

Ethical Considerations for Neuroscience Research Across the Life Span

A PI's Perspective



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COI

Inventor

DETECT™ Technology – a novel tool for detecting concussions

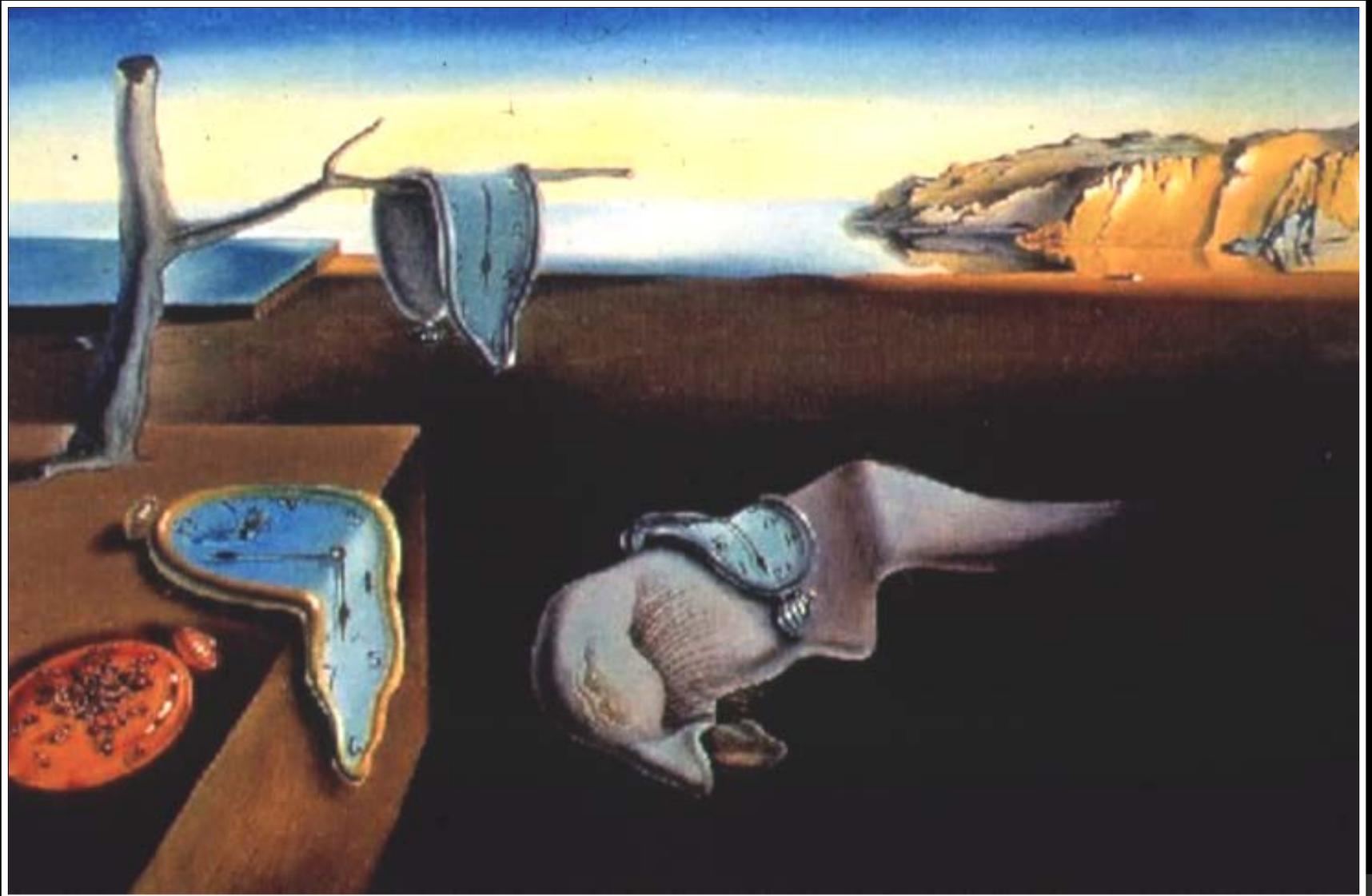


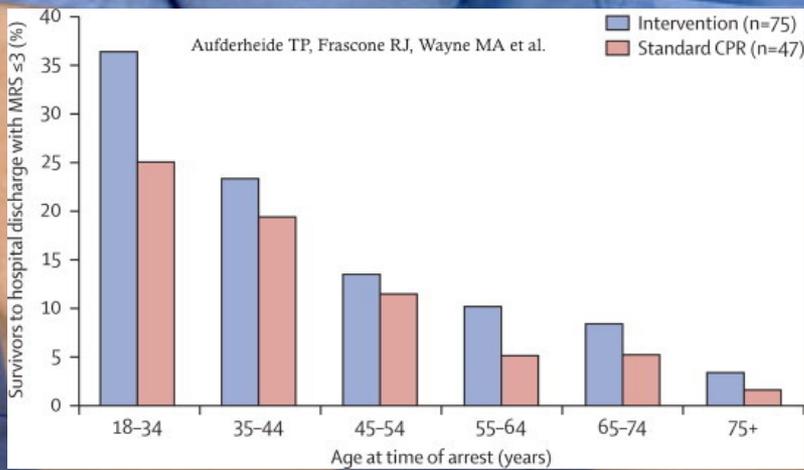
BHR Pharma – Inventor of technology licensed from Emory to create path for progesterone technology to consumer. Eligible for Royalties through Emory University.

Emergency Research

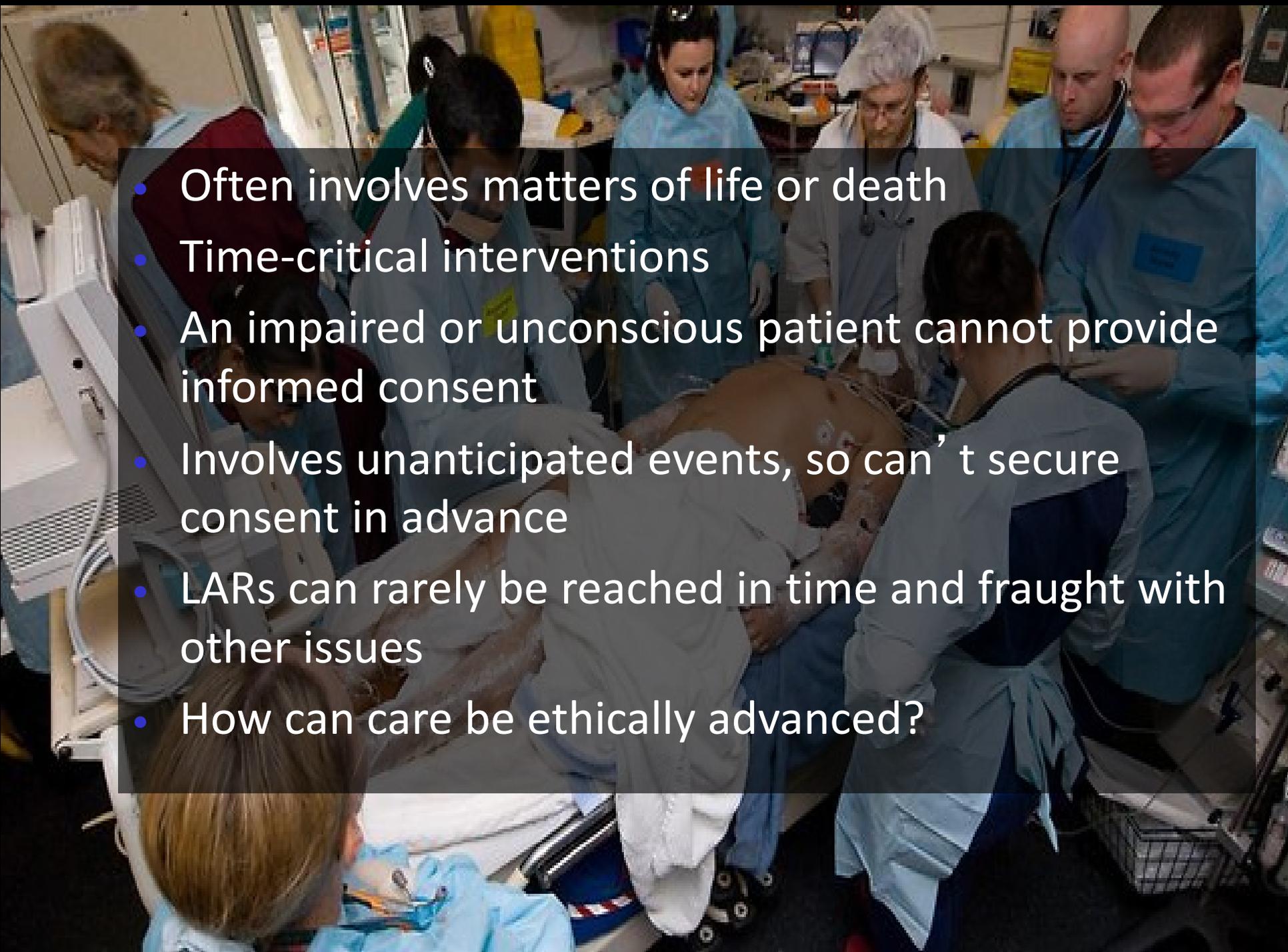


Time Has Never Mattered So Much





***Critical need for new life saving therapies and technologies**

- 
- Often involves matters of life or death
 - Time-critical interventions
 - An impaired or unconscious patient cannot provide informed consent
 - Involves unanticipated events, so can't secure consent in advance
 - LARs can rarely be reached in time and fraught with other issues
 - How can care be ethically advanced?

Respect for Persons

Beneficence



Justice



**Animal models
provide proof of
concept, but
can't find the
real answers**





Public Health Burden of TBI in the United States



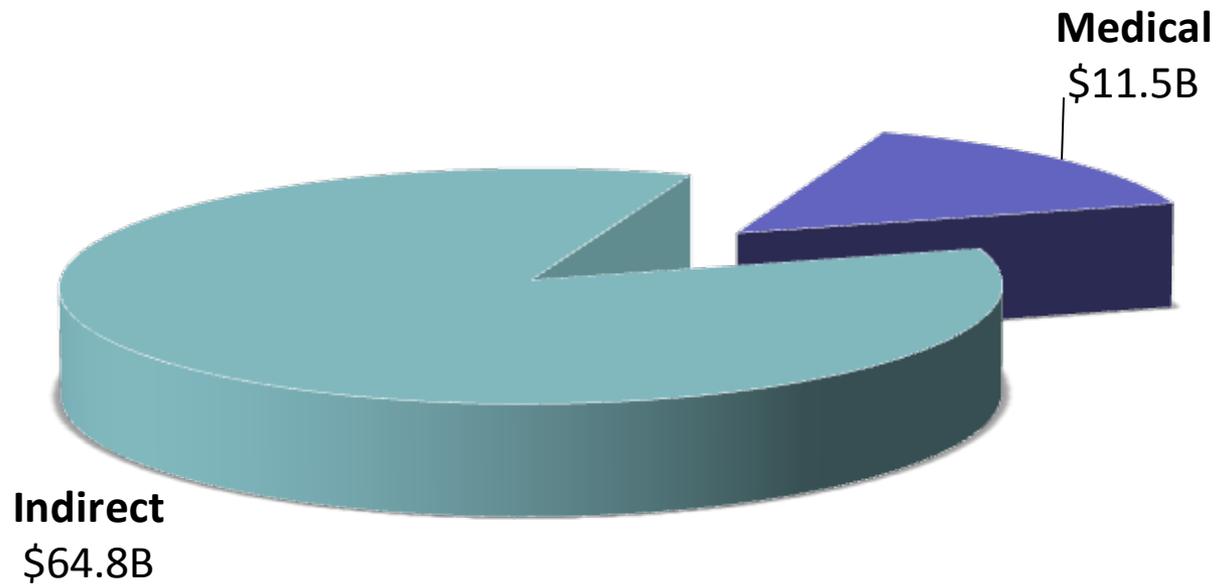


747 Passenger Airline
286 passengers

175 Airliners

Estimated Economic Costs of TBI

\$76.3 Billion in 2010



Finkelstein, E et al. The Incidence and Economic Burden of Injuries in the United States. New York (NY): Oxford University Press, 2006
Coronado, VG et al. The epidemiology and prevention of TBI, in press, 2012

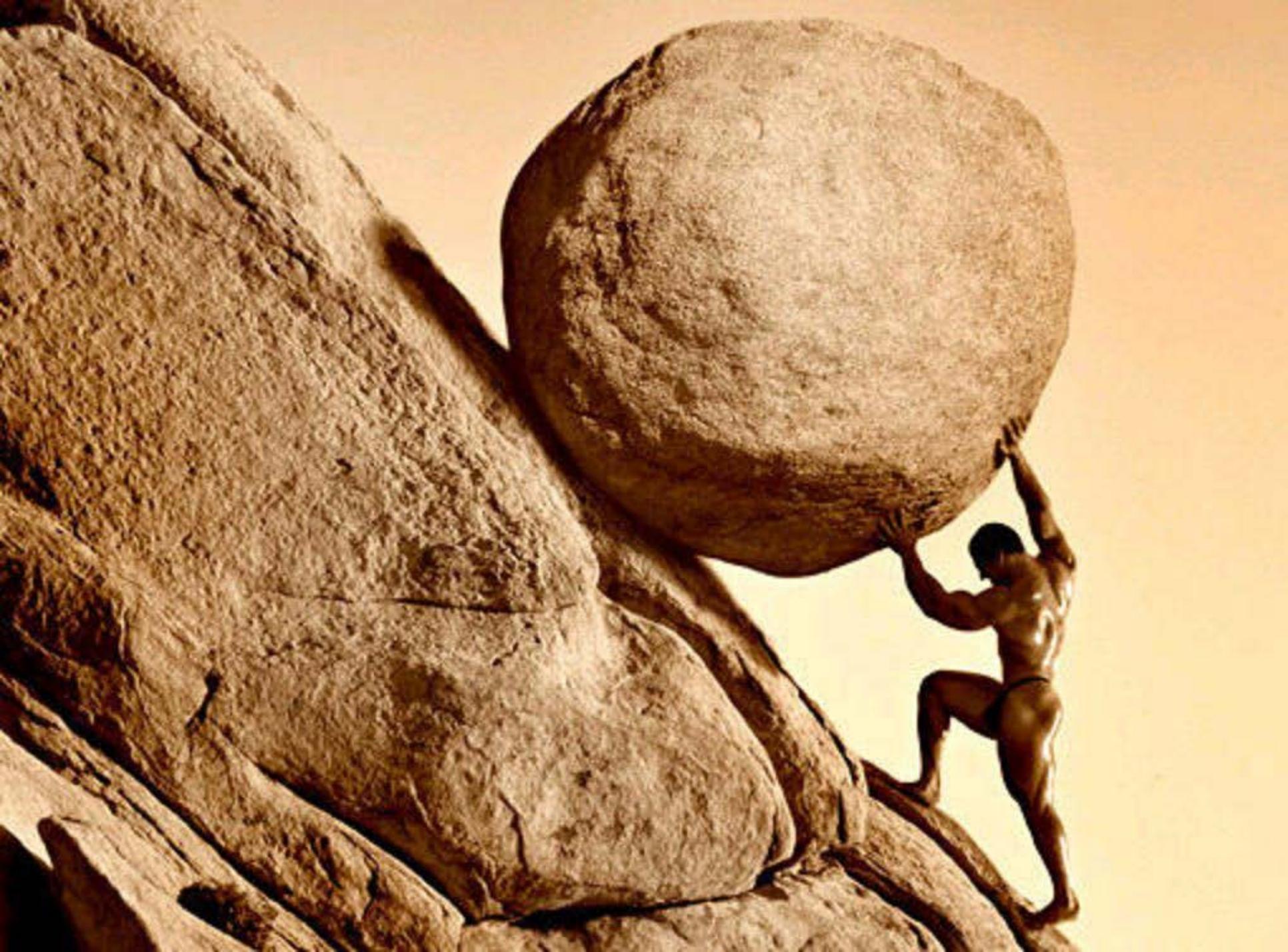
Failure of past TBI clinical Trials

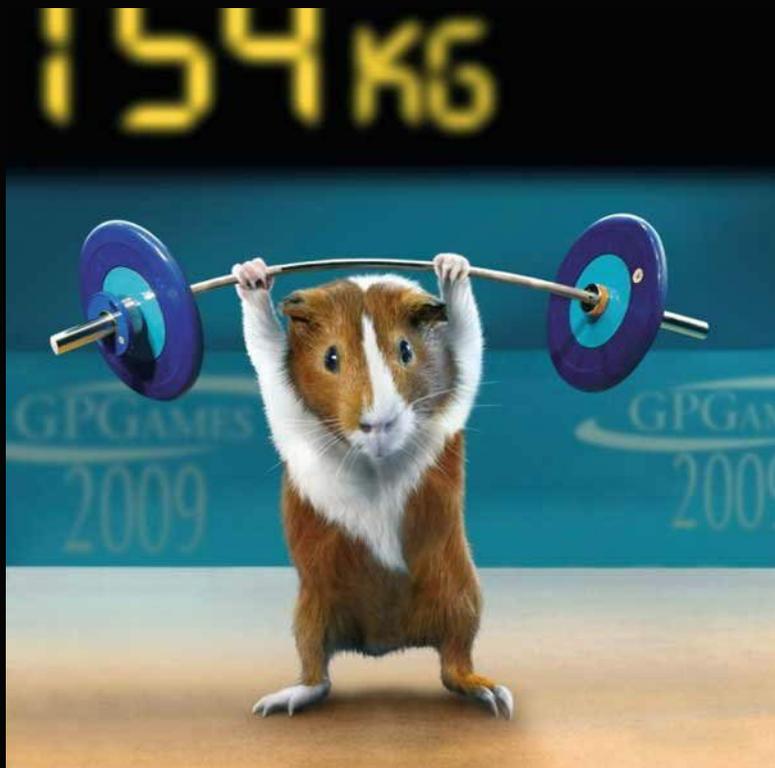
- “None of the available medical therapies provide substantial relief from oedema and raised ICP, or at best, they are temporizing in most cases.” *Ayata C and Ropper, A, J Clin Neurosci 9, 2002.*

- **All Present There Are No Effective**
Hypothermia trials have been inconclusive (Interagency meeting on TBI, Washington, DC 2006).

- **Drug Treatments For Traumatic Brain Injury**
50 compounds in 30 TBI trials over 30 years—all failed. Most recently:

- Methylprednisolone (CRASH trial) Failed
- Magnesium Sulfate Failed
- Dexanabinol Failed
- Tirilizad Failed





Corroborative Research

□ **>200 publications showing positive results with progesterone in neurological injury**

- 24 different laboratories
- 4 animal species
- 22 different animal models





ProTECT III



EFIC – Exception from Informed Consent



? Valid Consent
Informed Consent
Express Consent
Under Duress
Implied Consent
Specific Consent
Written Consent
Verbal Consent
Restricted Consent
?

Community Consultation

- 21 CFR 50.24
- consultation (including, where appropriate, consultation carried out by the IRB) with representatives of the communities in which the clinical investigation will be conducted and from which the subjects will be drawn
- provide an opportunity for the community from which research subjects may be drawn to understand the proposed clinical investigation and its risks and benefits and to discuss the investigation
- Community consultation *is not* community consent

ProTECT™ III

Progesterone for Traumatic Brain Injury

ProTECT III PI – David W. Wright

ProTECT Project Manager – Bethany Lane

Unblinded Statistician – Sharon Yeatts

Blinded Statisticians – Vicki Hertzberg, Yuko Palesch

SDMC Statistical Center PI – Yuko Palesch

NETT PI – Bill Barsan, Rob Silbergleit

NETT ProTECT Site Manager – Erin Bengelink

21 Hubs Active
45 Sites
10 Preparing

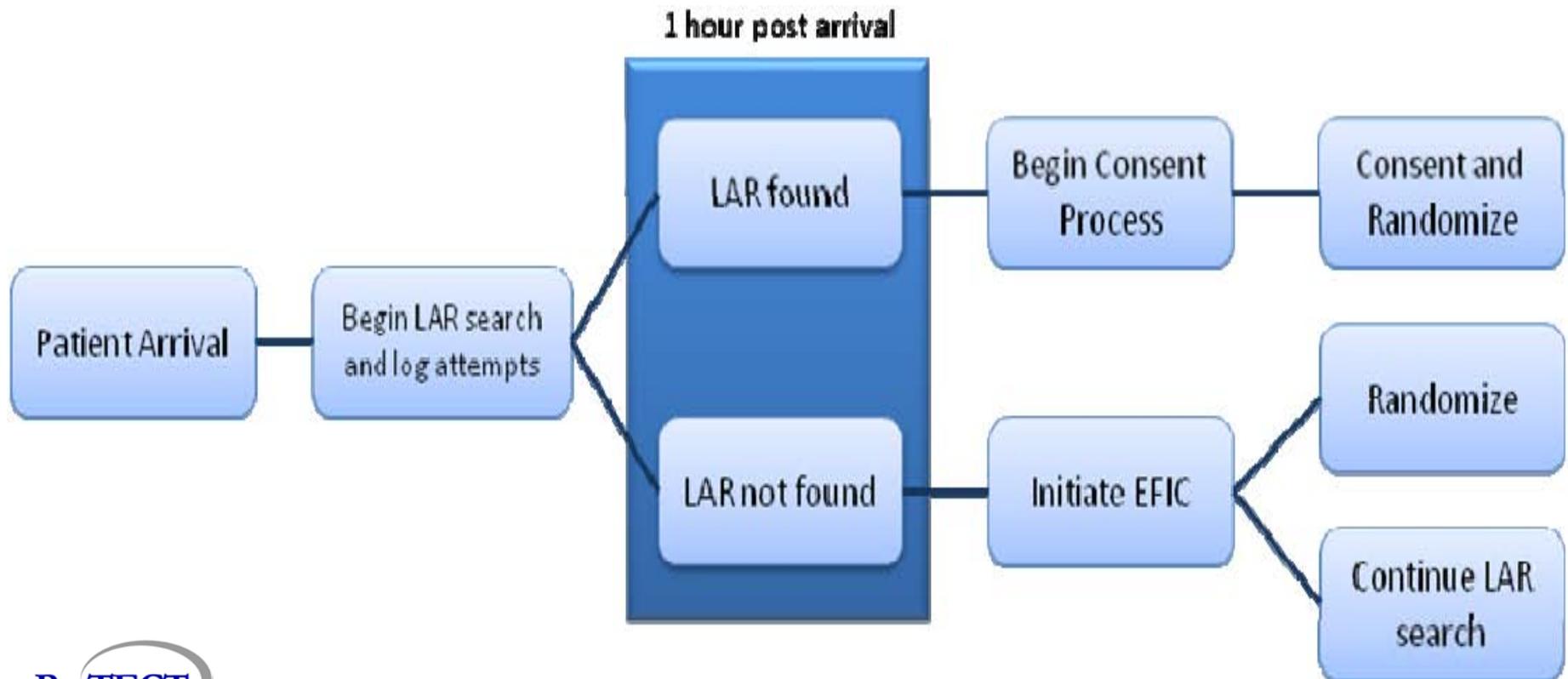


NINDS # 1U01NS062778
FDA IND # 108,144
IRB # 000-14409

CC Overview

		ProTECT
	CC Activities	237
	Participants who were reached	99,982
	Participants who gave feedback	4,820
	# closed ended responses received	75,801
	% supportive	82%
	# open ended responses received	3,913
	% supportive	71%

Informed consent and LAR process





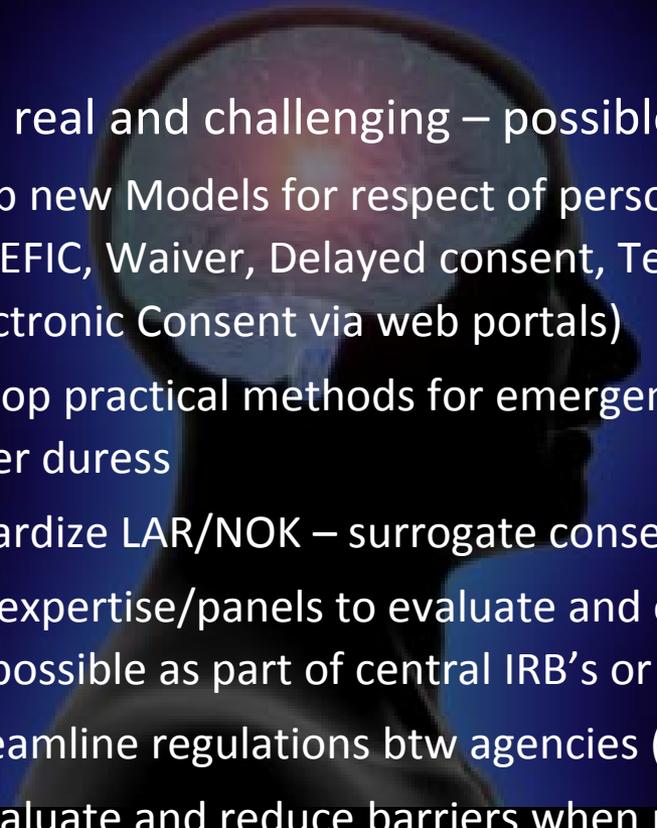


NO NEED TO PANIC

I found the beer and it's doing fine.



Summary – Take Home

- 
- There is a critical need for human emergency neuroscience research – it is imperative to conduct
 - The Ethical issues are real and challenging – possible considerations:
 - Expand and develop new Models for respect of persons when capacity is compromised (e.g. EFIC, Waiver, Delayed consent, Telephone consent, Video/Remote, electronic Consent via web portals)
 - Redesign and develop practical methods for emergency consent when capacity is present, but under duress
 - Improve and standardize LAR/NOK – surrogate consent
 - Develop centralize expertise/panels to evaluate and or oversee emergency research studies – possible as part of central IRB's or independent
 - Harmonize and streamline regulations btw agencies (FDA, OHRP, Local IRBs)
 - Continuously Re-evaluate and reduce barriers when possible
 - Provide more support for both emergency neuroscience research and evaluation of the Ethics issues related to it

