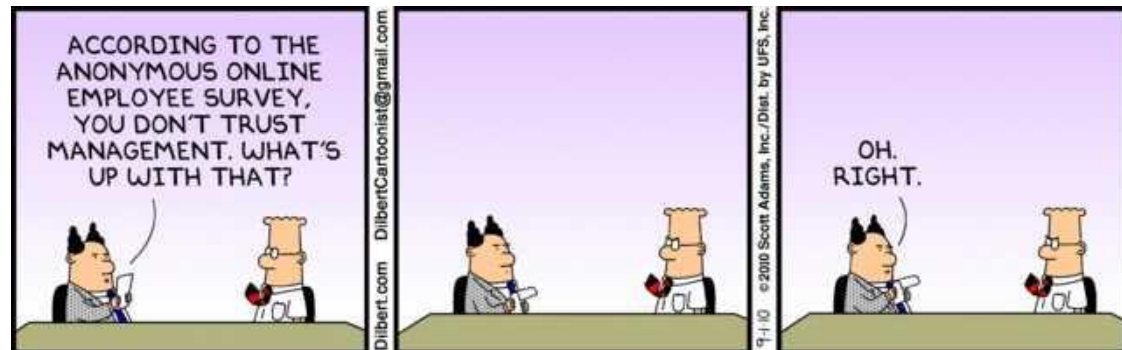
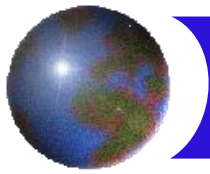


Research Protections for Human Participants: IRBs and the Researcher

✚ Plan for the presentation:

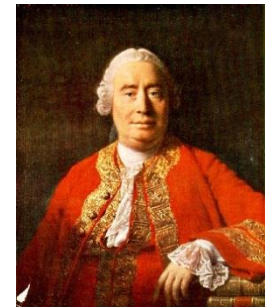
- ✚ Evolution of Research Protections
- ✚ Code of Federal Regulations (the “Common Rule”)
- ✚ OHRP and the administration of “the Regs”
- ✚ IRB02 Structure and Practice at UF
- ✚ Submitting your protocol to the IRB02
- ✚ Some issues and controversies (for your discipline)
- ✚ Q&A

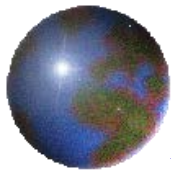




Ethical Dilemmas

- ⊕ The ethics of research on humans
 - ⊕ *"The difficult ethical questions are not raised by bad people doing bad things for no reason, but by good people doing bad things for good reasons"*
- ⊕ Individual Autonomy versus the Greater Good
 - ⊕ Emmanuel Kant versus David Hume?
- ⊕ Evidence-based ethics?
 - ⊕ the *Journal of Empirical Research on Human Research Ethics*

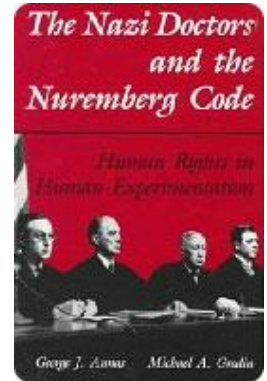




Evolution of Research Protections

✚ WW2 Nazi medical “experiments” and the Nuremburg Code (1948)

- Voluntary and informed consent
- Benefits commensurate to the risks
- Right to withdraw without penalty

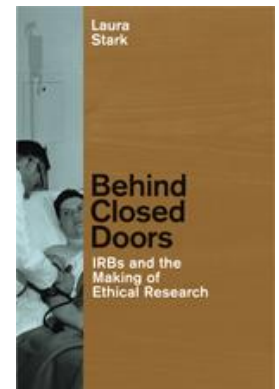


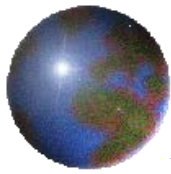
✚ The NIH Clinical Research Committee (1953)

- NIH Clinical Center established in Bethesda, MD
- “Normal Patients” & Prisoner populations recruited
- “Committee of Experts” charged with review

✚ The Declaration of Helsinki (WMA, 1964)

- Adopts key elements of the Nuremburg Code
- Participant’s interests trump those of society







Evolution of Research Protections in US

✚ Infamous cases of poor protection in US

✚ Ethical abuses in biomedical research

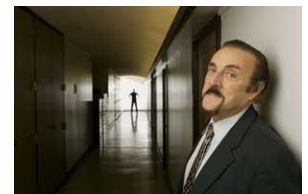
- Medical studies of **conscientious objectors** in WW2 
- Willowbrook Hepatitis Study (1950's) [& Guatemala 1940's]
- **Beecher's NEJM paper (1966) reviews 22 such cases**
- San Antonio Contraception Study (1972)
- Tuskegee Syphilis Study (1932-1972) [*"Miss Evers' Boys"*] 

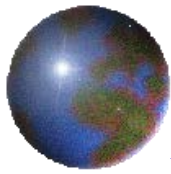
✚ Abuses in the behavioral and social sciences

- Milgram's Obedience Study (1963) 



- Zimbardo's Prison Study (1972) 



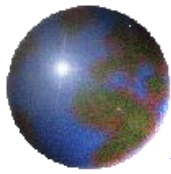


Establishing Research Protections in the US

✚ National Research Act (1974)



- ✚ Establishes first federal regulations and IRBs
 - **Based on NIH's** *Clinical Research Committee* (1953)
- ✚ Creates a *National Commission for Protection of Human Subjects of Biomedical **and Behavioral** Research*
- ✚ National Commission issues reports 1975-1978
 - Vulnerable populations (pregnant women, prisoners)
 - Regulations modified and expanded in response
 - issues the [Belmont Report](#), 1978



Evolution of Research Protections

✚ The Belmont Report (1978)



✚ Respect for persons (*be nice!*)

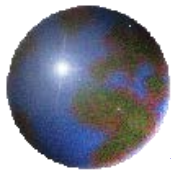
- informed consent to participate and to withdraw consent
- Privacy of individual, confidentiality of data protected
- Protecting vulnerable subjects and avoiding coercion

✚ Beneficence (*be good!*)

- May individual participants benefit from the procedures?
- Benefits commensurate to risks
- Risks minimized, benefits maximized, by design

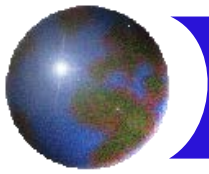
✚ Justice (*be fair!*)

- Who is asked to participate? Who excluded?
- Burdens and benefits distributed equitably



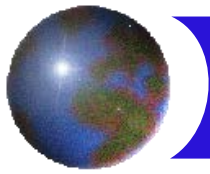
Code of Federal Regulations

- ✚ 45 CFR 46, aka “**Common Rule**”
 - ✚ Revised regs adopted in 1981 by DHHS
 - ✚ Subsequently adopted by 17 agencies (*Part A, at least*)
 - ✚ Last big revision 1991; more proposed July 2011
- ✚ Lays out the regulatory territory:
 - ✚ What is research? What is exempt / expeditable?
 - ✚ **What is the structure of the IRB's?**
 - ✚ How should the IRB do its business?
- ✚ ALL (non-exempt) human subjects research must comply at institutions signing standard **FWA** with Feds



45 CFR 46 (continued) ...

- ❖ Special populations of participants
 - ❖ Pregnant Women, fetuses (*Subpart B, 1975*)
 - ❖ Prisoners (*SubPart C, 1978*)
 - ❖ Children (*SubPart D, 1983*)
- ❖ & special (implicit) concern when capacity for consent is limited
 - ❖ Developmental disabilities
 - ❖ Cognitive impairment due to trauma or disease



Online Resources: Office of Human Research Protections (OHRP)



Jerry Menikoff, M.D.
Director, OHRP

✿ “Enforces” regulations and provides:

✿ The regs at:

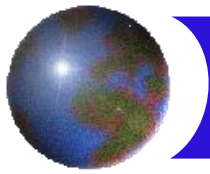
<http://www.hhs.gov/ohrp/humansubjects/index.html>

✿ Guidance and Interpretation:

<http://www.hhs.gov/ohrp/policy/index.html>

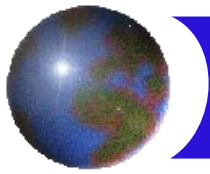
✿ Stated Goal of “Facilitating the Research Enterprise”

✿ Can suspend (and has done so) institutional research in the face of serious noncompliance by investigators or IRBs



The IRB02: Social, Behavioral and Educational Science Research (SBER)

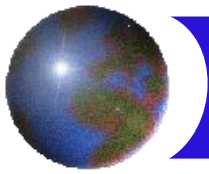
- ⊕ About 1,400 **new** protocols annually
 - ⊕ **Most expedited; many exempt; ~1% go to “full board”**
- ⊕ Also includes
 - ⊕ Marketing, Journalism, Education, Forestry, Recreation, Building Construction, Urban Planning, Fine Arts & Music, some Health Center projects, etc.
- ⊕ Monthly meetings of Board (n=8)
- ⊕ **Includes one nonscientist, one “community member”**
(unaffiliated with Institution)



IRB02 Members

- Ira Fischler, Chair (Psychology)
- Cory Armstrong (Journalism)
- Glen Busby^a (VA chaplain; nonscientist & community)
- Alan Cooke (Marketing)
- Lonn Lanza-Kaduce (Sociology and Criminology & Law)
- David Miller^b (ED: Educational Psychology)
- Hazel Jones (ED: Special Education)
- Mark Bishop (PHHP: Physical Therapy)

- [Alternates](#): ^aDenise Long, ^bDavid Therriault



The Review Process

✚ The “Reviewer’s Checklist” for protocols

✚ The decision tree

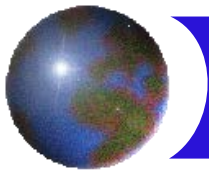
- Is it research? (vs. training, program evaluation, etc.)
 - “A systematic investigation ... designed to develop or contribute to generalized knowledge” [45 CFR 46.102(d)]
- Is it exempt? (e.g. existing data, etc.; *see list*)
- Is it expeditable? (“minimal-risk” in broad categories)

✚ Elements of informed consent

- Regardless of written or oral, signed or unsigned

✚ When elements, or consent, can be waived

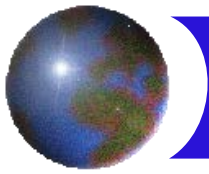
- **Waiving documentation of consent (“no sig”)**
- Waiving parental permission and other elements



Triaging SBER in Academe

✚ Is it research? (*UF policy says....*)

- ✚ Research about organizations? (*generally no*)
 - ✚ Program evaluation (*generally no*)
 - ✚ Classroom projects (*generally no*)
 - ✚ Oral history and investigative/news interviews (*generally no*)
 - ✚ Student projects: theses and dissertations (*generally yes*)
 - ✚ Does publication = research? (*likely, but not necessarily*)
-
- ✚ Institution, funding agency, instructor, or researcher may prefer or require IRB review nonetheless

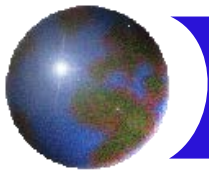


Exempt Research

❏ If it's human subjects research, is it exempt?

If so, from what?

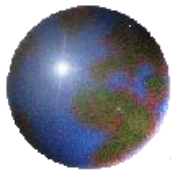
- Regs list 6 “exempt” categories of research under 45 CFR 46.101(b)
- These are exempt from regulatory compliance; the institution may still require review – and use the regulations (and the IRB) for guidance
 - *Although UF's FWA de jour applies only to federally funded research, de facto it's applied to all HSR*
 - *UF IRB02 “conservative” in exemptions*
 - Little functional difference (except for annual review)
 - Still, about 25% of submitted protocols exempt



The “Big Three” Exemptions for SBER

- ⊕ **(1)** Research conducted in established .. educational settings, involving normal **educational practices**, such as research on instructional strategies, or on the effectiveness among **techniques**, curricula or classroom management **techniques”**
- ⊕ **(2)** Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), **survey procedures, interview procedures or observation of public behavior, unless:**
 - ❏ (i) information obtained is **recorded** in such a manner that human subjects can be **identified**, directly or through identifiers linked to the subjects; **and**
 - ❏ (ii) any disclosure of the human subjects' responses outside the research could reasonably **place the subjects at risk** of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

[can't be applied to child research]
- ⊕ **(4)** Research involving the collection or study of **existing data**, documents, records,... **if these sources are publicly available** **or** if the information is **recorded by the investigator** in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.



Evaluating a “Protocol” at IRB02

✚ Protocol submission

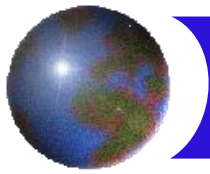
✚ The elements of a protocol

- Purpose of the study
- Research methodology (*jargon-free*)
- Potential risks and benefits
- Number and age of participants, method of recruitment, compensation
- Description of the informed consent **process**

✚ IRB02 Website resources at:

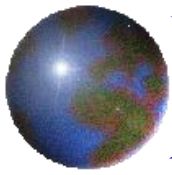
✚ <http://irb.ufl.edu/irb02/index.html>

✚ IRB02 Template as guidance



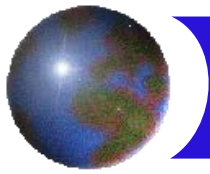
Pragmatics of Protocol Review

- ⊕ Three hard copies* submitted to IRB02 office
- ⊕ Logged in for preliminary review
 - ⊞ Checked for signatures, attachments, elements of Consent
 - ⊞ referred to Chair or Vice-Chair
- ⊕ Triaged into exempt, expedited, full board
- ⊕ Feedback to PI within 7-10 business days
 - ⊞ Approved as submitted
 - ⊞ Approved with explicit changes
 - ⊞ Returned for revisions/clarifications
 - ⊞ Scheduled for next Full Board meeting
- ⊕ Revisions can be submitted via email
- ⊕ Approval is for one year*; Revisions commonly expedited



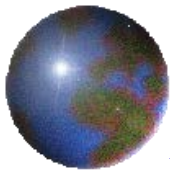
Common Errors in Protocols

- ❖ Language in protocol or consent too complex or technical
- ❖ Methods not described in sufficient detail
- ❖ Inconsistencies across sections
- ❖ Forgot to attach attachments (!)
- ❖ Confusion over anonymity vs. confidentiality
- ❖ Potential for coercion may be downplayed
 - Supervisors “encouraging” employees to participate
 - Use of researcher’s own students as participants
 - Use of “undue compensation” [or lottery]
- ❖ Potential risks may be underestimated
- ❖ Inadequate plans for debriefing



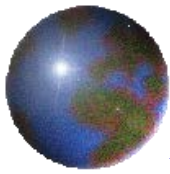
Some myths about IRB Review

- ❖ As PI, I can decide if IRB review is needed
- ❖ **If there's only one or two subjects, it's not "research"**
- ❖ If I need it, I can get approval later
- ❖ **There are no costs to skipping IRB review**
- ❖ Preparing my protocol is burdensome at best
- ❖ **I'll never get my approval in time**
- ❖ IRBs won't approve any research involving deception
- ❖ **IRBs won't approve "qualitative research"**
- ❖ Consent, and documentation, have to be written



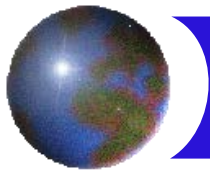
Entertainment for IRBs: The Best of UF

- The actual study has been completed. I am turning in my proposal in the next week.
- The interview will be tape recorded. After the transcription, I will physically destroy the tape by ripping out the ribbon.
- The survey will be given to high students in a classroom setting.
- 13. Why do you come to this Starbucks?
 - (d) To grab a snake and a lunch
- At this point, the participants will sing the informed consent
- *Maximum number of participants sought: 300*
Number of participants run: 2
Reason for closing study: Response rate did not meet expectations
- *5(d): I have recruited no participants because: Our data collection site did not allow us to collect the data*
- *[Study on goal setting]* **"The study will take about 30 minutes at your computer...** as an alternative for extra credit, you can instead write a 10-page paper (no less than 8,000 words) explaining what are, in your opinion, the top five factors contributing to goal achievement."
- **Title: "Effect of potato fiber on fecal weight and bowel movement frequency."**
Main risk: flatulence. Minimized by surveys being filled out in private.



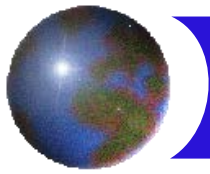
Broad IRB Issues in SBER Research

- ⊗ Assessing risk
 - ⊠ Risks of participating vs. risks of disclosure
 - ⊠ Magnitude vs. likelihood of harm
 - ⊠ **What's "minimal risk?"**
- ⊗ Weighing costs and benefits
 - ⊠ Should IRBs assess scientific merit?
- ⊗ Studies in other countries
 - ⊠ **Need for "local" oversight and review**
 - ⊠ Linguistic and cultural expertise of researchers
 - ⊠ OHRP's [Compilation of International Protections](#)



SBER Issues (continued)

- ⊗ Deception and debriefing
 - ⊠ What conditions justify its use?
 - ⊠ Does debriefing defuse potential harms?
- ⊗ Confidentiality and its limits
 - ⊠ Court subpoenas of data
 - ⊠ Certificates of Confidentiality
 - ⊠ Evidence of child abuse
 - ⊠ Third-party investigations and consent
- ⊗ Confidentiality and the Web
 - ⊠ Chatrooms and forums – public behavior?
 - ⊠ Server and data security
 - ⊠ Sharing of information about recruitment, responses



Online Tutorials for Human Research Protections

Collaborative Institutional Training Initiative (CITI)

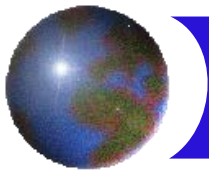
<http://www.citiprogram.org/>

National Institutes of Health (NIH) Office of Extramural Research:

<http://phrp.nihtraining.com/users/login.php>

UC Irvine Human Research Tutorials

<http://apps.research.uci.edu/tutorial/>

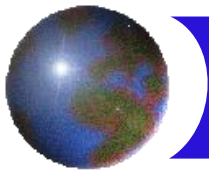


Nazi Experimentation

Prisoners were
sterilized
given malaria
blinded
chilled
etc.



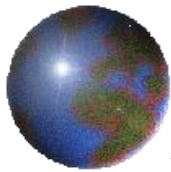
A freezing experiment at Dachau. Dr. E. Holzhohner, left, professor of physiology at the Medical School of the University of Kiel, and Dr. Sigmund Rascher observe a "subject" immersed in ice water. This particular man was a political prisoner. (*Trial exhibit – Office Chief of Counsel for War Crimes, Nuremberg*)



The Nuremberg “Doctors Trial”



*Dec 1946 – Aug 1947. 23 doctors and administrators;
16 found guilty, seven sentenced to death and executed*



Y EVENING, FEBRUARY 18, 1946.

In Nation's Service

*Items of Interest Concerning Union County Folk
In Armed Forces of Their Country*

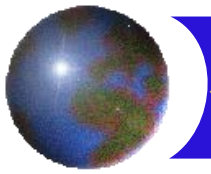
Special for San Diego January 30.

Fischler Attends War Trial.

In a letter to his wife, Mrs. Sylvia Fischler, of 163 Elmora avenue, S/Sgt. Charles Fischler, now with the Army of Occupation at Furth, Germany, wrote that on January 31 he attended the war crimes trial at Nuernberg. The only man in his outfit selected to attend the trial on that occasion, he had an opportunity to listen to the testimony in five languages. He described the ingenious head phone device through which he heard the testimony translated into English simply by turning a dial each time a different language was spoken.

The letter commented upon the disinterested attitude displayed by Goering and the other top war criminals. It stated that mostly they sat with their arms folded, and not looking at anyone or anything in particular.

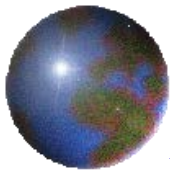
Sergeant Fischler, has been in Ger-



The Nuremburg Code: 1st Principle

- ✚ The **voluntary consent** of the human subject is absolutely essential. This means that the person involved should have legal capacity to give consent; should be so situated as to be able to exercise free power of choice, without the intervention of any element of force, fraud, deceit, duress, over-reaching, or other ulterior form of constraint or coercion; and should have **sufficient knowledge and comprehension of the elements of the subject matter involved**, as to enable him to make an understanding and enlightened decision. This latter element requires that, before the acceptance of an affirmative decision by the experimental subject, there should be made known to him **the nature, duration, and purpose of the experiment**; the **method and means** by which it is to be conducted; all **inconveniences and hazards** reasonably to be expected; and the effects upon his health or person, which may possibly come from his participation in the experiment.
- ✚ The **duty and responsibility for ascertaining the quality of the consent rests upon each individual who initiates, directs or engages in the experiment**. It is a personal duty and responsibility which may not be delegated to another with impunity.

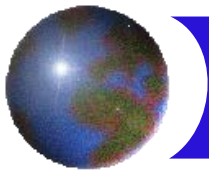




The Tuskegee Syphilis Experiment

- ✚ 400 poor black men in Tuskegee, Alabama selected for “free treatment” for *bad blood*; 200 uninfected “control group”
- ✚ Not told they already had syphilis
- ✚ Regular exams and tests (e.g., spinal taps, biopsies & blood draws) over 40 years
- ✚ Penicillin withheld when it became available
- ✚ Ended only when media learned of it
- ✚ Heller of PHS still defended the [ethics](#) of the study, stating: *“The men's status did not warrant ethical debate. They were subjects, not patients; clinical material, not sick people.”*



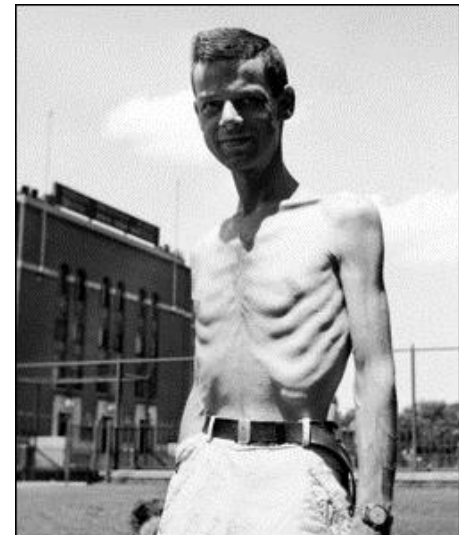


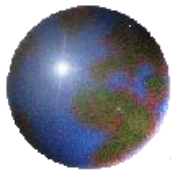
Human Guinea Pigs. Nearly 500 WW2 COs competed to volunteer as guinea pigs in dangerous and life-threatening medical experiments seeking cures for malaria, infectious hepatitis, atypical pneumonia and typhus. Some CO subjects were inoculated with live hepatitis virus.

"We were very concerned of course that we had been called all kinds of names, yellow bellies, and things like that. I had volunteered for an ambulance driver and got turned down, American Field Service, they said they didn't want any more COs, they had too many, but I was young and I wanted to show that I was not a coward, so when they offered me this chance of being a guinea pig, it fit right in with my scheme of things of proving that I was willing to take risks on my own body, but I just did not want to kill someone else." - CO Neil Hartman

Neil Hartman served as a human guinea pig and was repeatedly injected with live hepatitis virus. Former Surgeon General, C. Everett Koop, then a medical resident, performed two biopsies on Hartman.

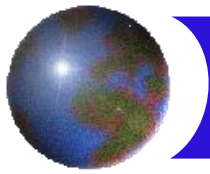
Other CO volunteers were covered with lice and sprayed with DDT, or subjected to high altitudes, extreme temperatures and lengthy periods of immobility. The **starvation experiments** conducted at the University of Minnesota were among the most dramatic test for the COs. Healthy, young men committed to the cause were reduced to angry and emaciated skeletons. The dramatic results of the experiments were so severe and long-term that they helped to inspire the Marshall Plan which, as a keystone of U.S. foreign policy, set a precedent for helping countries combat poverty, disease and malnutrition after the war.





Biomedical versus SBER Research

- ⊕ Physical versus other risks
 - ⊠ Psychological, social, economic, legal
- ⊕ Some grey areas
 - ⊠ Psychophysiology (EEG, fMRI measures)
 - PET? TMS?
 - ⊠ Kinesiology & Physiology (physical training)
 - ⊠ Communicative disorders & treatment
- ⊕ The common theme of informed consent



Classroom Scenarios

- ❏ Observation of normal classroom activity
- ❏ **Analysis of assigned “products”**
 - Obtaining consent for use
 - Post-hoc use, de-identified, as “existing data?”
- ❏ Additional activities for research purposes
 - e.g., interviews, reflection journals, surveys
- ❏ Cross-section comparison of methods
- ❏ **Study of one’s own students**
- ❏ Others studying your students