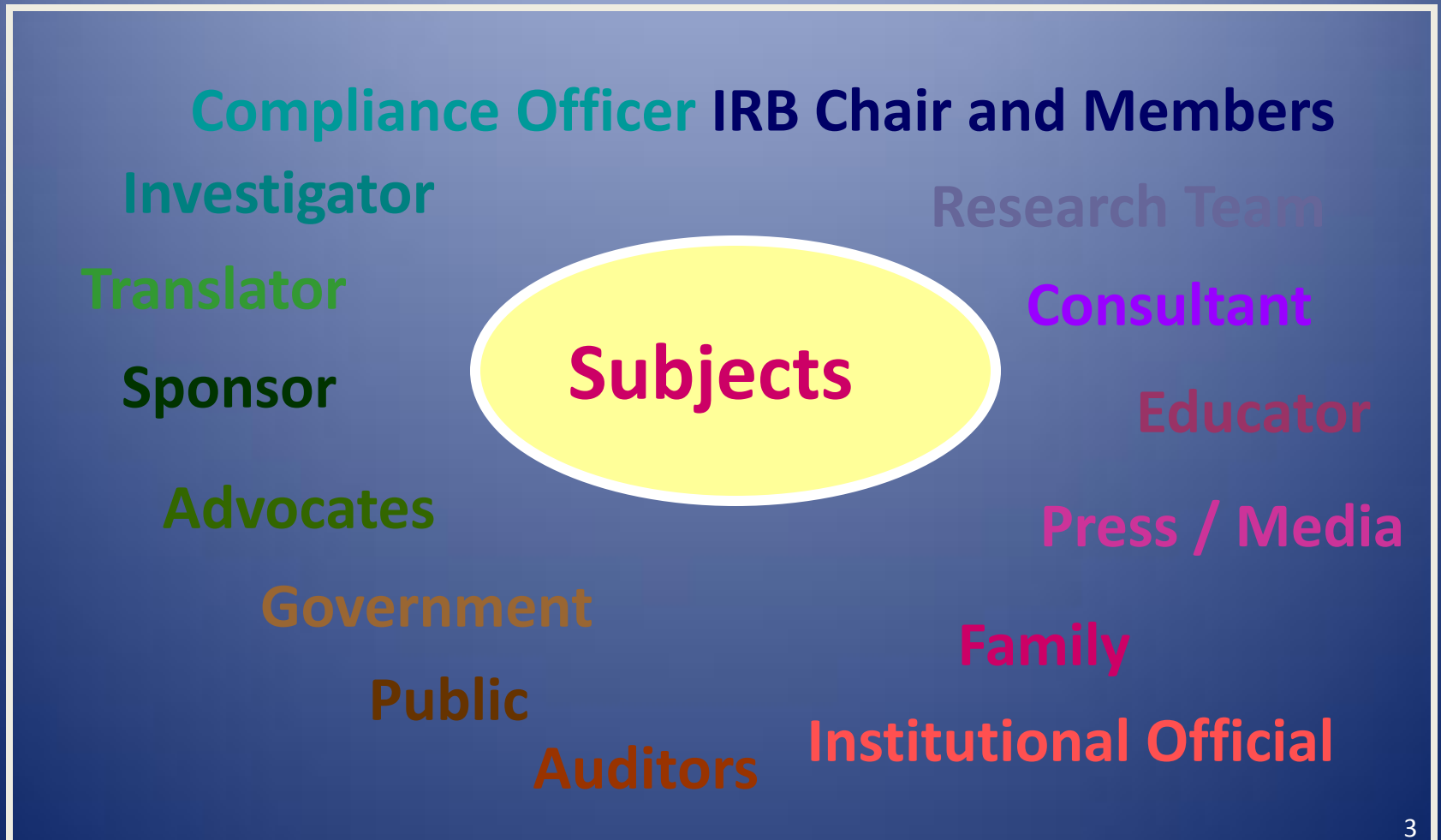


IRB  
Institutional Review Board  
Background and Process

Dara Rosenberg DDS, MS, MPH  
Director, Department of Dentistry  
Chair, IRB

- History and Ethical Principles
- Research Categories Covered
- Informed Consent
- Guidance on Completing the IRB Application

# Protecting Human Subjects is a Shared Responsibility



# History and Ethical Principles of Human Subjects Research

# Ethical Principles

- **Nuremburg Code**
- **Declaration of Helsinki**
- **The Belmont Report**

# Nuremberg

**During the Nuremberg War Crimes Trials, 23 German doctors were charged with crimes against humanity for “performing medical experiments upon concentration camp inmates and other living human subjects, without their consent, in the course of which experiments the defendants committed the murders, brutalities, cruelties, tortures, atrocities, and other inhuman acts.”**



Prior to the Nuremberg Code there was no generally accepted code of conduct governing the ethical aspects of human research.

# The Nuremberg Code (1947)

As part of the verdict, the Court enumerated some rules for "Permissible Medical Experiments", now known as the "Nuremberg Code". These rules include:

- **voluntary consent**
- **benefits outweigh risks**
- **ability of the subject to terminate participation**



# Declaration of Helsinki



## Recommendations Guiding Medical Doctors in Biomedical Research Involving Human Subjects

1964....(revised 1975, ...through 2000)

*“Concern for the interests of the subject must always prevail  
over the interests of science and society.”*

The Declaration, created by the World Medical Association, developed the 10 principles first stated in the Nuremberg Code and addressed clinical research, reflecting changes in medical practice from the term 'Human Experimentation'.

- The 1975 revision introduced the concept of oversight by an 'independent committee' (Article 1.2)
- This became a system of Institutional Review Boards in the US.
- In the US regulations governing IRBs began in 1981 and are now part of the Common Rule.

# Tuskegee Syphilis Study

American medical research project conducted by the U.S. Public Health Service from 1932 to 1972, examined the natural course of untreated syphilis in black American men. The subjects, all impoverished sharecroppers from Macon county, Alabama, were unknowing participants in the study; they were not told that they had syphilis, nor were they offered effective treatment.



## 1974: National Research Act (PL 93-348)

Established a National Commission for Protection of Human Subjects of Biomedical and Behavioral research.

Tasked to identify the basic ethical principles that should underlie human research, and develop guidelines to be followed in research to assure compliance with those principles.

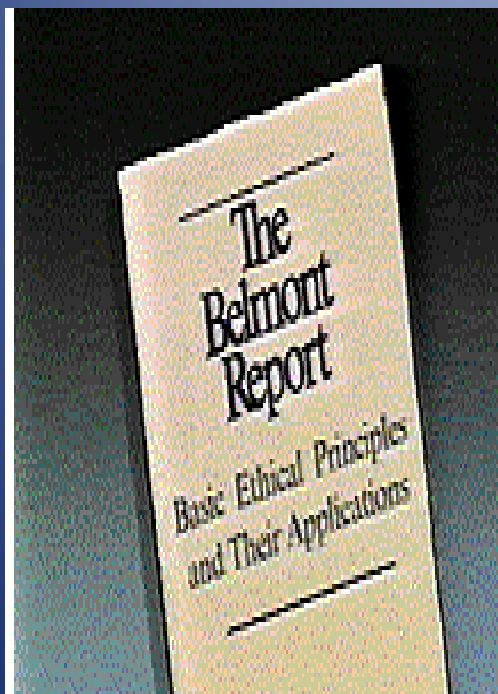
Mandated to consider:

1. Boundaries between research and practice of medicine
2. Guidelines for the selection of human subjects
3. The role of risk-benefit to determine if research is appropriate
4. The nature and definition of informed consent in various research settings

## 1978 – The Belmont Report

- Regulations for protection of human subjects 45 CFR part 46 was revised based upon the Belmont report.
- The three fundamental ethical principles for all human subject research identified in the Belmont Report remain the basis for the HHS human subject protection regulations.
- In 1991, 14 other Federal departments and agencies adopted these rules, now known as the “Common Rule”

“The objective ( of the Belmont Report) is to provide an analytical framework that will guide the resolution of ethical problems arising from research involving human subjects.”



- **Beneficence**

- Do no harm
- Maximize benefits & Minimize harm

- **Justice**

- Distribution of burden and benefits is equitable

- **Respect for persons**

- Individual autonomy is respected
- Persons with diminished autonomy need extra protections

# Basic Protections



**Assurance** of Compliance



Institutional Review **Board**



Legally Effective  
Informed **Consent**



# Institutional Assurance

- Required when engaged in non-exempt human subject research
- Documentation of institution's commitment to comply with applicable regulations
- Principal method of compliance oversight
- Federalwide Assurance (FWA) and registration with HHS Office for Human Research Protections



# HHS Regulations (45 CFR part 46)

HHS will conduct or support non-exempt human subject research only if:

- the institution has an OHRP-approved assurance, and
  - the institution has certified to HHS
    - research was reviewed and approved by IRB, and
    - the research will be subject to continuing review
- §46.103(b) & (f)



# Institutional Review Board

*A committee charged with the review of human subject research to ensure that the rights and welfare of research subjects are adequately protected.*

# Types of IRB Review

- Convened meeting of IRB
- Expedited review
  - minor changes to approved research
  - no greater than minimal risk and on “list” at:  
<http://www.hhs.gov/ohrp/policy/index.html#expedited>

# Exempt Research Categories\*

1. Normal educational practices in established educational settings
2. Educational tests, surveys, interviews, or observation of public behavior -unless identified & sensitive\*\*
3. Research on elected or appointed public officials or candidates for public office
4. Research using existing data, if publicly available or recorded without identifiers
5. Evaluation of public benefit service programs
6. Taste and food quality evaluation and consumer acceptance studies

46.101(b)(1-6)

\*\* does not apply to research with children except for research involving observation of public behavior when investigator(s) do not participate in the activities being observed.

\*None of the categories apply to Subpart C: prisoner research

# Expedited Review

**<sup>1</sup> An expedited review procedure consists of a review of research involving human subjects by the IRB chairperson or by one or more experienced reviewers designated by the chairperson from among members of the IRB in accordance with the requirements set forth in [45 CFR 46.110](#).**

[Source: 63 FR 60364-60367, November 9, 1998](#)

## Categories of Research That May Be Reviewed by the Institutional Review Board (IRB) through an Expedited Review Procedure

(A) Research activities that

- (1) present no more than minimal risk to human subjects, and
- (2) involve only procedures listed in one or more of the following categories:

## Research Categories

(1) Clinical studies of drugs and medical devices only when :

- (a) an investigational new drug application (21 CFR Part 312) is not required.
- (b) an investigational device exemption application (21 CFR Part 812) is not required;

(2) Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture:

- (a) from healthy, non-pregnant adults who weigh at least 110 pounds. The amounts drawn may not exceed 550 ml in an 8 week period and collection may not occur more frequently than 2 times per week; or
- (b) from other adults and children 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 2 times per week.

### (3) Prospective collection of biological specimens for research purposes by noninvasive means.

Examples: (a) hair and nail clippings in a nondisfiguring manner; (b) deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction; (c) permanent teeth if routine patient care indicates a need for extraction; (d) excreta and external secretions (including sweat); (e) uncannulated saliva collected either in an unstimulated fashion or stimulated by chewing gumbase or wax or by applying a dilute citric solution to the tongue; (f) placenta removed at delivery; (g) amniotic fluid obtained at the time of rupture of the membrane prior to or during labor; (h) supra- and subgingival dental plaque and calculus, provided the collection procedure is not more invasive than routine prophylactic scaling of the teeth and the process is accomplished in accordance with accepted prophylactic techniques; (i) mucosal and skin cells collected by buccal scraping or swab, skin swab, or mouth washings; (j) sputum collected after saline mist nebulization



(4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves.

Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging; (d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

(5) Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for non-research purposes (such as medical treatment or diagnosis).

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

(8) Continuing review of research previously approved by the convened IRB where the remaining research activities are limited to data analysis.

(9) Continuing review of research, where the IRB has determined and documented that the research involves no greater than minimal risk and no additional risks have been identified.

# Criteria for IRB Approval

Findings under §46.111:

- **Risks minimized**
- **Risk/benefit ratio reasonable**
- **Subject selection equitable**
- **Informed consent – obtained & documented (unless waived)**

# Criteria for IRB Approval, cont'd

Findings under §46.111:

- **Data monitoring, as appropriate**
- **Privacy and confidentiality protections**
- **Safeguards for vulnerable subjects**



# Informed Consent

***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***

**§46.111(a)(4)**

# Informed Consent

## Key principles of the informed consent process:

- *Full disclosure* of the nature of the research and the subject's participation,
- *Adequate comprehension* on the part of the potential subjects
- The subject's *voluntary choice* to participate
- Regulations do not recognize ‘passive consent’

# Basic Elements of Informed Consent

- **Research**
  - purpose
  - duration
  - procedures
- **Risks**
- **Benefits**
- **Alternatives**
- **Confidentiality**
- **Compensation for injury**
- **Whom to contact**
- **Right to refuse or withdraw without penalty**

§46.116(a)

**Note: Additional elements, when appropriate**  
**§46.116(b)**

# Additional Elements [§46.116(b)]

- **Risks related to pregnancy**
- **Anticipated reasons for termination from the study**
- **Costs**
- **Consequences of withdrawal**
- **New Findings**
- **Number of subjects**



# Waiver Written Documentation – Informed Consent

IRB may waive documentation if it finds  
either:

- consent form only record linking subject and research;  
*AND*
- principal risk from breach of confidentiality.

*OR*

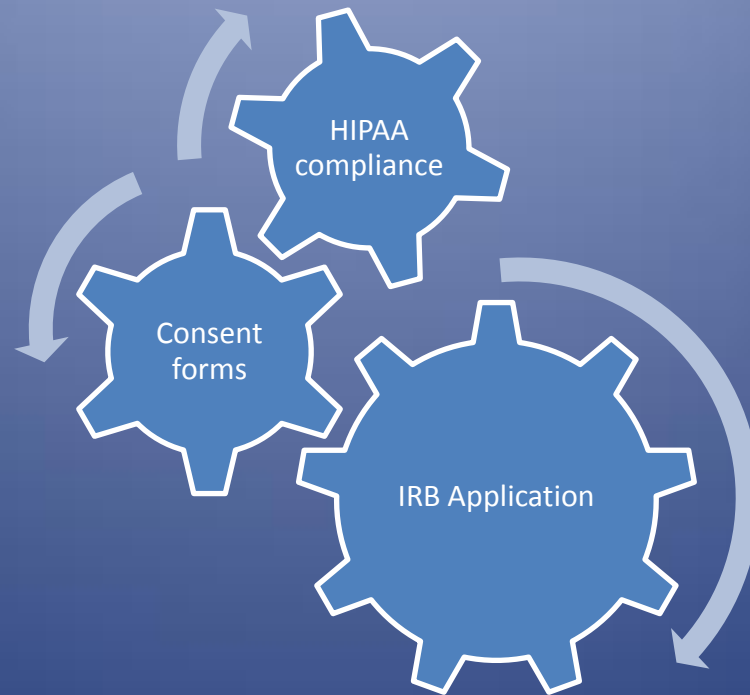
- minimal risk research; *AND*
- research procedures do not require written IC if done  
outside research context

§46.117(c)

# The Consent Process

*Informed consent is not a single event or just a form to be signed -- rather, it is an on-going process that takes place between the investigator and the prospective subject.*

# Completing the IRB Process



## **1. Cover letter**

- Briefly describe the study. The Principal Investigator (PI), must be a licensed or certified health professional. He/she must sign the letter.
- Include all investigators' current email addresses

## **2. IRB application**

- Delete application instructions that are written in italics when responding to each section.
- All investigators need to sign the application.

## **3. Consent form(s)**

- Use the St. Barnabas Hospital letterhead form.
- If you believe that your study does not require written informed consent, you must justify the reason(s) for your belief by letter to the IRB.

#### **4. HIPAA Compliance Assurance form(s)**

- Each researcher listed in the study must complete the HIPAA training (link to site) and sign a form. (If you have several studies, you must complete a form for each one.)

#### **5. Application fee: \$300.00**

#### **6. Additional document(s)**

- Copies of questionnaires used in the study, if applicable.
- Copies of data collection tools, if applicable.

#### **7. Email the completed application to:**

- [irb@stbarnabas-ny.org](mailto:irb@stbarnabas-ny.org)

#### **8. Submit a hard copy of the entire completed application package**

# HIPAA Compliance

**HIPAA applies to all research studies which involve the use or disclosure of individually identifiable protected health information (“PHI”).**

Research studies affected by HIPAA include both:

- (i) record research, (i.e., research using previously existing PHI, such as research involving a review of previously created medical records or previously collected tissue specimens)
- (ii) research involving treatment of research participants such as clinical trials.

All investigators are required to present proof of completion of HIPAA privacy training as it relates to research activities. The training consists of an on-line tutorial entitled, “Application of HIPAA to Research Activities,” and the review of all research related HIPAA policies of St. Barnabas Hospital

# Institutional Review Board

## HIPAA Compliance Assurance Letter

Date: \_\_\_\_\_

Study Title: \_\_\_\_\_

Study Number: \_\_\_\_\_

I have viewed the slide presentation entitled “Research Training Module,” related to privacy in the context of human research. I understand the implications contained therein and will fully comply with all the necessary regulations related to its implementation. Further I have read and understand St. Barnabas Hospital policies known as [HIPAA-5](#): “De-Identifying and Re-Identifying Patient’s Health Information” and [HIPAA-9](#): “Use of Patient Information in the Conduct of Research Activities” and have read and understand the St. Barnabas [“Patient Privacy Notice”](#) that St. Barnabas provides to all patients.

As a researcher, I agree to uphold the privacy rights, as delineated in the above policies, of all research volunteers who are part of any research project to which I help to conduct. I understand that failure to comply with HIPAA regulations related to privacy of protected health information may involve sanctions upon myself and impact on my ability to conduct research at St. Barnabas Hospital and its facilities.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (please print)

\_\_\_\_\_  
Department and Title



# Completing the IRB Application

## APPLICATION FOR RESEARCH PROJECT

*(Please note that all directions for completing this application have been italicized for your convenience. Delete the directions when you submit your completed application. Handwritten applications will not be accepted. You should add space within the document as your needs dictate.)*

**Date:** \_\_\_\_\_

**TITLE OF PROPOSED PROJECT:** \_\_\_\_\_

\_\_\_\_\_

**I. INVESTIGATORS:** *(Please note that the person listed first here will be considered the Principal Investigator (PI) for the purposes of this IRB. The PI must be a member of the SBH Medical Staff (attending). Residents and medical students are prohibited from being the PI. Please add more lines as needed).* (IMPORTANT: Please sign at the end of the application)

	<b>Name (with title)</b>	<b>Staff Appointment</b>	<b>Department</b>	<b>E-mail Address</b>
<b>1. (PI)</b>				
<b>2.</b>				
<b>3.</b>				
<b>4.</b>				
<b>5.</b>				
<b>6.</b>				
<b>7.</b>				

## II. RESEARCH TYPE(S):

<b>Observation Study</b> <b>(mark all that apply)</b>	<b>Interventional Study</b>
<input type="checkbox"/> Case Report	<input type="checkbox"/> Controlled
<input type="checkbox"/> Case Series	<input type="checkbox"/> Uncontrolled
<input type="checkbox"/> Cross Sectional	<input type="checkbox"/> Others: _____
<input type="checkbox"/> Cohort	_____
<input type="checkbox"/> - <input type="checkbox"/> Chart Review	
<input type="checkbox"/> Literature Review	
<input type="checkbox"/> Prospective	
<input type="checkbox"/> Retrospective	
<input type="checkbox"/> Others: _____	
-	

### III. SUBJECTS OF PROPOSED PROJECT:

1. HUMANS \_\_\_\_\_ ANIMALS \_\_\_\_\_ BOTH \_\_\_\_\_

2. The number of subjects that you expect to study \_\_\_\_\_

3. Participation of Women and Minorities: *(Federal guidelines require that IRBs “monitor and encourage” the participation of women and minorities in clinical research protocols. Please describe here the anticipated participation of women, racial and ethnic groups and non-English speaking populations. If women and minorities are not to be included, a strong justification must be provided.*

### IV. FOR PROJECTS THAT WILL USE AN INVESTIGATIONAL DRUG OR DEVICE:

•IND or IDE Number: \_\_\_\_\_

•Name of Exemption Holder: \_\_\_\_\_

**V. PROJECTED DURATION OF RESEARCH:** *(IRB approval is generally granted for one year. Please indicate the proposed chronology of the project, and your anticipation of renewal.)*

**VI. LOCATION OF RESEARCH:** *(List exact places (ambulatory sites etc.) that patients will be recruited, where any procedures will takes place, as well as where any lab tests will be done.)*

**VII. OTHER LOCATIONS:** *(If this is a multi-center trial, or has been previously conducted elsewhere, indicate the specifics of that information here.)*

**VII. ESTIMATED ANNUAL BUDGET:**

- 1. Equipment/Supplies *(itemize by category) (estimate resources to be used):*
  
- 2. Lab/Treatment Costs *(cost per test or treatment):*

Test	Cost

3. Source of Funding:

## **IX. POTENTIAL CONFLICT OF INTEREST:**

*(If any of the investigators or the St. Barnabas Hospital have a proprietary interest in a drug, device or procedure under investigation, or might stand to benefit financially in any way from the results of the investigation, that information must be disclosed here.)*

## **X. CONFIDENTIALITY OF STUDY DATA:**

*(Describe the procedures for safeguarding the confidentiality of the study data and the identity of study subjects. Please note that all study data must be coded (Hospital Unit numbers, Social Security numbers, subject initials, phone numbers and addresses are all considered to be personal identifiers, and should not be used as coding mechanisms.) A unique code should be used for all study subjects. Indicate the secure location where data will be stored and who will have access.)*

### **•VULNERABLE CLASSES:**

*(If any of the following vulnerable classes will be included in your study describe what additional safeguards you will put in place to assure the protection of their rights:*

- Persons under the age of eighteen*
- Pregnant women*
- Psychiatric patients*
- Prisoners*
- Persons who are institutionalized*
- Persons who cannot give informed consent. )*

## •XII. ABSTRACT/INTRODUCTION:

• *What do you intend to do? Why is the study important? What has already been done? How are you going to do the study?*

## •XIII. BACKGROUND AND SIGNIFICANCE:

• *Describe past studies and efforts in relation to this project (footnote where appropriate), critically evaluate existing knowledge and specifically identify gaps that the project is intended to fill. State the importance of the research project by relating the specific aims to the broad, long-term objectives.*

## XIV. SPECIFIC AIMS:

*State the broad, long-term objectives and describe realistically what the specific research project is intended to accomplish and/or what hypothesis is to be tested.*

## **XV. EXPERIMENTAL DESIGN AND METHODS:**

*(Outline experimental design and procedures to be used to accomplish the specific aims of the project.)*

•**Data Collection:** *(Means by which data will be collected (i.e. data, records, etc. Retrospective Prospective, number in study). Will information be collected specifically for study or routine patient care? If a study questionnaire is to be used, please attach a copy. If any handouts are to be given to a patient, those handouts should also be attached.)*

•**Patient Selection:** *(Characteristics of population – number, age, sex, ethnic background, health status, criteria for inclusion and exclusion in study. Include a detailed list of exclusion criteria.)*

•**Subject recruitment:** *(How and where will subjects be recruited? If any fliers or advertisements are to be used, they should be attached.)*



- **Potential Benefits:** *(Provide a realistic summary of possible benefits to subjects who participate.)*
- **Potential risks:** *(Physical, psychological, social, legal and assess their likelihood and seriousness.)*
- **Confidentiality of Study Data:** *(Describe procedures for protecting confidentiality and provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects.)*
- **Compensation to Subjects:** *(A statement as to whether the subject will be provided with any compensation for participations in the study. Indicate the amount.)*
- **Statistical analysis:** *(Provide details as to how the data collected will be analyzed (statistical tests to be used) and interpreted.)*

**LITERATURE CITATIONS** *(Please list the sources that you used in developing the background section of this application. Previous studies on a similar topic should also be listed).*

**APPROVAL OF CONCERNED DEPARTMENT DIRECTORS:**

<u>DEPARTMENT</u>	<u>DIRECTOR'S SIGNATURE</u>	<u>DATE</u>
1. _____	_____	_____
2. _____	_____	_____
3. _		

**SIGNATURE OF PRINCIPAL INVESTIGATOR:** \_\_\_\_\_

**SIGNATURE(S) OF OTHER INVESTIGATOR(S):** \_\_\_\_\_  
\_\_\_\_\_