## Responsible Conduct of Research, Scholarship, and Creative Activities

# Protection of Human Subjects

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## Objectives

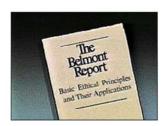
- Understand reasons for federal regulations about human subjects research
- Understand the Belmont Report principles of respect for persons, beneficence, and justice
- Recognize the requirement for human research protection training for every investigator

## **Definitions**

- Research means "a systematic investigation, including research development, testing, or evaluation, designed to develop or contribute to generalizable knowledge"
- Human subject means "a living individual about whom an investigator ... conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information"

The Research Act of 1974, 45 CFR 46.102(d),(f)

## Protection of Human Subjects in Research



Protection of human subjects is based upon three principles from the Belmont Report

- Respect for persons
- Beneficence
- Justice

#### Belmont Report:

## Respect for Persons

- Every person has the right to determine what shall happen to him or her – participation must be voluntary\*
- Special consideration and protection is extended to "vulnerable" subjects such as children, persons with cognitive disabilities, prisoners, and institutionalized persons
- \* A waiver of informed consent is possible under some conditions if the research poses no more than minimum risk to participants. Check with an IRB if you have questions.

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<u>Respect for Persons</u> – This concept incorporates at least two ethical convictions: that individuals should be treated as autonomous agents, and that persons with diminished capacity or autonomy are entitled to protection.

Respect for persons demands that the subject enters into the research voluntarily and with adequate information. Informed consent is one of the primary ethical requirements underpinning research with human subjects; it reflects the basic principle of respect for persons. Informed consent assures that prospective human subjects will understand the nature of the research and can knowledgeably and voluntarily decide whether or not to participate. Informed consent must be obtained voluntarily, without coercion, especially when vulnerable populations are involved, such as children, persons with cognitive disabilities, prisoners, and institutionalized persons.

Above information is quoted or paraphrased from MSU's initial IRB training course, <a href="http://www.humanresearch.msu.edu/requiredtraining.html">http://www.humanresearch.msu.edu/requiredtraining.html</a>.

<u>Waiver of Informed Consent</u> – A waiver of informed consent may be approved if the IRB agrees that: (a) the research involves no more than minimal risk to the subjects; (b) the waiver or alteration will not adversely affect the rights and welfare of the subjects; (c) the research could not practicably be carried out without the waiver or alteration; and (d) whenever appropriate, the subjects will be provided with additional pertinent information after participation. Check with an IRB if you have questions.

#### Belmont Report:

## Beneficence

 No person shall be placed at risk unless the risks are reasonable in relation to the anticipated benefits

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<u>Beneficence</u> – Persons are treated in an ethical manner, taken from the Hippocratic maxim of "do no harm", which implies not only respecting subjects' decisions and doing no harm, but also by making efforts to secure their well-being. The term beneficence is often understood to cover acts of kindness or charity that go beyond strict obligation. With respect to research involving human subjects, beneficence have two general rules: (1) do not harm and (2) maximize possible benefits and minimize possible harms.

Selection of subject populations should be equitable - neither weighted with compromised persons nor unfair under-representation of any particular group.

Above information is quoted or paraphrased from MSU's initial IRB training course, <a href="http://www.humanresearch.msu.edu/requiredtraining.html">http://www.humanresearch.msu.edu/requiredtraining.html</a>.

#### Belmont Report:

## **Justice**

 Risks and benefits should be justly distributed – who ought to receive the benefits of research and who should bear its burdens?

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<u>Justice</u> - Justice applies directly to the selection of subjects. There must be fair procedures and outcomes in the selection of research subjects. Investigators must consider both participants and those who are not selected for participation.

- A bias to the knowledge base develops when one population is studied more than another. For
  example, there is more knowledge about health care for men than women because, for many
  years, more investigators chose to study men than women. This is not fair because the benefits
  of research (e.g., knowledge about health care) should accrue to everyone as much as practical.
  Although it is not practical (or wise) to include a variety of populations in a single study,
  investigators should consider this issue when designing an overall program of research.
- It is also important that no single population should bear the burdens of research (e.g., risks associated with participation). Earlier in history it was relatively common for researchers to select easily accessible participants (e.g., prisoners, institutionalized people) whose lives were not as highly valued as the lives of other people. In other cases investigators chose to study poor or illiterate people because it was easier to convince them to participate. These scenarios are wrong from an ethical perspective because the vulnerable population takes the risks while other people reap the benefits. (These scenarios may also be wrong from a research design perspective if the resulting sample is not representative of the overall population of interest.)

The amount of risk, that is appropriate to expose subjects to in a research study, depends on the expected benefits of the research. Justice seeks to answer the question of who ought to receive the benefits of research and who should bear its burdens?

Some of the above information is quoted or paraphrased from MSU's initial IRB training course, http://www.humanresearch.msu.edu/requiredtraining.html.

## Rationale for Belmont Report: Historical Perspective

Document	Precipitating Events	
Nuremberg Code, 1949	Unethical Nazi research involving concentration camp prisoners during World War II	
Declaration of Helsinki, 1964	Analysis of issues related to medical research by the World Health Organization	
Belmont Report, 1979	Evidence of unethical research in the U.S., including the Tuskegee Syphilis Study conducted by the U.S. Department of Public Health	

Documents: http://www.humanresearch.msu.edu/ethicaldocuments.html

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<u>Nuremberg Code</u> (1949). During World War II, Nazi physicians and scientists conducted research studies involving concentration camp inmates. Wikipedia

(http://en.wikipedia.org/wiki/Nazi\_human\_experimentation) provides an account of experiments involving twins, freezing, malaria, mustard gas, sulfonamide, sea water, sterilization, poisons, incendiary bombs, and high altitude. Many thousands of inmates died as a result of these experiments. After World War II, at the Nuremberg trials, the physicians and scientists were tried in a court of law. In addition to convictions and sentences, the court judgments were codified as the *Nuremberg Code*. Provisions include: (1) informed consent is essential; (2) research should be based on prior animal work; (3) the risks should be justified by the anticipated benefits; (4) only qualified scientists must conduct research; (5) physical and mental suffering must be avoided; and (6) research in which death or disabling injury is expected should not be conducted (https://www.citiprogram.org/members/learnersII/moduletext.asp?strKeyID=67A396A8-17D3-4A60-8300-2F31A4A15B7E-4797201&module=498).

Declaration of Helsinki (1964 with subsequent revisions). The World Medical Association developed a set of best practices called the *Declaration of Helsinki* based upon analysis of issues related to medical research. The following principles were established in addition to adoption of most provisions from the *Nuremberg Code*: (1) individuals have a right to self-determination and a right to make informed decisions about participation both initially and during the course of research; (2) the subject's welfare must always take precedence over the interests of science and society; (3) ethical considerations must always take precedence over laws and regulations; (4) surrogate consent should be considered when research subjects are incompetent, physically or mentally incapable of giving consent, or is a minor; and (5) assent should be obtained from vulnerable subjects whenever possible (http://en.wikipedia.org/wiki/Declaration of Helsinki).

Belmont Report (1979). Prior to the Belmont Report, the USA basically took a position that unethical research studies did not happen in the United States. Two events changed that perception: (a) a 1966 article by Beecher in the New England Journal of Medicine describing 22 examples of unethical research studies published in scientific journals; and (b) publicity about the Tuskegee Syphilis Study conducted from 1932-1972 by the U.S. Department of Public Health. The U.S. Department of Health, Education, and Welfare (now Health and Human Services) developed the Belmont Report in response to these abuses of human subjects in research. The Belmont Report is the basis for 45 Code of Federal Regulations part 46, which currently governs human subjects research in the USA. (Wikipedia, http://en.wikipedia.org/wiki/Belmont\_Report)

Interested readers can learn more about historical examples of human subjects research from the MSU IRB Tutorial (http://35.8.104.116:591/ucrihs/ucrihs\_tutorial/) or from the CITI modules related to history and ethical principles

(https://www.citiprogram.org/members/learnersII/optionalmodules.asp?strKeyID=493359C8-B09B-4DB9-82B0-78EECF77C74E-4797201).

#### Rationale for Belmont Report:

## History of Abuse

One reason for creation of the Belmont Report and subsequent federal regulations is a history of abuse of human subjects under the guise of scientific investigation. Some noteworthy studies include:

- Tuskegee syphilis study
   Willowbrook study
- Nazi war crimes
- Project Camelot
- Human radiation experiments
- Milgram's study
- Johns Hopkins cases

#### Descriptions of these studies are located at:

http://www.humanresearch.msu.edu/requiredtraining.html

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The Tuskegee syphilis study is described on the next two slides.

Descriptions of the other studies can be found in MSU's initial IRB training course at http://www.humanresearch.msu.edu/requiredtraining.html.

The listed studies certainly are not the only examples of abuse of human subjects in research, but they are amongst the most egregious examples of abuse. A quick internet search will reveal many additional examples.

#### **Example of Abuse: Tuskegee Syphilis Study**

- Conducted by the U.S. Public Health from 1932-1972 to study the natural progression of untreated syphilis
- Participants
  - Poor, rural African-American men with syphilis were promised treatment for "bad blood" + hot meal + proper burial with casket
  - E group included about 400 men with syphilis
  - C group included about 200 men without syphilis
- Early results showed high death rate and more medical complications amongst men with syphilis
- Men were not informed of or treated with penicillin, an effective treatment for syphilis, when the drug became available in the 1940s

Description adapted from MSU's initial IRB training course http://www.humanresearch.msu.edu/requiredtraining.html

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In 1972, the public learned about the Tuskegee Syphilis Project. This study was conducted in the United States from 1932-1972. The purpose was to determine the natural history of untreated latent syphilis.

Approximately 400 poor, rural African-American men with syphilis, and about 200 men without syphilis, who served as the controls, were studied without treatment in order to understand the progression of the disease.

To get the men involved in the study, they were told that they would be treated for "bad blood" and were promised a hot meal and proper burial complete with a casket. They had been subjects of the study since 1932, for a total of 40 years.

By 1936, it was apparent that many more infected men than controls had developed complications. Ten years later a report of the study indicated that the death rate among those with syphilis was about twice as high as it was among the control group.

In the 1940's, when penicillin, known to be an effective treatment for syphilis, became available, the men were neither informed of this, nor treated with the antibiotic. The study continued until the first accounts of it appeared in the national press in 1972, at which time an ad hoc advisory panel was formed by the government to give advice on how to assure that such experiments would never again be conducted.

Public outcry about the Tuskegee Syphilis Study prompted the development of the *Belmont Report*.

## Federal Regulations

The most important federal regulations governing human subjects of research include:

Regulation	Federal Agency
45 CFR 46 (160,162,164) HIPAA	Department of Health and Human Services
21 CFR 50 21 CFR 56 21 CFR 312 21 CFR 812	Food and Drug Administration

Links to these regulations are posted at

http://www.humanresearch.msu.edu/federalregs.html

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CFR refers to "common federal regulation"

#### U.S. Office of Health and Human Services Regulations

- 45 CFR 46 protection of human subjects based upon the three principles of the Belmont Report (see subsequent slides)
- HIPAA (Health Insurance Portability and Accountability Act) protection of personal identifiable health information

#### U.S. Food and Drug Administration Regulations

- 21 CFR 50 protection of human subjects
- 21 CFR 56 regulations on institutional review boards
- 21 CFR 312 investigational new drugs
- 21 CFR 812 investigational device exemptions

## Federal Regulations, continued

#### Learn about human subjects regulations by

- Completing the online IRB investigator training http://www.humanresearch.msu.edu/requiredtraining.html
- Paying attention to instructions associated with the initial application, renewal, and revision forms http://www.humanresearch.msu.edu/form\_instructions.html
- Asking IRB staff
   http://www.humanresearch.msu.edu/staff.html

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IRB stands for Institutional Review Board, federal terminology for committees that review research projects involving human subjects

MSU has three IRBs that consider applications from different academic disciplines

- Social, Behavioral and Education Institutional Review Board (SIRB)
- Biomedical and Health Institutional Review Board (BIRB)
- Community Research Institutional Review Board (CRIRB)

## Federal Regulations, continued

- According to The Research Act of 1974, Title 45
   Code of Federal Regulations Part 46 (45 CFR 46),
   research involving human subjects that is
   conducted, supported, or otherwise subject to
   regulation by any federal department or agency
   must be reviewed by the appropriate IRB
- MSU policies
  - MSU observes the 45 CFR 46 policy
  - Exceptions exist for research that is not subject to 45 CFR 46 if no more than minimal risk
  - When in doubt, submit the project for review or ask an IRB staff member for advice

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The Research Act of 1974, Title 45 Code of Federal Regulations Part 46
Requires that all projects involving human subjects at institutions which receive federal money for research be reviewed by an Institutional Review Board (IRB)

#### Research that must be reviewed by an IRB at MSU

- All research covered by 45 CFR 46 must be reviewed by the appropriate IRB before contact with potential subjects
- Research that is not covered by 45 CFR 46 must be submitted to and approved by
  the appropriate IRB before contact with potential subjects: (a) if there is more than
  minimum risk to participants or (b) if the funding agency, professional organization,
  journal, etc., require evidence of IRB approval. Investigators who are uncertain
  whether to submit a project for review should contact an IRB staff member for
  advice.

#### Review of submitted applications at MSU

- Some submitted projects are deemed <u>not</u> to involve human subjects or <u>not</u> to constitute research. In these cases investigators receive a letter indicating that IRB review is not required.
- Submitted projects that <u>do</u> involve human subjects and <u>do</u> constitute research are reviewed by IRB staff members who are experts in federal regulations and also by IRB faculty reviewers who are experts in research. In these cases investigators receive an approval letter after all concerns have been resolved.

## Rationale for Federal Regulations

#### Issues related to the conduct of research

- History of human subject abuse
- Exploitation of vulnerable populations
- Inadequate process for informed consent
- Coercion
- Deception
- Boundaries between research and therapy
- Privacy and data security
- Responsibility to the public who funds research

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#### Issues

- <u>Exploitation of vulnerable populations</u> Prisoners, medical patients, children, persons with disabilities
- <u>Inadequate process for informed consent</u> failure to provide complete information about the study in a form that potential subjects can understand, failure to observe the cultural context in which potential participants reside
- <u>Coercion</u> real or perceived ways in which potential subjects feel obligated to participate in research, even though they may not wish to participate
- <u>Deception</u> withholding the purpose or other fundamental information about the study at the time of consent
- <u>Boundaries between research and therapy</u> competing values when medical care professionals conduct research
- Privacy and data security protection of individually identifiable information
- Responsibility to the public who funds research concern for human welfare

Note about informed consent. General principles of obtaining informed consent include providing comprehensive information about the study in a form that subjects can understand and obtaining the subject's written signature signifying her/his consent to participate. However, there are some cases when informed consent and documentation of informed consent (the subject's signature) can be waived. Check Section 6 of the MSU *Human Research Protection Manual* for more information (http://www.humanresearch.msu.edu/hrpmanual.html).

## Rationale for Regulations, continued

#### Other reasons

- Increasingly complex research environment
  - Increasing number of researchers
  - Greater availability of research funding
  - Greater pressure to secure grants and publish
- Increased public interest and awareness of human rights issues
- Increasing concern over the privacy of health care information
- Changes in research topics, methods, and contexts

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#### Increasingly complex research environment

- Communities of scientists and scholars have become so large that self-policing of the responsible conduct of research (RCR) isn't as practical as it was earlier in our history.
- Greater availability of research funding, as well as greater pressure to secure grants and publish, has led to a more competitive environment in which some researchers are tempted to take short-cuts or behave with less than impeccable ethics.

#### Increased public interest and awareness of human rights issues

 Every day newspaper, radio, television, and internet news reports include descriptions of human rights violations in all facets of life, including research. As a result, both the general public and the scientific community are more alert to the possibility of abuse of human subjects in research settings.

#### Increasing concern over the privacy of health care information

- In 1996, the U.S. government established a law related to record-keeping standards in the health-care industry, namely the Health Insurance Portability and Privacy Act of 1996 (HIPAA) . One purpose of HIPAA was to reduce health-care costs by establishing a standard method of recording and transmitting health-care information amongst different agencies. Another purpose of HIPAA was to protect the privacy of individually-identifiable health information.
- Researchers whose data include individually-identifiable health information must abide by HIPAA provisions.

#### Changes in research topics, methods, and contexts

- Some current research topics (e.g., genetics, cloning) are very sensitive.
- Some current research methods (e.g., use of hazardous substances, weapons research) can be dangerous.
- Some research contexts (e.g., concern for national security) heighten concerns about ethical issues.

# Recent Violations: U.S. Restricts Research at Johns Hopkins After a Volunteer's Death (8/31/01)

"The U.S. Department of Health and Human Services in July halted all federally financed medical studies on human subjects at the Johns Hopkins University School of Medicine, and other medical programs within the university. The action followed the death in June of a healthy volunteer participant in an asthma study."

Quoted from the Chronicle of Higher Education

http://chronicle.com/article/US-Restricts-Research-at-/13942/

Recent Violations: U.S. Officials Order Duke Medical Center to Suspend Research Involving Humans (5/21/99)

"Citing lax safety and oversight procedures, a federal agency has suspended nearly all government-sponsored research involving humans at the Duke University Medical Center. ... The punishment, imposed last week by the federal Office for Protection from Research Risks, threatens a significant portion of the \$175-million in federal grants that the center received this year for medical research."

Quoted from the Chronicle of Higher Education http://chronicle.com/article/US-Officials-Order-Duke-M/33463/

#### Recent Violations: Penn Settles With Federal Government Over Fatal Gene-Therapy Study (2/18/05)

"The University of Pennsylvania has settled with the federal government over the death of an 18-year-old participant in a gene-therapy study in 1999. ... Government investigators charged that Penn and the researchers should have stopped the study before Mr. Gelsinger's death because other patients undergoing the gene therapy had experienced serious reactions. They also charged that researchers had failed to fully inform the Food and Drug Administration about adverse side effects in study participants."

Quoted from the Chronicle of Higher Education

http://chronicle.com/article/Penn-Settles-With-Federal-G/32461/

## Recent Violations: *Professor Accused of Rules Violation* (10/23/09)

"Professor of Psychology Ellen J. Langer is under investigation for allegations that she violated rules governing the use of human subjects for research, according to University officials. Three anonymous sources confirmed in the Boston Globe last week that Harvard investigators are examining whether Langer 'used or planned to use the same needles on different research subjects' in her social psychology studies."

Quoted from the Harvard Crimson

http://www.thecrimson.com/article.aspx?ref=505277

## Recent Violations: Violations rife in hospital's studies on veterans (8/5/08)

"An investigation of research conducted at an Arkansas veterans hospital has uncovered rampant violations in its human experiments program, including missing consent forms, secret HIV testing and failure to report more than 100 deaths of subjects participating in studies."

#### Quoted from the Washington Times

http://www.washingtontimes.com/news/2008/aug/05/violations-rife-in-hospitals-studies-on-veterans/

- The next several slides include information about investigator and IRB responsibilities during each step of the IRB process
- In most cases, the investigator and IRB responsibilities reflect applications of the Belmont principles
- Additional information and online initial application, renewal, and revision forms are located on the IRB web site at http://www.humanresearch.msu.edu/
- Additional resources are available from Collaborative Institutional Training Initiative (CITI), <a href="https://www.citiprogram.org">https://www.citiprogram.org</a>

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## PI Develops Research Plan

#### Investigator responsibilities

- Design research that has potential to directly or indirectly benefit human beings
- Use fair subject selection/recruitment methods
- Plan experimental procedures with consideration for the physical and psychological safety of subjects
- Disseminate results

#### IRB responsibilities

None

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Step #1 is not technically part of the IRB process. However, investigators should consider these applications of the Belmont principles when designing research projects. The decisions made during the design of the study will be reflected in the investigator's IRB application.

#### Investigator responsibilities:

Design research that has potential to directly or indirectly benefit human beings.

- Research (but not necessarily each investigation) should benefit all segments of the human population, including persons from diverse age, gender, ethnic, cultural, etc. groups.
- Use appropriate research designs, experimental methods, and statistical analyses to help insure that the research will lead to valid, useful results.

Use fair subject selection/recruitment methods.

- The burden of research (e.g., participating in a research study) should not unfairly focus on a convenient or captive group of people such as prisoners.
- Do not coerce people into participation with incentives that might cause them to act against their best interests, or by exerting the researcher's power over potential subjects (e.g., teacher asking one's own students to participate).
- Develop informed consent procedures that provide comprehensive information to prospective subjects in an understandable form. Emphasize voluntary participation.

Plan experimental procedures with consideration for the physical and psychological safety of subjects.

- Analyze the risks of participation and take steps to minimize or mitigate those risks.
- Develop plans for collecting, storing, and retaining research data that help to maintain security of private information.

#### Disseminate results

 Potential benefits of human subjects research will not be realized if results are not published and presented.

## PI Submits IRB Application

#### Investigator responsibilities

- Complete IRB investigator training or renewal
- Develop initial IRB application using forms posted at http://www.humanresearch.msu.edu/
- Submit initial application and required attachments IRB responsibilities
- Acknowledge receipt of application
- Assign application to staff member for review

#### IRB Investigator Training:

http://www.humanresearch.msu.edu/requiredtraining.html

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<u>Investigator training</u>. Investigators must have current human research protection training before project approval.

#### Initial training

- Complete the online MSU IRB Tutorial
- Training expires after two years

#### Renewal of investigator training

- Complete six online CITI training modules (over 50 topics are available). CITI refers to the Collaborative Institutional Training Initiative.
- Renewals expire after two years

More information. Much helpful information is posted on the IRB web site (http://www.humanresearch.msu.edu) including interactive online IRB application forms and instructions, consent templates, HIPAA templates, FAQ, staff directory, submission deadlines, etc.

## IRB Staff Reviews Application

#### Investigator responsibilities

- Respond to staff requests for information IRB responsibilities
- Staff members determine whether application is complete
- Staff members post the application online for consideration by IRB reviewers

## 4 IRB Reviews Application

#### Investigator responsibilities

· Respond to comments from reviewers

#### IRB responsibilities

- · Application is assigned to IRB (faculty) reviewers
- IRB reviewers use criteria from the next two slides to determine whether the application should be approved
- IRB reviewers correspond with investigators about changes that are needed to the IRB application, continuing until issues are resolved

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The project is assigned to reviewers from the appropriate IRB board – SIRB, BIRB, or CRIRB

- Exempt or expedited (minimal risk) 2 reviewers
- Full review (more than minimal risk and/or vulnerable subjects) 4 reviewers + consideration at a meeting of the entire board

#### Go to

http://www.humanresearch.msu.edu/applications/Review\_Categories\_Exempt&Expedited.pdf for more information about exempt and expedited status.

## IRB Application Review Criteria

Criterion	Belmont Principle
Does the project have scientific value and validity?	Justice
Is the selection of subjects suitable?	Justice
Does the study have a valid scientific design posing minimal risk to subjects?	Justice & Beneficience
Are risks to subjects minimized?	Justice & Beneficience
If vulnerable populations are being used, are safeguards in place to avoid coercion or undue influence?	Respect for persons

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Vulnerable populations include groups such as pregnant women, neonates, fetuses, prisoners, and children.

## Review Criteria, continued

Criterion	Belmont Principle
Will informed consent be obtained?	Respect for persons
Is there adequate provision for monitoring the data collected to ensure the safety of subjects?	Beneficience
Are there adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data	Beneficience

More information is included in MSU's initial IRB training course (http://www.humanresearch.msu.edu/requiredtraining.html)

## Application is Approved

#### Investigator responsibilities

- Wait until approval letter is received before contacting prospective subjects
- Use IRB-stamped consent forms

#### IRB responsibilities

- Approve exempt and expedited projects after two IRB staff members (exempt) or two reviewers (expedited) indicate approval
- Approve full-review projects after majority vote by the full IRB (faculty) committee
- Contact investigator with approval letter

## 6 Revisions

#### Investigator responsibilities

- Submit a request for revisions prior to implementing <u>any</u> change in an approved protocol (e.g., list of investigators, instrumentation, experimental methods, subject recruitment methods, sample size, funding, etc.)
- Respond to comments from reviewers

#### IRB responsibilities

- Same staff and reviewer responsibilities as for initial applications
- Number of reviewers depends upon level of risk

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For projects with exempt status, the investigator is allowed to make minor revisions without IRB approval.

#### Renewals

#### Investigator responsibilities

- · Submit request for renewal every year
- Submit a more comprehensive request for renewal every five years

#### IRB responsibilities

- Same staff and reviewer responsibilities as for initial applications
- · Number of reviewers depends upon level of risk

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MSU will soon initiate a new policy in which most exempt category projects must be renewed every two years instead of annually. Investigators will be informed if the new policy applies to their research. Criteria that describe exempt research are posted at http://www.humanresearch.msu.edu/applications/Review\_Categories\_Exempt&Expedited.pdf.

## 8 Reports

#### Investigator responsibilities

 Report adverse events involving subjects, unexpected problems implementing the research protocol, and possible non-compliance with research regulations

#### IRB responsibilities

- · Investigate reported incidents as needed
- · Deliberation by full IRB board if needed
- Make required reports to the U.S. Office for Human Research Protection and/or Food and Drug Administration

## Audits

#### Investigator responsibilities

- · Respond to requests from auditors
- Produce requested documentation of consent and the conduct of the research project

#### IRB responsibilities

- · Conduct either random or "for cause" audits
- Evaluate compliance with approved IRB protocol
- Evaluate the veracity of subject complaints received by the IRB office as needed
- Evaluate adverse events, unexpected problems, and possible non-compliance with research regulations as needed

## Important Information

- Every investigator associated with a project (including students) must be listed on the IRB application
- Every investigator listed on the IRB application must have current training
- The IRB cannot approve a research project after the fact – the application must precede the research

## Important Information, continued

- Failure to observe IRB regulations is an unacceptable research practice that will result in penalties for the investigator
  - Such situations may be referred to the MSU Research Integrity Officer for action
  - Dissertations and theses might not be accepted by the Graduate School
  - Graduate students may be dismissed from their degree programs and the university
  - Journals may refuse to publish manuscripts without evidence of IRB approval

#### Graduate Students – Don't Let This Happen to You!

Imagine this scenario ... You take your completed dissertation to the Graduate School, where a staff member notices that your research involved human subjects and asks for a copy of your IRB approval letter. You do not have an approval letter because you did not seek IRB approval prior to your study.

There are three possible consequences:

- · You are terminated from your degree program.
- You are required to re-do your research after obtaining IRB approval.
- · Your dissertation is reviewed by the MSU Research Integrity Officer (or other appropriate office) who agrees that the dissertation may be accepted for degree purposes. In this case there usually is a requirement that none of the work is ever published.

Responsible Conduct of Research Scholarship and Creative Activities Michigan State University Graduate School, 2010 http://grad.msu.edu/

In fact, the above scenario occurs a few times each year. Read on for more information.

MSU is committed to the ethical principles and the expectations of compliance for the use of human subjects in research.

#### From the faculty handbook

(http://www.hr.msu.edu/documents/facacadhandbooks/facultyhandbook/protection.htm): The Graduate School will not accept a thesis or dissertation without the verification of the IRB or IACUC number, or the signed declaration that humans or animals were not used in the research.

#### From The Graduate School, Final Submission of

<u>Thesis/Dissertation</u> (http://grad.msu.edu/thesisdissertation/docs/formatfinal.pdf): "Human or Animal Subjects Form - All students must complete and submit this form, even if no human or animal subjects were used. The form must be signed by the student and by the major professor and must include the UCRIHS or AUF number(s) as appropriate. In cases where the student's research involves human subjects, an approval letter from the University Committee on Research Involving Human Subjects (UCRIHS) must be submitted with the form." <a href="http://grad.msu.edu/current/formatfinal.pdf">http://grad.msu.edu/current/formatfinal.pdf</a>, <a href="http://grad.msu.edu/current/formatfinal.pdf">http://grad.msu.edu/current/formatfinal.pdf</a>.

The Graduate School checks theses and dissertations for compliance with MSU and federal regulations.

- Non-compliant theses or dissertations, that is, those that, in fact, used animals or human subjects without the appropriate oversight committee approval, are <u>not</u> accepted.
- These are sent to the Research Integrity Officer (RIO) or to the appropriate office for examination. The student, his/her major professor, the department chair and the appropriate dean(s) are notified.
- A thesis or dissertation will only be accepted as a part of degree requirements, if and when the research compliance office authorizes the Graduate School to accept it.
- Please note that if the office directs the Graduate School to accept the document, there is usually a requirement that none of the work is ever published.

## Important Information, continued

- Benefits of compliance with IRB policies and federal regulations
  - The privacy, health, and welfare of human subjects is protected
  - The quality of research is improved because subjects have willingly agreed to participate, and are therefore more likely to care about the research and give good effort on assigned tasks

## Important Information, continued

- The three IRBs at MSU have two major goals: (1) to protect human subjects of research and (2) to facilitate research on the MSU campus
- IRB staff members are available to answer your questions by phone, email, or in a face-to-face meeting

Office of Human Research Protection 207 Olds Hall Phone: (517) 355-2180

Email: IRB@msu.edu

http://www.humanresearch.msu.edu

## Sources

- The Belmont Report, the Declaration of Helsinki, and the Nuremburg Code, all available at <a href="http://www.humanresearch.msu.edu/ethicaldocuments.html">http://www.humanresearch.msu.edu/ethicaldocuments.html</a>
- MSU Human Research Protection Program, <u>http://humanresearch.msu.edu/</u>
- Federal regulations, including the Research Act of 1974, 45 CFR 46,

http://humanresearch.msu.edu/federalregs.html

- Health Information Privacy (HIPAA), http://www.hhs.gov/ocr/privacy/
- Collaborative Institutional Training Initiative (CITI), including over 50 modules on topics related to human research protections, <a href="https://www.citiprogram.org">https://www.citiprogram.org</a>