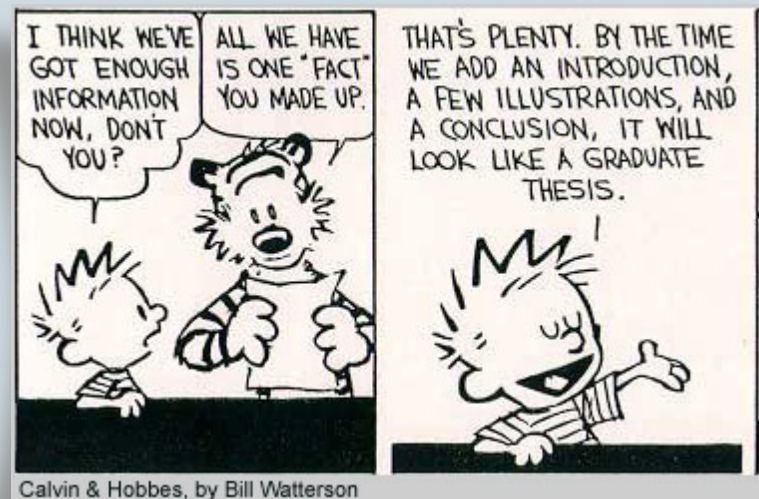


Responsible Conduct in Research & Human Subjects Research



CS5/692
LECTURE 1



Goals



- *Brief* introduction to Responsible Conduct of Research
- History of Human Subjects in Research
 - Rationale for ethical governing bodies and regulations
- Where to go for more information?

What is RCR?



- Responsible Conduct of Research
- *“The practice of scientific investigation with integrity.”*
 - Seems obvious?
 - ✦ As we’ll see, there is clearly a need for regulation
 - And...an iterative process for review of regulations
 - Many funding agencies and many universities now require basic RCR training for all researchers and many students

9 Basic Components of RCR



- Collaborative Science
- Conflicts of Interest and Commitments
- Data Acquisition, Management, Sharing, & Ownership
- **Human Research Protections**
- Lab Animal Welfare
- Mentoring
- Peer Review
- Publications Practices and Responsible Authorship
- Research Misconduct

World War II as Impetus for First Guidelines



- **Nuremberg Code (1947)**
 - “Research” conducted on humans during WWII without their consent
 - Subsequent trials led to creation of ethical code for human subject research
 - Introduced *Informed Consent* and *Voluntary Participation*

International Guidelines for Research



- Declaration of Helsinki, 1964
 - World Medical Association's contribution
 - Multiple revisions to 2013
 - Basic statement of ethical principles for medical research involving human subjects
 - Calls for prior and ongoing approval for research
 - Basis for “Good Clinical Practices”



Not enough...



- **Thalidomide (1950's)**
 - 12,000 pregnant women given non-FDA approved drug
- **Radiation research**
 - Extensive research in 1940's – 60's
 - Generally on poor, vulnerable populations, including many pregnant women, fetuses, newborns, and children with disabilities

Not enough...

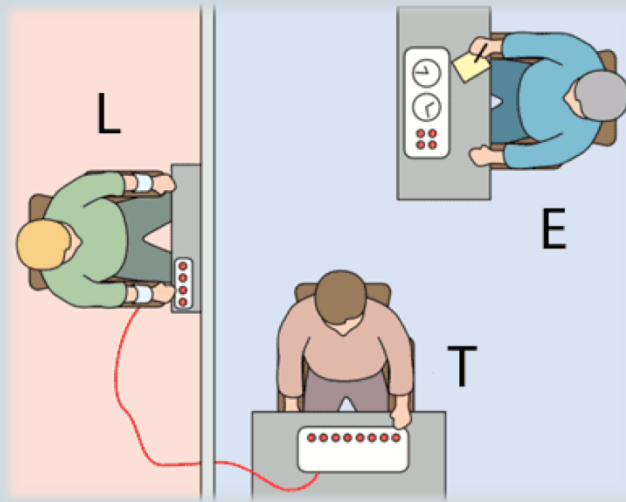


- **Tuskegee Syphilis Study**
 - Alabama, 1932-1973
 - Funded by US Public Health Service
 - 600 African American males, low income, promised free medical treatments
 - Blatant unethical practices: actively denying treatment, coercive practices, withholding medical information, no informed consent
 - Only ended when story of study became public. Even still, no apology from government until more than 20 years later.

Not Enough...



- Psychological experimentation
- Milgram experiments at Yale (1961-63)
 - Coercion, obedience, deception



Milgram, S. (1973). The perils of obedience. *Harper's*, 247(1483), 1973.

National Research Act of 1974



- Congress forced Department of HHS to come up with some rules
 - Title 45 of the Code of Federal Regulations, Part 46
 - ✦ 45 CFR 46
 - National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1974-1979)
 - ✦ This commission released The Belmont Report of 1979
 - Continues to guide ethical practice in research
 - Established modern IRB system

“Common Rule”



- 1991: Federal adoption of 45 CFR 46, Subpart A
 - Additional protections for:
 - ✦ Pregnant women, human fetuses, and neonates
 - ✦ Children
 - ✦ Prisoners

Related Week 1 Readings



- Steneck:
 - Chapter 1: Rules of the Road
 - Chapter 3: The Protection of Human Subjects
- Excerpt from Skloot R., "The Immortal Life of Henrietta Lacks":
 - Preface
 - First Chapter
- Radiolab segment, "Henrietta's Tumor"



Additional Resources



- [CITI training](#)
- Office of Research Integrity
 - [Case studies](#)
- *The Immortal Life of Henrietta Lacks*
 - *Novel by Rebecca Skloot*
 - *HBO movie premieres April 22*
- [The Deadly Deception](#)
 - Recommended Nova video on the Tuskegee Syphilis Study
- Former President Bill Clinton's Presidential Apology for Tuskegee Syphilis Study. ["I AM SORRY."](#)