NIEHS IRB STANDARD FORMAT FOR PROTOCOLS
for submission with Initial Review Application (form NIH-1195)

a. **Precis.** In 400 words or fewer, provide a description of the objectives, study population, design, and outcome parameters.

b. **Introduction:** Describe the background, including human subject or animal research and references that are relevant to the design and conduct of the study. Where new techniques or procedures are to be used, a description of preliminary or early work should be provided. If an FDA Investigational New Drug (IND) is to be used, animal data on the drug should be included. If the study is one for which a Clinical Investigator's Brochure (CIB) is provided, one copy of the CIB must be available to the IRB when the protocol is reviewed. A summary of the relevant features of the CIB should be included in the protocol.

c. **Objectives**: State the objectives of the study, whenever possible, as hypotheses.

d. **Study Design and Methods:** Describe the involvement of human subjects (see section (h), below) including initial evaluation procedures and screening tests, phases, procedures and sequence of the study. Separate standard and experimental aspects of the study as much as possible. Describe alternatives to experimental therapy if they exist. Give detailed procedures for treatment, dose adjustments, etc. Describe the randomization procedure, if applicable. Address the experience of investigators if procedures are to be performed for which the investigators have not been specifically credentialed.

e. **Inclusion and exclusion criteria:** These must be included in the protocol.

f. **Monitoring Subjects and Criteria for Withdrawal of Subjects from the Study:** Describe the types, frequency and duration of tests, admissions, outpatient visits. Consider specifying a monitor if the study involves a blinded design. Define stop points and criteria for withdrawing subjects from the study.

g. **Analysis of the Study:** Delineate the precise outcomes to be measured and analyzed. Describe how these results will be measured and statistically analyzed. Delineate methods used to estimate the required number of subjects. Describe power calculations if the study involves comparisons.

h. **Human Subject Protections:** Protocols without this section will not be accepted for IRB review.

i. Rationale for Subject Selection:

The protocol must include (a) a rationale for research subject selection based on a review of gender/ethnic/race categories at risk for the disease/condition being studied; (b) strategies/procedures for recruitment (including advertising, if applicable); and (c) justification for exclusions, if any. If the protocol involves subject enrollment at multiple sites, describe plans for ensuring appropriate IRB review and approval at each site.

Explain the rationale for the involvement of special classes of subjects, if any, such as fetuses, pregnant women, children, cognitively impaired individuals, prisoners or other institutionalized individuals, or others who are likely to be vulnerable. Reference the appropriate Clinical Center Medical Administrative Series (hyperlink to http://ohsr.od.nih.gov/New/mpafwa_docmas.html) or Federal Regulations Subparts (hyperlink to http://ohsr.od.nih.gov/guidelines/45cfr46.html) as necessary when discussing the research involvement of these subjects. Discuss what, if any, procedures or practices will be used in the protocol to minimize their susceptibility to undue influences and unnecessary risks (physical, psychological, etc.) as research subjects.

ii. Evaluation of Benefits and Risks/Discomforts:

Describe the potential benefits to subjects or to others that may reasonably be expected from the research. If volunteers are involved, specify compensation, if applicable.

Describe any potential risks -- physical, psychological, social, legal, or other -- and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects. Describe the procedures for protecting against or minimizing any potential risks, such as violations of confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of subjects.

Discuss why the risks to subjects are reasonable in relation to the anticipated benefits and in relation to the importance of the knowledge that may reasonably be expected to result.

iii. Consent and Assent Processes and Documents

Describe the consent procedures to be followed, including the circumstances in which consent will be sought and obtained, who will seek it (e.g., contract staff, Principal Investigator, etc.), the nature of the information to be provided to prospective subjects, and the method of documenting consent.

The proposed consent document must be attached. It should be written in the second person, in language understandable to someone who has not completed high school. NIH form NIH-2514-1 (Consent to Participate in a Clinical Research Study: http://www.cc.nih.gov/ccc/protomechanics/chap_3.html) is to be used for all subjects enrolled in research conducted at the Clinical Center. Research at sites other than the Clinical Center should contain similar language where appropriate.

Children are generally not legally empowered to give consent, but depending on their age, they may have the ability to give assent ("assent" means a child's affirmative agreement to participate in research). Every protocol involving children (those individuals under age 18) should include a discussion of how assent will be obtained for the particular study. If an assent is to be obtained, use form NIH-2514-2.

i. References. Include selected references which highlight methods, controversies, and study outcomes.

j. Additional considerations (e.g., ionizing radiation; collaborative research; IND, other. Discuss contract or study conduct arrangements. State if these considerations do not apply). If a study is being conducted under contract, describe the role of contract staff as well as NIEHS staff.