How do I get to the bottom?

You have to know somebody.
• Lessons Learned
  • Gratitude
  • Humility
  • Compassion
  • Charity
  • Global View
A Global View

• “Of all forms of inequality, injustice in health is the most shocking and the most inhumane”
  – King M L 1955

• Healthcare inequities and disparities will be the new era of civil rights for the 21st century.
Pediatric Critical Care Global Issues

- Advocacy

- Growth in Critical Care

- Emergence of Disruptive Technologies

- Humanism: Dealing with uncertainty
Children’s Vulnerability

• Communities are suffering a double loss: dead children and orphaned boys and girls. “Our major concern is that the kids who survived the tsunami now survive the aftermath.”

UNICEF spokesman Alfred Ironside - N Y. Dec 28 th 2004

• They do not become orphans when their parents die, they become orphans when their parents are dying, and this is especially true in the case of the death of a mother.
Children’s Vulnerability

• The women and children pay a disproportionate price in conflicts.

• Rates of malnutrition, disease, and death among children rank among the highest in the world.

• Child abuse increased following natural disasters.
MDG 4 Target -- Reduce under 5 child mortality by two-thirds between 1990 and 2015

Despite progress, deaths remain unacceptably high. Thirteen times more likely to happen in the developing world (many countries no progress - most in SSA)
Education Policy

Figure 1: Mortality in children under 5 years, under 1 year, and neonates, Mexico 1980–2005
Rate per 1000 livebirths. Source: Ministry of Health Mexico/SEDE and CONAPO.
Advocacy

• The campaign .... is much like a political campaign: it needed icons, mascots, images, slogans- the strategies of advertising as much as the tools of science. For any illness to rise to political prominence, it needed marketing..... A disease needed to be transformed politically before it could be transformed scientifically.
Pediatric Critical Care Global Issues

- Advocacy
- Growth in Critical Care
- Emergence of Disruptive Technologies
- Humanism: Dealing with uncertainty
Growth in Critical Care

- Early antimicrobial therapy for infections
- Innovative training programs in pre-hospital trauma care
- Oxygen monitoring and therapy for children with pneumonia
- Improved care for sick children at district hospitals
- Improved structure and organization of acute care services for children
Pediatric Critical Care Global Issues

• Advocacy

• Growth in Critical Care

• Emergence of Disruptive Technologies

• Humanism: Dealing with uncertainty
Emergence of Disruptive Technologies
Disruptive/Liberation Technologies

• “Social media” age

– Participatory medicine – active role for patients and families “e-patients”, sets up a different relationship

• Using social media – 540 US hospitals
  – 247 YouTube channels, 316 Facebook pages, 419 Twitter accounts, and 67 blogs

– Hospital Social Network List, Found In Cache, http://ebennett.org/hsnl

• How do we deal with confidentiality, liability, disagreements, relationships?
One of Canada’s most prestigious medical institutions has made the bold decision to go public with details of a highly emotional tug-of-war over a dying infant in an attempt to defend itself against a slew of threats, condemnations and criticisms playing out in social media.

The case highlights how the emerging .......can quickly damage an organization and force even the most staid institutions to change their communications strategies.
Watson Wins Jeopardy

IBM's Watson supercomputer destroys all humans...

What The Watson Supercomputer Winning Jeopardy Could Mean For The Future Of Medicine
'Jeopardy!'s famous Watson computer -- maybe make that Dr. Watson

February 22, 2011 | By Mary Forgione, Los Angeles Times

Could Watson, the IBM computer that trounced two-top notch "Jeopardy!" players on the TV quiz show, become a fixture in the doctor’s office? Maybe, but not likely next week.

Watson in medicine

Why IBM’s artificial intelligence “Watson” could not replace a physician

by Ilifaat Husain on Feb 21, 2011

IBM Watson could have massive impact in medicine

By Alexis • Feb 18th, 2011 • Category: Industry News

School of Medicine Radiologists Collaborate with IBM to Bring Watson Computer Brain Power to Health Care
Pediatric Critical Care Global Issues

• Advocacy

• Growth in Critical Care

• Emergence of Disruptive Technologies

• Humanism: Dealing with uncertainty
Certainty

• “When I was a boy of fourteen, my father was so ignorant I could hardly stand to have the old man around. But when I got to be twenty-one, I was astonished by how much he'd learned in seven years.”

  Mark Twain

• The truth is when I was your age I was in no need of advice. I knew everything. My world was filled with certitudes. But when you get to my age, you realize you know nothing. Doubts are the unhappy rule.

  Mordecai Richler McGill University 2000
Certainty in Medicine

• Aristotle (before 17th century)
  – Mind body dualism

• René Descartes - father of modernity
  – an unwillingness to accept the uncertainty and ambiguity of human affairs
  – mechanical theory: the body as a machine with discrete subunits that can be studied, evaluated, cured, or replaced independently
Uncertainty in Medicine

1-Biological variability
2-Bias of patient and physician
3-Errors in interpretation
4-Uncertainty surrounding decision
5-Motives
6-Opinions of patients and physicians
7-Values of patient and physician

Diagnostics and therapeutics
Uncertainty in Medicine

- Tolerance of uncertainty is a necessary skill for effective care..... It can also enhance experiential learning. But in a world of increasing medical knowledge, capabilities, and expectations, the extent of uncertainty is rarely discussed, despite findings that one in three necropsies disagreed with the stated cause of death.

The Lancet 2010
• Only when disclosure of uncertainty becomes commonplace in medical practice will the physician/patient relationship evolve to a level of greater understanding and satisfaction for both the physician and patient.

Henry MS J Med Ethics 2006

• A distressing feature in the life you are about to embark is the uncertainty which pertains not alone to our science and art, but the very hopes and fears which make us men. In seeking out the absolute truth we aim the unattainable, and must be content with finding broken portions.”

William Osler