

### **Institutional Review Board (IRB) Manual**

Policies and Procedures for the Protection of Human Subjects of Research

> Revised: August 2007 Originally Adopted: July 1, 1995

Office of the Vice President for Academic Affairs and Dean of the Faculty

# **Utica College**

### Institutional Review Board (IRB) Manual

Policies and Procedures for the Protection of Human Subjects of Research

#### CONTENTS

Table of ContentsPage		3	
I.	Preamble	.Page	5
II.	Policies	.Page	6
III.	Definitions	.Page	7
IV.	Procedures	.Page	9
V.	Appendices start on	.Page	30

Revised: June 2003 Originally Adopted: July 1, 1995

#### I. Preamble

**II.** Policies

#### **III. Definitions**

#### **IV. Procedures**

- A. Responsibilities of the Principal Investigator or Instructor
- B. The Institutional Review Board
  - 1. Responsibilities
  - 2. Authority
  - 3. Membership
  - 4. Functions and operations
  - 5. Review of research
  - 6. Expedited review
  - 7. Criteria of review
  - 8. Further administrative review
  - 9. Evaluation and disposition of applications
  - 10. Suspension or termination of approval of research
  - 11. Research undertaken in cooperation with another organization
  - 12. Board record-keeping and reporting
- C. Application for Approval of Research with Human Subjects
  - 1. General requirements
  - 2. Informed consent
  - 3. Exceptions to the general requirements for informed consent
  - 4. Documentation of informed consent
- D. Additional Protections for Children Involved as Subjects of Research
  - 1. Limitations on exempt activities
  - 2. Research that presents no greater than minimal risk to children
  - 3. Research that presents greater than minimal risk to children, but also the prospect of direct benefit to the individual subjects
  - 4. Research that presents greater than minimal risk to children and no prospect of direct benefit to the individual subjects
  - 5. Assent of the subjects
  - 6. Consent of the parents or guardians
  - 7. Wards
- E. Additional Protection Pertaining to Other Vulnerable Research Populations
- F. Investigation, Appeals, and Consequences for Noncompliance

#### **V.** Appendices

- A. The Belmont Report
- B. Code of Federal Regulations
- C. Summary of Procedures for Research on Human Subjects
- D. Teaching Proposal: In-class Research Projects Application
- E. Research Proposal Application
- F. Teaching Proposal: In-class Research Projects Checklist for Approved Course
- G. Informed Consent Form Template
- H. Tips on Informed Consent

#### I. Preamble

Research with human subjects at Utica College shall be guided by three general ethical principles: respect for persons, beneficence, and justice. These principles and the rules that may be derived from them shall form the analytical framework for determining whether and how research with human subjects may be conducted. They are articulated in the report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research entitled Ethical Principles and Guidelines for the Protection of Human Subjects of Research. (See Appendix A: The Belmont Report.)

#### II. Policies

**A.** Colleges and other large organizational units in which research with human subjects is regularly conducted shall maintain and support a unit review committee, whose function it is to provide merit review and guidance for the protection of human subjects to investigators from that unit and to determine whether specific research projects are exempt from requirements for further review.

**B.** Utica College shall maintain and support an Institutional Review Board (for the Protection of Human Subjects), whose function it is to determine whether and how research with human subjects may be conducted and to educate the community with regard to the protection of human subjects.

**C.** No research with human subjects shall be conducted until the Institutional Review Board has approved the research protocol. Before such approval is granted, proper consideration shall be given to the risks to the subjects, the anticipated benefits to the subjects and others, the importance of the knowledge that may reasonably be expected to result, and the informed consent process to be employed.

**D.** Utica College shall maintain its commitment to the protection of the rights and welfare of human subjects of research. The College's Policies and Procedures for the Protection of Human Subjects of Research apply to all activities that include research with human subjects and:

**1.** are sponsored by the College; or

**2.** are conducted by or under the direction of any employee, student, or agent of the College in connection with his or her institutional responsibilities; or

**3.** are conducted by or under the direction of any employee, student, or agent of the College using any property or facility of the College; or

4. involve the use of the College's nonpublic information.

**E.** Utica College shall encourage and promote constructive communication among research administrators, division deans, program directors/coordinators, research investigators, research staff, human subjects, and College officials as a means of maintaining a high level of awareness regarding the safeguarding of the rights and welfare of the subjects.

**F.** Utica College shall comply with all federal, state, and local regulations pertaining to the protection of human subjects.

#### III. Definitions

**A.** "**Research**" means a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge. Activities that meet this definition constitute "research" for purposes of this policy, whether or not they are conducted or supported under a program that is considered research for other purposes. For example, some programs of "evaluation" or "instruction" may include research activities.

**B.** "**Human Subject,**" as defined in the Code of Federal Regulations (Appendix B), means a living individual about whom an investigator conducting research obtains either

- 1. data through intervention or interaction with the individual; or
- 2. identifiable private information.

"Intervention" includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes.

"Interaction" includes communication or interpersonal contact between investigator and subject.

"Private information" includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place. It also includes information that has been provided for specific purposes by an individual and that the individual can reasonably expect will not be made public (for example, a medical record). If the private information is not individually identifiable (i.e., if the identity of the subject is not known and cannot readily be ascertained by the investigator or associated with the information), the research does not constitute research involving human subjects.

**C.** "**Minimal risk**" means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

**D.** "Assurance" means the agreement between the College and the Office for Protection from Research Risks (OPRR), on behalf of the Secretary of Health and Human Services, stipulating the methods by which the College protects the welfare of human research subjects in accordance with the regulations.

**E. "Guidebook"** means the National Institutes of Health *Protecting Human Research Subjects Institutional Review Board Guidebook,* 1993 or succeeding revised editions.

**F.** "College" means Utica College.

- G. "Dean" means Vice President of Academic Affairs and Dean of the Faculty.
- H. "Board" means Institutional Review Board.

#### A. Responsibilities of the Principal Investigator or Instructor

The individual employee, student, or agent of the College who conducts or directs research with human subjects exercises the following responsibilities.

**1.** The Principal Investigator or Instructor shall design and present to the authorized review body a protocol of the research to be conducted. The authorized body of first review is the Utica College Institutional Review Board.

**2.** The Principal Investigator or Instructor shall not initiate any research with human subjects until the Board has approved the protocol.

**3.** The Principal Investigator or Instructor shall make no alterations to the approved protocol without the prior approval of such alterations by the Board.

**4.** The Principal Investigator or Instructor shall report at once to the Board any unanticipated harm to human subjects.

**5.** The Principal Investigator or Instructor shall report to the Board on the conduct of the research and shall seek approval for continuation of the research at least annually, and more frequently if the Board so requires.

**6.** The Principal Investigator or Instructor shall cooperate fully with the Board in monitoring the progress of the research.

#### **B.** The Institutional Review Board

#### 1. Responsibilities.

Responsibility for the protection of human subjects of research at Utica College is in large part vested in the Institutional Review Board. The Board is, therefore, responsible not only for reviewing, regulating, and monitoring such research, but also for educating the College community in the protection of human subjects. Specific responsibilities of the Board include the following.

- **a.** Meet on an as-needed basis to review proposals.
- **b.** Advise investigators on improvements to research protocols.
- c. Monitor the research it has approved, through review of the annual reports.
- **d.** Maintain records of its activities.

**e.** Report to the Dean all actions pertaining to research supported by extramural funding or proposed for such support.

**f.** Report at once to the Dean any action to suspend or terminate approved research. See section  $\mathbf{F}$  below.

**g.** Assist the Dean, as requested, in interpreting College research with human subjects for any of the College's constituencies or for the general public.

**h.** Devise and conduct programs of education in matters relevant to research with human subjects for the benefit of students and employees of the College.

**i.** Review annually the College's policies and procedures for the protection of human subjects and report any inadequacies or suggested improvements to the Dean.

j. Report its activities to the Dean annually, or more frequently if so requested.

**2.** Authority. The Board is authorized to:

**a.** Approve, disapprove, or require modifications in the research protocols submitted to it.

**b.** Monitor the research it has approved by any means it deems appropriate, including observation of the consent process and the research, and appointment of a third party to undertake such observation.

c. Suspend or terminate approved research, whenever the research is not being conducted in accordance with the Board's requirements or whenever it has been associated with unexpected harm to human subjects. See section  $\mathbf{F}$  below.

#### 3. Membership.

The Dean shall appoint members of the Board to three-year terms. Members may be reappointed to further terms. Alternates may be appointed when necessary and have the same voting privileges as the member for whom they substitute.

For faculty appointments, the member shall serve as Secretary during the first year, Vice-Chair during the second year, and Chair during the third year. Only tenured members of the faculty who engage in research with human subjects and who have substantial experience in the review of research with human subjects are eligible to serve.

The Vice President of Institutional Research and Planning shall serve as a permanent member of the Board and be responsible for maintaining all relevant records, (e.g., the minutes, letters or correspondences, proposals) pertaining to the business of the Board. The Administrative Assistant for the Vice President of Institutional Research and Planning shall serve as recording secretary for the Board.

The Board shall have no more than seven and no fewer than five members, with varying backgrounds to promote complete and adequate review of research activities

commonly conducted by the College. The Board shall be sufficiently qualified through the experience and expertise of its members, the diversity of the members, including consideration of race, gender, and cultural backgrounds, and their sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects.

In addition to possessing the professional competence necessary to review specific research activities, the Board shall be able to ascertain the acceptability of proposed research in terms of institutional commitments and regulations, applicable law, and standards of professional conduct and practice. The Board shall, therefore, include persons knowledgeable in these areas or have access to the counsel of such persons.

Certain populations of human subjects require extra protection because of their diminished autonomy. Diminished autonomy may result, for example, from immaturity, illness, mental disability, or incarceration. The College regularly conducts research with one such population, children and youth. The Board shall, therefore, include one or more members who are primarily concerned with the welfare of children and youth. When the Board reviews research that purposefully requires inclusion of children with disabilities, persons with diminished mental capacities as research subjects, the Board must include at least one *ad hoc* member primarily concerned with the welfare of these research subjects. Persons qualified to serve in this capacity are identified by the Board and appointed by the Dean. If the Board determines in the future that another vulnerable population of human subjects is regularly involved in College research, it shall amend its membership requirements to include one or more members who are primarily concerned with the welfare of such subjects.

The Board may not consist entirely of members of one gender or of one profession. The Board shall always include at least one member whose primary concerns are in nonscientific areas, such as ethicists or members of the clergy. The Board shall always include at least one community member who is not otherwise affiliated with the College and who is not part of the immediate family of a person who is affiliated with the College.

A single member of the Board may fill more than one representational role.

No member of the Board may participate in the Board's review of any project in which the member has a conflicting interest, except to provide information requested by the Board.

The Board may, at its discretion, invite individuals with competence in special areas to assist in the review of complex issues. These individuals may not vote with the Board.

#### **Duties of IRB Members:**

Chair

- Report to the Dean
- Serve as contact person for and communicate with principal investigators and instructors
- Prepare annual memoranda and reports
- Respond to inquiries from interested parties
- Remain informed about news bulletins and releases from the Office for Human Research Protections (OHRP), National Institutes of Health (NIH), Department of Health and Human Services (HHS)

Vice-Chair

- Act for the Chair in his/her absence
- Conduct educational programs
- Meet with new faculty

Secretary

- Oversee maintenance of all records
- Review and edit minutes of meetings

#### 4. Functions and operations.

Proposals that require a full review as opposed to an expedited review (see page 12) shall be reviewed by each Board member individually. The Chair will first screen proposals for clarity and adequate protection of human subjects before forwarding them to Board members. If all Board members individually approve the proposal, it will be considered "approved," and the Principal Investigator will be notified. If any Board member(s) requests further information or requires minor modifications (which does not affect the integrity of the proposal), the Chair will submit the request to the Principal Investigator. The Principal Investigator's revisions will be sent to the Board member(s) for further review. If the Board member(s) accepts the revisions, and all other Board members have approved the proposal, the proposal will be considered "approved." If the Board member(s) does not accept the revision, disapproves, or requires major modification of the proposal, a meeting of the Board will be called to discuss the proposal. At least one member whose primary concern is in a nonscientific area must be present at this meeting. A proposal must receive unanimous approval from the Board members present at this meeting before research can proceed.

The Board reports promptly to the Dean any serious or continuing noncompliance by investigators with the Board's requirements and determinations. It also reports such noncompliance to any extramural sponsors of the research in question.

#### 5. Review of research.

The Board reviews and acts to approve, require modifications in, or disapprove research activities with human subjects.

The Board requires that information given to subjects as part of informed consent meaningfully adds to the protection of the rights and welfare of subjects and is in accordance with federal regulations. The Board either requires documentation of informed consent or, in circumstances described in federal regulations, explicitly waives documentation.

If the Board decides to disapprove a research activity, it includes in its written notification a statement of the reasons for its decision and gives the investigator an opportunity to respond in person or in writing.

The Board conducts continuing review of research it has approved at intervals appropriate to the degree of risk, but not less often than once per year. This review may require the Principal Investigator to submit a protocol summary and status report on the progress of the research. The Board also may observe, or appoint a third party to observe, the consent process and the research.

#### 6. Expedited review.

An expedited review is conducted by the Expedited Review Subcommittee, which consists of the Chair and the Vice President for Institutional Research and Planning. (If he/she is not available, the Chair will select one other member of the Board to be the second reviewer.)

In an expedited review, the reviewers may exercise all the authorities of the Board except that the reviewers may not disapprove the research. If the reviewers find that the application does not meet the criteria of eligibility for expedited review outlined below, or if they fail to approve the application, the Chair will consult the Principal Investigator and a revised proposal will then be submitted for full review. If the Expedited Review Subcommittee approves the proposal, the Principal Investigator will be notified. The Board members will be informed of all decisions made by the Subcommittee. The Subcommittee attempts to act on a request for expedited review within ten business days.

The Principal Investigator may request an expedited review of an application for approval of research in any of the following circumstances, provided the research proposed will not be federally funded.

**a.** The Principal Investigator believes that the research activities proposed are limited to those activities in one or more of the categories of exemption described in the Code of Federal Regulations (see pages 4 -5 of Appendix B).

**b.** The Principal Investigator proposes only minor changes in previously approved research during the period for which approval is authorized.

**c.** The Principal Investigator believes that the research activities proposed involve no more than minimal risk to human subjects and that they are limited to one or more of the categories eligible for expedited review established by the

United States Department of Health and Human Services and published periodically in the Federal Register, as outlined below.

#### **RESEARCH ACTIVITIES THAT MAY BE EXEMPT FROM FURTHER REVIEW**

Research involving children, pregnant women, prisoners, persons with mental disabilities, or other adult subjects of diminished autonomy is subject to special restrictions, as outlined in Appendix B. For adult subjects of undiminished autonomy, capable of making a truly voluntary and uncoerced decision whether or not to participate as subjects in research, the categories of research exempt from further review requirements are:

**a**. Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as:

(1) research on regular and special education instructional strategies; or

(2) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

**b**. research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior, unless:

(1) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and

(2) 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.

**c**. Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (2) of this section, if:

(1) the human subjects are elected or appointed public officials or candidates for public office; or

(2) federal statute(s) requires without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

**d**. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, 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.

#### **RESEARCH ACTIVITIES (NON-FEDERALLY FUNDED) THAT MAY BE REVIEWED THROUGH EXPEDITED REVIEW PROCEDURES**

Research activities involving no more than minimal risk and in which the only involvement of human subjects will be in one or more of the following categories, carried out through standard methods, may be reviewed by the Board through an expedited review procedure.

**a.** Recording of data from subjects 18 years of age or older using noninvasive procedures routinely employed in clinical practice, which includes the use of physical sensors that are applied either to the surface of the body or at a distance and do not involve input of matter or significant amounts of energy into the subject or an invasion of the subject's privacy. It also includes such procedures as weighing, testing sensory acuity, electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, diagnostic echography, and electroretinography. It does not include exposure to electromagnetic radiation outside the visible range (e.g., x-rays, microwaves).

**b**. Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows.

(1) from healthy, nonpregnant adults who weigh at least 110 pounds. For these subjects, the amounts drawn may not exceed 550 ml in an 8-week period and collection may not occur more frequently than two times per week; or

(2) from other adults and children, considering the age, weight, and health of the subjects, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these subjects, the amount drawn may not exceed the lesser of 50 ml or 3 ml per kg in an 8-week period and collection may not occur more frequently than two times per week.

**c.** Voice recordings made for research purposes such as investigations of speech defects.

**d**. Clinical studies of drugs and medical devices only when condition (1) or (2) is met.

(1) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (N.B. Research on marketed drugs that significantly increase the risks or decrease the acceptability of the risks associated with the use of the product is not eligible for expedited review.)

(2) Research on medical devices for which

(i) an investigational device exemption application (21 CFR Part 812) is not required; or

(ii) the medical device is cleared/approved for marketing and the medical device is being used in accordance with its cleared/approved labeling.

e. The study of existing data, documents, records, pathological specimens, or diagnostic specimens.

**f.** Research on individual or group behavior or characteristics of individuals, such as studies of perception, cognition, game theory, or test development, where the investigator does not manipulate subjects' behavior and the research will not involve stress to subjects.

#### 7. Criteria of review.

The Board approves research only when it has determined that all of the following requirements are satisfied:

**a.** Risks to subjects are minimized. Procedures used are consistent with sound research design and do not unnecessarily expose subjects to risk. Whenever appropriate, the research uses procedures already being performed on the subjects for other purposes, such as diagnosis or treatment.

**b.** Risks to subjects are reasonable in relation to anticipated benefits, if any, to the subjects, and the importance of the knowledge that may reasonably be expected to result. The Board considers only those risks and benefits that may result from the research. The Board does not consider possible long-range effects of applying knowledge gained in the research as among those research risks that fall within the purview of its responsibility.

**c.** The selection of subjects is equitable. In making this assessment, the Board takes into account the purposes of the research and the setting in which the research will be conducted and is particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, persons with mental disabilities, or economically or educationally disadvantaged persons.

**d.** Informed consent is sought from each prospective subject or the subject's legally authorized representative. The Board conforms to federal regulations of informed consent procedures and may impose additional requirements.

**e**. Informed consent is appropriately documented, in accordance with, and to the extent required by, federal regulations. The Board also may impose documentation requirements in addition to those required by federal regulations.

**f**. Where appropriate, the research protocol makes adequate provision for monitoring the data collected to insure the safety of subjects.

**g**. Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

**h**. Where some or all of the subjects are likely to be vulnerable to coercion or undue influence, appropriate additional safeguards are included in the protocol to protect the rights and welfare of these subjects.

#### 8. Further administrative review.

Research that has been approved by the Board may be subject to further review and approval or disapproval by the Dean or by other College officers designated by the President. However, no officer of the College may approve research that has not been approved by the Board.

#### 9. Evaluation and disposition of applications.

The Board evaluates applications for approval of research with human subjects according to its written procedures and review criteria. In doing so, it may call upon the Principal Investigator or appropriate third parties for information and assistance.

It is important for the College community to understand that the Board may not limit its concerns to specific research activities or procedures. In weighing risks and benefits, the Board is, of necessity, making judgments about the merits of the proposed research plan. In considering the ethical principles that guide the conduct of research with human subjects, the Board must, of necessity, resolve conflicts posed by the demands of the principles themselves.

For example, it is within the purview of the Board's responsibilities to determine that a research plan does not promise to generate the desired knowledge; or that the knowledge to be gained does not promise to outweigh the risks undergone; or that community attitudes and mores will find certain aspects of the research unacceptable.

The Board communicates its decision to approve, disapprove, or require modifications in the research protocol in writing to the Principal Investigator, who is authorized to inform other interested parties, including extramural sponsors, cooperating organizations, or other College officers, of the Board's decisions.

When the Board approves a research protocol, it stipulates in writing the requirements for continuing review of the research.

When the Board disapproves a research protocol, it states in writing its reasons for disapproval and invites a response from the Principal Investigator.

When the Board requires modifications in a research protocol, it details those modifications in writing and requires from the Principal Investigator written verification that the modifications have been made, before final approval is granted.

Applications that have been evaluated and all Board correspondence concerning them become part of the Board's records.

#### **10.** Suspension or termination of approval of research.

The Board has authority to suspend or terminate approval of research that is not being conducted in accordance with the Board's requirements or that has been associated with unexpected serious harm to subjects. When the Board exercises this authority, it promptly communicates its action and the reasons for the action in writing to the Principal Investigator, the Dean, and the extramural sponsor of the research, if any. See section  $\mathbf{F}$  below.

#### 11. Research undertaken in cooperation with another organization.

College research with human subjects may be undertaken in cooperation with another organization, provided the College enters into a written agreement with the other organization that allows the College to have adequate control of project activities for which it is responsible. If such research is funded by an extramural sponsor and if the College is the grantee or primary contractor, that responsibility extends to safeguarding the rights and welfare of human subjects of research conducted by the cooperating organization.

In such cases where the collaboration involves human subjects in the College community, the Board requires that the proposal be submitted to the Board for approval in addition to the approval from an external Institutional Review Board.

#### 12. Board record-keeping and reporting.

The College supports the record-keeping requirements of the Board by providing in the Office of Institutional Research and Planning storage space and staff to maintain records in good order. Records include:

**a.** Copies of all applications reviewed; scientific evaluations, if any, that accompany the applications; approved sample consent documents; progress reports submitted by Principal Investigators; reports of injuries to subjects; all correspondence pertaining to the application or to the research; and records of monitoring and continuing review activities. These records are maintained as active files for three years after completion of the research.

**b**. Minutes of Board meetings in sufficient detail to show attendance; actions taken; the vote on these actions, including the number of members voting for, against, and abstaining; the basis for requiring modifications in or for

disapproving research; and written summaries of the discussion of controversial issues and their resolution.

- **c.** Annual reports of the Board.
- **d.** Decisions made by the Expedited Review Subcommittee.
- e. Other reports generated by the Board or its subcommittees.
- **f.** Other correspondence of the Board.

**g.** A list of Board members identified by name; earned degrees; representative capacity; indications of experience such as board certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to Board deliberations; and any employment or other relationship between each member and the College.

**h.** Written procedures for the Board.

All records are accessible for inspection and copying, at reasonable times and in a reasonable manner, by representatives of governmental agencies responsible for regulating research with human subjects, by representatives of extramural sponsors of research, by members of the Board itself, and by any other person so authorized by the Dean.

The Board reports to the Dean the actions it takes on all applications for approval of research, including actions pertaining to research supported by extramural funding or proposed for such support.

The Board reports to the Dean at once any action to suspend or terminate approved research, any unexpected serious harm to human subjects of research, and any serious or continuing noncompliance by investigators with the Board's requirements and determinations. It also reports such incidents to any extramural sponsor of the research in question. See section  $\mathbf{F}$  below.

The Board also reports to the Dean, at least annually, a record of Board activities, including its annual review of the College's policies and procedures for the protection of human subjects and any recommendations for modifications resulting from that review.

#### C. Application for Approval of Research with Human Subjects

#### 1. General requirements.

Application forms and instructions may be obtained from the Office of Institutional Research and Planning. It is essential that the application be completed fully and in detail. The application must describe the problem or question to be addressed by the research, the objectives of the research, and the methods to be used in sufficient detail to enable the Board to judge the merits of the research proposed. It must also assess

the potential risks and benefits to the subjects and describe the measures taken to minimize the risks.

In describing risks, the application should indicate the specific nature of potential short- or long-term risks, physical, psychological, social, legal, or other. Risks might include physical discomfort or harm, adverse psychological reaction, invasion of privacy, breach of confidentiality, or any other threat to the dignity, rights, or welfare of human subjects. The application should assess both the likelihood and the seriousness of potential risks and discuss the relative advantages and disadvantages of alternative procedures.

In describing benefits, the application should consider benefits to the individual subjects, benefits to persons similarly situated, and benefits to society in general.

In describing safety measures, the application should detail all procedures for protecting against or minimizing potential risks. Such measures might include screening procedures, follow-up procedures, debriefing, separating identifiers from data, and training staff. The likelihood of the effectiveness of such measures should also be assessed.

#### 2. Informed consent.

The application for approval of research must describe the procedures for gaining and documenting the informed consent of the human subjects. Except as detailed below, no investigator may involve a human being as a subject in research unless the investigator has obtained the legally effective informed consent of the subject or the subject's legally authorized representative.

An investigator shall seek such consent only under circumstances that provide the prospective subject or the subject's representative sufficient opportunity to consider whether or not to participate and that minimize the possibility of coercion or undue influence. The information that is given to the subject or the representative shall be in language understandable to the subject or the representative. No informed consent, whether oral or written, may include any exculpatory language through which the subject or the representative is made to waive or appear to waive any of the subject's legal rights or releases or appears to release the investigator, the sponsor, the College, or its agents from liability for negligence.

In seeking informed consent, the following information shall be provided to each subject.

**a.** A statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and an identification of any procedures that are experimental;

**b.** A description of any reasonably foreseeable risks or discomforts to the subject;

**c.** A description of any benefits to the subject or to others that may reasonably be expected from the research;

**d**. A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;

**e.** A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;

**f.** For research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatments are available if injury occurs and, if so, what they consist of or where further information may be obtained;

**g**. An explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and

**h.** A statement that participation is voluntary, that refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and that the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.

In addition, one or more of the following elements of information, when appropriate, shall also be provided to each subject.

**a.** A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant) that are currently unforeseeable;

**b.** Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent;

**c.** Any additional costs to the subject that may result from participation in the research;

**d.** The consequences of a subject's decision to withdraw from the research and the procedures for orderly termination of participation by the subject;

**e**. A statement that significant new findings developed during the course of the research, which may relate to the subject's willingness to continue participation, will be provided to the subject; and,

f. The approximate number of subjects involved in the study.

#### 3. Exceptions to the general requirements for informed consent.

The Board may approve a consent procedure that does not include, or which alters, some or all of the elements of informed consent, or may waive the requirement to obtain informed consent, provided that the Board finds and documents one of the two following sets of circumstances.

**a.** The research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine:

(1) public benefit or service programs;

(2) procedures for obtaining benefits or services under those programs;

(3) possible changes in or alternatives to those programs or procedures; or

(4) possible changes in methods or levels of payment for benefits or services under those programs; and

**b.** the research could not practicably be carried out without the waiver or alteration

or

c. The research involves no more than minimal risk to the subjects; and

**d.** the waiver or alteration will not adversely affect the rights and welfare of the subjects; and

**e.** the research could not practicably be carried out without the waiver or alteration; and

**f.** whenever appropriate, the subjects will be provided with additional pertinent information after participation.

#### 4. Documentation of informed consent.

Unless the Board explicitly waives the requirement, informed consent shall be documented by the use of a written consent form approved by the Board and signed by the subject or the subject's legally authorized representative. A copy shall be given to the person signing the form.

The consent form may be either of the following.

**a.** A written consent document that embodies the required elements of informed consent. This form may be read to the subject or the subject's legally authorized representative, but in any event, the investigator shall give the subject or the representative adequate opportunity to read it before it is signed.

**b**. A "short form" written consent document stating that the required elements of informed consent have been presented orally to the subject or the subject's legally authorized representative. When this method is used, there shall be a witness to the oral presentation. The Board's approval of a written summary of what is to be said to the subject or the representative is also necessary. Only the short form itself is to be signed by the subject or the representative. However, the witness shall sign both the short form and a copy of the summary, and the person obtaining consent shall also sign a copy of the summary. Finally, a copy of the summary shall be given to the subject or the representative, in addition to a copy of the short form.

The Board may waive the requirement of a signed consent form for some or all subjects, if it finds:

**a**. That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. In this case, each subject must be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes in the matter must govern; or

**b**. That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside the research context.

When the Board waives the documentation requirement, it may require the investigator to provide subjects with a written statement regarding the research.

#### **D.** Additional Protections for Children Involved as Subjects of Research

The College recognizes an obligation to provide additional protections for human subjects who have not attained the legal age for consent to treatments or procedures involved in the research. For a detailed description, see Appendix B.

#### 1. Limitations on exempt activities.

When the human subjects are children, stricter guidelines apply in determining whether or not an expedited review is appropriate. In general, the applicable exemptions are:

**a.** research conducted in established or commonly acceptable educational settings;

**b.** research involving the use of educational tests;

**c.** research involving existing data that are publicly available or recorded in such a way that subjects cannot be identified;

d. research and demonstration projects; and

e. taste and food quality evaluation and consumer acceptance studies.

Furthermore, if the research involves surveys, interviews, or observations of public behavior and the Principal Investigator participates in the activities being observed, the research cannot be considered exempt.

#### 2. Research that presents no greater than minimal risk to children.

Research that presents no greater than minimal risk to children will be approved only if the Board finds that adequate provisions are made for soliciting the assent of the children and the permission of their parents or guardians.

# 3. Research that presents greater than minimal risk to children, but also the prospect of direct benefit to the individual subjects.

If the proposed research presents greater than minimal risk to children, but also the prospect of direct benefit to the individual subjects, the Board may approve the research only if it finds that:

**a**. the risk is justified by the anticipated benefit to the subjects;

**b**. the relation of the anticipated benefit to the risk is at least as favorable to the subjects as that presented by available alternative approaches; and

**c.** adequate provisions are made for soliciting the assent of the children and the permission of their parents or guardians.

# 4. Research that presents greater than minimal risk to children and no prospect of direct benefit to the individual subjects.

If the proposed research presents greater than minimal risk to children and no prospect of direct benefit to individual subjects, but is likely to yield generalizable knowledge about the subject's condition or disorder, the Board may approve the research only if it finds that:

**a.** the risk represents a minor increase over minimal risk;

**b.** the intervention or procedure presents experiences to subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social, or educational situations;

**c**. the intervention or procedure is likely to yield generalizable knowledge about the subjects' disorder or condition that is of vital importance for the understanding or amelioration of the subjects' condition or disorder; and

**d**. adequate provisions are made for soliciting assent of the children and permission of their parents or guardians.

#### 5. Assent of the subjects.

In otherwise approvable research with children, the Board normally requires that adequate provisions are made for soliciting the assent of the children, whenever the Board judges the children to be capable of providing assent, given the ages, maturity, and psychological state of the children involved. The Board may make this judgment for all children involved in research under a particular protocol, or for each child individually, as it deems appropriate. If the Board determines that the capability of some or all of the children is so limited that they cannot reasonably be consulted, it may waive the requirement for assent. If the Board determines that the children are capable of assenting, it may waive the requirement for assent only in circumstances in which the consent of adult subjects would be waived. When the Board determines that assent is required, it also determines whether and how assent must be documented.

#### 6. Consent of the parents or guardians.

In all research with children, the Board normally requires that adequate provisions are made for soliciting the permission of each child's parent or guardian. If the research involves greater than minimal risk and no prospect of direct benefit to individual subjects, and if permission is to be obtained from parents, or guardians, the Board requires the permission of both parents, unless one parent is deceased, unknown, incompetent, or not reasonably available, or unless only one parent has legal responsibility for the care and custody of the child. Permission by parents or guardians must be documented in the same manner and to the same extent required for informed consent of adult subjects.

The Board may waive the requirement of parental or guardian permission in circumstances in which the consent of adult subjects would be waived. It also may waive the requirement if it determines that a research protocol is designed for conditions or for a subject population for which such permission is not a reasonable requirement to protect the subjects, provided an appropriate mechanism for protecting the children is substituted, and provided further that the waiver is not inconsistent with applicable law.

#### 7. Wards.

The Board will approve the inclusion in otherwise approvable research of children who are wards of the state or of any other agency, institution, or entity, only if such research is either:

**a.** Related to their status as wards; or

**b.** Conducted in schools, camps, hospitals, institutions, or similar settings in which the majority of children involved as subjects are not wards.

If such research is approved, the Board shall require appointment of an advocate for each child who is a ward, in addition to any other individual acting on behalf of the child as guardian or parent. One individual may serve as advocate for more than one child. The advocate shall be an individual who has the background and experience to act in, and agrees to act in, the best interests of the child for the duration of the child's participation in the research and who is not associated in any way (except in the role as advocate or member of the Board) with the research, the investigator, or the guardian organization.

#### E. Additional Protection Pertaining to Other Vulnerable Research Populations

In order for the Board to approve research involving pregnant women, human fetuses, neonates, prisoners, or other persons of diminished autonomy, the research must strictly adhere to all additional federal regulations, as detailed in Appendix B.

#### F. Investigation, Appeals, and Consequences for Noncompliance

**1.** Reports of alleged noncompliance with the Board's requirements or of alleged unexpected harm to subjects may be submitted to the Board by any person having knowledge of or involvement in the research in question. These persons may include (but are not limited to):

**a.** the subject of the research;

**b.** any parent, guardian, or other designated authority (legal or implied) when subjects are children, prisoners, persons with mental disabilities, or other adult subjects of diminished autonomy;

- **c.** any member of the research team;
- **d.** the third party appointed by the Board to monitor the research.

**2.** These reports of alleged noncompliance or unexpected harm should be submitted, in writing, to the Chair of the Board.

**a.** In an instance deemed to be an emergency, an initial report may be made by phone or in person, but must be followed with a written report.

- **b.** Such written reports must include:
  - (1) the nature of the alleged noncompliance or harm;
  - (2) person(s) alleged to be committing the violation;
  - (3) names (or groups) of subjects involved;

(4) name(s) of person(s) reporting alleged violation or unexpected harm, and his/her relationship to the research.

**3.** The Chair of the Board shall call an official meeting of the Board to be held within two working days of the receipt of the allegation. If the situation is deemed an

emergency, the Chair of the Board, in consultation with the Dean, has the authority to order suspension of the research pending further investigation.

**4.** The initial official meeting of the Board shall consider whether or not the allegation constitutes a *prima facie* concern.

**a.** If no *prima facie* concern is found to exist, the Chair of the Board shall notify, in writing, the person(s) who has made the allegation. No further action will take place unless further evidence can be provided by the person(s) making the initial allegation.

**b.** If the Board determines that the allegation warrants further investigation, the Chair of the Board shall notify the Principal Investigator(s) in writing. This notification shall include a copy of the allegation that has been made [including the name(s) of the person(s) that has made the allegation] and a date for an official meeting to address the allegation. Copies of this notification should be sent to the Dean and the College's attorney.

**5.** A second official meeting should be held within seven working days of this written notification and should include the following persons: the full membership of the Board; the Principal Investigator(s) and other members of the research team that are deemed to be appropriate; and the person(s) who initiated the allegation of noncompliance or unexpected harm. If deemed appropriate, the Dean, the College's attorney, and the Dean of the academic division housing the research may be asked to attend this meeting. If students are present in the capacity of either Principal Investigator(s)) or as the person making the allegation, appropriate faculty advisors or supervisors shall be asked to attend this meeting.

**a.** The purpose of the meeting shall be to address issues and allegations and to determine whether further investigation is warranted. The Chair of the Board shall conduct this meeting and shall appoint a Board member to take notes. Additional meetings, investigation, interviews, etc., may be scheduled, if deemed appropriate and necessary by the Board.

**b.** These measures will be conducted in a fair and timely manner. Additional meetings of the Board (with or without other persons present) may be scheduled as necessary. The decision whether or not to temporarily suspend the research during the investigation will be made by a majority vote of the Board members present. The vote will require a quorum.

**6.** An official meeting of the Board shall be scheduled following the investigation. This meeting will be held to discuss the findings of the investigation and to decide (by majority vote of those Board members present, quorum required) whether or not the allegation of noncompliance or unexpected harm is justified.

**a.** If a decision is made that the allegation of noncompliance or unexpected harm is not justified, notification of this decision shall be sent, in writing, to the Principal Investigator(s), the person who has made the allegation, and the Dean. No further action shall be taken unless compelling evidence can be provided that such action is warranted.

**b.** If a decision is made that the allegation of noncompliance or unexpected harm is justified, a meeting shall be scheduled between the Board and the Principal Investigator(s). The Dean shall be asked to attend this meeting. Other persons asked to attend this meeting may include other members of the research team, the Dean of the division housing the research, and the College's attorney. If students are present in the capacity of either the person making the allegation or the person who is charged with noncompliance, appropriate faculty advisors or supervisors shall be asked to attend. If extramural funding or support has been involved, the person designated as being in charge of the funding or support may be asked to attend the meeting. At this meeting, the findings of the investigation shall be discussed and consequences shall be imposed. These consequences may include (but are not limited to): terminating the research; altering research methods; allowing a Board member to monitor all aspects of the research; and/or altering the subject pool. If the research has received extramural funding or support, additional consequences may be imposed by the extramural agency. A written report of the Board's findings, the nature of the discussion held at this meeting, and the consequences will be sent to the Dean, the College's attorney, the Office for Human Research Protections (OHRP), any extramural authority involved in the funding or support of the research, the Dean of the division housing the research, and the Principal Investigator(s). If the Principal Investigator(s) is represented by the AAUP-UC, a copy of this report will be sent to the AAUP-UC president. If the Principal Investigator(s) is a student, a copy of this report will be sent to the appropriate advisor(s) or supervisor(s).

7. If the Principal Investigator(s) feels that the Board decision of noncompliance is in error, he/she may file an appeal, in writing, within seven working days of the aforementioned meeting. This appeal should be sent to the Dean. If such an appeal is filed, persons appointed by the Dean will conduct an appropriate investigation. The Dean will make the final decision regarding the appeal.

## APPENDIX A.

## **The Belmont Report**

Office of the Secretary

Ethical Principles and Guidelines for the Protection of Human Subjects of Research

The National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research

April 18, 1979

AGENCY: Department of Health, Education, and Welfare.

ACTION: Notice of Report for Public Comment.

SUMMARY: On July 12, 1974, the National Research Act (Pub. L. 93-348) was signed into law, there-by creating the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. One of the charges to the Commission was to identify the basic ethical principles that should underlie the conduct of biomedical and behavioral research involving human subjects and to develop guidelines which should be followed to assure that such research is conducted in accordance with those principles. In carrying out the above, the Commission was directed to consider: (i) the boundaries between biomedical and behavioral research and the accepted and routine practice of medicine, (ii) the role of assessment of risk-benefit criteria in the determination of the appropriateness of research involving human subjects, (iii) appropriate guidelines for the selection of human subjects for participation in such research and (iv) the nature and definition of informed consent in various research settings.

The Belmont Report attempts to summarize the basic ethical principles identified by the Commission in the course of its deliberations. It is the outgrowth of an intensive four-day period of discussions that were held in February 1976 at the Smithsonian Institution's Belmont Conference Center supplemented by the monthly deliberations of the Commission that were held over a period of nearly four years. It is a statement of basic ethical principles and guidelines that should assist in resolving the ethical problems that surround the conduct of research with human subjects. By publishing the Report in the Federal Register, and providing reprints upon request, the Secretary intends that it may be made readily available to scientists, members of Institutional Review Boards, and Federal employees. The two-volume Appendix, containing the lengthy reports of experts and specialists who assisted the Commission in fulfilling this part of its charge, is available as DHEW Publication No. (OS) 78-0013 and No. (OS) 78-0014, for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Unlike most other reports of the Commission, the Belmont Report does not make specific recommendations for administrative action by the Secretary of Health, Education, and Welfare. Rather, the Commission recommended that the Belmont Report be adopted in

its entirety, as a statement of the Department's policy. The Department requests public comment on this recommendation.

National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research

#### Members of the Commission

Kenneth John Ryan, M.D., Chairman, Chief of Staff, Boston Hospital for Women. Joseph V. Brady, Ph.D., Professor of Behavioral Biology, Johns Hopkins University. Robert E. Cooke, M.D., President, Medical College of Pennsylvania. Dorothy I. Height, President, National Council of Negro Women, Inc. Albert R. Jonsen, Ph.D., Associate Professor of Bioethics, University of California at San Francisco. Patricia King, J.D., Associate Professor of Law, Georgetown University Law Center. Karen Lebacqz, Ph.D., Associate Professor of Christian Ethics, Pacific School of Religion. \*\*\* David W. Louisell, J.D., Professor of Law, University of California at Berkeley. Donald W. Seldin, M.D., Professor and Chairman, Department of Internal Medicine, University of Texas at Dallas. \*\*\*Eliot Stellar, Ph.D., Provost of the University and Professor of Physiological Psychology, University of Pennsvlvania. \*\*\* Robert H. Turtle, LL.B., Attorney, VomBaur, Coburn, Simmons & Turtle,

Washington, D.C.

\*\*\* Deceased.

#### Table of Contents

Ethical Principles and Guidelines for Research Involving Human Subjects

A. Boundaries Between Practice and Research

- B. Basic Ethical Principles
  - 1. Respect for Persons
  - 2. Beneficence
  - 3. Justice

#### C. Applications

- 1. Informed Consent
- 2. Assessment of Risk and Benefits
- 3. Selection of Subjects

Ethical Principles & Guidelines for Research Involving Human Subjects

Scientific research has produced substantial social benefits. It has also posed some troubling ethical questions. Public attention was drawn to these questions by reported abuses of human subjects in biomedical experiments, especially during the Second World War. During the Nuremberg War Crime Trials, the Nuremberg code was drafted as a set of standards for judging physicians and scientists who had conducted biomedical experiments on concentration camp prisoners. This code became the prototype of many later codes (1) intended to assure that research involving human subjects would be carried out in an ethical manner.

The codes consist of rules, some general, others specific, that guide the investigators or the reviewers of research in their work. Such rules often are inadequate to cover complex situations; at times they come into conflict, and they are frequently difficult to interpret or apply. Broader ethical principles will provide a basis on which specific rules may be formulated, criticized and interpreted.

Three principles, or general prescriptive judgments, that are relevant to research involving human subjects are identified in this statement. Other principles may also be relevant. These three are comprehensive, however, and are stated at a level of generalization that should assist scientists, subjects, reviewers and interested citizens to understand the ethical issues inherent in research involving human subjects. These principles cannot always be applied so as to resolve beyond dispute particular ethical problems. The objective is to provide an analytical framework that will guide the resolution of ethical problems arising from research involving human subjects.

This statement consists of a distinction between research and practice, a discussion of the three basic ethical principles, and remarks about the application of these principles.

#### Part A: Boundaries Between Practice & Research

#### A. Boundaries Between Practice and Research

It is important to distinguish between biomedical and behavioral research, on the one hand, and the practice of accepted therapy on the other, in order to know what activities ought to undergo review for the protection of human subjects of research. The distinction between research and practice is blurred partly because both often occur together (as in research designed to evaluate a therapy) and partly because notable departures from standard practice are often called "experimental" when the terms "experimental" and "research" are not carefully defined.

For the most part, the term "practice" refers to interventions that are designed solely to enhance the well-being of an individual patient or client and that have a reasonable expectation of success. The purpose of medical or behavioral practice is to provide diagnosis, preventive treatment or therapy to particular individuals.(2) By contrast, the term "research' designates an activity designed to test an hypothesis, permit conclusions to be drawn, and thereby to develop or contribute to generalizable knowledge (expressed, for example, in theories, principles, and statements of relationships). Research is usually described in a formal protocol that sets forth an objective and a set of procedures designed to reach that objective.

When a clinician departs in a significant way from standard or accepted practice, the innovation does not, in and of itself, constitute research. The fact that a procedure is "experimental," in the sense of new, untested or different, does not automatically place it in the category of research. Radically new procedures of this description should, however, be made the object of formal research at an early stage in order to determine whether they are safe and effective. Thus, it is the responsibility of medical practice committees, for example, to insist that a major innovation be incorporated into a formal research project. (3). Research and practice may be carried on together when research is designed to evaluate the safety and efficacy of a therapy. This need not cause any confusion regarding whether or not the activity requires review; the general rule is that if there is any element of research in an activity, that activity should undergo review for the protection of human subjects.

Part B: Basic Ethical Principles

**B.** Basic Ethical Principles

The expression "basic ethical principles" refers to those general judgments that serve as a basic justification for the many particular ethical prescriptions and evaluations of human actions. Three basic principles, among those generally accepted in our cultural tradition, are particularly relevant to the ethics of research involving human subjects: the principles of respect of persons, beneficence and justice.

1. Respect for Persons. -- Respect for persons incorporates at least two ethical convictions: first, that individuals should be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection. The principle of respect for persons thus divides into two separate moral requirements: the requirement to acknowledge autonomy and the requirement to protect those with diminished autonomy.

An autonomous person is an individual capable of deliberation about personal goals and of acting under the direction of such deliberation. To respect autonomy is to give weight to autonomous persons' considered opinions and choices while refraining from obstructing their actions unless they are clearly detrimental to others. To show lack of respect for an autonomous agent is to repudiate that person's considered judgments, to deny an individual the freedom to act on those considered judgments, or to withhold information necessary to make a considered judgment, when there are no compelling reasons to do so.

However, not every human being is capable of self-determination. The capacity for selfdetermination matures during an individual's life, and some individuals lose this capacity wholly or in part because of illness, mental disability, or circumstances that severely restrict liberty. Respect for the immature and the incapacitated may require protecting them as they mature or while they are incapacitated.

Some persons are in need of extensive protection, even to the point of excluding them from activities which may harm them; other persons require little protection beyond making sure they undertake activities freely and with awareness of possible adverse consequence. The extent of protection afforded should depend upon the risk of harm and the likelihood of benefit. The judgment that any individual lacks autonomy should be periodically reevaluated and will vary in different situations.

In most cases of research involving human subjects, respect for persons demands that subjects enter into the research voluntarily and with adequate information. In some situations, however, application of the principle is not obvious. The involvement of prisoners as subjects of research provides an instructive example. On the one hand, it would seem that the principle of respect for persons requires that prisoners not be deprived of the opportunity to volunteer for research. On the other hand, under prison conditions they may be subtly coerced or unduly influenced to engage in research activities for which they would not otherwise volunteer. Respect for persons would then dictate that prisoners be protected. Whether to allow prisoners to "volunteer" or to "protect" them presents a dilemma. Respecting persons, in most hard cases, is often a matter of balancing competing claims urged by the principle of respect itself.

2. Beneficence. -- Persons are treated in an ethical manner not only by respecting their decisions and protecting them from harm, but also by making efforts to secure their wellbeing. Such treatment falls under the principle of beneficence. The term "beneficence" is often understood to cover acts of kindness or charity that go beyond strict obligation. In this document, beneficence is understood in a stronger sense, as an obligation. Two general rules have been formulated as complementary expressions of beneficent actions in this sense: (1) do not harm and (2) maximize possible benefits and minimize possible harms.

The Hippocratic maxim "do no harm" has long been a fundamental principle of medical ethics. Claude Bernard extended it to the realm of research, saying that one should not injure one person regardless of the benefits that might come to others. However, even avoiding harm requires learning what is harmful; and, in the process of obtaining this information, persons may be exposed to risk of harm. Further, the Hippocratic Oath requires physicians to benefit their patients "according to their best judgment." Learning what will in fact benefit may require exposing persons to risk. The problem posed by these imperatives is to decide when it is justifiable to seek certain benefits despite the risks involved, and when the benefits should be foregone because of the risks.

The obligations of beneficence affect both individual investigators and society at large, because they extend both to particular research projects and to the entire enterprise of research. In the case of particular projects, investigators and members of their institutions are obliged to give forethought to the maximization of benefits and the reduction of risk that might occur from the research investigation. In the case of scientific research in general, members of the larger society are obliged to recognize the longer term benefits

and risks that may result from the improvement of knowledge and from the development of novel medical, psychotherapeutic, and social procedures.

The principle of beneficence often occupies a well-defined justifying role in many areas of research involving human subjects. An example is found in research involving children. Effective ways of treating childhood diseases and fostering healthy development are benefits that serve to justify research involving children -- even when individual research subjects are not direct beneficiaries. Research also makes it possible to avoid the harm that may result from the application of previously accepted routine practices that on closer investigation turn out to be dangerous. But the role of the principle of beneficence is not always so unambiguous. A difficult ethical problem remains, for example, about research that presents more than minimal risk without immediate prospect of direct benefit to the children involved. Some have argued that such research is inadmissible, while others have pointed out that this limit would rule out much research promising great benefit to children in the future. Here again, as with all hard cases, the different claims covered by the principle of beneficence may come into conflict and force difficult choices.

3. Justice. -- Who ought to receive the benefits of research and bear its burdens? This is a question of justice, in the sense of "fairness in distribution" or "what is deserved." An injustice occurs when some benefit to which a person is entitled is denied without good reason or when some burden is imposed unduly. Another way of conceiving the principle of justice is that equals ought to be treated equally. However, this statement requires explication. Who is equal and who is unequal? What considerations justify departure from equal distribution? Almost all commentators allow that distinctions based on experience, age, deprivation, competence, merit and position do sometimes constitute criteria justifying differential treatment for certain purposes. It is necessary, then, to explain in what respects people should be treated equally. There are several widely accepted formulations of just ways to distribute burdens and benefits. Each formulation mentions some relevant property on the basis of which burdens and benefits should be distributed. These formulations are (1) to each person an equal share, (2) to each person according to individual need, (3) to each person according to individual effort, (4) to each person according to merit.

Questions of justice have long been associated with social practices such as punishment, taxation and political representation. Until recently these questions have not generally been associated with scientific research. However, they are foreshadowed even in the earliest reflections on the ethics of research involving human subjects. For example, during the 19th and early 20<sup>th</sup> centuries the burdens of serving as research subjects fell largely upon poor ward patients, while the benefits of improved medical care flowed primarily to private patients. Subsequently, the exploitation of unwilling prisoners as research subjects in Nazi concentration camps was condemned as a particularly flagrant injustice. In this country, in the 1940's, the Tuskegee syphilis study used disadvantaged, rural black men to study the untreated course of a disease that is by no means confined to that population. These subjects were deprived of demonstrably effective treatment in order not to interrupt the project, long after such treatment became generally available.

Against this historical background, it can be seen how conceptions of justice are relevant to research involving human subjects. For example, the selection of research subjects

needs to be scrutinized in order to determine whether some classes (e.g., welfare patients, particular racial and ethnic minorities, or persons confined to institutions) are being systematically selected simply because of their easy availability, their compromised position, or their manipulability, rather than for reasons directly related to the problem being studied. Finally, whenever research supported by public funds leads to the development of therapeutic devices and procedures, justice demands both that these not provide advantages only to those who can afford them and that such research should not unduly involve persons from groups unlikely to be among the beneficiaries of subsequent applications of the research.

## Part C: Applications

## C. Applications

Applications of the general principles to the conduct of research leads to consideration of the following requirements: informed consent, risk/benefit assessment, and the selection of subjects of research.

1. Informed Consent. -- Respect for persons requires that subjects, to the degree that they are capable, be given the opportunity to choose what shall or shall not happen to them. This opportunity is provided when adequate standards for informed consent are satisfied.

While the importance of informed consent is unquestioned, controversy prevails over the nature and possibility of an informed consent. Nonetheless, there is widespread agreement that the consent process can be analyzed as containing three elements: information, comprehension and voluntariness.

Information. Most codes of research establish specific items for disclosure intended to assure that subjects are given sufficient information. These items generally include: the research procedure, their purposes, risks and anticipated benefits, alternative procedures (where therapy is involved), and a statement offering the subject the opportunity to ask questions and to withdraw at any time from the research. Additional items have been proposed, including how subjects are selected, the person responsible for the research, etc.

However, a simple listing of items does not answer the question of what the standard should be for judging how much and what sort of information should be provided. One standard frequently invoked in medical practice, namely the information commonly provided by practitioners in the field or in the locale, is inadequate since research takes place precisely when a common understanding does not exist. Another standard, currently popular in malpractice law, requires the practitioner to reveal the information that reasonable persons would wish to know in order to make a decision regarding their care. This, too, seems insufficient since the research subject, being in essence a volunteer, may wish to know considerably more about risks gratuitously undertaken than do patients who deliver themselves into the hand of a clinician for needed care. It may be that a standard of "the reasonable volunteer" should be proposed: the extent and nature of information should be such that persons, knowing that the procedure is neither necessary

for their care nor perhaps fully understood, can decide whether they wish to participate in the furthering of knowledge. Even when some direct benefit to them is anticipated, the subjects should understand clearly the range of risk and the voluntary nature of participation.

A special problem of consent arises where informing subjects of some pertinent aspect of the research is likely to impair the validity of the research. In many cases, it is sufficient to indicate to subjects that they are being invited to participate in research of which some features will not be revealed until the research is concluded. In all cases of research involving incomplete disclosure, such research is justified only if it is clear that (1) incomplete disclosure is truly necessary to accomplish the goals of the research, (2) there are no undisclosed risks to subjects that are more than minimal, and (3) there is an adequate plan for debriefing subjects, when appropriate, and for dissemination of research results to them. Information about risks should never be withheld for the purpose of eliciting the cooperation of subjects, and truthful answers should always be given to direct questions about the research. Care should be taken to distinguish cases in which disclosure would destroy or invalidate the research from cases in which disclosure would simply inconvenience the investigator.

Comprehension. The manner and context in which information is conveyed is as important as the information itself. For example, presenting information in a disorganized and rapid fashion, allowing too little time for consideration or curtailing opportunities for questioning, all may adversely affect a subject's ability to make an informed choice.

Because the subject's ability to understand is a function of intelligence, rationality, maturity and language, it is necessary to adapt the presentation of the information to the subject's capacities. Investigators are responsible for ascertaining that the subject has comprehended the information. While there is always an obligation to ascertain that the information about risk to subjects is complete and adequately comprehended, when the risks are more serious, that obligation increases. On occasion, it may be suitable to give some oral or written tests of comprehension.

Special provision may need to be made when comprehension is severely limited -- for example, by conditions of immaturity or mental disability. Each class of subjects that one might consider as incompetent (e.g., infants and young children, mentally disable patients, the terminally ill and the comatose) should be considered on its own terms. Even for these persons, however, respect requires giving them the opportunity to choose to the extent they are able, whether or not to participate in research. The objections of these subjects to involvement should be honored, unless the research entails providing them a therapy unavailable elsewhere. Respect for persons also requires seeking the permission of other parties in order to protect the subjects from harm. Such persons are thus respected both by acknowledging their own wishes and by the use of third parties to protect them from harm.

The third parties chosen should be those who are most likely to understand the incompetent subject's situation and to act in that person's best interest. The person authorized to act on behalf of the subject should be given an opportunity to observe the research as it proceeds in order to be able to withdraw the subject from the research, if such action appears in the subject's best interest.

Voluntariness. An agreement to participate in research constitutes a valid consent only if voluntarily given. This element of informed consent requires conditions free of coercion and undue influence. Coercion occurs when an overt threat of harm is intentionally presented by one person to another in order to obtain compliance. Undue influence, by contrast, occurs through an offer of an excessive, unwarranted, inappropriate or improper reward or other overture in order to obtain compliance. Also, inducements that would ordinarily be acceptable may become undue influences if the subject is especially vulnerable.

Unjustifiable pressures usually occur when persons in positions of authority or commanding influence -- especially where possible sanctions are involved -- urge a course of action for a subject. A continuum of such influencing factors exists, however, and it is impossible to state precisely where justifiable persuasion ends and undue influence begins. But undue influence would include actions such as manipulating a person's choice through the controlling influence of a close relative and threatening to withdraw health services to which an individual would otherwise be entitle.

2. Assessment of Risks and Benefits. -- The assessment of risks and benefits requires a careful arrayal of relevant data, including, in some cases, alternative ways of obtaining the benefits sought in the research. Thus, the assessment presents both an opportunity and a responsibility to gather systematic and comprehensive information about proposed research. For the investigator, it is a means to examine whether the proposed research is properly designed. For a review committee, it is a method for determining whether the risks that will be presented to subjects are justified. For prospective subjects, the assessment will assist the determination whether or not to participate.

The Nature and Scope of Risks and Benefits. The requirement that research be justified on the basis of a favorable risk/benefit assessment bears a close relation to the principle of beneficence, just as the moral requirement that informed consent be obtained is derived primarily from the principle of respect for persons. The term "risk" refers to a possibility that harm may occur. However, when expressions such as "small risk" or "high risk" are used, they usually refer (often ambiguously) both to the chance (probability) of experiencing a harm and the severity (magnitude) of the envisioned harm.

The term "benefit" is used in the research context to refer to something of positive value related to health or welfare. Unlike, "risk," "benefit" is not a term that expresses probabilities. Risk is properly contrasted to probability of benefits, and benefits are properly contrasted with harms rather than risks of harm. Accordingly, so-called risk/benefit assessments are concerned with the probabilities and magnitudes of possible harm and anticipated benefits. Many kinds of possible harms and benefits need to be taken into account. There are, for example, risks of psychological harm, physical harm, legal harm, social harm and economic harm and the corresponding benefits. While the most likely types of harms to research subjects are those of psychological or physical pain or injury, other possible kinds should not be overlooked.

Risks and benefits of research may affect the individual subjects, the families of the individual subjects, and society at large (or special groups of subjects in society).

Previous codes and Federal regulations have required that risks to subjects be outweighed by the sum of both the anticipated benefit to the subject, if any, and the anticipated benefit to society in the form of knowledge to be gained from the research. In balancing these different elements, the risks and benefits affecting the immediate research subject will normally carry special weight. On the other hand, interests other than those of the subject may on some occasions be sufficient by themselves to justify the risks involved in the research, so long as the subjects' rights have been protected. Beneficence thus requires that we protect against risk of harm to subjects and also that we be concerned about the loss of the substantial benefits that might be gained from research.

The Systematic Assessment of Risks and Benefits. It is commonly said that benefits and risks must be "balanced" and shown to be "in a favorable ratio." The metaphorical character of these terms draws attention to the difficulty of making precise judgments. Only on rare occasions will quantitative techniques be available for the scrutiny of research protocols. However, the idea of systematic, nonarbitrary analysis of risks and benefits should be emulated insofar as possible. This ideal requires those making decisions about the justifiability of research to be thorough in the accumulation and assessment of information about all aspects of the research, and to consider alternatives systematically. This procedure renders the assessment of research more rigorous and precise, while making communication between review board members and investigators less subject to misinterpretation, misinformation and conflicting judgments. Thus, there should first be a determination of the validity of the presuppositions of the research; then the nature, probability and magnitude of risk should be distinguished with as much clarity as possible. The method of ascertaining risks should be explicit, especially where there is no alternative to the use of such vague categories as small or slight risk. It should also be determined whether an investigator's estimates of the probability of harm or benefits are reasonable, as judged by known facts or other available studies.

Finally, assessment of the justifiability of research should reflect at least the following considerations: (i) Brutal or inhumane treatment of human subjects is never morally justified. (ii) Risks should be reduced to those necessary to achieve the research objective. It should be determined whether it is in fact necessary to use human subjects at all. Risk can perhaps never be entirely eliminated, but it can often be reduced by careful attention to alternative procedures. (iii) When research involves significant risk of serious impairment, review committees should be extraordinarily insistent on the justification of the risk (looking usually to the likelihood of benefit to the subject -- or, in some rare cases, to the manifest voluntariness of the participation). (iv) When vulnerable populations are involved in research, the appropriateness of involving them should itself be demonstrated. A number of variables go into such judgments, including the nature and degree of risk, the condition of the particular population involved, and the nature and level of the anticipated benefits. (v) Relevant risks and benefits must be thoroughly arrayed in documents and procedures used in the informed consent process.

3. Selection of Subjects. -- Just as the principle of respect for persons finds expression in the requirements for consent, and the principle of beneficence in risk/benefit assessment, the principle of justice gives rise to moral requirements that there be fair procedures and outcomes in the selection of research subjects.

Justice is relevant to the selection of subjects of research at two levels: the social and the individual. Individual justice in the selection of subjects would require that researchers exhibit fairness: thus, they should not offer potentially beneficial research only to some patients who are in their favor or select only "undesirable" persons for risky research. Social justice requires that distinction be drawn between classes of subjects that ought, and ought not, to participate in any particular kind of research, based on the ability of members of that class to bear burdens and on the appropriateness of placing further burdens on already burdened persons. Thus, it can be considered a matter of social justice that there is an order of preference in the selection of classes of subjects (e.g., adults before children) and that some classes of potential subjects (e.g., the institutionalized mentally infirm or prisoners) may be involved as research subjects, if at all, only on certain conditions.

Injustice may appear in the selection of subjects, even if individual subjects are selected fairly by investigators and treated fairly in the course of research. Thus injustice arises from social, racial, sexual and cultural biases institutionalized in society. Thus, even if individual researchers are treating their research subjects fairly, and even if IRBs are taking care to assure that subjects are selected fairly within a particular institution, unjust social patterns may nevertheless appear in the overall distribution of the burdens and benefits of research. Although individual institutions or investigators may not be able to resolve a problem that is pervasive in their social setting, they can consider distributive justice in selecting research subjects.

Some populations, especially institutionalized ones, are already burdened in many ways by their infirmities and environments. When research is proposed that involves risks and does not include a therapeutic component, other less burdened classes of persons should be called upon first to accept these risks of research, except where the research is directly related to the specific conditions of the class involved. Also, even though public funds for research may often flow in the same directions as public funds for health care, it seems unfair that populations dependent on public health care constitute a pool of preferred research subjects if more advantaged populations are likely to be the recipients of the benefits.

One special instance of injustice results from the involvement of vulnerable subjects. Certain groups, such as racial minorities, the economically disadvantaged, the very sick, and the institutionalized may continually be sought as research subjects, owing to their ready availability in settings where research is conducted. Given their dependent status and their frequently compromised capacity for free consent, they should be protected against the danger of being involved in research solely for administrative convenience, or because they are easy to manipulate as a result of their illness or socioeconomic condition.

(1) Since 1945, various codes for the proper and responsible conduct of human experimentation in medical research have been adopted by different organizations. The best known of these codes are the Nuremberg Code of 1947, the Helsinki Declaration of 1964 (revised in 1975), and the 1971 Guidelines (codified into Federal Regulations in 1974) issued by the U.S. Department of Health, Education, and Welfare Codes for the

conduct of social and behavioral research have also been adopted, the best known being that of the American Psychological Association, published in 1973.

(2) Although practice usually involves interventions designed solely to enhance the well being of a particular individual, interventions are sometimes applied to one individual for the enhancement of the well-being of another (e.g., blood donation, skin grafts, organ transplants) or an intervention may have the dual purpose of enhancing the well-being of a particular individual, and, at the same time, providing some benefit to others (e.g., vaccination, which protects both the person who is vaccinated and society generally). The fact that some forms of practice have elements other than immediate benefit to the individual receiving an intervention, however, should not confuse the general distinction between research and practice. Even when a procedure applied in practice may benefit some other person, it remains an intervention designed to enhance the well-being of a particular individual or groups of individuals; thus, it is practice and need not be reviewed as research.

(3) Because the problems related to social experimentation may differ substantially from those of biomedical and behavioral research, the Commission specifically declines to make any policy determination regarding such research at this time. Rather, the Commission believes that the problem ought to be addressed by one of its successor bodies.

National Institutes of Health Bethesda, Maryland 20892

Policy and Assurances | OHRP Home Page

If you have questions about human subject research, click ohrp@osophs.dhhs.gov If you have questions/suggestions about this web page, click Webmaster Updated July 21, 2000

## **APPENDIX B.**

# **Code of Federal Regulations**

## **CODE OF FEDERAL REGULATIONS**

## TITLE 45 PUBLIC WELFARE

## DEPARTMENT OF HEALTH AND HUMAN SERVICES NATIONAL INSTITUTES OF HEALTH OFFICE FOR PROTECTION FROM RESEARCH RISKS

## PART 46

## **PROTECTION OF HUMAN SUBJECTS**

#### \* \* \*

## Revised November 13, 2001 Effective December 13, 2001

\* \* \*

Subpart A --Federal Policy for the Protection of Human Subjects (Basic DHHS for Protection of Human Research Subjects)

Sec.

Sec.	
46.101	To what does this policy apply?
46.102	Definitions.
46.103	Assuring compliance with this policyresearch conducted or supported by
	any Federal Department or Agency.
46.104-	[Reserved]
46.106	
46.107	IRB membership.
46.108	IRB functions and operations.
46.109	IRB review of research.
46.110	Expedited review procedures for certain kinds of research involving no
	more than minimal risk, and for minor changes in approved research.
46.111	Criteria for IRB approval of research.
46.112	Review by institution.
46.113	Suspension or termination of IRB approval of research.
46.114	Cooperative research.
46.115	IRB records.
46.116	General requirements for informed consent.
46.117	Documentation of informed consent.
46.118	Applications and proposals lacking definite plans for involvement of
	human subjects.
46.119	Research undertaken without the intention of involving human subjects.
46.120	Evaluation and disposition of applications and proposals for research to be
conducted or supported by a Federal Department or Agency.	
46.121	[Reserved]
46.122	Use of Federal funds.

46.123	Early termination of research support: Evaluation of applications and
	proposals.
46.124	Conditions.

Subpart B --Additional Protections for Pregnant Women, Human Fetuses and Neonates Involved in Research

Sec. 46.201 To what do these regulations apply? 46.202 Definitions. 46.203 Duties of IRBs in connection with research involving pregnant women, fetuses, and neonates. 46.204 Research involving pregnant women or fetuses. 46.205 Research involving neonates. 46.206 Research involving, after delivery, the placenta, the dead fetus or fetal material. 46.207 Research not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates.

Subpart C -- Additional DHHS Protections Pertaining to Biomedical and Behavioral Research Involving Prisoners as Subjects

## Sec.

~	
46.301	Applicability.
46.302	Purpose.
46.303	Definitions.
46.304	Composition of Institutional Review Boards where prisoners are involved.
46.305	Additional duties of the Institutional Review Boards where prisoners are
	involved.
46.306	Permitted research involving prisoners.

Subpart D -- Additional DHHS Protections for Children Involved asSubjects in Research

Sec.	
46.401	To what do these regulations apply?
46.402	Definitions.
46.403	IRB duties.
46.404	Research not involving greater than minimal risk.
46.405	Research involving greater than minimal risk but presenting the prospect
	of direct benefit to the individual subjects.
46.406	Research involving greater than minimal risk and no prospect of direct
	benefit to individual subjects, but likely to yield generalizable knowledge
	about the subject's disorder or condition.
46.407	Research not otherwise approvable which presents an opportunity to

understand, prevent, or alleviate a serious problem affecting the health or welfare of children.

46.408	Requirements for permission by parents or guardians and for assent by
	children.
46.409	Wards.

Authority: 5 U.S.C. 301; Sec. 474(a), 88 Stat. 352 (42 U.S.C. 2891-3(a)).

Note: As revised, Subpart A of the DHHS regulations incorporates the Common Rule (Federal Policy) for the Protection of Human Subjects (56 FR 28003). Subpart D of the HHS regulations has been amended at Section 46.401(b) to reference the revised Subpart A.

The Common Rule (Federal Policy) is also codified at

7 CFR Part 1c	Department of Agriculture
10 CFR Part 745	Department of Energy
14 CFR Part 1230	National Aeronautics and Space Administration
15 CFR Part 27	Department of Commerce
16 CFR Part 1028	Consumer Product Safety Commission
22 CFR Part 225	International Development Cooperation Agency, Agency for
	International Development
24 CFR Part 60	Department of Housing and Urban Development
28 CFR Part 46	Department of Justice
32 CFR Part 219	Department of Defense
34 CFR Part 97	Department of Education
38 CFR Part 16	Department of Veterans Affairs
40 CFR Part 26	Environmental Protection Agency
45 CFR Part 690	National Science Foundation
49 CFR Part 11	Department of Transportation

## TITLE 45 CODE OF FEDERAL REGULATIONS PART 46

#### **PROTECTION OF HUMAN SUBJECTS**

\* \* \*

## Revised June 18, 1991 Effective August 19, 1991

\* \* \*

Subpart A Federal Policy for the Protection of Human Subjects (Basic DHHS Policy for Protection of Human Research Subjects) Source: 56 FR 28003, June 18, 1991.

§46.101 To what does this policy apply?

(a) Except as provided in paragraph (b) of this section, this policy applies to all research involving human subjects conducted, supported or otherwise subject to regulation by any Federal Department or Agency which takes appropriate administrative action to make the policy applicable to such research. This includes research conducted by Federal civilian employees or military personnel, except that each Department or Agency head may adopt such procedural modifications as may be appropriate from an administrative standpoint. It also includes research conducted, supported, or otherwise subject to regulation by the Federal Government outside the United States.

(1) Research that is conducted or supported by a Federal Department or Agency, whether or it is regulated as defined in §46.102(e), must comply with all sections of this policy.

(2) Research that is neither conducted nor supported by a Federal Department or Agency but is subject to regulation as defined in §46.102(e) must be reviewed and approved, in compliance with §46.101, §46.102, and §46.107 through §46.117 of this policy, by an Institutional Review Board (IRB) that operates in accordance with the pertinent requirements of this policy.

(b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:1

(1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

(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.

(3) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior that is not exempt under paragraph (b)(2) of this section, if: (i) the human subjects are elected or appointed public officials or candidates for public office; or (ii) Federal statute(s) require(s) without exception that the confidentiality of the personally identifiable information will be maintained throughout the research and thereafter.

(4) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, 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.

(5) Research and demonstration projects which are conducted by or subject to the approval of Department or Agency heads, and which are designed to study, evaluate, or otherwise examine: (i) Public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

(6) Taste and food quality evaluation and consumer acceptance studies, (i) if wholesome foods without additives are consumed or (ii) if a food isconsumed that contains a food ingredient at or below the level and for a use found to be safe, or agricultural chemical or environmental contaminant at or below the level found to be safe, by the Food and Drug Administration or approved by the Environmental Protection Agency or the Food Safety and Inspection Service of the U.S. Department of Agriculture.

(c) Department or Agency heads retain final judgment as to whether a particular activity is covered by this policy.

(d) Department or Agency heads may require that specific research activities or classes of research activities conducted, supported, or otherwise subject to regulation by the Department or Agency but not otherwise covered by this policy, comply with some or all of the requirements of this policy.

(e) Compliance with this policy requires compliance with pertinent Federal laws or regulations which provide additional protections for human subjects.

(f) This policy does not affect any State or local laws or regulations which may otherwise be applicable and which provide additional protections for human subjects.

(g) This policy does not affect any foreign laws or regulations which may otherwise be applicable and which provide additional protections to human subjects of research.

(h) When research covered by this policy takes place in foreign countries, procedures normally followed in the foreign countries to protect human subjects may differ from

those set forth in this policy. [An example is a foreign institution which complies with guidelines consistent with the World Medical Assembly Declaration (Declaration of Helsinki amended 1989) issued either by sovereign states or by an organization whose function for the protection of human research subjects is internationally recognized.] In these circumstances, if a Department or Agency head determines that the procedures prescribed by the institution afford protections that are at least equivalent to those provided in this policy, the Department or Agency head may approve the substitution of the foreign procedures in lieu of the procedural requirements provided in this policy. Except when otherwise required by statute, Executive Order, or the Department or Agency head, notices of these actions as they occur will be published in the Federal Register or will be otherwise published as provided in Department or Agency procedures.

(i) Unless otherwise required by law, Department or Agency heads may waive the applicability of some or all of the provisions of this policy to specific research activities or classes or research activities otherwise covered by this policy. Except when otherwise required by statute or Executive Order, the Department or Agency head shall forward advance notices of these actions to the Office for Protection from Research Risks, National Institutes of Health, Department of Health and Human Services (DHHS), and shall also publish them in the Federal Register or in such other manner as provided in Department or Agency procedures.1

1 Institutions with DHHS-approved assurances on file will abide by provisions of Title 45 CFR Part 46 Subparts A-D. Some of the other departments and agencies have incorporated all provisions of Title 45 CFR Part 46 into their policies and procedures as well. However, the exemptions at 45 CFR 46.101(b) do not apply to research involving prisoners, fetuses, pregnant women, or human in vitro fertilization, Subparts B and C. The exemption at 45 CFR 46.101(b)(2), for research involving survey or interview procedures or observation of public behavior, does not apply to research with children, Subpart D, except for research involving observations of public behavior when the investigator(s) do not participate in the activities being observed.

## §46.102 Definitions.

(a) Department or Agency head means the head of any Federal Department or Agency and any other officer or employee of any Department or Agency to whom authority has been delegated.

(b) Institution means any public or private entity or Agency (including Federal, State, and other agencies).

(c) Legally authorized representative means an individual or judicial or other body authorized under applicable law to consent on behalf of a prospective subject to the subject's participation in the procedure(s) involved in the research.

(d) Research means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported under a program which is considered research for other purposes. For example, some demonstration and service programs may include research activities.

(e) Research subject to regulation, and similar terms are intended to encompass those research activities for which a Federal Department or Agency has specific responsibility for regulating as a research activity, (for example, Investigational New Drug requirements administered by the Food and Drug Administration). It does not include research activities which are incidentally regulated by a Federal Department or Agency solely as part of the Department's or Agency's broader responsibility to regulate certain types of activities whether research or non-research in nature (for example, Wage and Hour requirements administered by the Department of Labor).

(f) Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains

- (1) data through intervention or interaction with the individual, or
- (2) identifiable private information.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

(g) IRB means an Institutional Review Board established in accord with and for the purposes expressed in this policy.

(h) IRB approval means the determination of the IRB that the research has been reviewed and may be conducted at an institution within the constraints set forth by the IRB and by other institutional and Federal requirements.

(i) Minimal risk means that the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

(j) Certification means the official notification by the institution to the supporting Department or Agency, in accordance with the requirements of this policy, that a research project or activity involving human subjects has been reviewed and approved by an IRB in accordance with an approved assurance.

\$46.103 Assuring compliance with this policy -- research conducted or supported by any Federal Department or Agency.

(a) Each institution engaged in research which is covered by this policy and which is conducted or supported by a Federal Department or Agency shall provide written assurance satisfactory to the Department or Agency head that it will comply with the requirements set forth in this policy. In lieu of requiring submission of an assurance, individual Department or Agency heads shall accept the existence of a current assurance, appropriate for the research in question, on file with the Office for Protection from Research Risks, National Institutes Health, DHHS, and approved for Federal wide use by that office. When the existence of an DHHS-approved assurance is accepted in lieu of requiring submission of an assurance, reports (except certification) required by this policy to be made to Department and Agency heads shall also be made to the Office for Protection from Protection from Research Risks, National Institutes of Health, DHHS.

(b) Departments and agencies will conduct or support research covered by this policy only if the institution has an assurance approved as provided in this section, and only if the institution has certified to the Department or Agency head that the research has been reviewed and approved by an IRB provided for in the assurance, and will be subject to continuing review by the IRB. Assurances applicable to federally supported or conducted research shall at a minimum include:

(1) A statement of principles governing the institution in the discharge of its responsibilities for protecting the rights and welfare of human subjects of research conducted at or sponsored by the institution, regardless of whether the research is subject to Federal regulation. This may include an appropriate existing code, declaration, or statement of ethical principles, or a statement formulated by the institution itself. This requirement does not preempt provisions of this policy applicable to Department- or Agency-supported or regulated research and need not be applicable to any research exempted or waived under §46.101 (b) or (i).

(2) Designation of one or more IRBs established in accordance with the requirements of this policy, and for which provisions are made for meeting space and sufficient staff to support the IRB's review and record keeping duties.

(3) A list of IRB members identified by name; earned degrees; representative capacity; indications of experience such as board certifications, licenses, etc., sufficient to describe each member's chief anticipated contributions to IRB deliberations; and any employment or other relationship between each member and the institution; for example: full-time employee, part-time employee, member of governing panel or board, stockholder, paid or unpaid consultant. Changes in IRB membership shall be reported to the Department or Agency head, unless in accord with §46.103(a) of this policy, the existence of a DHHS-approved assurance is accepted. In this case, change in IRB membership shall be reported to the Office for Protection from Research Risks, National Institutes of Health, DHHS.

(4) Written procedures which the IRB will follow (i) for conducting its initial and continuing review of research and for reporting its findings and actions to the investigator and the institution; (ii) for determining which projects require review more often than annually and which projects need verification from sources other than the investigators that no material changes have occurred since previous IRB

review; and (iii) for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject.

(5) Written procedures for ensuring prompt reporting to the IRB, appropriate institutional officials, and the Department or Agency head of (i) any unanticipated problems involving risks to subjects or others or any serious or continuing noncompliance with this policy or the requirements or determinations of the IRB; and (ii) any suspension or termination of IRB approval.

(c) The assurance shall be executed by an individual authorized to act for the institution and to assume on behalf of the institution the obligations imposed by this policy and shall be filed in such form and manner as the Department or Agency head prescribes.

(d) The Department or Agency head will evaluate all assurances submitted in accordance with this policy through such officers and employees of the Department or Agency and such experts or consultants engaged for this purpose as the Department or Agency head determines to be appropriate. The Department or Agency head's evaluation will take into consideration the adequacy of the proposed IRB in light of the anticipated scope of the institution's research activities and the types of subject populations likely to be involved, the appropriateness of the proposed initial and continuing review procedures in light of the probable risks, and the size and complexity of the institution.

(e) On the basis of this evaluation, the Department or Agency head may approve or disapprove the assurance, or enter into negotiations to develop an approvable one. The Department or Agency head may limit the period during which any particular approved assurance or class of approved assurances shall remain effective or otherwise condition or restrict approval.

(f) Certification is required when the research is supported by a Federal Department or Agency and not otherwise exempted or waived under §46.101 (b) or (i). An institution with an approved assurance shall certify that each application or proposal for research covered by the assurance and by §46.103 of this policy has been reviewed and approved by the IRB. Such certification must be submitted with the application or proposal or by such later date as may be prescribed by the Department or Agency to which the application or proposal is submitted. Under no condition shall research covered by §46.103 of the policy be supported prior to receipt of the certification that the research has been reviewed and approved by the IRB. Institutions without an approved assurance covering the research shall certify within 30 days after receipt of a request for such a certification from the Department or Agency, that the application or proposal has been approved by the IRB. If the certification is not submitted within these time limits, the application or proposal may be returned to the institution.

(Approved by the Office of Management and Budget under Control Number 9999-0020.)

§§46.104--46.106 [Reserved]

§46.107 IRB membership.

(a) Each IRB shall have at least five members, with varying backgrounds to promote complete and adequate review of research activities commonly conducted by the institution. The IRB shall be sufficiently qualified through the experience and expertise of its members, and the diversity of the members, including consideration of race, gender, and cultural backgrounds and sensitivity to such issues as community attitudes, to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects. In addition to possessing the professional competence necessary to review specific research activities, the IRB shall be able to ascertain the acceptability of proposed research in terms of institutional commitments and regulations, applicable law, and standards of professional conduct and practice. The IRB shall therefore include persons knowledgeable in these areas. If an IRB regularly reviews research that involves a vulnerable category of subjects, such as children, prisoners, pregnant women, or handicapped or mentally disabled persons, consideration shall be given to the inclusion of one or more individuals who are knowledgeable about and experienced in working with these subjects.

(b) Every nondiscriminatory effort will be made to ensure that no IRB consists entirely of men or entirely of women, including the institution's consideration of qualified persons of both sexes, so long as no selection is made to the IRB on the basis of gender. No IRB may consist entirely of members of one profession.

(c) Each IRB shall include at least one member whose primary concerns are in scientific areas and at least one member whose primary concerns are in nonscientific areas.

(d) Each IRB shall include at least one member who is not otherwise affiliated with the institution and who is not part of the immediate family of a person who is affiliated with the institution.

(e) No IRB may have a member participate in the IRB's initial or continuing review of any project in which the member has a conflicting interest, except to provide information requested by the IRB.

(f) An IRB may, in its discretion, invite individuals with competence in special areas to assist in the review of issues which require expertise beyond or in addition to that available on the IRB. These individuals may not vote with the IRB

§46.108 IRB functions and operations.

In order to fulfill the requirements of this policy each IRB shall:

(a) Follow written procedures in the same detail as described in §46.103(b)(4) and to the extent required by §46.103(b)(5).

(b) Except when an expedited review procedure is used (see §46.110), review proposed research at convened meetings at which a majority of the members of the IRB are present, including at least one member whose primary concerns are in nonscientific areas.

In order for the research to be approved, it shall receive the approval of a majority of those members present at the meeting

§46.109 IRB review of research.

(a) An IRB shall review and have authority to approve, require modifications in (to secure approval), or disapprove all research activities covered by this policy.

(b) An IRB shall require that information given to subjects as part of informed consent is in accordance with §46.116. The IRB may require that information, in addition to that specifically mentioned in §46.116, be given to the subjects when in the IRB's judgment the information would meaningfully add to the protection of the rights and welfare of subjects.

(c) An IRB shall require documentation of informed consent or may waive documentation in accordance with \$46.117.

(d) An IRB shall notify investigators and the institution in writing of its decision to approve or disapprove the proposed research activity, or of modifications required to secure IRB approval of the research activity. If the IRB decides to disapprove a research activity, it shall include in its written notification a statement of the reasons for its decision and give the investigator an opportunity to respond in person or in writing.

(e) An IRB shall conduct continuing review of research covered by this policy at intervals appropriate to the degree of risk, but not less than once per year, and shall have authority to observe or have a third party observe the consent process and the research. (Approved by the Office of Management and Budget under Control Number 9999-0020.)

\$46.110 Expedited review procedures for certain kinds of research involving no more than minimal risk, and for minor changes in approved research.

(a) The Secretary, HHS, has established, and published as a Notice in the Federal Register, a list of categories of research that may be reviewed by the IRB through an expedited review procedure. The list will be amended, as appropriate, after consultation with other departments and agencies, through periodic republication by the Secretary, HHS, in the Federal Register. A copy of the list is available from the Office for Protection from Research Risks, National Institutes of Health, DHHS, Bethesda, Maryland 20892.

(b) An IRB may use the expedited review procedure to review either or both of the following.

(1) some or all of the research appearing on the list and found by the reviewer(s) to involve no more than minimal risk,

(2) minor changes in previously approved research during the period (of one year or less) for which approval is authorized.

Under an expedited review procedure, the review may be carried out by the IRB chairperson or by one or more experienced reviewers designated by the chairperson from

among members of the IRB. In reviewing the research, the reviewers may exercise all of the authorities of the IRB except that the reviewers may not disapprove the research. A research activity may be disapproved only after review in accordance with the non-expedited procedure set forth in §46.108(b).

(c) Each IRB which uses an expedited review procedure shall adopt a method for keeping all members advised of research proposals which have been approved under the procedure.

(d) The Department or Agency head may restrict, suspend, terminate, or choose not to authorize an institution's or IRB's use of the expedited review procedure.

§46.111 Criteria for IRB approval of research.

(a) In order to approve research covered by this policy the IRB shall determine that all of the following requirements are satisfied:

(1) Risks to subjects are minimized: (i) by using procedures which are consistent with sound research design and which do not unnecessarily expose subjects to risk, and (ii) whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.

(2) Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the importance of the knowledge that may reasonably be expected to result. In evaluating risks and benefits, the IRB should consider only those risks and benefits that may result from the research (as distinguished from risks and benefits of therapies subjects would receive even if not participating in the research). The IRB should not consider possible long-range effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.

(3) Selection of subjects is equitable. In making this assessment the IRB should take into account the purposes of the research and the setting in which the research will be conducted and should be particularly cognizant of the special problems of research involving vulnerable populations, such as children, prisoners, pregnant women, mentally disable persons, or economically or educationally disadvantaged persons.

(4) Informed consent will be sought from each prospective subject or the subject's legally authorized representative, in accordance with, and to the extent required by \$46.116.

(5) Informed consent will be appropriately documented, in accordance with, and to the extent required by §46.117.

(6) When appropriate, the research plan makes adequate provision for monitoring the data collected to ensure the safety of subjects.

(7) When appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

(b) When some or all of the subjects are likely to be vulnerable to coercion or undue influence, such as children, prisoners, pregnant women, mentally disabled persons, or economically or educationally disadvantaged persons, additional safeguards have been included in the study to protect the rights and welfare of these subjects.

§46.112 Review by institution.

Research covered by this policy that has been approved by an IRB may be subject to further appropriate review and approval or disapproval by officials of the institution. However, those officials may not approve the research if it has not been approved by an IRB.

§46.113 Suspension or termination of IRB approval of research.

An IRB shall have authority to suspend or terminate approval of research that is not being conducted in accordance with the IRB's requirements or that has been associated with unexpected serious harm to subjects. Any suspension or termination or approval shall include a statement of the reasons for the IRB's action and shall be reported promptly to the investigator, appropriate institutional officials, and the Department or Agency head.

(Approved by the Office of Management and Budget under Control Number 9999-0020.)

§46.114 Cooperative research.

Cooperative research projects are those projects covered by this policy which involve more than one institution. In the conduct of cooperative research projects, each institution is responsible for safeguarding the rights and welfare of human subjects and for complying with this policy. With the approval of the Department or Agency head, an institution participating in a cooperative project may enter into a joint review arrangement, rely upon the review of another qualified IRB, or make similar arrangements for avoiding duplication of effort.

§46.115 IRB records.

(a) An institution, or when appropriate an IRB, shall prepare and maintain adequate documentation of IRB activities, including the following:

(1) Copies of all research proposals reviewed, scientific evaluations, if any, that accompany the proposals, approved sample consent documents, progress reports submitted by investigators, and reports of injuries to subjects.

(2) Minutes of IRB meetings which shall be in sufficient detail to show attendance at the meetings; actions taken by the IRB; the vote on these actions including the number of members voting for, against, and abstaining; the basis for requiring changes in or disapproving research; and a written summary of the discussion of controverted issues and their resolution. (3) Records of continuing review activities.

(4) Copies of all correspondence between the IRB and the investigators.

(5) A list of IRB members in the same detail as described in §46.103(b)(3).

(6) Written procedures for the IRB in the same detail as described in 46.103(b)(4) and 46.103(b)(5).

(7) Statements of significant new findings provided to subjects, as required by 46.116(b)(5).

(b) The records required by this policy shall be retained for at least 3 years, and records relating to research which is conducted shall be retained for at least 3 years after completion of the research. All records shall be accessible for inspection and copying by authorized representatives of the Department or Agency at reasonable times and in a reasonable manner.

(Approved by the Office of Management and Budget under Control Number 9999-0020.)

§46.116 General requirements for informed consent.

Except as provided elsewhere in this policy, no investigator may involve a human being as a subject in research covered by this policy unless the investigator has obtained the legally effective informed consent of the subject or the subject's legally authorized representative. An investigator shall seek such consent only under circumstances that provide the prospective subject or the representative sufficient opportunity to consider whether or not to participate and that minimize the possibility of coercion or undue influence. The information that is given to the subject or the representative shall be in language understandable to the subject or the representative. No informed consent, whether oral or written, may include any exculpatory language through which the subject or the representative is made to waive or appear to waive any of the subject's legal rights, or releases or appears to release the investigator, the sponsor, the institution or its agents from liability for negligence.

(a) Basic elements of informed consent. Except as provided in paragraph (c) or (d) of this section, in seeking informed consent the following information shall be provided to each subject:

(1) a statement that the study involves research, an explanation of the purposes of the research and the expected duration of the subject's participation, a description of the procedures to be followed, and identification of any procedures which are experimental;

(2) a description of any reasonably foreseeable risks or discomforts to the subject;

(3) a description of any benefits to the subject or to others which may reasonably be expected from the research;

(4) a disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject;

(5) a statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained;

(6) for research involving more than minimal risk, an explanation as to whether any compensation and an explanation as to whether any medical treatments are available if injury occurs and, if so, what they consist of, or where further information may be obtained;

(7) an explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject; and

(8) a statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits to which the subject is otherwise entitled.

(b) additional elements of informed consent. When appropriate, one or more of the following elements of information shall also be provided to each subject:

(1) a statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant) which are currently unforeseeable;

(2) anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent;

(3) any additional costs to the subject that may result from participation in the research;

(4) the consequences of a subject's decision to withdraw from the research and procedures for orderly termination of participation by the subject;

(5) A statement that significant new findings developed during the course of the research which may relate to the subject's willingness to continue participation will be provided to the subject; and

(6) the approximate number of subjects involved in the study.

(c) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth above, or waive the requirement to obtain informed consent provided the IRB finds and documents that:

(1) the research or demonstration project is to be conducted by or subject to the approval of state or local government officials and is designed to study, evaluate, or otherwise examine: (i) public benefit or service programs; (ii) procedures for obtaining benefits or services under those programs; (iii) possible changes in or

alternatives to those programs or procedures; or (iv) possible changes in methods or levels of payment for benefits or services under those programs; and

(2) the research could not practicably be carried out without the waiver or alteration.

(d) An IRB may approve a consent procedure which does not include, or which alters, some or all of the elements of informed consent set forth in this section, or waive the requirements to obtain informed consent provided the IRB finds and documents that:

(1) the research involves no more than minimal risk to the subjects;

(2) the waiver or alteration will not adversely affect the rights and welfare of the subjects;

(3) the research could not practicably be carried out without the waiver or alteration; and

(4) whenever appropriate, the subjects will be provided with additional pertinent information after participation.

(e) The informed consent requirements in this policy are not intended to preempt any applicable Federal, State, or local laws which require additional information to be disclosed in order for informed consent to be legally effective.

(f) Nothing in this policy is intended to limit the authority of a physician to provide emergency medical care, to the extent the physician is permitted to do so under applicable Federal, State, or local law.

(Approved by the Office of Management and Budget under Control Number 9999-0020.)

§46.117 Documentation of informed consent.

(a) Except as provided in paragraph (c) of this section, informed consent shall be documented by the use of a written consent form approved by the IRB and signed by the subject or the subject's legally authorized representative. A copy shall be given to the person signing the form.

(b) Except as provided in paragraph (c) of this section, the consent form may be either of the following:

(1) A written consent document that embodies the elements of informed consent required by §46.116. This form may be read to the subject or the subject's legally authorized representative, but in any event, the investigator shall give either the subject or the representative adequate opportunity to read it before it is signed; or

(2) A short form written consent document stating that the elements of informed consent required by §46.116 have been presented orally to the subject or the subject's legally authorized representative. When this method is used, there shall be a witness to the oral presentation. Also, the IRB shall approve a written summary of what is to be said to the subject or the representative. Only the short

form itself is to be signed by the subject or the representative. However, the witness shall sign both the short form and a copy of the summary, and the person actually obtaining consent shall sign a copy of the summary. A copy of the summary shall be given to the subject or the representative, in addition to a copy of the short form.

(c) An IRB may waive the requirement for the investigator to obtain a signed consent form for some or all subjects if it finds either:

(1) That the only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern; or

(2) That the research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.

In cases in which the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research. (Approved by the Office of Management and Budget under Control Number 9999-0020.)

\$46.118 Applications and proposals lacking definite plans for involvement of human subjects.

Certain types of applications for grants, cooperative agreements, or contracts are submitted to departments or agencies with the knowledge that subjects may be involved within the period of support, but definite plans would not normally be set forth in the application or proposal. These include activities such as institutional type grants when selection of specific projects is the institution's responsibility; research training grants in which the activities involving subjects remain to be selected; and projects in which human subjects' involvement will depend upon completion of instruments, prior animal studies, or purification of compounds. These applications need not be reviewed by an IRB before an award may be made. However, except for research exempted or waived under §46.101 (b) or (i), no human subjects may be involved in any project supported by these awards until the project has been reviewed and approved by the IRB, as provided in this policy, and certification submitted, by the institution, to the Department or Agency.

§46.119 Research undertaken without the intention of involving human subjects.

In the event research is undertaken without the intention of involving human subjects, but it is later proposed to involve human subjects in the research, the research shall first be reviewed and approved by an IRB, as provided in this policy, a certification submitted, by the institution, to the Department or Agency, and final approval given to the proposed change by the Department or Agency.

\$46.120 Evaluation and disposition of applications and proposals for research to be conducted or supported by a Federal Department or Agency.

(a) The Department or Agency head will evaluate all applications and proposals involving human subjects submitted to the Department or Agency through such officers and employees of the Department or Agency and such experts and consultants as the Department or Agency head determines to be appropriate. This evaluation will take into consideration the risks to the subjects, the adequacy of protection against these risks, the potential benefits of the research to the subjects and others, and the importance of the knowledge gained or to be gained.

(b) On the basis of this evaluation, the Department or Agency head may approve or disapprove the application or proposal, or enter into negotiations to develop an approvable one.

§46.121 [Reserved]

§46.122 Use of Federal funds.

Federal funds administered by a Department or Agency may not be expended for research involving human subjects unless the requirements of this policy have been satisfied.

§46.123 Early termination of research support: Evaluation of applications and proposals.

(a) The Department or Agency head may require that Department or Agency support for any project be terminated or suspended in the manner prescribed in applicable program requirements, when the Department or Agency head finds an institution has materially failed to comply with the terms of this policy.

(b) In making decisions about supporting or approving applications or proposals covered by this policy the Department or Agency head may take into account, in addition to all other eligibility requirements and program criteria, factors such as whether the applicant has been subject to a termination or suspension under paragraph (a) of this section and whether the applicant or the person or persons who would direct or has/have directed the scientific and technical aspects of an activity has/have, in the judgment of the Department or Agency head, materially failed to discharge responsibility for the protection of the rights and welfare of human subjects (whether or not the research was subject to Federal regulation).

§46.124 Conditions.

With respect to any research project or any class of research projects the Department or Agency head may impose additional conditions prior to or at the time of approval when in the judgment of the Department or Agency head additional conditions are necessary for the protection of human subjects.

Subpart B

Additional Protections for Pregnant Women, Human Fetuses and Neonates Involved in Research

Source: Federal Register: November 13, 2001 (Volume 66, Number 219), Rules and Regulations, Page 56775-56780, from the Federal Register Online via GPO Access [wais.access.gpo.gov] [DOCID:fr13no01-9].

§46.201 To what do these regulations apply?

(a) Except as provided in paragraph (b) of this section, this subpart applies to all research involving pregnant women, human fetuses, neonates of uncertain viability, or nonviable neonates conducted or supported by the Department of Health and Human Services (DHHS). This includes all research conducted in DHHS facilities by any person and all research conducted in any facility by DHHS employees.

(b) The exemptions at Sec. 46.101(b)(1) through (6) are applicable to this subpart.

(c) The provisions of Sec. 46.101(c) through (i) are applicable to this subpart. Reference to State or local laws in this subpart and in Sec. 46.101(f) is intended to include the laws of federally recognized American Indian and Alaska Native Tribal Governments.

(d) The requirements of this subpart are in addition to those imposed under the other subparts of this part.

§46.202 Definitions.

The definitions in Sec. 46.102 shall be applicable to this subpart as well. In addition, as used in this subpart:

(a) Dead fetus means a fetus that exhibits neither heartbeat, spontaneous respiratory activity, spontaneous movement of voluntary muscles, nor pulsation of the umbilical cord.

(b) Delivery means complete separation of the fetus from the woman by expulsion or extraction or any other means.

(c) Fetus means the product of conception from implantation until delivery.

(d) Neonate means a newborn.

(e) Nonviable neonate means a neonate after delivery that, although living, is not viable.

(f) Pregnancy encompasses the period of time from implantation until delivery. A woman shall be assumed to be pregnant if she exhibits any of the pertinent presumptive signs of pregnancy, such as missed menses, until the results of a pregnancy test are negative or until delivery.

(g) Secretary means the Secretary of Health and Human Services and any other officer or employee of the Department of Health and Human Services to whom authority has been delegated.

(h) Viable, as it pertains to the neonate, means being able, after delivery, to survive (given the benefit of available medical therapy) to the point of independently maintaining heartbeat and respiration. The Secretary may from time to time, taking into account medical advances, publish in the Federal Register guidelines to assist in determining whether a neonate is viable for purposes of this subpart. If a neonate is viable then it may be included in research only to the extent permitted and in accordance with the requirements of subparts A and D of this part.

\$46.203 Duties of IRBs in connection with research involving pregnant women, fetuses, and neonates.

In addition to other responsibilities assigned to IRBs under this part, each IRB shall review research covered by this subpart and approve only research which satisfies the conditions of all applicable sections of this subpart and the other subparts of this part.

§46.204 Research involving pregnant women or fetuses.

Pregnant women or fetuses may be involved in research if all of the following conditions are met:

(a) Where scientifically appropriate, preclinical studies, including studies on pregnant animals, and clinical studies, including studies on nonpregnant women, have been conducted and provide data for assessing potential risks to pregnant women and fetuses;

(b) The risk to the fetus is caused solely by interventions or procedures that hold out the prospect of direct benefit for the woman or the fetus; or, if there is no such prospect of benefit, the risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge which cannot be obtained by any other means;

(c) Any risk is the least possible for achieving the objectives of the research;

(d) If the research holds out the prospect of direct benefit to the pregnant woman, the prospect of a direct benefit both to the pregnant woman and the fetus, or no prospect of benefit for the woman nor the fetus when risk to the fetus is not greater than minimal and the purpose of the research is the development of important biomedical knowledge that cannot be obtained by any other means, her consent is obtained in accord with the informed consent provisions of subpart A of this part;

(e) If the research holds out the prospect of direct benefit solely to the fetus then the consent of the pregnant woman and the father is obtained in accord with the informed consent provisions of subpart A of this part, except that the father's consent need not be obtained if he is unable to consent because of unavailability, incompetence, or temporary incapacity or the pregnancy resulted from rape or incest.

(f) Each individual providing consent under paragraph (d) or (e) of this section is fully informed regarding the reasonably foreseeable impact of the research on the fetus or neonate;

(g) For children as defined in Sec. 46.402(a) who are pregnant, assent and permission are obtained in accord with the provisions of subpart D of this part;

(h) No inducements, monetary or otherwise, will be offered to terminate a pregnancy;

(i) Individuals engaged in the research will have no part in any decisions as to the timing, method, or procedures used to terminate a pregnancy; and

(j) Individuals engaged in the research will have no part in determining the viability of a neonate

§46.205 Research involving neonates.

(a) Neonates of uncertain viability and nonviable neonates may be involved in research if all of the following conditions are met:

(1) Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates.

(2) Each individual providing consent under paragraph (b)(2) or (c)(5) of this section is fully informed regarding the reasonably foreseeable impact of the research on the neonate.

(3) Individuals engaged in the research will have no part in determining the viability of a neonate.

(4) The requirements of paragraph (b) or (c) of this section have been met as applicable.

(b)Neonates of uncertain viability. Until it has been ascertained whether or not a neonate is viable, a neonate may not be involved in research covered by this subpart unless the following additional conditions have been met:

(1) The IRB determines that:

(i) The research holds out the prospect of enhancing the probability of survival of the neonate to the point of viability, and any risk is the least possible for achieving that objective, or

(ii) The purpose of the research is the development of important biomedical knowledge which cannot be obtained by other means and there will be no added risk to the neonate resulting from the research; and

(2) The legally effective informed consent of either parent of the neonate or, if neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the legally effective informed consent of either parent's legally authorized representative is obtained in accord with subpart A of this part, except that the consent of the father or his legally authorized representative need not be obtained if the pregnancy resulted from rape or incest. (c) Nonviable neonates. After delivery nonviable neonate may not be involved in research covered by this subpart unless all of the following additional conditions are met:

(1) Vital functions of the neonate will not be artificially maintained;

(2) The research will not terminate the heartbeat or respiration of the neonate;

(3) There will be no added risk to the neonate resulting from the research;

(4) The purpose of the research is the development of important biomedical knowledge that cannot be obtained by other means; and

(5) The legally effective informed consent of both parents of the neonate is obtained in accord with subpart A of this part, except that the waiver and alteration provisions of Sec. 46.116(c) and (d) do not apply. However, if either parent is unable to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of one parent of a nonviable neonate will suffice to meet the requirements of this paragraph (c)(5), except that the consent of the father need not be obtained if the pregnancy resulted from rape or incest. The consent of a legally authorized representative of either or both of the parents of a nonviable neonate will not suffice to meet the requirements of this paragraph (c)(5).

(d) Viable neonates. A neonate, after delivery, that has been determined to be viable may be included in research only to the extent permitted by and in accord with the requirements of subparts A and D of this part.

§46.206 Research involving, after delivery, the placenta, the dead fetus or fetal material.

(a) Research involving, after delivery, the placenta; the dead fetus; macerated fetal material; or cells, tissue, or organs excised from a dead fetus, shall be conducted only in accord with any applicable Federal, State, or local laws and regulations regarding such activities.

(b) If information associated with material described in paragraph (a) of this section is recorded for research purposes in a manner that living individuals can be identified, directly or through identifiers linked to those individuals, those individuals are research subjects and all pertinent subparts of this part are applicable.

\$46.207 Research not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of pregnant women, fetuses, or neonates.

The Secretary will conduct or fund research that the IRB does not believe meets the requirements of Sec.46.204 or Sec. 46.205 only if:

(a) The IRB finds that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses or neonates; and

(b) The Secretary, after consultation with a panel of experts in pertinent disciplines (for example: science, medicine, ethics, law) and following opportunity for public review and comment, including a public meeting announced in the Federal Register, has determined either:

(1) That the research in fact satisfies the conditions of Sec. 46.204, as applicable; or

(2) The following:

(i) The research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of pregnant women, fetuses or neonates;

(ii) The research will be conducted in accord with sound ethical principles; and

(iii) Informed consent will be obtained in accord with the informed consent provisions of subpart A and other applicable subparts of this part.

Subpart C

Additional DHHS Protections Pertaining to Biomedical Behavioral Research Involving Prisoners as Subjects Source: 43 FR 53655, Nov. 16, 1978.

§46.301 Applicability.

(a) The regulations in this subpart are applicable to all biomedical and behavioral research conducted or supported by the Department of Health and Human Services involving prisoners as subjects.

(b) Nothing in this subpart shall be construed as indicating that compliance with the procedures set forth herein will authorize research involving prisoners as subjects, to the extent such research is limited or barred by applicable State or local law.

(c) The requirements of this subpart are in addition to those imposed under the other subparts of this part.

§46.302 Purpose.

Inasmuch as prisoners may be under constraints because of their incarceration which could affect their ability to make a truly voluntary and uncoerced decision whether or not to participate as subjects in research, it is the purpose of this subpart to provide additional safeguards for the protection of prisoners involved in activities to which this subpart is applicable. §46.303 Definitions.

As used in this subpart:

(a) "Secretary" means the Secretary of Health and Human Services and any other officer or employee of the Department of Health and Human Services to whom authority has been delegated.

(b) "DHHS" means the Department of Health and Human Services.

(c) "Prisoner" means any individual involuntarily confined or detained in a penal institution. The term is intended to encompass individuals sentenced to such an institution under a criminal or civil statute, individuals detained in other facilities by virtue of statutes or commitment procedures which provide alternatives to criminal prosecution or incarceration in a penal institution, and individuals detained pending arraignment, trial, or sentencing.

(d) "Minimal risk" is the probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons.

§46.304 Composition of Institutional Review Boards where prisoners are involved.

In addition to satisfying the requirements in §46.107 of this part, an Institutional Review Board, carrying out responsibilities under this part with respect to research covered by this subpart, shall also meet the following specific requirements:

(a) A majority of the Board (exclusive of prisoner members) shall have no association with the prison(s) involved, apart from their membership on the Board.

(b) At least one member of the Board shall be a prisoner, or a prisoner representative with appropriate background and experience to serve in that capacity, except that where a particular research project is reviewed by more than one Board only one Board need satisfy this requirement.

§46.305 Additional duties of the Institutional Review Boards where prisoners are involved.

(a) In addition to all other responsibilities prescribed for Institutional Review Boards under this part, the Board shall review research covered by this subpart and approve such research only if it finds that:

(1) the research under review represents one of the categories of research permissible under §46.306(a)(2);

(2) any possible advantages accruing to the prisoner through his or her participation in the research, when compared to the general living conditions, medical care, quality of food, amenities and opportunity for earnings in the

prison, are not of such a magnitude that his or her ability to weigh the risks of the research against the value of such advantages in the limited choice environment of the prison is impaired;

(3) the risks involved in the research are commensurate with risks that would be accepted by nonprisoner volunteers;

(4) procedures for the selection of subjects within the prison are fair to all prisoners and immune from arbitrary intervention by prison authorities or prisoners. Unless the principal investigator provides to the Board justification in writing for following some other procedures, control subjects must be selected randomly from the group of available prisoners who meet the characteristics needed for that particular research project;

(5) the information is presented in language which is understandable to the subject population;

(6) adequate assurance exists that parole boards will not take into account a prisoner's participation in the research in making decisions regarding parole, and each prisoner is clearly informed in advance that participation in the research will have no effect on his or her parole; and

(7) where the Board finds there may be a need for follow-up examination or care of participants after the end of their participation, adequate provision has been made for such examination or care, taking into account the varying lengths of individual prisoners' sentences, and for informing participants of this fact.

(b) The Board shall carry out such other duties as may be assigned by the Secretary.

(c) The institution shall certify to the Secretary, in such form and manner as the Secretary may require, that the duties of the Board under this section have been fulfilled.

§46.306 Permitted research involving prisoners.

(a) Biomedical or behavioral research conducted or supported by DHHS may involve prisoners as subjects only if:

(1) the institution responsible for the conduct of the research has certified to the Secretary that the Institutional Review Board has approved the research under \$46.305 of this subpart; and

(2) in the judgment of the Secretary the proposed research involves solely the following:

(A) study of the possible causes, effects, and processes of incarceration, and of criminal behavior, provided that the study presents no more than minimal risk and no more than inconvenience to the subjects;

(B) study of prisons as institutional structures or of prisoners as incarcerated persons, provided that the study presents no more than minimal risk and no more than inconvenience to the subjects;

(C) research on conditions particularly affecting prisoners as a class (for example, vaccine trials and other research on hepatitis which is much more prevalent in prisons than elsewhere; and research on social and psychological problems such as alcoholism, drug addiction, and sexual assaults) provided that the study may proceed only after the Secretary has consulted with appropriate experts including experts in penology, medicine, and ethics, and published notice, in the Federal Register, of his intent to approve such research; or

(D) research on practices, both innovative and accepted, which have the intent and reasonable probability of improving the health or well-being of the subject. In cases in which those studies require the assignment of prisoners in a manner consistent with protocols approved by the IRB to control groups which may not benefit from the research, the study may proceed only after the Secretary has consulted with appropriate experts, including experts in penology, medicine, and ethics, and published notice, in the Federal Register, of the intent to approve such research.

(b) Except as provided in paragraph (a) of this section, biomedical or behavioral research conducted or supported by DHHS shall not involve prisoners as subjects.

Subpart D Additional DHHS Protections for Children Involved as Subjects in Research

Source: 48 FR 9818, March 8, 1983; 56 FR 28032, June 18, 1991.

§46.401 To what do these regulations apply?

(a) This subpart applies to all research involving children as subjects, conducted or supported by the Department of Health and Human Services.

(1) This includes research conducted by Department employees, except that each head of an Operating Division of the Department may adopt such nonsubstantive, procedural modifications as may be appropriate from an administrative standpoint.

(2) It also includes research conducted or supported by the Department of Health and Human Services outside the United States, but in appropriate circumstances, the Secretary may, under paragraph (i) of §46.101 of Subpart A, waive the applicability of some or all of the requirements of these regulations for research of this type.

(b) Exemptions at 46.101(b)(1) and (b)(3) through (b)(6) are applicable to this subpart. The exemption at 46.101(b)(2) regarding educational tests is also applicable to this subpart. However, the exemption at 46.101(b)(2) for research involving survey or interview procedures or observations of public behavior does not apply to research covered by this subpart, except for research involving observation of public behavior when the investigator(s) do not participate in the activities being observed.

(c) The exceptions, additions, and provisions for waiver as they appear in paragraphs (c) through (i) of §46.101 of Subpart A are applicable to this subpart.

§46.402 Definitions.

The definitions in §46.102 of Subpart A shall be applicable to this subpart as well. In addition, as used in this subpart:

(a) "Children" are persons who have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which the research will be conducted.

(b) "Assent" means a child's affirmative agreement to participate in research. Mere failure to object should not, absent affirmative agreement, be construed as assent.

(c) "Permission" means the agreement of parent(s) or guardian to the participation of their child or ward in research.

(d) "Parent" means a child's biological or adoptive parent.

(e) "Guardian" means an individual who is authorized under applicable State or local law to consent on behalf of a child to general medical care.

§46.403 IRB duties.

In addition to other responsibilities assigned to IRBs under this part, each IRB shall review research covered by this subpart and approve only research which satisfies the conditions of all applicable sections of this subpart.

§46.404 Research not involving greater than minimal risk.

DHHS will conduct or fund research in which the IRB finds that no greater than minimal risk to children is presented, only if the IRB finds that adequate provisions are made for soliciting the assent of the children and the permission of their parents or guardians, as set forth in §46.408.

\$46.405 Research involving greater than minimal risk but presenting the prospect of direct benefit to the individual subjects.

DHHS will conduct or fund research in which the IRB finds that more than minimal risk to children is presented by an intervention or procedure that holds out the prospect of direct benefit for the individual subject, or by a monitoring procedure that is likely to contribute to the subject's well-being, only if the IRB finds that:

(a) the risk is justified by the anticipated benefit to the subjects;

(b) the relation of the anticipated benefit to the risk is at least as favorable to the subjects as that presented by available alternative approaches; and

(c) adequate provisions are made for soliciting the assent of the children and permission of their parents or guardians, as set forth in §46.408.

§46.406 Research involving greater than minimal risk and no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition.

DHHS will conduct or fund research in which the IRB finds that more than minimal risk to children is presented by an intervention or procedure that does not hold out the prospect of direct benefit for the individual subject, or by a monitoring procedure which is not likely to contribute to the well-being of the subject, only if the IRB finds that:

(a) the risk represents a minor increase over minimal risk;

(b) the intervention or procedure presents experiences to subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social, or educational situations;

(c) the intervention or procedure is likely to yield generalizable knowledge about the subjects' disorder or condition which is of vital importance for the understanding or amelioration of the subjects' disorder or condition; and

(d) adequate provisions are made for soliciting assent of the children and permission of their parents or guardians, as set forth in §46.408.

\$46.407 Research not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children.

DHHS will conduct or fund research that the IRB does not believe meets the requirements of §46.404, §46.405, or §46.406 only if:

(a) the IRB finds that the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of children; and

(b) the Secretary, after consultation with a panel of experts in pertinent disciplines (for example: science, medicine, education, ethics, law) and following opportunity for public review and comment, has determined either:

(1) that the research in fact satisfies the conditions of §46.404, §46.405, or §46.406, as applicable, or (2) the following:

(i) the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of children; (ii) the research will be conducted in accordance with sound ethical principles;

(iii) adequate provisions are made for soliciting the assent of children and the permission of their parents or guardians, as set forth in §46.408.

§46.408 Requirements for permission by parents or guardians and for assent by children.

(a) In addition to the determinations required under other applicable sections of this subpart, the IRB shall determine that adequate provisions are made for soliciting the assent of the children, when in the judgment of the IRB the children are capable of providing assent. In determining whether children are capable of assenting, the IRB shall take into account the ages, maturity, and psychological state of the children involved. This judgment may be made for all children to be involved in research under a particular protocol, or for each child, as the IRB deems appropriate. If the IRB determines that the capability of some or all of the children is so limited that they cannot reasonably be consulted or that the intervention or procedure involved in the research holds out a prospect of direct benefit that is important to the health or well-being of the children and is available only in the context of the research, the assent of the children is not a necessary condition for proceeding with the research. Even where the IRB determines that the subjects are capable of assenting, the IRB may still waive the assent requirement under circumstances in which consent may be waived in accord with §46.116 of Subpart A.

(b) In addition to the determinations required under other applicable sections of this subpart, the IRB shall determine, in accordance with and to the extent that consent is required by §46.116 of Subpart A, that adequate provisions are made for soliciting the permission of each child's parents or guardian. Where parental permission is to be obtained, the IRB may find that the permission of one parent is sufficient for research to be conducted under §46.404 or §46.405. Where research is covered by §46.406 and §46.407 and permission is to be obtained from parents, both parents must give their permission unless one parent is deceased, unknown, incompetent, or not reasonably available, or when only one parent has legal responsibility for the care and custody of the child.

(c) In addition to the provisions for waiver contained in §46.116 of Subpart A, if the IRB determines that a research protocol is designed for conditions or for a subject population for which parental or guardian permission is not a reasonable requirement to protect the subjects (for example, neglected or abused children), it may waive the consent requirements in Subpart A of this part and paragraph (b) of this section, provided an appropriate mechanism for protecting the children who will participate as subjects in the research is substituted, and provided further that the waiver is not inconsistent with Federal, State, or local law. The choice of an appropriate mechanism would depend upon the nature and purpose of the activities described in the protocol, the risk and anticipated benefit to the research subjects, and their age, maturity, status, and condition.

(d) Permission by parents or guardians shall be documented in accordance with and to the extent required by §46.117 of Subpart A.

(e) When the IRB determines that assent is required, it shall also determine whether and how assent must be documented.

§46.409 Wards.

(a) Children who are wards of the State or any other agency, institution, or entity can be included in research approved under \$46.406 or \$46.407 only if such research is:

(1) related to their status as wards; or

(2) conducted in schools, camps, hospitals, institutions, or similar settings in which the majority of children involved as subjects are not wards.

(b) If the research is approved under paragraph (a) of this section, the IRB shall require appointment of an advocate for each child who is a ward, in addition to any other individual acting on behalf of the child as guardian or in loco parentis. One individual may serve as advocate for more than one child. The advocate shall be an individual who has the background and experience to act in, and agrees to act in, the best interests of the child for the duration of the child's participation in the research and who is not associated in any way (except in the role as advocate or member of the IRB) with the research, the investigator(s), or the guardian organization.

Policy and Assurances | OHRP Home Page

If you have questions about human subject research, click ohrp@osophs.dhhs.gov If you have questions/suggestions about this web page, click Webmaster Updated January 23, 2002

## **APPENDIX C.**

## **Summary of Procedures for Research on Human Subjects**

## Summary of Procedures for Research on Human Subjects

- 1. Review of Regulations
  - Beneficence
  - Appropriate use of subjects
  - Informed consent
  - Confidentiality
- 2. Types of Review
  - A. Expedited
    - Course proposals
    - Exempt research (e.g., surveys or observations with no subject identification)
    - Continuations with minor modifications
  - B. Full Board
    - Experimental studies
    - Research involving greater than minimal risk
    - Continuations with substantial modifications
- 3. Protocol for Reviewing Proposals
  - Screened by Chair
  - If expedited review, independently read by Chair and Vice President for Institutional Research and Planning. If concerns, submitted for full review.
  - If full review, independently read by all Board members and feedback sent to Chair. If approved, no further action; if conditionally approved, Board members meet to discuss the concerns before Chair addresses issues or Board meets with researcher; if disapproved, Board members meet with researcher.
- 4. Other Matters
  - A. Our role is **not** to proofread or edit proposals. Proposals that are not ready for review will be returned to the researcher.
  - B. It is within our responsibility to review research design. We can reject or request modification to any design that places subjects at greater than minimal risk, especially if there is another plausible design. We can and are expected to make suggestions regarding research design pertaining to the soundness of that design, even though we may approve the research as it pertains to human subjects' issues. Regulations charge us with the responsibility to guard against research that is not supported by a clear

rationale. In other words, it is not appropriate to place subjects at even minimal risk, without a clear goal, just for the sake of doing a research project.

Revised from Jo Ellen Vespo's September 12, 2001 Agenda

# **APPENDIX D.**

# **Teaching Proposal:**

**In-class Research Projects Application** 

### UTICA COLLEGE Institutional Review Board Teaching Proposal: In-class Research Projects Application, Part I

**Directions**: Please use the below form for your proposal. You only need to obtain initial approval with this application **once** for research-designated courses that will be repeated without modifications. However, you need to ask for an extension every semester that the course is being taught using Appendix F of the IRB Manual. (Modifications include, but are not limited to, changes affecting course numbers, titles, and descriptions).

Upon receiving course approval from the IRB, you will need to complete an *Inclass Research Projects Checklist for Approved Course, Part II* form (Appendix F of the IRB Manual, which can be found at http://www.utica.edu/plananalysis/). This form is a guideline to assure the IRB that each student research project involves minimal risk, adheres to ethical standards, maintains the confidentiality and informed consent of the subjects, and generally is to be used only for classroom purposes. **Appendix F must be completed each semester that the course is taught.** 

Course Prefix, Number and Title:

Instructor's Name:

Telephone Number:

When, how often, and by whom is the course taught?

Is this offering a one-time, research-oriented course?

**Directions:** Please address the following sections A-F in the boxes provided below. If there is an arrow  $(\downarrow)$  in the box then type on the line below the arrow. The box will expand to accommodate the length of text.

**Note:** If you cut and paste anything into the boxes, please make sure that your margins are the same as the margins in this application (1 inch). If you are having trouble cutting and pasting into the boxes, check if your document style is set to **normal** throughout the document. If you want to tab inside a box, use "control tab." Tab alone creates a new box.

A.

**1.** Describe the purpose of the research projects:  $\downarrow$ 

Β.

1. Describe the method of data collection:  $\checkmark$ 

#### C.

1. Describe the sample and how subjects will be selected:  $\downarrow$ 

#### D.

**1.** Describe how consent will be obtained:  $\downarrow$ 

#### E.

**1.** Describe how confidentiality will be protected:  $\downarrow$ 

#### F.

1. Describe the benefits and risks, if any, to the subjects, students, and community-at-large:  $\downarrow$ 

Please cut and paste a copy of the description of the assignment given to the students in the box below.

Please cut and paste a copy of the course syllabus in the box below. **Note:** A copy of the syllabus must be submitted each semester that the course is taught.

Date

Instructor's Signature

# **APPENDIX E.**

# **Research Proposal Application**

### UTICA COLLEGE Institutional Review Board Research Proposal Application

**Directions:** Please complete this application by typing your responses in the boxes provided. If there is an arrow  $(\downarrow)$  in the box then type on the line below the arrow. Your text should be black while the application text is blue. If you cut and paste anything into the boxes please make sure that your margins are the same as the margins in this application (1 inch).

If you are having trouble cutting and pasting into the boxes, check if your document style is set to **normal** throughout the document. If you want to tab inside a box use "control tab." Tab alone creates a new box.

**Note:** These boxes will expand to accommodate text. Write NA in the box if the category does not apply. Upon completion, **submit two signed copies of this application and any additional materials necessary for your proposal.** 

If the researcher is a student, then this proposal must include the faculty research advisor's name and telephone number. The faculty research advisor first must approve all student research proposal applications before they are submitted to the IRB.

Faculty Research Advisor's Name	Telephone Number

Researcher's			
Name(s):			
Telephone Number:			
Title of Research			
Proposal:			
Anticipated Dates of Data	Begin	End	
Collection:	Date:	Date:	

- I. Review Type: Select <u>one</u> of the following three review types and justify your selection in the box provided. Make sure to refer to the criteria located in the IRB Manual located on the UC website at <u>http://www.utica.edu/instresearch/index.htm</u>.
  - C. *Exempt* (Surveys or observations with no subject identification, research conducted in established or commonly accepted educational settings, collection or study of existing data, documents, etc. If publicly available, this may also include taste and food quality evaluation and consumer acceptance studies. Refer to pages 47-49 of the IRB Manual).

**1.** Provide Rationale for Review Choice: ↓

D. *Expedited* (Proposals with minimal risk, course proposals, and continuations of previously approved applications with minor modifications. Refer to pages 13-17 & 54-56 of the IRB Manual).

#### 1. Provide Rationale for Review Choice: ↓

E. *Full Board* (May include experimental studies, research involving greater than minimal risk, research involving children, continuations of previously approved applications with substantial modifications. Refer to Appendix C, pages 75-76 of the IRB Manual).

1. Provide Rationale for Review Choice: ↓

**II. Describe the rationale for your study** (required for all applications).

A. Rationale: ↓

#### **III.** Research Design (required for all applications).

A. Subjects

1. Describe characteristics: ↓

2. Describe affiliation (such as institutional, classroom, or organizational):  $\downarrow$ 

3. List and/or attach any documents used to solicit subjects: ↓

**4.** Describe general state of health: ↓

5. If not "adult normal" group, include justification: ↓

#### Procedures

**1.** Describe research procedures:  $\downarrow$ 

2. Describe tools/materials/tests/instruments (including reliability and validity): ↓

3. Cut and paste any attachments on the line below the arrow for the abovementioned tools and instruments. Include such things as copies of survey materials, or copies of instruments, and headings.

Copies of the subject's consent form should be included in Section IV.E. If you do not have the item(s) available in electronic format then attach a copy to this document and list them below in the order that they are attached:  $\downarrow$ 

**IV. Type of consent** (not required for **exempt** applications).

A. Describe how the consent was obtained:  $\downarrow$ 

**B.** Describe where the consent was obtained:  $\downarrow$ 

C. If subjects are minors or mentally incompetent, then describe how permission was granted:  $\downarrow$ 

D. If subjects are minors or mentally incompetent, then describe by whom permission was granted:  $\downarrow$ 

E. Please cut and paste a copy of the subject's consent form into this box below the arrow.  $\downarrow$ 

F. Please cut and paste a copy of the researcher's consent form into this box below the arrow.  $\checkmark$ 

### Please complete this IRB checklist.

(Not required for **exempt** applications).

<u>46.116</u> - Informed Consent Checklist: Basic and Additional Elements. Refer to the consent form that you submitted in Section IV.E. In completing this form please indicate the number of the paragraph in which the item appears by typing it into the boxes on the left-hand side of this sheet.

	A statement that the study involves research.
	An explanation of the purposes of the research.
	The expected duration of the subject's participation.
	A description of the procedures to be followed.
	Identification of any procedures which are experimental.
	A description of any reasonably foreseeable risks or discomforts to the subject.
	A description of any benefits to the subject or to others which may reasonably be
	expected from the research.
	A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject.
	A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained.
<ul><li>( ) Research</li><li>( ) Rights</li><li>( ) Injury</li></ul>	An explanation of whom to contact for answers to pertinent questions about the research and research subjects' rights, and whom to contact in the event of a research-related injury to the subject.
	A statement that participation is voluntary, refusal to participate will involve no
	penalty or loss of benefits to which the subject is otherwise entitled, and the subject
	may discontinue participation at any time without penalty or loss of benefits, to which the subject is otherwise entitled.
	The following statement: "By signing this document, the subject waives no legal rights."
Additional eler	nents, if appropriate
	A statement that the particular treatment or procedure may involve risks to the
	subject (or to the embryo or fetus, if the subject is or may become pregnant), which are currently unforeseeable.
	Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent.
	Any additional costs to the subject that may result from participation in the research.
	The consequences of a subject's decision to withdraw from the research and
	procedures for orderly termination of participation by the subject.
	A statement that significant new findings developed during the course of the
	research, which may relate to the subject's willingness to continue participation, will
	be provided to the subject.
	The approximate number of subjects involved in the study.
	If research involves more than minimal risk, an explanation as to whether any
	compensation, and an explanation as to whether any medical treatments are available,
	if injury occurs and, if so, what they consist of, or where further information may be obtained.

**V. Confidentiality** (required for all applications).

A. Indicate precautions to safeguard records: ↓

**B.** Describe immediate protection of data:  $\downarrow$ 

C. Describe long-term protection of data:  $\downarrow$ 

VI. Risks and Benefits (required for all applications).

*A. Beneficial research* (such as research having **direct** therapeutic effect)
**1. Describe immediate risks:** ↓

2. Describe long-range risks: ↓

3. Provide rationale for the necessity of risk:  $\downarrow$ 

4. Provide rationale for the alternatives that were considered:  $\downarrow$ 

<u>5. Explain why these alternatives are not feasible:  $\downarrow$ </u>

6. Describe procedures protecting against/minimizing risks: ↓

7. Describe the likely effectiveness of these protections:  $\checkmark$ 

8. Assess benefits to subjects: ↓

9. Assess benefits to society in general:  $\downarrow$ 

## <u>OR</u>

*B. Non-beneficial research* (such as research involving physiological and psychological investigations)

1. Describe immediate risks: ↓

2. Describe long-range risks: ↓

**3.** Provide rationale for the necessity of risk:  $\downarrow$ 

**4.** Provide rationale for the alternatives that were considered: ↓

5. Explain why these alternatives are not feasible:  $\checkmark$ 

6. Describe procedures protecting against/minimizing risks: ↓

7. Describe the likely effectiveness of these protections:  $\downarrow$ 

8. Assess importance of knowledge to be gained: ↓

9. Explain how this information outweighs the risks: ↓

**VII. Outside Agency Involvement:** If applicable, cut and paste the appropriate documentation into the box(es) provided below. If not applicable, write NA in the box(es). If it is necessary, you can attach a copy of the documentation to your paper submission. If you do so, please indicate this in the proper box below. (Required for all applications).

A. Researchers are from Utica College, subjects are from an outside agency, and there is no outside agency IRB (e.g., a school district).

Attach documentation that permission has been granted to proceed with your study.

B. Researchers are from both Utica College and an outside agency, subjects are from either Utica College or the outside agency or both, and there is an outside agency IRB.

Attach documentation that the proposal has been submitted to or approved by the outside agency IRB.

C. Researchers are from Utica College, subjects are from an outside agency and perhaps also from Utica College, and there is an outside agency IRB.Attach documentation that the proposal has been submitted to or approved by the

D. Researchers are from an outside agency, subjects are from Utica College and perhaps also from the outside agency, and there is an outside agency IRB. Attach documentation that the proposal has been submitted to or approved by the outside agency IRB.

If more than one outside agency is involved, please complete all of the applicable categories.

### VIII. Additional Comments

**IX. References** (please type any references in the box below).

**Directions:** Please print or type your name(s), sign, and date this form below. Thank you.

Researcher's Name(s)

Researcher's Signature(s)

Date

## **APPENDIX F.**

## **Teaching Proposal:**

**In-class Research Projects Checklist for Approved Course** 

### UTICA COLLEGE Institutional Review Board Teaching Proposal: In-class Research Projects Checklist for Approved Course, Part II

**Directions**: Your course has received approval from the IRB as a course involving student research for educational purposes. (For initial approval, see Appendix D of the IRB Manual at <u>http://www.utica.edu/instresearch/index.htm</u>). Based on the description given to the IRB, it has been judged that such research projects typically involve minimal risk and are generally only used for classroom purposes. In granting this approval, the IRB holds you responsible for reviewing all student proposals to ensure that they meet with the guidelines listed below.

You also are responsible for providing the IRB with this checklist and a list of all research proposals. Any proposals that involve more than minimal risk must be submitted to the IRB for full review. These student researchers must complete the Research Proposal Application and follow its design.

**Note:** These boxes will expand to accommodate text. If you cut and paste anything into the boxes, please make sure that your margins are the same as the margins in this application (1 inch). If you are having trouble cutting and pasting into the boxes, check if your document style is set to **normal** throughout the document. If you want to tab inside a box, use "control tab." Tab alone creates a new box.

Course Prefix, Number and Title:			
Instructor's Name:			
Semester:			
Anticipated Dates of Data Collection:	Begin Date:	End Date:	
Original Course Approval Date (Append	dix D):		

- 1. Please provide the IRB with a list of all student researchers' names and the titles of their research projects by typing or cutting and pasting it into the box below.
- 2. The instructor has reviewed and approved all research proposals. Check the appropriate box.

Yes	
No	

box. (As defined by federal regulations, a risk is minimal where "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests"). See the IRB Manual (Appendix B, 46.102 Definitions, part (i) on page 50) at http://www.utica.edu/instresearch/index.htm for more information. 4. All research proposals provide the following steps to ensure confidentiality. Yes Check the appropriate box. No A. Consent forms will be kept separate from data sheets. B. Codes will be used so that no names appear on data sheets. C. Consent forms and data sheets will be kept in a secure place. D. Names will not appear in any written or oral presentations of the research findings. E. Upon completion of the study, the data will be either destroyed or filed securely. 5. All research proposals involve only Utica College students who are at least Yes eighteen years old. Check the appropriate box. No 6. All research proposals have a statement of informed consent (see attached IRB Yes

3. All research proposals involve minimal risk to the subjects. Check the appropriate

checklist) that includes the following information. Check the appropriate box.

- A. A description of the study and any possible risks involved.
- B. The name and telephone number of the researcher and/or instructor.
- C. A statement indicating that participation is voluntary and the subject can withdraw at any time without penalty.
- D. A statement that the subject may receive extra credit for agreeing to participate.
- E. A statement that a summary of the research may be presented at a conference or submitted for publication.
- F. The following statement. "By signing this document, the subject waives no legal rights."

Cut and paste a copy of each statement of informed consent into the box below using the corresponding student name(s) and project title as a heading.

7. All student researchers have read and signed a copy of the attached Ethical Responsibilities of the Researcher form. Check the appropriate box.

You are responsible for ensuring that any proposals not consistent with the above guidelines are submitted for full review. Also, the IRB maintains the right to request full review of any of the attached proposals, if the Board has any concerns.

Yes	
No	

Yes No

No

8. Please cut and paste a copy of the course syllabus into the box below, unless it has already been submitted for this semester with Appendix D.

Instructor's Signature	Date

### 46.116- Informed Consent Checklist: Basic and Additional Elements

In the boxes on the left-hand side of this checklist, reference the paragraph number of the consent form in which the below points are addressed (ex. See paragraph 2). Write NA if the category does not apply. Fill out one of these for each attached consent form.

Student Nam	e(s)			
<b>Project</b>				
Title				
	A statement that the study involves research.			
	An explanation of the purposes of the research.			
	The expected duration of the subject's participation.			
	A description of the procedures to be followed.			
	Identification of any procedures which are experimental.			
	A description of any reasonably foreseeable risks or discomforts to the subject.			
	A description of any benefits to the subject or to others which may reasonably be			
	expected from the research.			
	A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the subject.			
	A statement describing the extent, if any, to which confidentiality of records identifying the subject will be maintained.			
() Research	An explanation of whom to contact for answers to pertinent questions about the			
() Rights	research and research subjects' rights, and whom to contact in the event of a			
() Injury	research-related injury to the subject.			
	A statement that participation is voluntary, refusal to participate will involve no penalty or loss of benefits to which the subject is otherwise entitled, and the subject may discontinue participation at any time without penalty or loss of benefits, to which the subject is otherwise entitled.			
	The following statement: "By signing this document, the subject waives no legal rights."			
Additional el	ements, if appropriate			
	A statement that the particular treatment or procedure may involve risks to the subject (or to the embryo or fetus, if the subject is or may become pregnant), which are currently unforeseeable.			
	Anticipated circumstances under which the subject's participation may be terminated by the investigator without regard to the subject's consent.			
	Any additional costs to the subject that may result from participation in the research.			
	The consequences of a subject's decision to withdraw from the research and			
	procedures for orderly termination of participation by the subject.			
	A statement that significant new findings developed during the course of the research, which may relate to the subject's willingness to continue participation, will be provided to the subject.			
	The approximate number of subjects involved in the study.			
	If research involves <b>more</b> than minimal risk, an explanation as to whether any			
	compensation, and an explanation as to whether any medical treatments are			
	available, if injury occurs and, if so, what they consist of, or where further			
	information may be obtained.			

### UTICA COLLEGE Institutional Review Board

#### In-class Research Project Ethical Responsibilities of the Researcher

Course Prefix, Number and Title:		
Instructor's Name:		
Semester:		
Anticipated Dates of Data Collection:	Begin Date:	End Date:

My instructor has discussed with me the importance of (1) explaining the purpose and goals of this research project to the subject(s) and (2) protecting the identity of the subject(s). To meet these ethical responsibilities, I shall do the following:

1. I shall explain the purpose and nature of the research to the subject(s). In addition, I shall inform the subject(s) that my instructor will read the paper and also that there is the possibility that this paper may be submitted for publication or presentation at a symposium or conference, which would require that other professionals review this paper. I shall assure the subject(s) that all names will be removed from the paper prior to submitting it;

2. I shall obtain permission from the subject(s) prior to collecting data. The subject(s) will be informed that participation is strictly voluntary, and that s/he (they) may terminate participation at any time without any penalty; and

3. I shall remove all names from the paper and use pseudonyms to protect the identity of the subject(s).

Student's Signature	Date

## **APPENDIX G.**

# **Informed Consent Form Template**

## INFORMED CONSENT FORM TEMPLATE

## **Title of Research Study**

### **Invitation to Participate**

You are invited to participate in this research study investigating ...

### **Basis for Subject Selection**

You are eligible to participate in this study because ... You will be one of approximately ... to participate in this study.

### Purpose of Study

The main purpose of this study is ... Another purpose is ...

### **Procedures**

You will be asked to ... It is anticipated that your time commitment will be ...

## <u>Potential Risks</u>

There are minimal perceivable risks associated with your involvement in this research study. However, you may ... If at any time while you are participating you feel ..., please inform ... immediately. If at any time after your participation you feel ..., please seek appropriate medical treatment or contact ..., so you may be referred to a qualified academic or personal counselor. You also need to contact ..., Chair of the Utica College Institutional Review Board, at ..., if you have any questions or concerns about your rights as a participant.

## Potential Benefits

The potential benefits to you for participating in this research study are ...

### **Guarantee of Confidentiality**

To insure confidentiality, you ... At no time will your name appear on any materials or reports of the research findings (including web-site postings of the results, conference presentations, or professional publications). Materials associated with this study will be kept under lock and key in ... Your signed consent form will be stored separately from your data to insure complete confidentiality. At the conclusion of this study, all materials will be destroyed.

## Withdrawal from Participation

Participation in this study is voluntary. Your decision to participate or not to participate will not affect ... If you decide to participate, you are free to withdraw your consent and to discontinue your participation at any time with impunity. You will receive the same reward as if you had participated in the entire study.

## **Offer to Answer Any Questions**

If you have any questions about the procedures at any time, please do not hesitate to ask. If you think of questions later, please feel free to contact ... All questions about the procedures and this study in general will be answered. However, some questions may not be able to be answered until after you have completed the procedures to insure that your responses will not be affected by your knowledge of the research.

## <u>Participant's Statement</u>

I am voluntarily making the decision to participate and am at least eighteen years of age. My signature certifies that I have read and understand the aforementioned information. My signature also certifies that I have had an adequate opportunity to discuss this study with the research investigator and have had all of my questions answered to my satisfaction. I understand that by signing this document, I waive no legal rights. I also know that I shall receive a copy of this consent form for my records.

Participant's Printed Name

Participant's Signature

## **Research Investigator's Statement**

In my judgment, the aforementioned participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to do so.

Research Investigator's Printed Name

Research Investigator's Signature

Research Investigator's Telephone Number Research Investigator's E-mail Address

Informed Consent Form Template, Draft

Date

Date

# **APPENDIX H.**

# **Tips on Informed Consent**

### Office for Protection from Research Risk SPA Information Packet

### **<u>Tips On Informed Consent</u>**

The process of obtaining informed consent must comply with the requirement of 45 CFR 46.116. The document of informed consent must comply with 45 CFR 46.117. The following comments may help in the development of an approach and proposed language by investigators for obtaining consent and its approval by IRBs.

- Informed consent is a process, not just a form. Information must be presented to enable persons to voluntarily decide whether or not to participate as a research subject. It is a fundamental mechanism to ensure respect for persons through provision of thoughtful consent for a voluntary act. The procedure used in obtaining informed consent should be designed to educate the subject population in terms that they can understand. Therefore, informed consent language and its documentation (especially explanation of the study's purpose, duration, experimental procedures, alternatives, risks, and benefits) must be written in "lay language," (i.e., understandable to the people being asked to participate). The written presentation of information is used to document the basis for consent and for the subjects' future reference. The consent document should be revised when deficiencies are noted or when additional information will improve the consent process.
- Use of the first person (e.g., "I understand that...") can be interpreted as suggestive, may be relied upon as a substitute for sufficient factual information, and can constitute coercive influence over a subject. Use of scientific jargon and legalese is not appropriate. Think of the document primarily as a teaching tool, not as a legal instrument.
- Describe the overall experience that will be encountered. Explain the research activity, how it is experimental (e.g., a new drug, extra tests, separate research records, or nonstandard means of management, such as flipping a coin for random assignment or other design issues). Inform the human subjects of the reasonably foreseeable harms, discomforts, inconvenience and risks that are associated with the research activity. If additional risks are identified during the course of the research, the consent process and documentation will require revisions to inform subjects as they are recontacted or newly contacted.
- Describe the benefits that subjects may reasonably expect to encounter. There may be none other than a sense of helping the public-at-large. If payment is given to defray the incurred expense for participation, it must not be coercive in amount or method of distribution.
- Describe any alternatives to participating in the research project. For example, in drug studies the medication(s) may be available through their family doctor or clinic without the need to volunteer for the research activity.

- The regulations insist that the subjects be told the extent to which their personally identifiable private information will be held in confidence. For example, some studies require disclosure of information to other parties. Some studies inherently are in need of a Certificate of Confidentiality, which protects the investigator from involuntary release (e.g., subpoena) of the names or other identifying characteristics of research subjects. The IRB will determine the level of adequate requirements for confidentiality in light of its mandate to ensure minimization of risk and determination that the residual risks warrant involvement of subjects.
- If research-related injury (i.e., physical, psychological, social, financial, or otherwise) is possible in research that is more than minimal risk (see 45 CFR 46.102[g]), an explanation must be given of whatever voluntary compensation and treatment will be provided. Note that the regulations do not limit injury to "physical injury." This belief is a common misinterpretation.
- The regulations prohibit waiving or appearing to waive any legal rights of subjects. Therefore, for example, consent language must be carefully selected that deals with what the institution is <u>voluntarily</u> willing to do under circumstances, such as providing for compensation beyond the provision of immediate or therapeutic intervention in response to a research-related injury. In short, subjects should not be given the impression that they have agreed to and are without recourse to seek satisfaction beyond the institution's <u>voluntarily</u> chosen limits.
- The regulations provide for the identification of contact persons who would be knowledgeable to answer questions of subjects about the <u>research</u>, <u>rights as a research subject</u>, and <u>research-related injuries</u>. These three areas must be explicitly stated and addressed in the consent process and documentation. Furthermore, a single person is not likely to be appropriate to answer questions in all areas because of potential conflicts of interest or the appearance of such. Questions about the research are frequently best answered by the investigator(s). However, questions about the rights of research subjects or research-related injuries (where applicable) may best be referred to those individuals not on the research team. These questions could be addressed to the IRB, an ombudsman, an ethics committee, or other informed administrative body. Therefore, each consent document can be expected to have at least two names with local telephone numbers for contacts to answer questions in these specified areas.
- The statement regarding voluntary participation and the right to withdraw at any time can be taken almost verbatim from the regulations (45 CFR 46.116[a][b]). It is important not to overlook the need to point out that no penalty or loss of benefits will occur as a result of <u>both</u> not participating or withdrawing at any time. It is equally important to alert potential subjects to any foreseeable consequences to them should they unilaterally withdraw while dependent on some intervention to maintain normal function.
- Don't forget to ensure provision for appropriate additional requirements, which concern consent. Some of these requirements can be found in sections 46.116(b), 46.205(a)(2), 46.207(b), 46.208(b), 46.209(d), 46.305(a)(5-6), 46.408(c), and

46.409(b). The IRB may impose additional requirements that are not specifically listed in the regulations to ensure that adequate information is presented in accordance with institutional policy and local law.

3/16/93