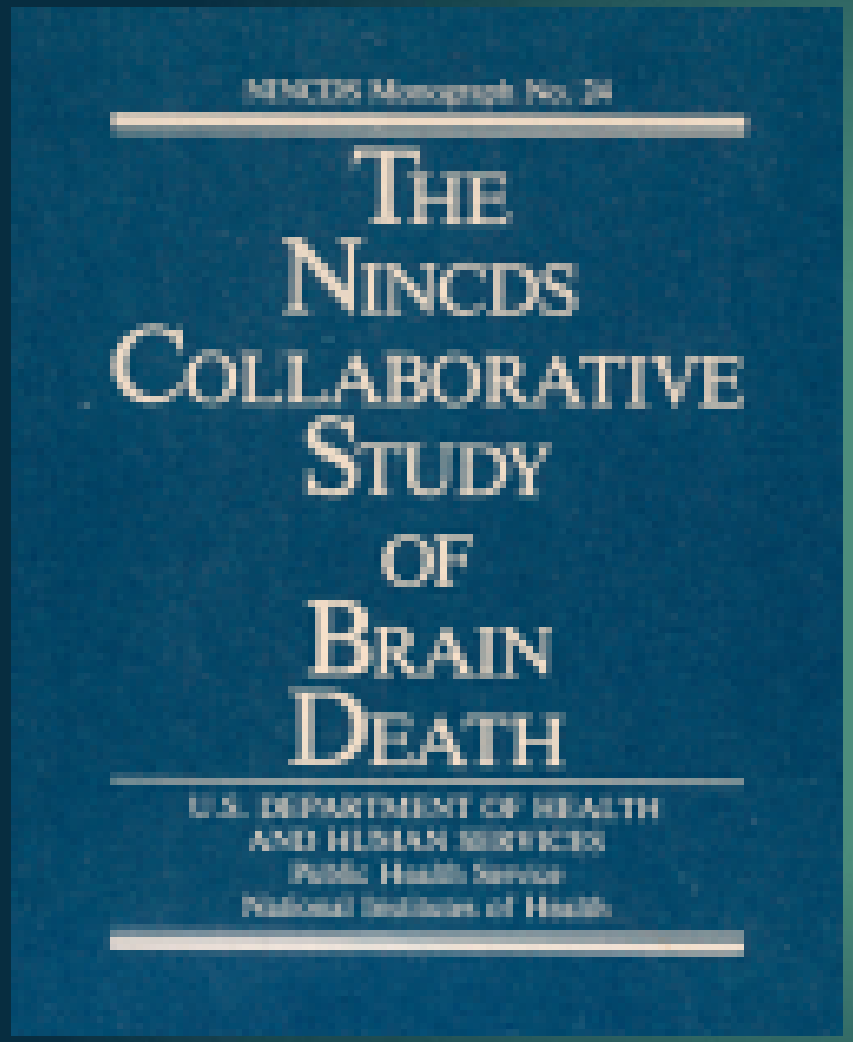
- Beecher HK, et al. A Definition of Irreversible Coma. *JAMA* 205, no. 6 (1968): 337-340.

Nair-Collins, M. Expanding the Social Status of "Corpse" to the Severely Comatose: *Henry Beecher and the Harvard Brain Death Committee.* Perspectives in Biology and Medicine, 65, no. 1 (2022): 41-58.

"Our primary purpose is to define irreversible coma as a new criterion for death."

This **redefinition** certainly was of great utility because it allowed organ procurement to skirt the dead donor rule by simply declaring comatose people to be "dead."

Dead Donor Rule: People must neither be alive when organs are removed nor killed by the process of organ removal.



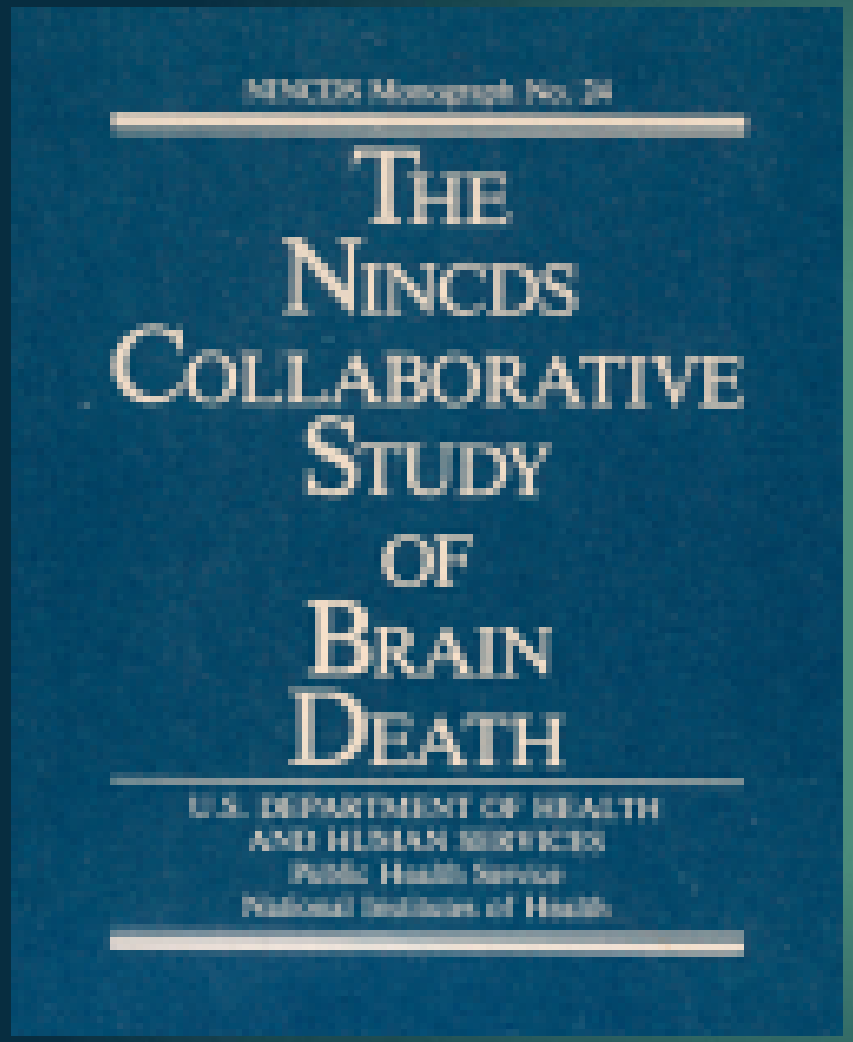
Neuropathology of "Brain Death"

National Institute of Neurologic Diseases and Stroke Collaborative Study 1970-72

> Of 226 brains autopsied, ten were grossly normal and only **40%** showed total brain infarction.

It was **"not possible to verify that a diagnosis made before cardiac arrest by any set or subset of criteria would invariably correlate with a diffusely destroyed brain".**

The National Institute of Neurologic Diseases and Stroke Collaborative Study of Brain Death. NINCDS Monograph No. 24. US Dept. of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Neurological and Communicative Disorders and Stroke. Bethesda, Maryland 20205.



Dr. Gaetano Molinari:

"While the prognosis for recovery of function is nil and the probability of death within days to weeks is extremely high, one major question remains and perhaps has been brought into focus by the NINCDS Collaborative Study. That question is:

Does a fatal *prognosis* permit the physician to pronounce death?

It is highly doubtful whether such glib euphemisms as 'he's practically dead,' … 'he can't survive,' … 'he has no chance of recovery anyway,' will ever be acceptable legally or morally as a pronouncement that death has occurred.

Defining Death: 1981 President's Commission for the Study of Ethical Problems In Medicine & Biomedical & Behavioral Research

1. In 1981 the brain was considered the "Master Integrator", without which biological death would very quickly occur.

Their argument was based on a **prognosis** of death, not a diagnosis

Defining Death: 1981 President's Commission for the Study of Ethical Problems In Medicine & Biomedical & Behavioral Research

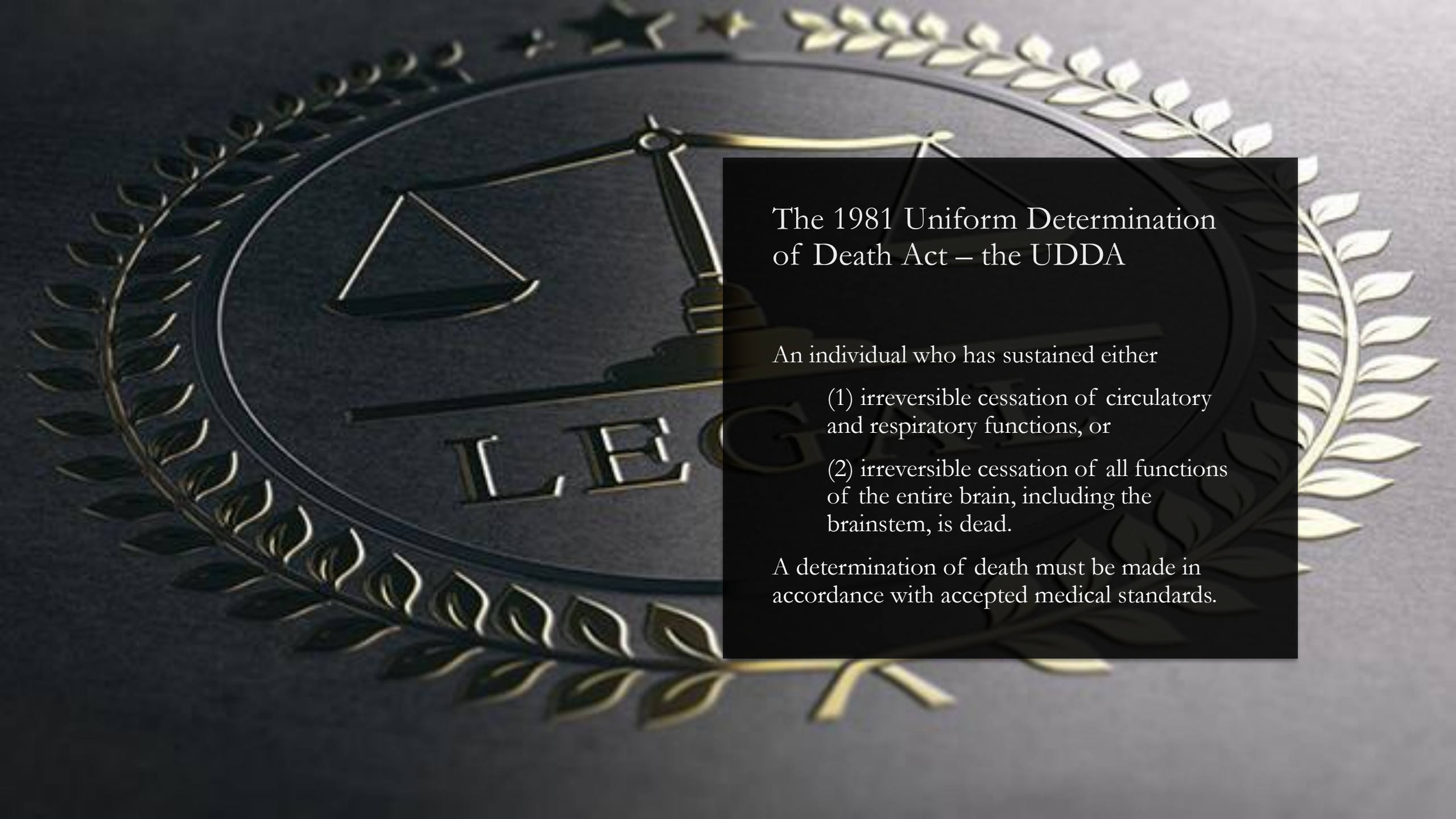
2. They asserted that the development of technologies such as ventilators to sustain life "*masked*" that death had already occurred.

They believed that ventilating a corpse would make it look alive

Harvard professor of philosophy Daniel Wikler wrote *Defining Death*'s third chapter, "Understanding the Meaning of Death."

"I was put in a tight spot, and I fudged. I knew that there was an air of bad faith about it. I made it seem like there are a lot of profound unknowns and went in the direction of fuzziness, so that no one could say, 'Hey, your philosopher says this is nonsense.' That's what I thought, but you'd never know from what I wrote."

Rachel Aviv, "What Does It Mean to Die?," *The New Yorker* (January 29, 2018), www.newyorker.com/magazine/2018/02/05/what-does-it-mean-to-die.



The 1981 Uniform Determination of Death Act – the UDDA

An individual who has sustained either

(1) irreversible cessation of circulatory and respiratory functions, or

(2) irreversible cessation of all functions of the entire brain, including the brainstem, is dead.

A determination of death must be made in accordance with accepted medical standards.

But are brain dead patients dead? No.

In 1998, this was disproved by Dr. D. Alan Shewmon, who documented **175 cases of "brain dead" people who lived** after the declaration of death under the UDDA, one for more than 20 years!

These cases show that brain death is a **prognosis** of death, and not death itself.

Shewmon DA. Chronic "brain death": Meta-analysis and conceptual consequences. Neurology 1998;51;1538-1545.

Shewmon's 175 "brain dead" people continued to show integrated functioning of their bodies

1. Metabolic activity
    a. digestion, absorption of nutrients, elimination of wastes
    b. exchange of oxygen and carbon dioxide at the capillary-alveolar interface and between the red blood cells-tissues
2. Wound healing
3. Spontaneous movements
4. Maintenance of body temperature
5. Mounting of appropriate stress responses
6. Fighting infections
7. Going through puberty
8. Gestating pregnancies

All of these are the work of the patient.
Machinery does not do any of these things.

Shewmon DA. Chronic "brain death": Meta-analysis and conceptual consequences. Neurology 1998;51:1538-1545

Does the Ventilator Mask Death? No.

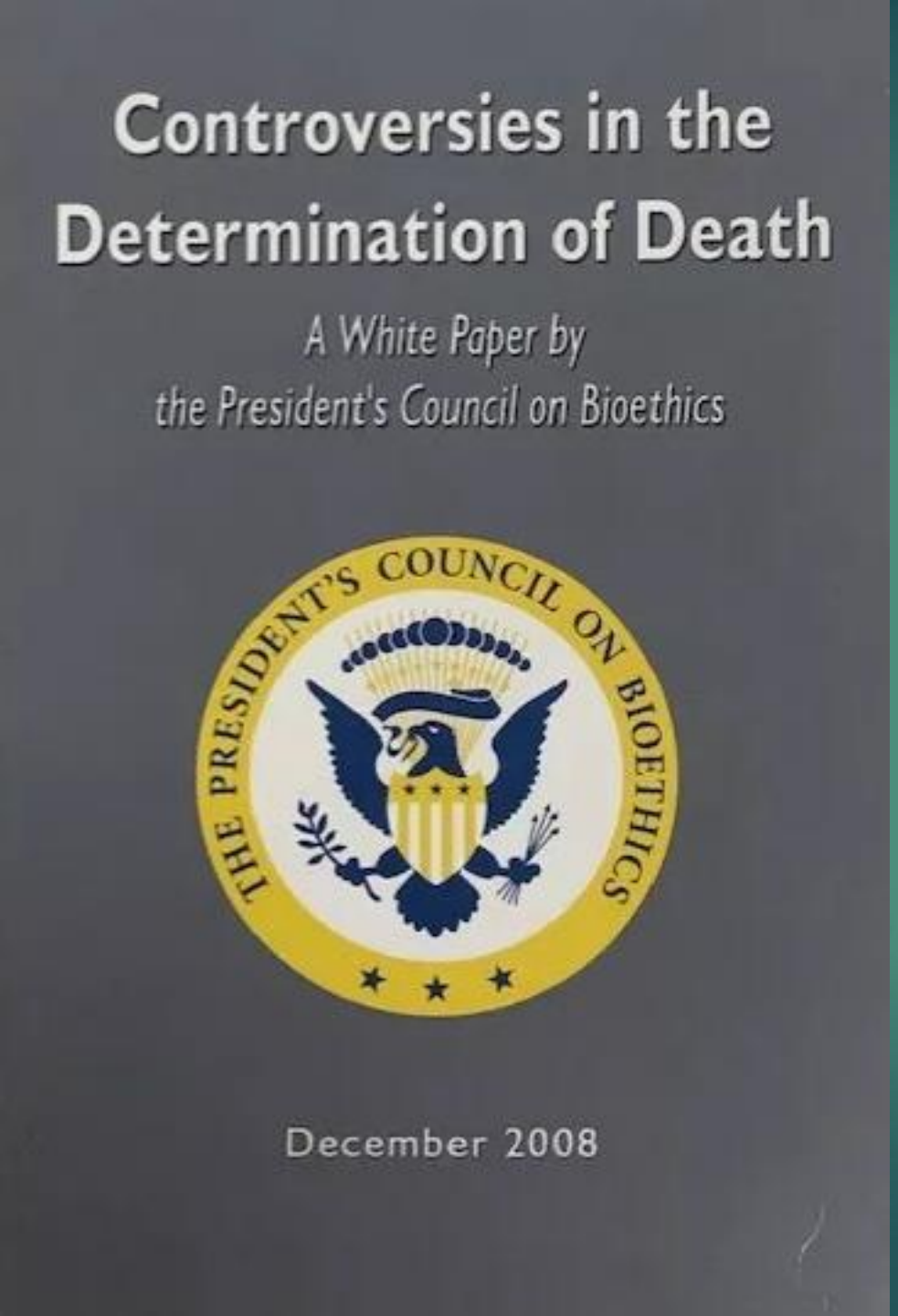
Life and death are mutually exclusive: machinery can only *sustain* life, not produce it.

Nguyen D. Pope John Paul II and the neurological standard for the determination of death: A critical analysis of his address to the Transplantation Society. The Linacre Quarterly 84 (2) 2017, 155-186.

“What we are arguing is that, at a certain point of dependence on artificial means of treatment, the organism becomes a non-organismal, medically supported, biological entity and can be determined to be dead.”

- **“At a certain point” --** vague and arbitrary; based on who gets to decide.
- **"Dependence on artificial means of treatment“ --** this is defining disability as death.
- **"Non-organismal, medically supported, biological entity“** - dehumanizing language

This is an arbitrary standard for removing human rights based on disability



Because of Shewmon's evidence that people were living after a brain death diagnosis, another presidential council was convened.

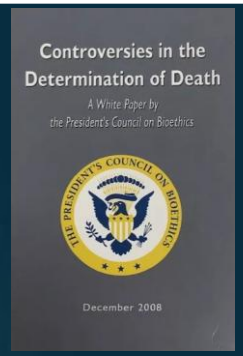
They noted that Shewmon's work left two options:

1. Abandon neurological criteria for determining death

2. Develop a new rationale for explaining why neurological criteria should equal death

New rationale based on a questionable philosophy rather than biology

"Total Brain Failure"

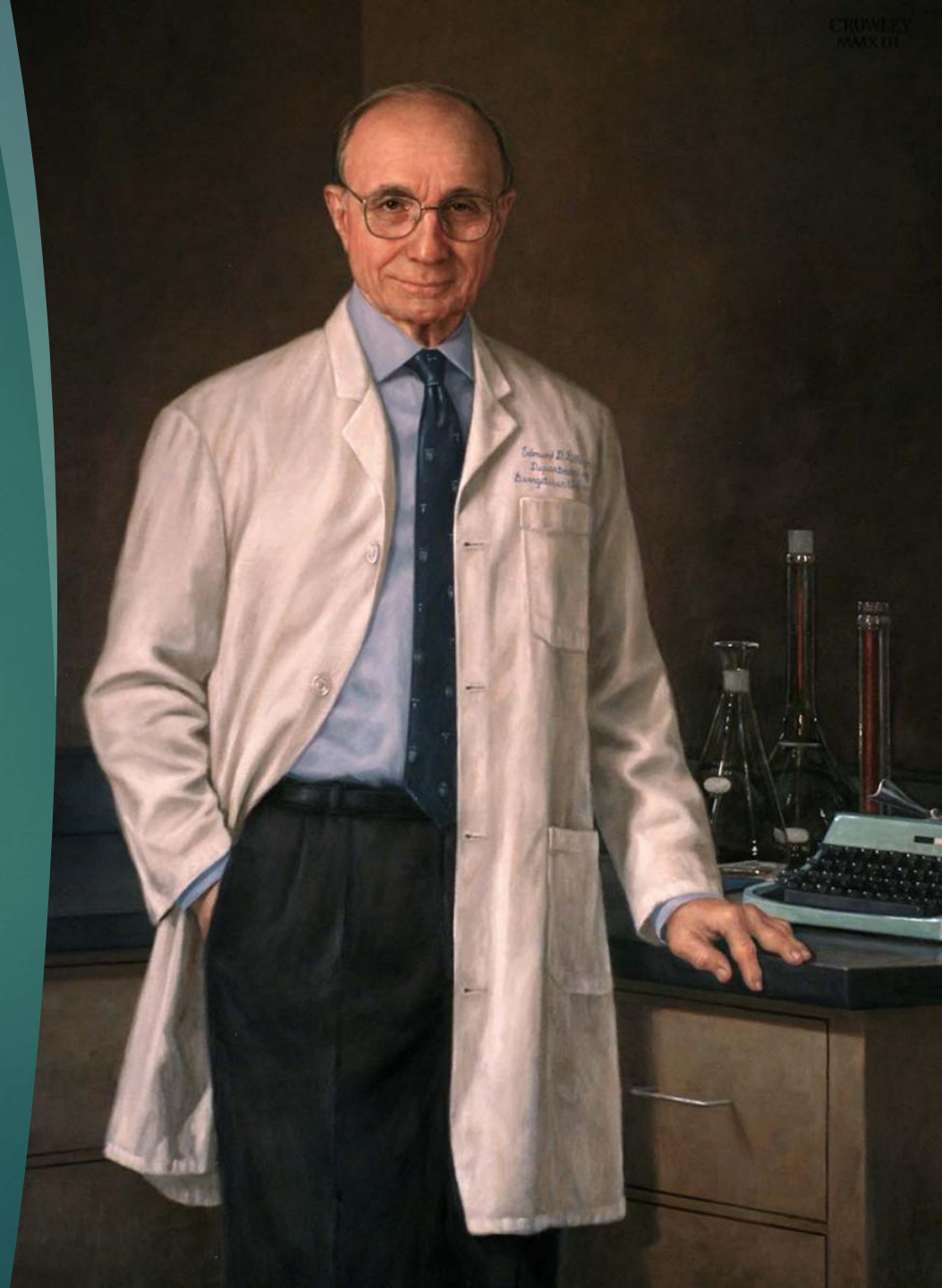


An organism is no longer alive when it ceases to perform the "fundamental vital work of a living organism – the work of self-preservation, achieved through the organism's need-driven commerce with the surrounding world."

This is an ability-based definition

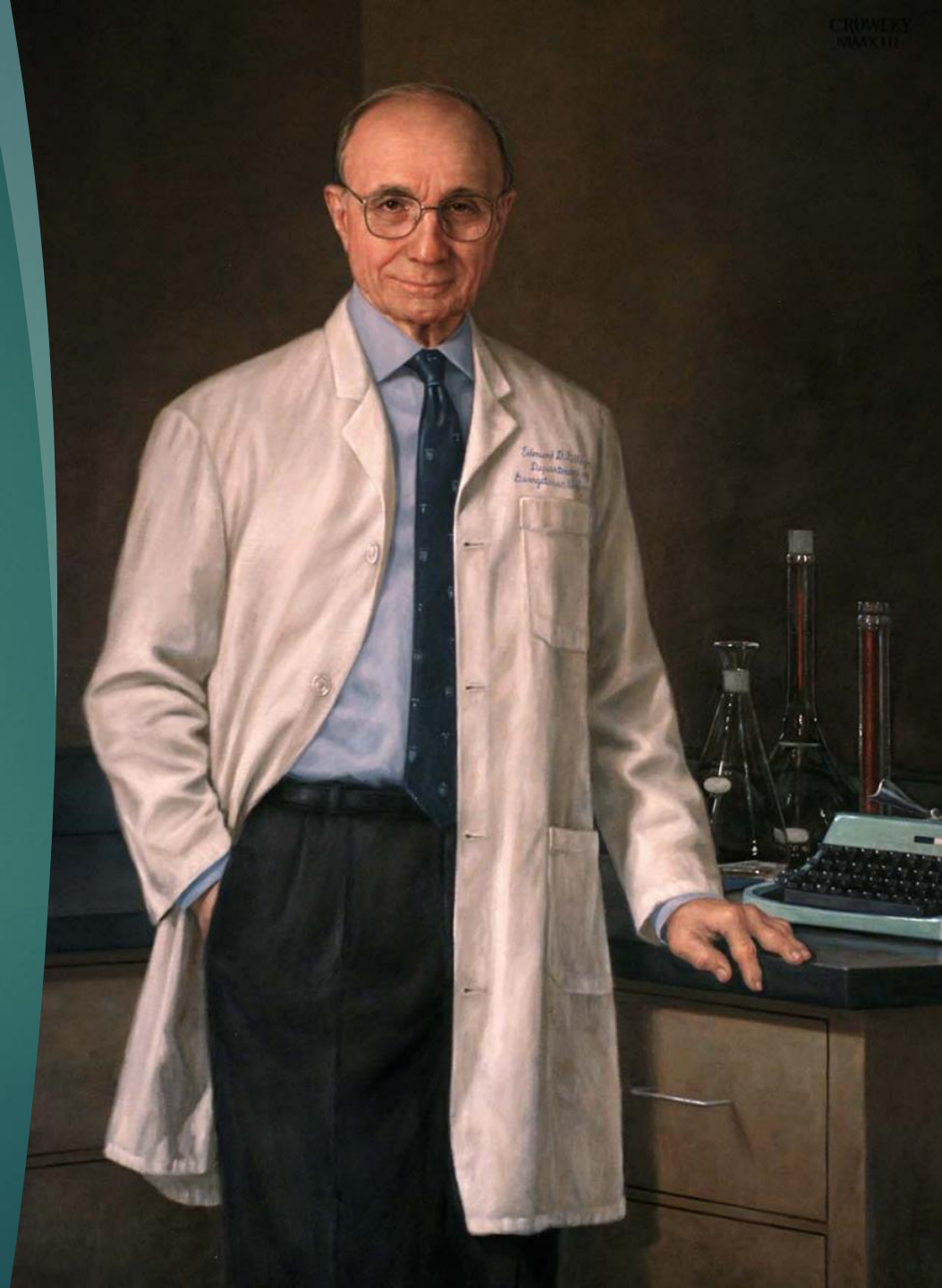
The Chair of the 2008 President's Council on Bioethics, Edmund D. Pellegrino disagreed:

"The only indisputable signs of death are those we have known since antiquity, i.e., loss of sentience, heartbeat, and breathing; mottling and coldness of skin; muscular rigidity; and eventual putrefaction as the result of generalized autolysis of body cells."



The Chair of the 2008 President's Council on Bioethics, Edmund D. Pellegrino:

"I have chosen to give priority to the welfare of the patient before he or she becomes a donor on grounds that harm must not be done even if good comes from it. No person should be sacrificed as a means for the good of another. This is a moral precept that recognizes the intrinsic worth of every human being."

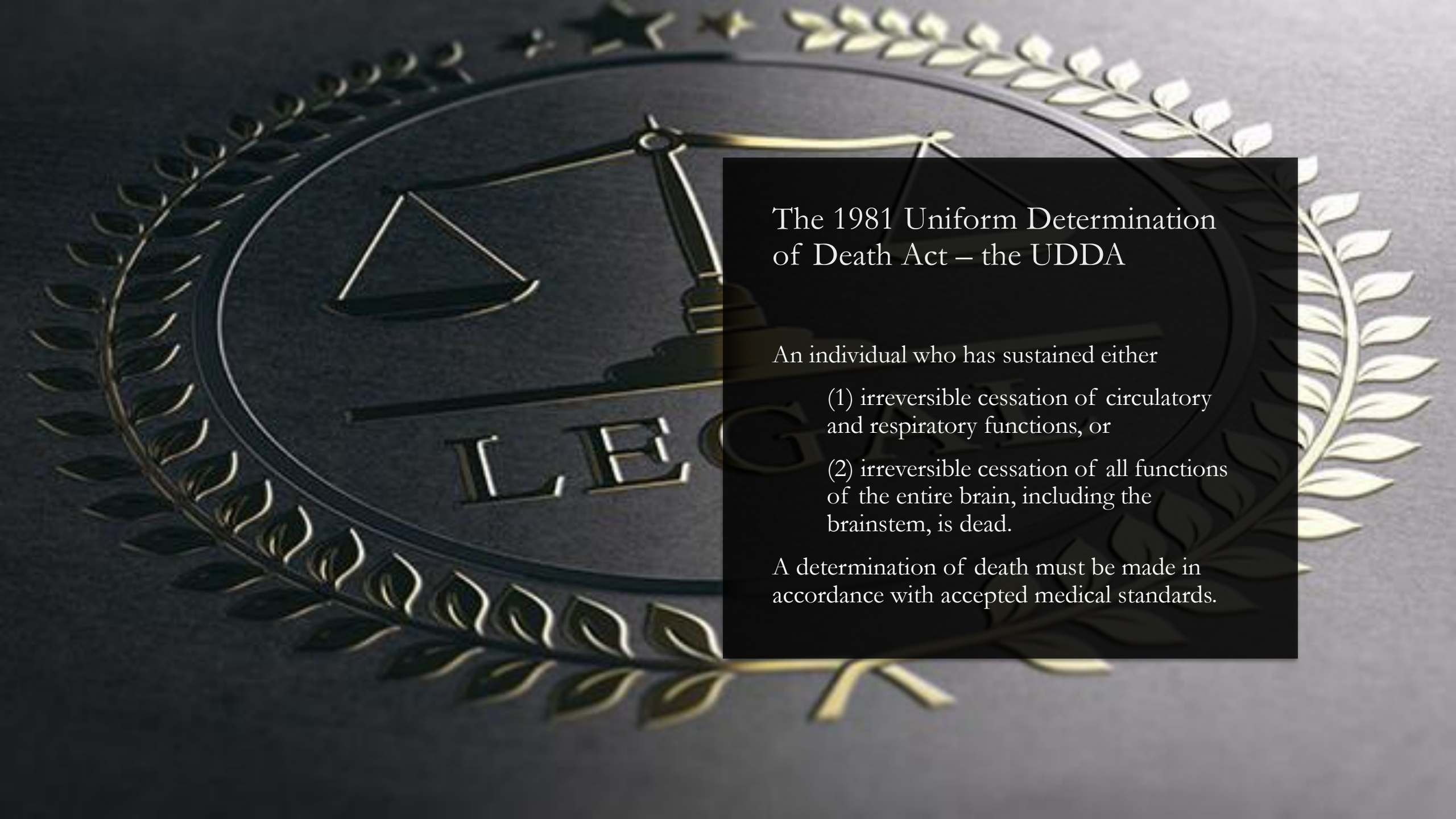


The 2008 President's Council
Failed to accurately reflect scientific facts

1. "Total Brain Failure" is inaccurate, as people with a clinical diagnosis of brain death still have certain brain functions:
   - 20% (of those tested) have EEG activity
   - 50-84% have a functioning hypothalamus

2. Metabolism, wound healing, fighting off infections, and the stress response to the incision to remove organs are all the work of self-preservation.

Shewmon DA. Brain Death: Can It Be Resuscitated? Hastings Center Report 39, no 2 (2009): 18-24./ Nair-Collins M, Joffe AF (2021): Frequent Preservation of Neurologic Function in Brain Death and Brainstem Death Entails False-Positive Misdiagnosis and Cerebral Perfusion, AJOB Neuroscience, DOI: 10.1080/21507740.2021.1973148.



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(2) irreversible cessation of all functions of the entire brain, including the brainstem, is dead.

A determination of death must be made in accordance with accepted medical standards.

No AAN brain death guideline has ever been based on the "irreversible cessation of all functions of the entire brain."

Since the first AAN guideline in 1995, brain death has always been based on the same bedside clinical triad:

1. Coma: unresponsiveness to the most noxious stimulus
2. Loss of brainstem reflexes
3. No breathing with the apnea test

No guideline checks all functions of the entire brain.

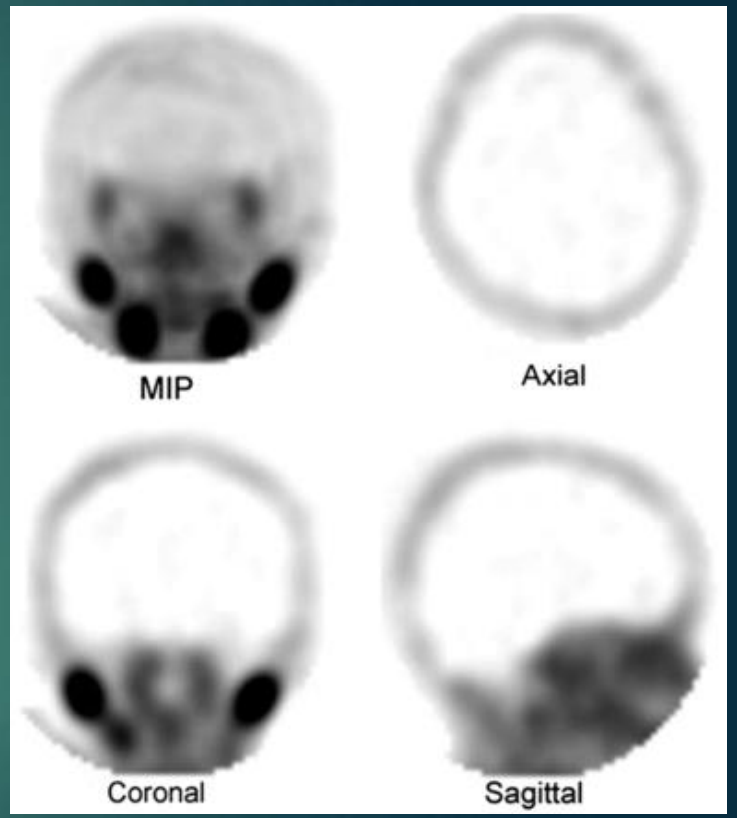
2023 AAN Guideline

The guideline emphasizes that BD/DNC is a bedside diagnosis, and that ancillary testing is required only if the clinical assessment cannot be safely or fully completed.

Unresponsiveness. *Though inability to respond is not the same as unconsciousness*	**No cerebrally mediated motor response to noxious stimulus.** *But "It can sometimes be challenging to determine whether a movement is cerebrally or spinally mediated based solely on clinical examination."*	**No pupillary light reflex, OCR/OVR, corneal reflex, cough & gag (no sucking or rooting reflex in infants <6 months).** *All functions of the entire brain (UDDA legal standard) are not tested.*	**Apnea test ≥60mmHg or ≥20mmHg over baseline PaCO2.** *But "Selection of targets for this challenge is arbitrary because no scientific data demonstrate specific PaCO2 above which medullary chemoreceptors would prompt respiration if they were functional."*

The 2023 AAN guidelines do not require ancillary testing <u>except when BD determination at the bedside cannot be completed</u>.

"all ancillary tests have shortcomings…none are 100% sensitive or specific."



Greer et al. Pediatric and Adult Brain Death/Death by Neurologic Criteria Consensus Guideline. *Neurology*, December12, 2023. 101 (24) 1112-1132.

Incoherence in the Brain Death Guideline Regarding Brain Blood Flow Testing: Lessons from the Much-Publicized Case of Zack Dunlap

Doyen Nguyen, OP, MD, STD, and Christine M. Zainer, MD View all authors and affiliations

OnlineFirst | https://doi.org/10.1177/00243639251317690

In 2007, after a severe traumatic brain injury, Zack Dunlap was declared BD according the to AAN criteria.

Unable to perform OVR due to CSF otorrhea
Unable to perform Apnea Test due to bradycardia

Zack's BD diagnosis was based on brain blood flow (BBF) scans, which were read as "no flow."

(Later, nuclear medicine experts were divided, with 2 of 3 questioning this reading.)

Lessons from Zack's case:

If elements of the clinical exam cannot be performed, the diagnosis of brain death **hinges** on ancillary tests that are known to yield false positive results

It defies logic that an ancillary test without a specificity of 100% is recommended by the AAN to establish the diagnosis of BD in patients who cannot undergo BD examination.

The fact that Zack overheard his doctors and parents discussing his "death" while he was comatose illustrates the gravity of a false-positive declaration of death.

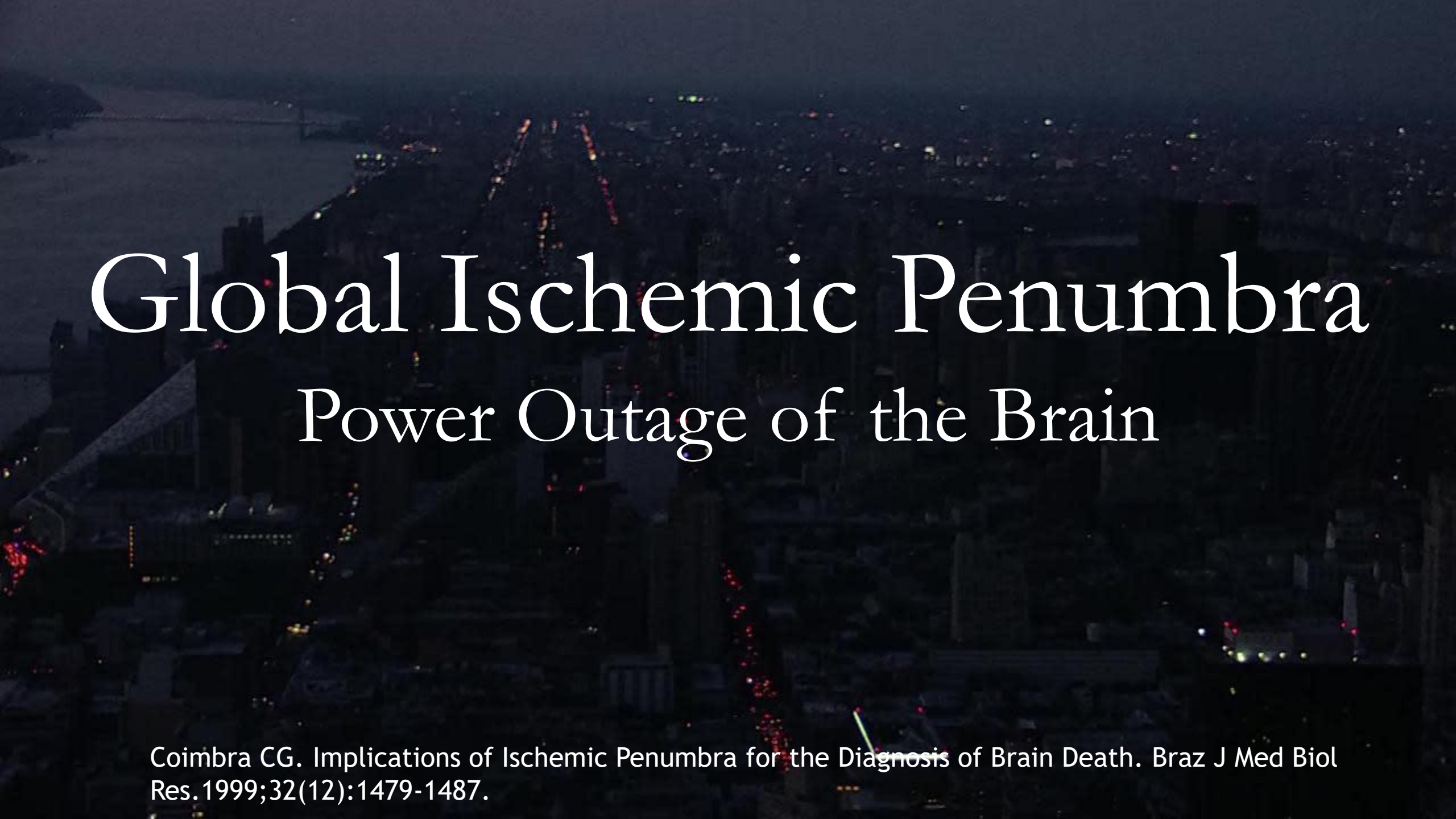
Jahi McMath

AAN Guidelines Falsified: Unable to Predict Irreversibility

- 3 doctors declared her brain dead
- 3 failed apnea tests
- 4 flatline EEGs
- 1 no flow cerebral perfusion scan

After she was moved to New Jersey, two neurologists testified that she was no longer brain dead but in a minimally conscious state.

Shewmon DA. Statement in Support of Revising the Uniform Determination of Death Act and in Opposition to a Proposed Revision. J Med Philos. 2021 May 14:jhab014



Global Ischemic Penumbra

Power Outage of the Brain

Coimbra CG. Implications of Ischemic Penumbra for the Diagnosis of Brain Death. Braz J Med Biol Res.1999;32(12):1479-1487.

Global Ischemic Penumbra (GIP) – Power Outage of the Brain

During periods of low blood flow, the brain shuts down its functions to reduce its metabolic requirements

At about 50% reduction in blood flow, the EEG becomes flatline and the brain becomes unresponsive to testing

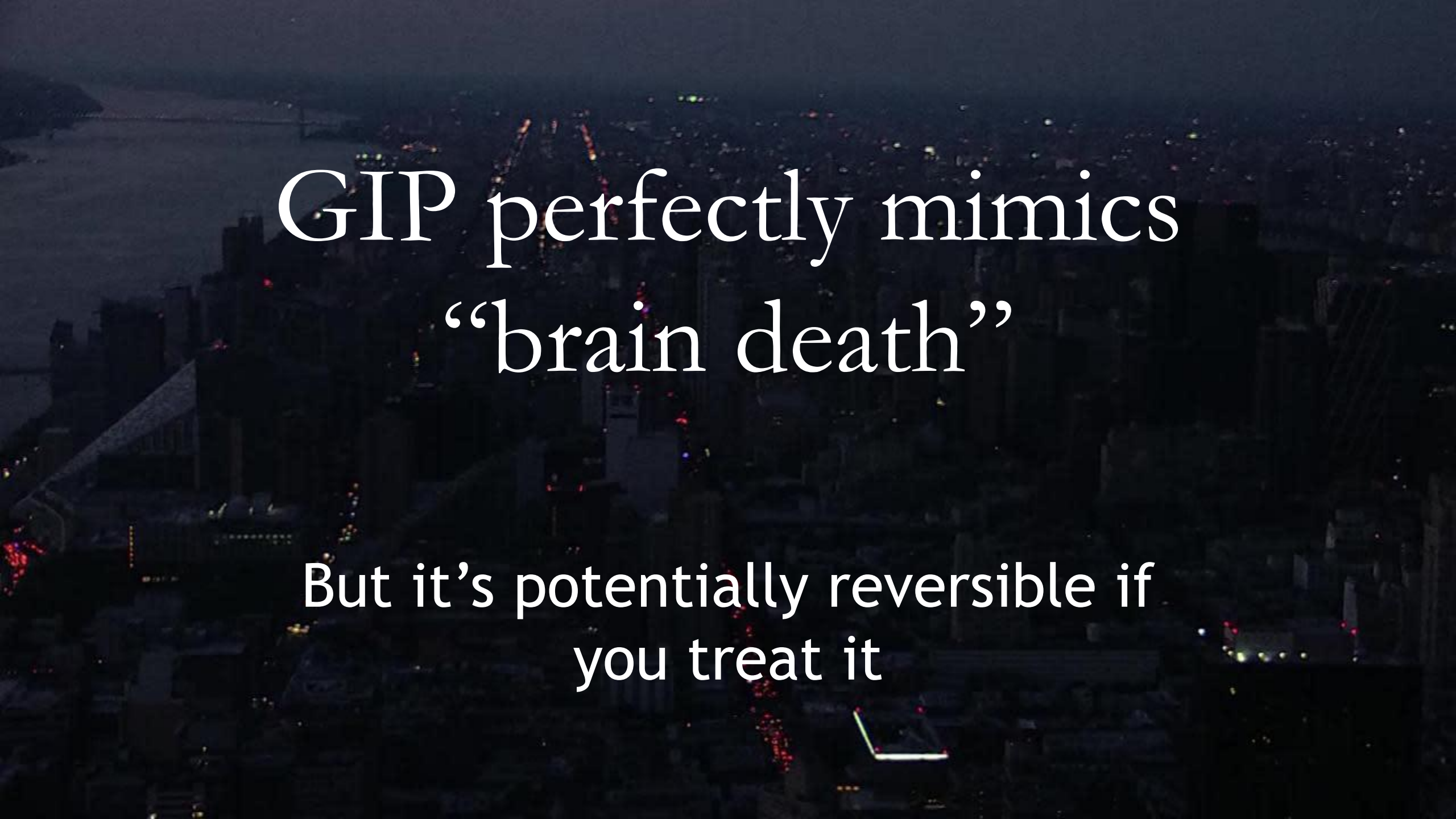
Global Ischemic Penumbra (GIP) – Power Outage of the Brain

During periods of low blood flow, the brain shuts down its functions to reduce its metabolic requirements

At about 50% reduction in blood flow, the EEG becomes flatline and the brain becomes unresponsive to testing

But tissue necrosis doesn't begin until brain blood flow is reduced below 20% of normal for several hours

Between 20-50%, there is not enough blood flow to support function, but there is enough flow to maintain viability



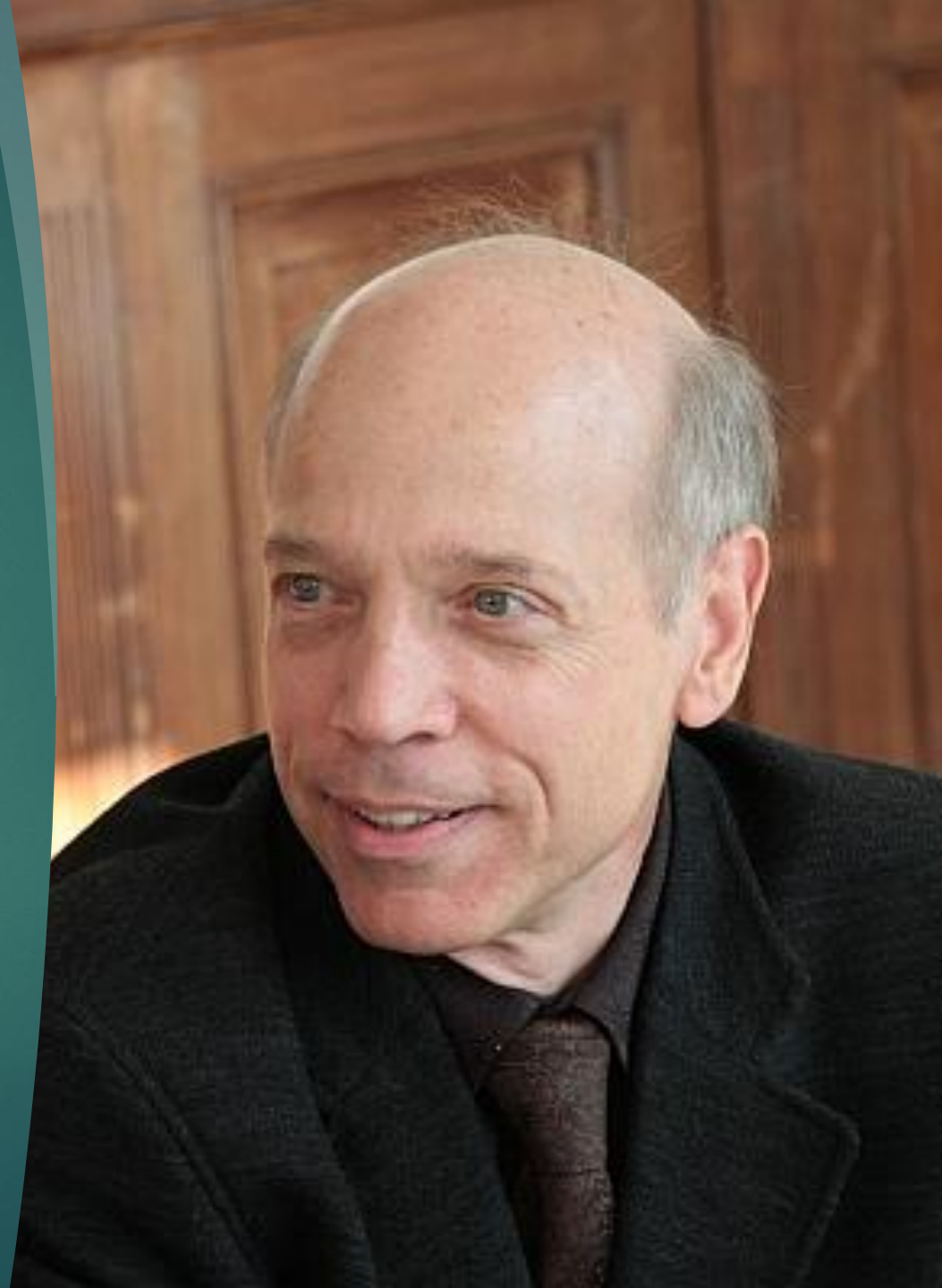
GIP perfectly mimics “brain death”

But it’s potentially reversible if you treat it

Dr. D. Alan Shewmon

"This (GIP) is not a hypothesis but a mathematical necessity. The clinically relevant question is therefore not whether GIP occurs but how long it might last. If, in some patients, it could last more than a few hours, then it would be a supreme mimicker of BD by bedside clinical examination, yet the non-function (or at least some of it) would be in principle reversible."

Shewmon DA. Statement in Support of Revising the Uniform Determination of Death Act and in Opposition to a Proposed Revision. J Med Philos. 2021 May 14:jhab014.



Lawsuits: Aden Hailu 2015

In the case of Aden Hailu, the Nevada Supreme Court ruled unanimously that the AAN brain death guideline did *NOT* meet the legal definition of brain death under the UDDA.

The attempt to revise the UDDA (RUDDA)

Due to an increasing number of high-profile lawsuits challenging the brain death diagnosis, a group calling themselves "brain death stakeholders" proposed changing US law.

Ann Intern Med. 2020 Jan 21;172(2):143-144. doi: 10.7326/M19-2731. Epub 2019 Dec 24.

It's Time to Revise the Uniform Determination of Death Act

Ariane Lewis [1], Richard J Bonnie [2], Thaddeus Pope [3]

Rather than encouraging doctors to follow the law, their aim was to make the law align with the AAN guidelines.

The RUDDA

After several years of study and debate, the Uniform Law Commission was unable to achieve consensus and tabled its work on the RUDDA in September of 2023.

Three weeks later, the American Academy of Neurology released a new brain death guideline recapitulating the proposals **refused** by the Uniform Law Commission.

- The 2023 AAN guideline explicitly continues to allow people with ongoing partial brain function to be declared dead.
- Did the AAN have new studies, facts, or data to support this new guideline?

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October 11, 2023 SPECIAL ARTICLE

Pediatric and Adult Brain Death/Death by Neurologic Criteria Consensus Guid

Report of the AAN Guidelines Subcommittee, AAP, CNS, and SCCM

David M. Greer, Matthew P. Kirschen, Ariane Lewis, Gary S. Gronseth, Alexander Rae-Grant, Stephen Ashwal, Maya A. Babu, David F. Bauer, Lori Billinghurst, Amanda Co Michael A. Rubin, Lori Shutter, Courtney Takahashi, Robert C. Tasker, Panayiotis Nicolaou Varelas, Eelco Wijdicks, Amy Bennett, Scott R. Wessels, John J. Halperin

First published October 11, 2023, DOI: https://doi.org/10.1212/WNL.0000000000207740

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Abstract

Background and Objectives The purpose of this guideline is to update the 2010 American Academy of Neurology (AAN) brain death/death by neurologic criteria (BD/DNC) guideline for adults and the 2011 American Academy of Pediatrics, Child Neurology Society, and Society of Critical Care Medicine guideline for infants and children and to clarify the BD/DNC determination process by integrating guidance for adults and children into a single guideline. Updates in this guideline include guidance related to conducting the BD/DNC evaluation in the context of extracorporeal membrane oxygenation, targeted temperature management, and primary infratentorial injury.

SPECIAL ARTICLE | October 11, 2023 |

Pediatric and Adult Brain Death/Death by Neurologic Criteria Consensus Guideline

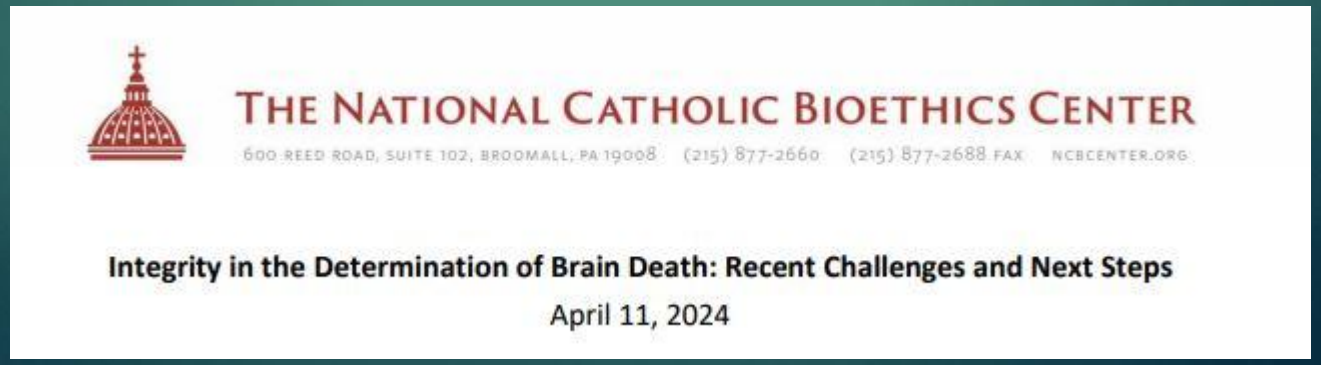
Methods

A panel of experts from multiple medical societies developed BD/DNC recommendations. Because of the lack of high-quality evidence on the subject, a novel, evidence-informed formal consensus process was used. This process relied on the panel experts' review and detailed knowledge of the literature surrounding BD/DNC to guide the development of preliminary recommendations. Recommendations were formulated and voted on, using a modified Delphi process, according to the 2017 AAN Clinical Practice Guideline Process Manual.

What happened to the scientific method?

The National Catholic Bioethics Center considers the AAN 2023 guideline "a decisive breakdown in the public consensus on death and organ donation."

"Hypothalamic functioning shows that not all functions of the entire brain have ceased, as stipulated by the UDDA. **Consequently, patients with confirmed hypothalamic function should not be diagnosed as brain dead, nor treated as dead, for the purpose of organ procurement.**"



THE NATIONAL CATHOLIC BIOETHICS CENTER

600 REED ROAD, SUITE 102, BROOMALL, PA 19008 (215) 877-2660 (215) 877-2688 FAX NCBCENTER.ORG

Integrity in the Determination of Brain Death: Recent Challenges and Next Steps

April 11, 2024

Ever since 1995, the AAN has insisted that the brain death diagnosis remains valid despite ongoing hypothalamic function. **People with partial brain function are not dead.**

Even the 1995 AAN guideline specifically mentions that brain death may be declared despite normal blood pressure and urine output: both of which are evidence of ongoing hypothalamic function.

This is the same saying (as per the 2023 AAN guideline) that clinicians may declare patients brain dead "despite evidence of neuroendocrine function."

Practice parameters for determining brain death in adults (Summary Statement). May 1995, *Neurology* 45 (5)1012-1014. https://doi.org/10.1212/WNL.45.5.1012.

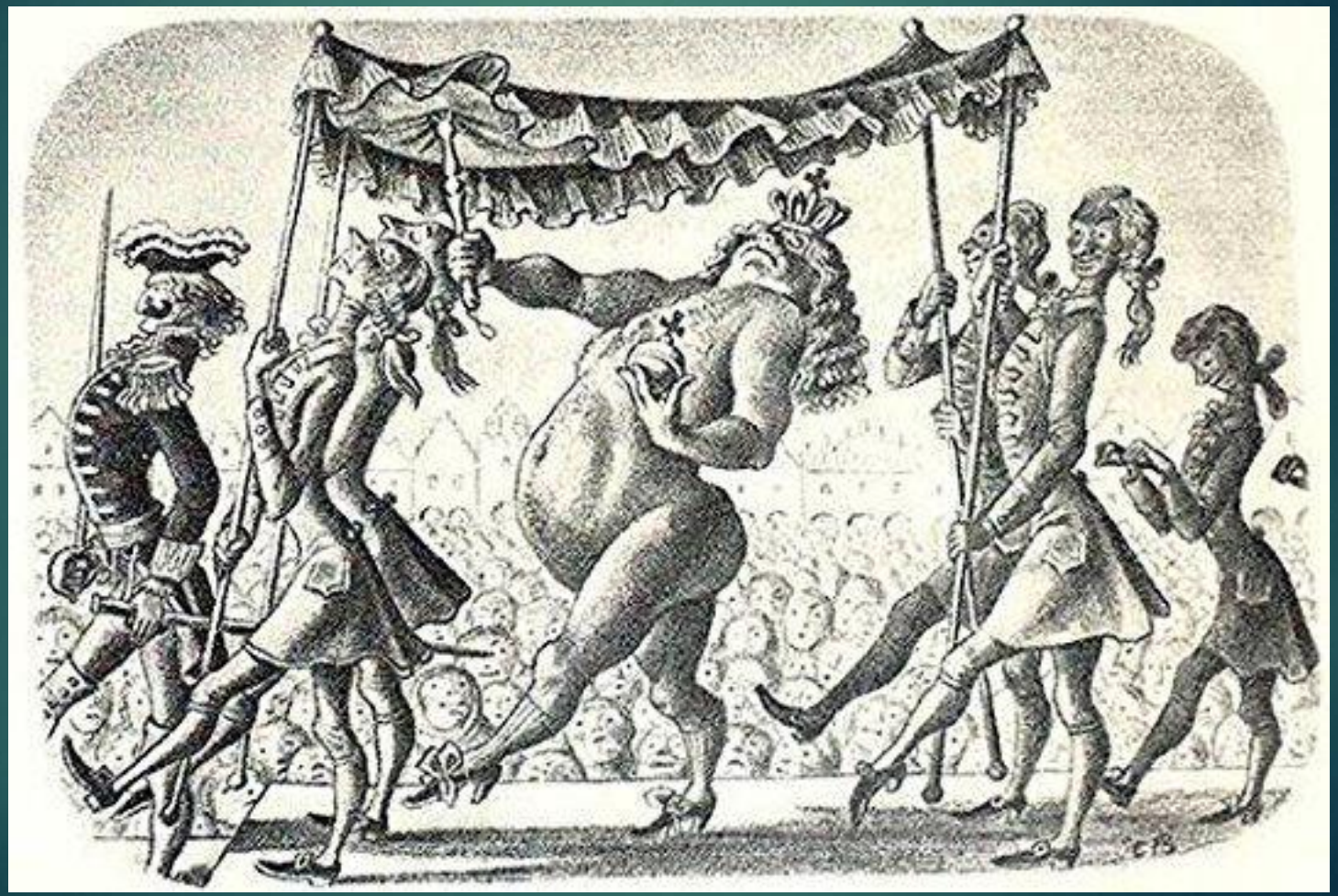
"Given the current state of medical science, we would argue that reasonable certainty can be achieved now by adding testing for diabetes insipidus to the current clinical triad of lack of conscious responsiveness, apnea, and absent brainstem reflexes."

Jahi McMath had diabetes insipidus which her doctor charted "suggests hypothalamic death."

During GIP there may also be a lack of hypothalamic function.

Those who advocate for adding tests of hypothalamic function to the AAN guidelines would have declared Jahi "dead" though subsequent events proved she was alive.

Emperor “Brain Death” has no clothes

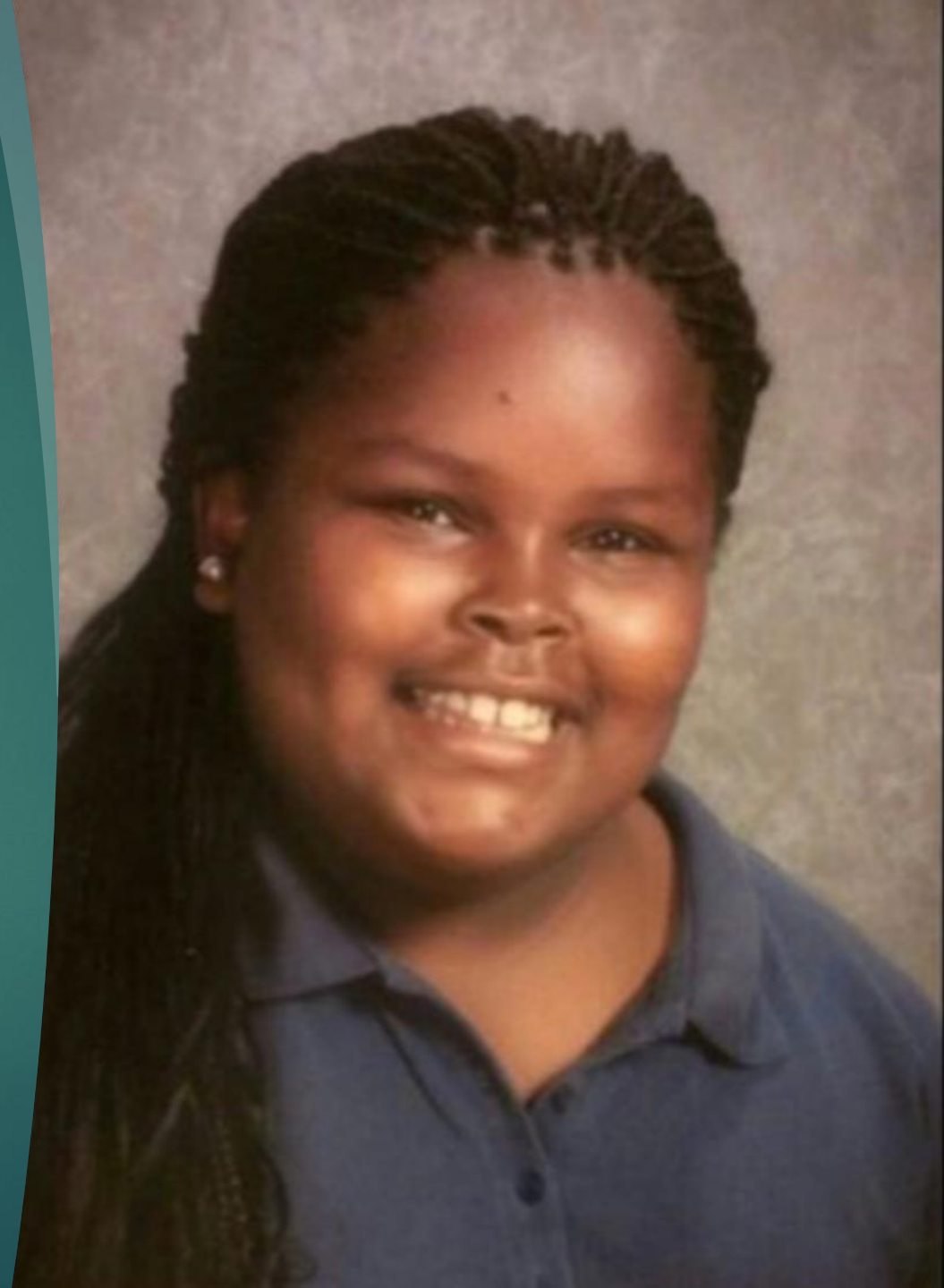


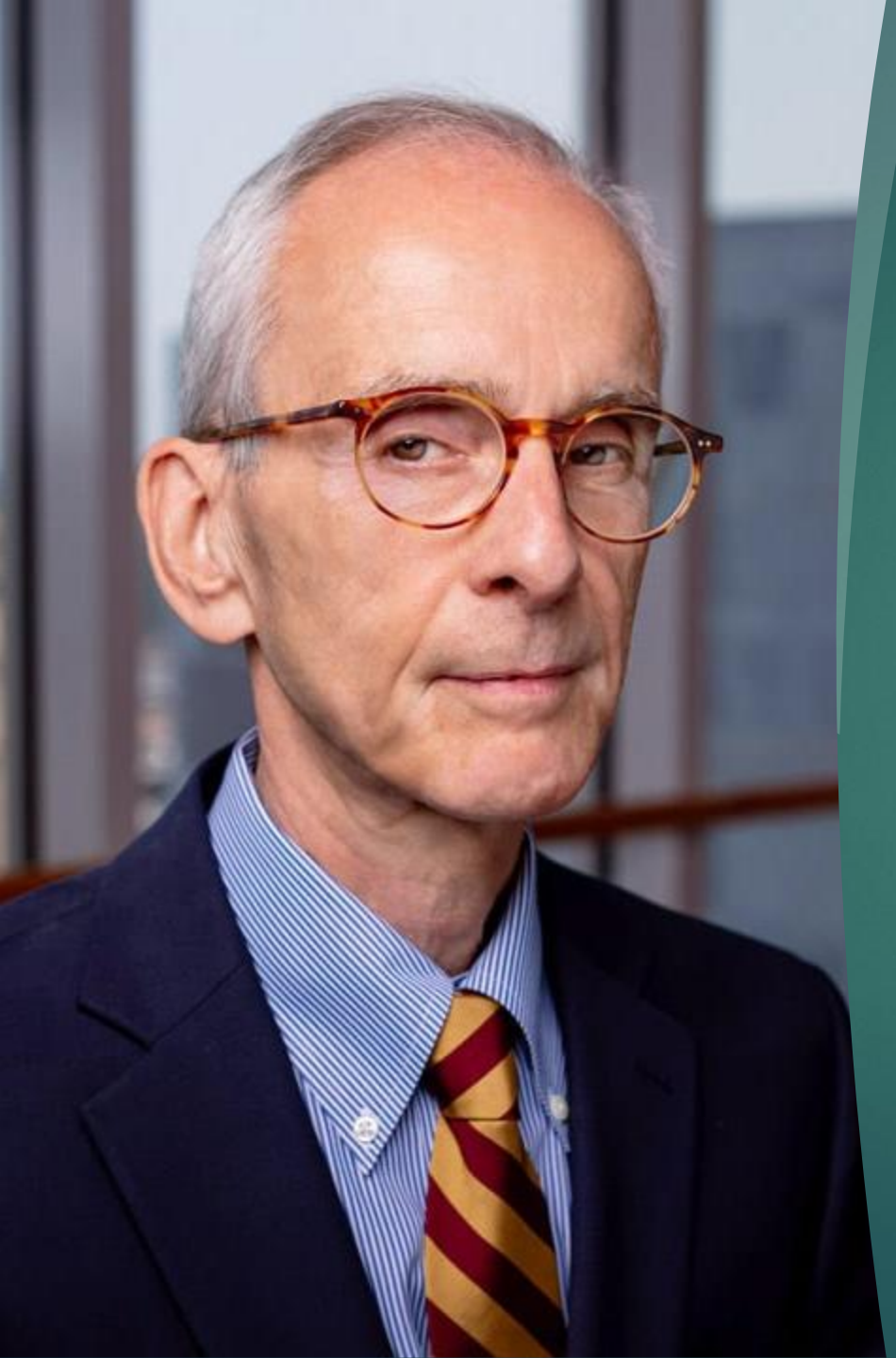
…and the fig leaf of the hypothalamus will not cover him

Jahi McMath proves:

People declared dead under the AAN brain death guideline (with or without tests of hypothalamic function) are neither biologically nor legally dead under the UDDA

So, what is driving the diagnosis of brain death?





Organs

Eelco F. Wijdicks, MD, PhD, neurocritical care specialist at Mayo Clinic stated in 2006

"…the diagnosis of brain death is driven by whether there is a transplantation programme (sic) or whether there are transplantation surgeons. I do not think brain death examination now, in practice, would have much if any meaning if it were not for the sake of transplantation."

PONTIFICIA ACADEMIA SCIENTIARUM Scripta Varia 110: The Signs of Death. VATICAN CITY 2007 OP NOTIFICIA ACADEMIA SCIENTIARUM. The Proceedings of the Working Group 11-12 September 2006, https://www.pas.va/content/dam/casinapioiv/pas/pdf-volumi/scripta-varia/sv110pas.pdf page 50.

The brain death concept does not reflect the reality of the phenomenon of death.

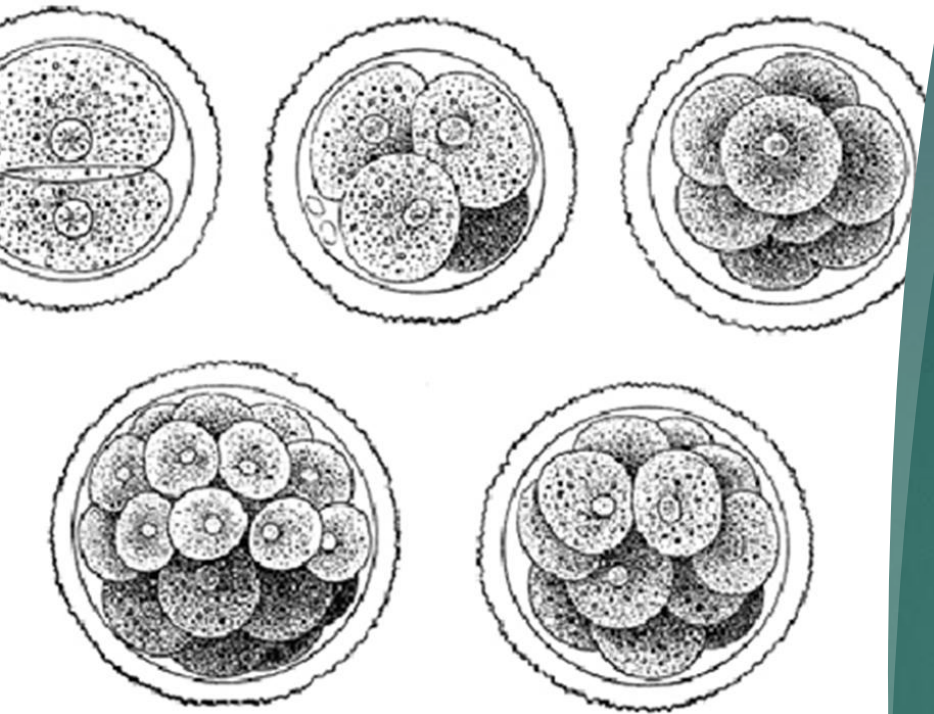
Therefore, any guideline for brain death determination will have no basis in scientific fact.

AND NO AMOUNT OF ADDITIONAL TESTING CAN RENDER THE INDEFENSIBLE BRAIN DEATH CONCEPT DEFENSIBLE

Summary and Conclusions

"Heart-beating or non-heart-beating organ procurement from patients with impaired consciousness is de facto a concealed practice of physician-assisted death, and therefore, violates both criminal law and the central tenet of medicine not to harm patients."

Verheidje JL, Rady M, McGregor JL. Brain death, states of impaired consciousness, and physician-assisted death for end-of life organ donation and transplantation. Med Health Care Philos. 2009 Nov;12(4):409-21.

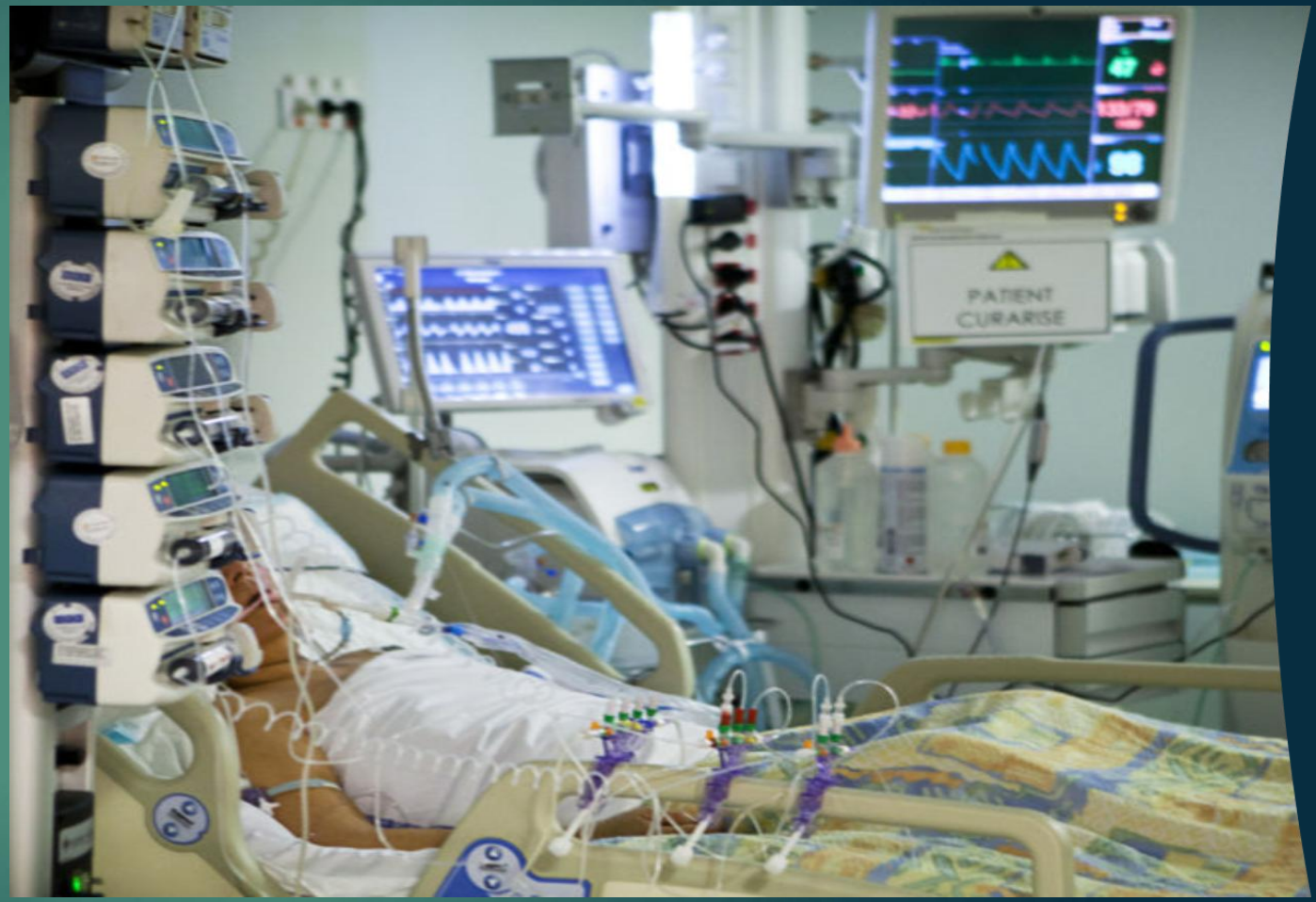


I. How can we call a person without a brain human and yet deny humanity to someone with brain failure?

II. "Brain death" is a **<u>prognosis</u>** of death, not death itself.

Harvesting organs from brain dead donors is an **act of homicide** against vulnerable, neurologically disabled people.

III. Human life continues as long as the body-soul unity continues, even with the help of technology.



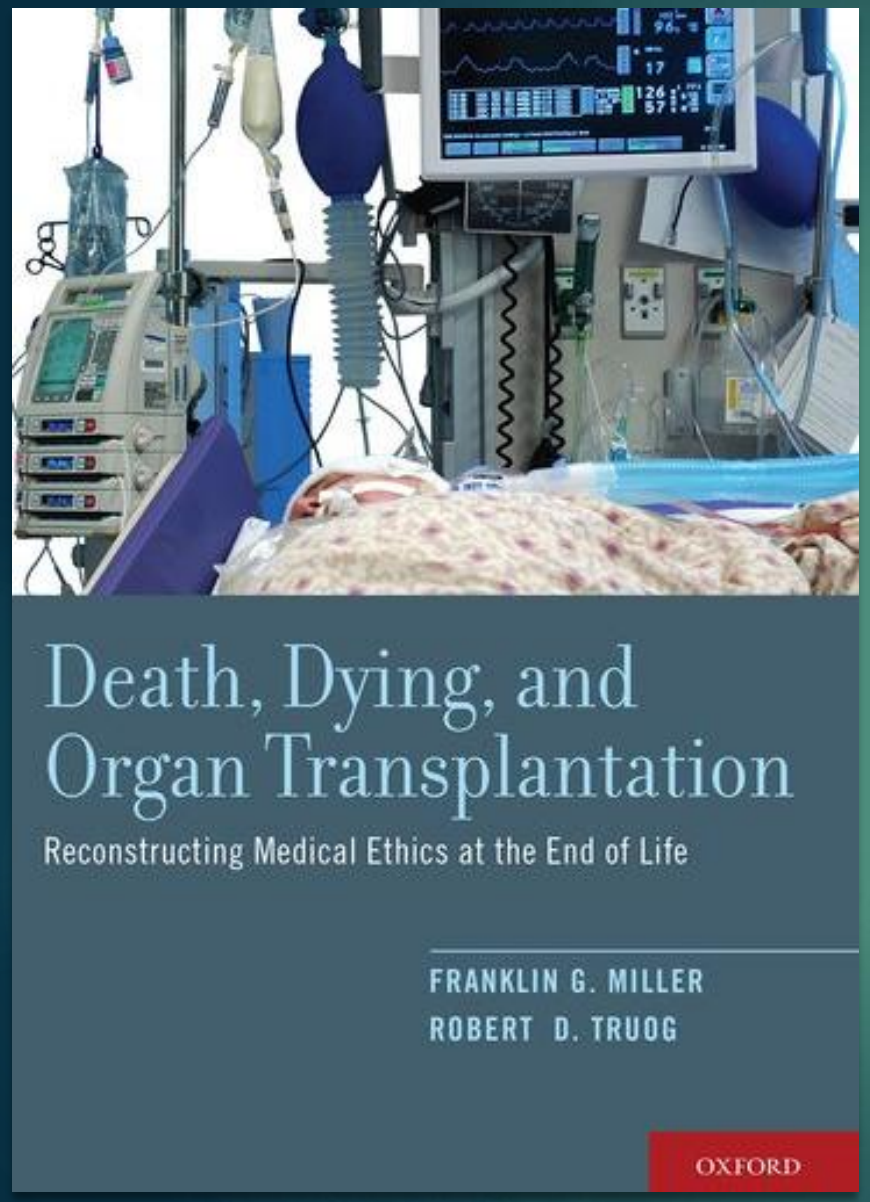
IV. The brain death diagnostic guidelines are unable to predict irreversibility

Jahi McMath met all medical criteria for brain death, yet she demonstrated improvement in brain function to the point of following commands

V. The public is being denied truly informed consent when they sign a donor card

“Conversely, were all families to be made fully aware and truly informed, one would find very large numbers of people objecting, and that would create needless conflict and chaos.”

It is the responsibility of Christians to defend the vulnerable even if it would cause conflict and chaos



Secular voices are being honest about this:

…"brain dead" donors remain alive and donors declared dead according to circulatory-respiratory criteria are not known to be dead at the time that their organs are procured.

THE JR WILLIAMS SR., MD '31 ENDOWED LECTURE

"DEAD DONOR RULE VIOLATIONS ARE RAMPANT: BRAIN DEATH, DCD, AND NRP"

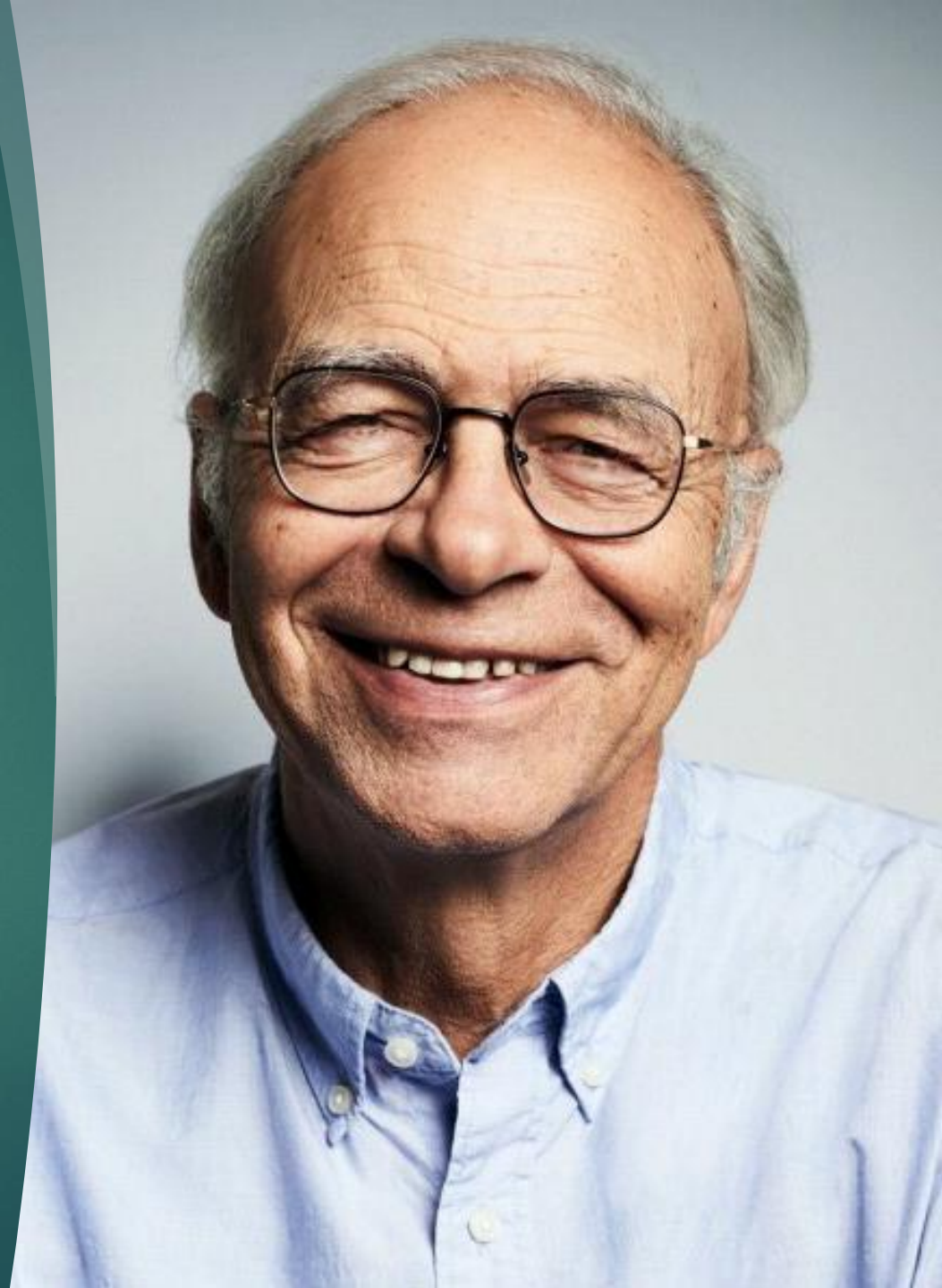
TULANE School of Medicine
MS in Bioethics & Medical Humanities

Dr. Thaddeus Pope, JD, PhD, HEC-C
Professor of Law, Mitchell Hamline School of Law, Hastings Center Fellow and former Fulbright Scholar

Tulane The Program in Medical Ethics and Human Values
MS Program: http://Tulane.edu/Bioethics

“I argue that the evidence now clearly shows that brain death is not equivalent to the death of the human organism.”

-Dr. Peter Singer



Ethics & Bioethics (in Central Europe), 2018, 8 (3-4), 153-165.

“Brain Dead” people are still alive and must be treated with humanity and dignity

We must expose the lie of brain death to the public

We must advocate for living donation

We must support ethical solutions for people with organ failure

Healthcare Advocacy and
Leadership Organization
7301 Bass Lake Rd
Minneapolis, MN 55428

www.halovoice.org
feedback@halovoice.org
1-888-221-4256 (HALO)

I REFUSE TO BE AN ORGAN DONOR

I, _____ ,

REFUSE TO BE AN ORGAN DONOR.

Do not perform an apnea test.
Do not notify an organ procurement organization if I appear to be at or near death.

Do not take any organs for transplantation or research.

Signature: _____

Witness: _____

Witness: _____

Date: _____

The 2008 President's Council on Bioethics: Controversies in the Determination of Death

Dr. Pellegrino closed his statement of dissent by quoting philosopher Hans Jonas:

"We do not know with certainty the borderline between life and death, and a definition cannot substitute for knowledge. Moreover, we have sufficient grounds for suspecting that the artificially supported condition of the comatose patient may still be one of life, however reduced---i.e., for doubting that, even with brain function gone, he is completely dead. In this state of marginal ignorance and doubt the only course to take is to lean over backward toward the side of possible life."