Critical Care Research:

Whether *Stamp Collecting*

or Searching for a Breakthrough

It’s the Fellows that Count
You can change the ET tube in this kid with raised ICP: If you can do it in 5 seconds
A stethoscope tells an intensivist what side of the chest a pneumothorax is on 50% of the time.

"If you want to see how important hyperventilation is in the management of intracranial hypertension, see what happens when you try to wean it!"

We don’t have a LAB
“Fellows don’t usually work out, but if you want to give it a try you can”

“Even small advances – if done carefully and published can be important. Even if they are not understood or applied at the time. It may be necessary to build it a block at a time.”

1983
Inflammation and Brain:
10,559 citations since 1992
Inflammation and stroke/cerebral ischemia:
2000+ citations since 1992

1977
“Even small advances –if done carefully and published can be important. Even if they are not understood or applied at the time. It may be necessary to build it a block at a time.”

Capt. John Hallenbeck, MD
United States Naval Medical Research In
International Resuscitation Research Center (IRRC)

The Late Dr. Peter Safar:
- The father of modern day CPR
- One of the 3 founders of critical care medicine in the USA
- First CCM training program in USA
- Founder of the modern day configuration of the ambulance
- Pioneer in Disaster Medicine
- Pioneer of the use of hypothermia in cerebral resuscitation

Safar Center for Resuscitation Research

1994
The Safar Train

Samuel Tisherman, MD
What is the clinical relevance of your work?
How can we take it to the bedside?
The famous Freedom House Project: The first paramedic service in the USA

Currently, we give up on too many “Brains and Hearts too good to die.”
It is our duty as clinician-scientist to search for BREAKTHROUGHS—not for \( p \)-values
Research is FUN!!!
Do it with collegiality, class, elegance, and team = family

Wine sipping promotes serendipitous discoveries. If you titrate it, it’s a stimulant.

Sit across from your wife so that you can look into her eyes.
“Applying for grants is like voting in Chicago—Vote early and vote often”
Develop a Secret Weapon—or two

Valerian Kagan, PhD
“We should do anything in our power to keep Hülya!”

Special Agent Hülya Bayır, MD
That’s the best science I have seen on this topic—from anybody

Larry Jenkins, PhD
I can’t take this!!

I think that finding is important

You Have Bob Clark!!!!!
Take maximal advantage of the resources of your mentor—
—But don’t listen to him or her.

“Pat, you use CSF biomarkers to study mechanisms of secondary damage in brain—”

“Do you think that we might be able to use SERUM biomarkers to detect brain injury in missed cases of child abuse?”

Rachel P. Berger, MD., MPH

Be BOLD—After all it is RESEARCH

Misguided mentor: ~1999
Multidisciplinary Critical Care RESEARCH

Extra-Departmental Collaborators & Trainees

Pharmacology
Neurosurgery
Surgery
Imaging
PM&R
Cell Biology
Emergency Medicine
Nursing
Anesthesia
Pediatrics
Emergency Medicine
Neonatology
Anesthesia
Neurology
Pharmacy
PM&R
Neurosurgery
Neurosurgery
Neurosurgery
Neurosurgery
Neurology
Surgery
PM&R
Nursing
Pharmacy
Anesthesia
Neonatology
PM&R
Neurology
Surgery
“30 days is really two months—If you count the nights!”

Sgt. Alvin York 1887-1964

Richard Traystman, PhD
Past and Current Fellow Trainees on Our T-32 Training in Pediatric Neurointensive Care and Resuscitation Research
Stamp Collecting Versus Searching for a Breakthrough

Peter's Laws For the Navigation of Life

1. If anything can go wrong, Fix It!
2. When given a choice - Take Both!
3. Multiple projects lead to multiple successes.
4. Start at the top then work your way up.
5. Do it by the book but be the author.
6. When forced to compromise, ask for more.
7. If you can't beat them, join them, then beat them.
8. If it's worth doing, it's worth doing right now.
9. If you can't win, change the rules.
10. If you can't change the rules, then ignore them.
11. Perfection is not optional.
12. When faced without a challenge, make one.
13. "No" simply means begin again at one level higher.
A wise man once said, multiple projects lead to multiple successes.

“A thousand thanks” to my Family, Trainees, Colleagues, and the AAP.