Institutional Official, depending on the circumstances. The official receiving the report, or his/her designee, will conduct a thorough investigation, and corrective action will be taken to prevent additional occurrences as warranted.

3. THE IRB REVIEW PROCESS

3.1 PURPOSE

The following describes the procedures required for the review of research by the IRB.

3.2 DEFINITIONS: IRB REVIEW

IRB Approval: *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.

Minimal Risk. 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.

Minimal Risk with Prisoners: *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. (45 CFR 46. 303(d)).

Minor change. A minor change is one which, in the judgment of the IRB reviewer, makes no substantial alteration in:

- the level of risks to participants
- the research design or methodology (adding procedures that are not eligible for expedited review would not be considered a minor change)
- the qualifications of the research team
- the facilities available to support safe conduct of the research
- any other factor which would warrant a review of the proposed changes by the convened IRB.

Quorum. A quorum of the IRB consists of a majority of the voting members, including at least one member whose primary concern is in a non-scientific area. Research involving prisoners requires that the quorum count contain a prisoner representative.

Suspension of IRB approval. A suspension is a directive of the convened IRB or another authorized individual to stop some or all previously approved research activities temporarily. Suspended protocols remain open and require continuing review.

Termination of IRB approval. A directive of the convened IRB to permanently stop all activities in previously approved research. Terminated protocols are considered closed and no longer require continuing review.

3.3 HUMAN SUBJECTS RESEARCH DETERMINATION

The responsibility for the initial determination of whether an activity constitutes human subjects research and therefore requires a submission to the IRB rests with the Investigator. The Investigator should make this determination based on the guidance provided by the NYU (Human Research Protections Program) HRPP on its website and the embedded assessments in the submission Applications.

3.4 EXEMPT STUDIES

Exempt research studies involve specific categories of research that do not require IRB review and approval. However, it is the policy of the NYU HRPP to have all such research submitted for review to the HRCO. The review ensures that the research truly meets the qualifications for exempt research as defined at 46.104 and ensures adherence to the ethical principles outlined in the Belmont Report. Experienced Human Research Office (HRCO) staff may conduct exempt research determinations that do not require a Limited IRB Review. Limited IRB review is a process that is required only for specific exempt subcategories and does not require an IRB to consider all of the IRB approval criteria in §46.111. In Limited IRB Review, the IRB must determine that certain conditions, which are specified in the regulations, are met. An experienced IRB member or the Chair may conduct a Limited IRB review via the expedited review mechanism.

Research that is determined to be Exempt has no expiration date; however, investigators are required to close-out their IRB study protocol when an Exempt study has ended. The IRB expects Investigators to cooperate in any compliance monitoring conducted by the HRC Office.

Categories of Exempt Research, Including Limited IRB Review subcategories (46.104)

The following categories of human subject research are exempt from IRB review, but must still be reviewed by the HRPP:

(1) Research conducted in established or commonly accepted educational settings that specifically involves normal educational practices that are not likely to adversely impact

students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
(2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

(i) The information obtained is recorded by the Investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;

(ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at Risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or

(iii) The information obtained is recorded by the Investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

(3)(i) Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection and at least one of the following criteria is met:

(A) The information obtained is recorded by the Investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects;
(B) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at Risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or
(C) The information obtained is recorded by the Investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

(ii) For the purpose of this provision, benign behavioral interventions are brief in duration, harmless, painless, not physically invasive, not likely to have a significant adverse lasting impact on the subjects, and the Investigator has no reason to think the

subjects will find the interventions offensive or embarrassing. Provided all such criteria are met, examples of such benign behavioral interventions would include having the subjects play an online game, having them solve puzzles under various noise conditions, or having them decide how to allocate a nominal amount of received cash between themselves and someone else.

(iii) If the research involves deceiving the subjects regarding the nature or purposes of the research, this exemption is not applicable unless the subject authorizes the deception through a prospective agreement to participate in research in circumstances in which the subject is informed that he or she will be unaware of or misled regarding the nature or purposes of the research.

(4) Secondary research for which consent is not required: Secondary research uses of identifiable private information or identifiable biospecimens, if at least one of the following criteria is met:

(i) The identifiable private information or identifiable biospecimens are publicly available;
(ii) Information, which may include information about biospecimens, is recorded by the Investigator in such a manner that the identity of the human subjects cannot readily be ascertained directly or through identifiers linked to the subjects, the Investigator does not contact the subjects, and the Investigator will not re-identify subjects;
(iii) The research involves only information collection and analysis involving the Investigator's use of identifiable health information when that use is regulated under 45 CFR parts 160 and 164, subparts A and E, for the purposes of "health care operations" or "research" as those terms are defined at 45 CFR 164.501 or for "public health activities and purposes" as described under 45 CFR 164.512(b); or
(NB Identifiable Health Information that is regulated under the HIPAA Privacy Rule that involves NYU PHI requires review by the NYU School of Medicine IRB/Privacy Board)
(iv) The research is conducted by, or on behalf of, a Federal department or agency using government-generated or government-collected information obtained for non-research activities, if the research generates identifiable private information that is or will be maintained on information technology that is subject to and in compliance with section 208(b) of the E-Government Act of 2002, 44 USC. 3501 note, if all of the identifiable private information collected, used, or generated as part of the activity will be maintained in systems of records subject to the Privacy Act of 1974, 5 USC. 552a, and, if applicable, the information used in the research was collected subject to the Paperwork Reduction Act of 1995, 44 USC. 3501 et seq.

(5) Research and demonstration projects that are conducted or supported by a Federal department or agency, or otherwise subject to the approval of department or agency

heads (or the approval of the heads of bureaus or other subordinate agencies that have been delegated authority to conduct the research and demonstration projects), and that are designed to study, evaluate, improve, or otherwise examine public benefit or service programs, including procedures for obtaining benefits or services under those programs, possible changes in or alternatives to those programs or procedures, or possible changes in methods or levels of payment for benefits or services under those programs. Such projects include, but are not limited to, internal studies by Federal employees, and studies under contracts or consulting arrangements, cooperative agreements, or grants. Exempt projects also include waivers of otherwise mandatory requirements using authorities such as sections 1115 and 1115A of the Social Security Act, as amended.
(i) Each Federal department or agency conducting or supporting the research and demonstration projects must establish, on a publicly accessible Federal Web site or in such other manner as the department or agency head may determine, a list of the research and demonstration projects that the Federal department or agency conducts or supports under this provision. The research or demonstration project must be published on this list prior to commencing the research involving human subjects.

(6) Taste and food quality evaluation and consumer acceptance studies:
(i) If wholesome foods without additives are consumed, or
(ii) If a food is consumed 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 US Department of Agriculture.

Each of the exemptions above may be applied to research subject to research with pregnant women, fetuses, and neonates if the conditions of the exemption are met. The exemptions above do not apply to research with prisoners, except for research aimed at involving a broader subject population that only incidentally includes prisoners.

Exemptions at (1), (4), (5), (6), (7), and (8) may be applied to research with children if the conditions of the exemption are met. Exemptions at (2)(i) and (ii) only may apply to research with children involving educational tests or the observation of public behavior when the investigator(s) do not participate in the activities being observed. Exemptions at (d)(2)(iii) may not be applied to research with children.

The following two exemptions have not been adopted by the NYU IRB

(7) Storage or maintenance for secondary research for which broad consent is required: Storage or maintenance of identifiable private information or identifiable biospecimens

for potential secondary research use if an IRB conducts a limited IRB review and makes the determinations required by §46.111(a)(8).

(8) Secondary research for which broad consent is required: Research involving the use of identifiable private information or identifiable biospecimens for secondary research use.

Additional Protections for exempt research afforded by the Belmont Report

Although exempt research is not covered by the federal regulations, this research is not exempt from the ethical guidelines of the Belmont Report. The reviewer (either HRCO Staff or IRB Member) determining exemption will determine whether to require additional protections for participants in keeping with the guidelines of the Belmont Report.

3.5 EXPEDITED REVIEW

An experienced IRB member conducts expedited reviews at NYU. The IRB member conducting the expedited review may exercise the authority of the IRB, except that the reviewer may not disapprove or terminate the research. The reviewer must refer all research protocols that would have been disapproved to the convened IRB for review. The reviewer may also refer other research protocols to the convened IRB whenever the reviewer believes that the convened IRB review is warranted.

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 below categories, may be reviewed by the IRB through the expedited review procedure authorized by 45 CFR 46.110. The activities listed should not be deemed to be of minimal risk simply because they are included on this list. Inclusion on this list merely means that the activity is eligible for review through the expedited review procedure when the specific circumstances of the proposed research involve no more than minimal risk to human subjects.

The categories apply regardless of the age of subjects, except as noted.

The expedited review procedure may not be used where identification of the subjects and/or their responses would reasonably place them at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, insurability, reputation, or be stigmatizing, unless reasonable and appropriate protections will be implemented so that risks related to invasion of privacy and breach of confidentiality are no greater than minimal.

The expedited review procedure may not be used for classified research involving human subjects. *NYU DOES NOT PERMIT THE CONDUCT OF CLASSIFIED RESEARCH*.

The standard requirements for informed consent (or its waiver, alteration, or exception) apply regardless of the type of review--expedited or convened--utilized by the IRB.

CATEGORIES OF EXPEDITED REVIEW

Category 1: Clinical studies of drugs and medical devices only when condition (a) or (b) is met. **(*NB: Research which meets the criteria for expedited review at category 1 cannot be reviewed by the NYU IRB and must be referred to the NYU Grossman School of Medicine IRB*).**

(a) Research on drugs for which an investigational new drug application (21 CFR Part 312) is not required. (Note: Research on marketed drugs that significantly increases the risks or decreases the acceptability of the risks associated with the use of the product is not eligible for expedited review); or

(b) Research on medical devices for which (i) an investigational device exemption application (21CFR812) 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.

Category 2: Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture as follows:

(a) from healthy, non-pregnant adults who weigh at least 110 pounds. For these participants, 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, considering the age, weight, and health of the participants, the collection procedure, the amount of blood to be collected, and the frequency with which it will be collected. For these participants, 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.

Category 3: Prospective collection of biological specimens for research purposes by noninvasive means. Examples include:

(a) hair and nail clippings in a non-disfiguring 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 gum base 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.

Category 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. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples include:

(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.

Category 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). (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human research participants. 45 CFR 46.104(d)(4). This listing refers only to research that is not exempt.)

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

Category 7: Research on individual or group characteristics or behavior (including, but not limited to, 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. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human research participants. 45 CFR 46.104(d)(2) and (d)(3). This listing refers only to research that is not exempt.)

Category 8: Continuing review of research previously approved by the convened IRB as follows:

(a) where:
(i) the research is permanently closed to the enrollment of new participants;
(ii) all participants have completed all research-related interventions; and
(iii) the research remains active only for long-term follow-up of participants; or
(b) where no participants have been enrolled and no additional risks have been identified; or
(c) where the remaining research activities are limited to data analysis.

Category 9: Continuing review of research, not conducted under an investigational new drug application or investigational device exemption where categories two (2) through eight (8) do not apply but the IRB has determined and documented at a convened

meeting that the research involves no greater than minimal Risk and no additional risks have been identified.

3.5.1 INFORMING THE IRB OF EXPEDITED REVIEW DETERMINATIONS

IRB members will be apprised of all expedited review approvals by means of a list in the meeting agenda. Any IRB member can request to review the full application for a study reviewed via expedited procedures by contacting the HRCO.

3.6 IRB MEETING SCHEDULE

The IRB meets on a regular basis throughout the year, typically monthly. The schedule for the IRB may vary due to holidays or lack of quorum. The IRB Meetings schedule for the academic year is posted on the HRCO website. Special meetings may be called at any time by the Chair or the Human Research Compliance (HRC) Director in consultation with the Chair.

3.6.1 PRELIMINARY REVIEW & ASSIGNMENT TO CONVENED IRB MEETINGS

Investigators submit applications electronically to the HRCO via Cayuse Human Ethics (IRB). Instructions for Cayuse Human Ethics (IRB) registration and the protocol submission process are available on the HRCO website.

Cayuse Human Ethics (IRB) smart forms are adaptable to all review levels. (e.g., Exempt vs. Limited IRB Review vs. Expedited review vs. Full-Board Review).

HRCO staff (e.g., IRB Administrators and Assistant IRB Administrators) perform preliminary reviews of all applications to ensure they contain the required components and associated documents. Only complete submissions will undergo a formal review under the NYU HRPP.

HRCO staff place applications on the agenda for the convened board when the non-exempt research proposes activities that do not meet the criteria for expedited review or expedited studies which cannot be approved by the designated expedited reviewer. HRCO staff may seek guidance from the Chair, HRC Director, and/or their designee to determine if an application requires convened IRB review.

Posted deadlines for full board review are on the HRCO website. The IRB will review applications of appropriate quality that contain all required components received by the posted deadline at its next convened meeting.

The IRB reviews applications that meet expedited review criteria or exempt-limited criteria on a rolling basis based on the submission date, except for the conditions described in the paragraph below.

Applications for research associated with a ***Just-in-Time*** or other sponsor requests that contain a specific deadline will receive a priority review. Investigators must attach the correspondence from the sponsor that reflects the deadline for IRB approval to their Cayuse Human Ethics (IRB) application. When submitting an application for research that has an impending funding deadline, the Investigator should note this in the study title of the Cayuse Human Ethics (IRB) application so that HRCO staff are alerted to the urgency of the review.

3.6.2 ASSIGNMENT AND CONDUCT OF REVIEWS

Full Board review

After determining that the protocol submission is complete and meets the criteria for review at a convened IRB meeting, HRC Office senior staff will assign protocols for review to the appropriate Board reviewers. The reviewer assignment will take into account the scientific content of the protocol and the required area of expertise. Each initial protocol will be assigned to two reviewers. At least one reviewer is assigned to each renewal and modification requiring review at a convened meeting. When the IRB is presented with a protocol that may be outside of the knowledge base of the NYU IRB, outside consultation will be sought.

Primary reviewers are responsible for:

- having a thorough knowledge of all of the details of the proposed research;
- performing an in-depth review of the proposed research;
- leading the discussion of the proposed research at the convened meeting and leading the IRB through the regulatory criteria for approval; and
- making suggestions for changes to the proposed research following regulatory criteria, where applicable.

If the primary reviewer is absent from the meeting, a new reviewer may be assigned, provided the new reviewer has reviewed the materials before the meeting.

Additionally, an absent reviewer can submit their written comments for presentation at the convened meeting, as long as there is another reviewer present at the convened

meeting who can serve as the primary reviewer. All IRB members have complete access to all of the research protocols for the meeting to ensure they can contribute to the deliberations and vote and must review ***all studies placed on the agenda***, not just their assigned reviews.

Expedited and Limited IRB Review

Qualified IRB members conduct reviews of research that meet the criteria for expedited or Limited IRB Review. Frequently the reviewer is an IRB member who is also a member of the HRCO staff.

3.6.3 QUORUM REQUIREMENTS FOR FULL BOARD REVIEWS

A quorum for a convened IRB meeting consists of a majority of the voting membership, including at least one member whose primary concern is in a non-scientific area. When reviewing prisoner research, a prisoner representative must be present and counted towards the quorum. The IRB Chair, with the assistance of the HRCO staff, will confirm that an appropriate quorum is present before calling the meeting to order. The IRB Chair is responsible for ensuring that the meetings remain appropriately convened.

A quorum must be maintained for each vote to occur. The HRCO staff member assigned as the Board Secretary records when meeting membership reaches quorum and advises the Chair to call the meeting to order. After the meeting is called to order, the Board Secretary notes arrivals and departures of all members. If the quorum is lost, the meeting will adjourn. Protocols not reviewed by the quorum must be tabled and moved to the next meeting.

Members are considered present and counted towards the quorum if participating through teleconferencing or videoconferencing. All members, whether participating remotely or in-person, will receive all pertinent material prior to the meeting, and will be able to actively and equally participate in the discussion of all protocols.

The attending IRB members may consider the opinions of absent members transmitted in written form. However, they may not be counted as votes or to satisfy the quorum for convened meetings.

3.6.4 GUESTS AT CONVENED MEETINGS

When an Investigator's application is reviewed at a convened IRB meeting, the Investigator is invited to attend the IRB meeting or remain available via phone to answer questions about the proposed research. Investigators may not be present for the discussion or vote on their research.

Other guests may be permitted to attend IRB meetings at the discretion of the IRB Chair and the HRC Director. Guests may not speak unless requested by the IRB and are required to sign a Confidentiality Agreement.

3.6.5 CONFLICTS OF INTEREST IN IRB REVIEW

Federal regulations prohibit IRB members from participating in the review of any research project in which they have conflicting interest, except to provide information that is requested by the IRB (45 CFR 46.107(e)). IRB members must comply with NYU institutional policies for the reporting and management of conflicts of interest. The NYU IRB works in conjunction with the NYU Conflict of Interest Review Board, which serves in an advisory capacity to interpret conflict of interest.

IRB Member's Disclosure of a Conflicting Interest

No IRB member, whether serving in the role of a convened IRB member or when serving as an expedited reviewer, with a declared conflict of interest may participate in the review except to provide information as requested.

This restriction includes a review of any materials submitted for the research project for the duration of the member's service on the IRB, such as:

- Initial IRB applications or Continuing review reports
- Modifications to approved research
- Reportable events/Incidents
- Allegations of non-compliance with regulations or requirements of the IRB

An expedited reviewer, who recognizes a conflicting interest with an item he or she is assessing under expedited review procedures, must have the item reassigned to a non-conflicted reviewer

Convened IRB members who realize they have a conflicting interest when first assigned an item for review at an upcoming IRB meeting must notify the meeting staff or IRB Chairperson immediately so that the item can be reassigned before the meeting

The IRB Chairperson begins each meeting with a reminder that each member must disclose any conflicting interest and recuse him or herself from the vote on the project by leaving the room or leaving the virtual meeting.

If the IRB Chairperson has a conflict, he or she may not chair the meeting during the consideration of the item in which the conflict resides and must leave the room or virtual meeting during the final discussion and vote.

If an IRB member recognizes a conflicting interest in an item under review at the IRB meeting, the IRB member must inform the Chairperson of the conflicting interest and leave the room or virtual meeting during the final discussion and vote on the item

If other IRB members need to request information about the item from the IRB member with the conflicting interest, the IRB member may remain in the room during the presentation of the item. However, the IRB member must leave the room during the IRB's final discussion and vote.

Consultant's Disclosure of a Conflicting Interest

Conflicting interest, as defined above, extends to any Consultant asked to review an item under review by the IRB.

The IRB member or HRCO Staff member who contacts a Consultant to inquire about assisting with a review is responsible for asking if the Consultant has a conflicting interest in the project. If such a conflict exists, the individual may not serve as a consultant.

Convened IRB Deliberation and Documentation

An IRB member or Chairperson with a conflicting interest is required to leave the room or virtual meeting (i.e. recuse) for the final discussion and voting on the item under review.

The IRB member who must recuse due to a conflict of interest is not counted towards quorum.

When the IRB member recuses due to conflict of interest, the meeting minutes will reflect the name of the IRB member, and his/her absence from the vote due to a conflict of interest. Meeting minutes are recorded in the Cayuse Human Ethics (IRB) electronic system.

3.7 CRITERIA FOR IRB APPROVAL OF RESEARCH

To approve human research, the IRB must determine that the following requirements are satisfied:

(1) Risks to participants are minimized: (i) by using procedures which are consistent with sound research design and which do not unnecessarily expose participants to risk, and (ii) whenever appropriate, by using procedures already

being performed on the participants for diagnostic or treatment purposes.

(2) Risks to participants are reasonable in relation to anticipated benefits, if any, to participants, 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 participants 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 participants is equitable. In making this assessment the IRB should take into account the purposes of the research and the setting in which the research. The IRB should be particularly cognizant of the special problems of research that involves a category of subjects who are vulnerable to coercion or undue influence, such as children, prisoners, individuals with impaired decision-making capacity, or economically or educationally disadvantaged persons.

(4) Informed consent will be sought from each prospective participant or the participant'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 participants.

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

3.7.1 RISK/BENEFIT ASSESSMENT

An assessment justifies that the risks to research participants posed by participation in research are balanced with or outweigh the anticipated benefits to the participants or society. The IRB must:

1. judge whether the anticipated benefit, either of new knowledge or improved conditions for the research participants, justifies asking any person to undertake the risks;
2. disapprove of research in which the risks are judged unreasonable in relation to the anticipated benefits.

Conducting the risk-benefits assessment to protect research participants is the primary responsibility of the IRB.

This assessment involves a series of steps:

- identify the risks associated with the research, as distinguished from other risks, such as the risks of therapies the participants would receive even if not participating in research;
- determine whether the risks will be minimized to the extent possible;
- identify the probable benefits to be derived from the research;
- determine whether the risks are reasonable in relation to the benefits to participants, if any, and assess the importance of the knowledge to be gained;
- ensure that potential participants will be provided with an accurate and fair description of the risks or discomforts and the anticipated benefits.

Risks to participants are minimized:

✓ by using procedures which are consistent with sound research design and which do not unnecessarily expose participants to risk; and
✓ whenever appropriate, by using procedures already being performed on the participants for diagnostic or treatment purposes.
✓ Risks to participants are reasonable in relation to anticipated benefits, if any, and to 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 participants 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 (e.g., the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.

3.7.1.1 RESEARCH DESIGN

To assess the risks and benefits of proposed research, the IRB **must** determine that the study employs **sound research design.** Sound research design considers the overarching goals and tenets common to scientific **research**, the specific objectives of the **research** project, and the ethical standards of the relevant scientific discipline or disciplines. Investigators and the IRB must be

aware of and implement national and international ethical principles that guide scientific research such as the **Belmont Report**, the **Nuremberg Code** and the **Declaration of Helsinki**.

In making this determination, the IRB may draw on its knowledge and disciplinary expertise. The IRB may also draw on the knowledge and disciplinary expertise of others, such as peer reviews by a funding agency or a department. In the absence of peer review, the IRB must consider all aspects of the research design to ensure the safety of the research participants and the success of the research.

3.7.2 SELECTION OF PARTICIPANTS IS EQUITABLE

The IRB determines by viewing the application and associated documents that the selection of participants is equitable concerning sex, age, class, etc. The IRB will not approve a study that does not provide for the equitable selection of participants or has not provided an appropriate scientific and ethical justification for excluding classes of persons who might benefit from the research.

In making this determination, the IRB evaluates:

- the purpose(s) of the research;
- the setting in which the research occurs;
- the scientific and ethical justification for including vulnerable populations;
- the scientific and ethical justification for excluding classes of persons who might benefit from the research; and
- the inclusion/exclusion criteria.

3.7.2.1 RECRUITMENT OF PARTICIPANTS

The Investigator will provide the IRB with all recruiting materials for use in identifying participants, including recruitment methods, advertisements, and payment arrangements.

3.7.3 INFORMED CONSENT / PARENTAL PERMISSION / CHILD ASSENT

The IRB will ensure that informed consent will be sought from each prospective participant or the participant's legally authorized representative, unless the criteria for a waiver of consent are met. In research involving minor children, the assent of the child and parental permission will be sought, as appropriate. The IRB will further ensure that consent is documented or otherwise approve, as appropriate, a waiver of documentation of consent.

3.7.4 DATA SAFETY MONITORING

The IRB determines that, where appropriate, the research plan makes adequate provision for monitoring the data to ensure the safety of participants. For research in which risks are substantial, the IRB may require a general description of the data and safety monitoring plan to be submitted to the IRB as part of the application. This plan should contain procedures for reporting incidents that meet the criteria outlined in NYU's *reporting incidents guidance*. In general, it is desirable for a Data and Safety Monitoring Board (DSMB) to be established by the study sponsor for research that is blinded, involves multiple sites, involves vulnerable participants, or employs high-risk interventions.

For some studies, the National Institutes of Health (NIH) require a DSMB. The IRB has the authority to require a DSMB as a condition for approval of research where it determines that such monitoring is needed. When research uses DSMBs, the IRB, when conducting a continuing review of research, may rely on a current statement from the DSMB. The DSMB statement must indicate that it has reviewed, and will continue to review, study-wide adverse events, interim findings, and any recent literature that may be relevant to the research in place of requiring that this information be submitted directly to the IRB. Such reports must be attached to the protocol in the Cayuse Human Ethics (IRB) system.

3.7.5 PRIVACY AND CONFIDENTIALITY

The IRB will determine whether adequate procedures are in place to protect the privacy of participants and to maintain the confidentiality of the data.

Privacy is the control over the extent, timing, and circumstances of sharing oneself (physically, behaviorally, or intellectually) with others. The evaluation of privacy also involves consideration of how the researcher accesses information from or about potential participants (e.g., recruitment process). IRB members consider strategies to protect privacy interests relating to contact with potential participants, and access to private information.

Confidentiality pertains to the treatment of information that an individual has disclosed in a relationship of trust and with the expectation that it will not be divulged to others without permission in ways that are inconsistent with the understanding of the original disclosure. During the informed consent process, if applicable, subjects must be informed of the precautions that will be taken to protect the confidentiality of the data and be informed of the parties who will or may have access (e.g., research team, funding agency, OHRP). This information will allow subjects to decide about the adequacy of the protections and the acceptability of the possible release of private information to the interested parties.

At the time of initial review, the IRB assesses whether there are adequate provisions to protect participant privacy and maintain confidentiality. The IRB does this through the evaluation of the:

- methods used to obtain information about participants;
- methods used to obtain information about individuals who may be recruited to participate in studies;
- use of personally identifiable records; and
- methods to protect the confidentiality of research data.

In some cases, a Certificate of Confidentiality (CoC) will be recommended or required for the protection of research participants if the funding agency does not automatically grant the CoC. In reviewing confidentiality protections, the IRB shall consider the nature, probability, and magnitude of harms that would be likely to result from disclosure of collected information outside the research. It shall evaluate the effectiveness of proposed de-identification techniques, coding systems, encryption methods, storage facilities, access limitations, and other relevant factors in determining the adequacy of confidentiality protections.

3.7.6 VULNERABLE POPULATIONS

During the initial review, the IRB will consider the scientific and ethical reasons for including vulnerable participants in research. The IRB may determine and require that when appropriate, additional safeguards are put into place for vulnerable participants.

Per the federal regulations, vulnerable participants are individuals "vulnerable to coercion and undue influence, in recognition that coercion or undue influence refers to the ability to make an informed decision about participating in research." Included in this definition are individuals with impaired decision-making capacity, prisoners, and children.

The IRB carefully considers group characteristics, such as economic, social, physical, and environmental conditions, to ensure that the research incorporates additional safeguards for vulnerable participants.

3.8 ADDITIONAL CONSIDERATIONS DURING IRB REVIEW AND APPROVAL OF RESEARCH

Determination of Risk

At the time of initial and continuing review, when applicable, the IRB will weigh the risks associated with the research. Risks associated with the research will be classified as either "minimal" or "greater than minimal" based on the "absolute" interpretation of

Minimal Risk. The meeting minutes will reflect the Committee's determination regarding risk levels for Full Board research applications.

Minimal Risk generally means that the probability and magnitude of physical or psychological harm anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or routine medical, dental, or psychological examinations. In order to be considered Minimal Risk, research must meet this definition and fall within one or more of the federally-defined categories that qualify for "Expedited" review. The definition of "Minimal Risk" is somewhat different for research involving prisoners.

See Minimal Risk as an International Ethical Standard in Research

Period of Approval

Unless approved under expedited procedures, at the time of initial review and at continuing review, when applicable, the IRB will determine the frequency of review. All protocols will be reviewed by the IRB at intervals appropriate to the degree of Risk but no less than once per year (unless the research has progressed to the point that it meets criteria outlined in the Continuing Review section, below). In some circumstances, a shorter review interval (e.g., biannually, quarterly, or after the accrual of a specific number of participants) may be required. The meeting minutes will reflect the IRB's determination regarding review frequency.

Review More Often than Annually

Research that meets any of the following criteria may require review more often than annually:

- significant risk to research participants (e.g., death, permanent or long-lasting disability or morbidity, severe toxicity) without the possibility of direct benefit to the participants;
- the involvement of especially vulnerable populations likely to be subject to coercion (e.g., terminally ill)
- a history of serious or continuing non-compliance on the part of the PI.

The IRB should also consider the following factors when determining which studies require review more frequently than on an annual basis:

- the probability of and magnitude of anticipated risks to the research participants,

- the likely medical condition of the proposed participants,
- the overall qualifications of the PI and other members of the research team,
- the experience of the PI and other members of the research team conducting similar research, including nature and frequency of adverse events observed in similar research at this and other institutions,
- the novelty of the research making unanticipated adverse events more likely,
- and any other factors that the IRB deems relevant.

In specifying an approval period of less than one year, the IRB may define the period with either a time interval or a maximum number of participants either studied or enrolled. If a maximum number of participants studied or enrolled is used to define the approval period, the approval period cannot exceed one year and that the number of participants studied or enrolled determines the approval period only when that number of participants is studied or enrolled in less than one year.

3.8.1 INVESTIGATOR CONFLICTS OF INTEREST (COI)

The NYU IRB is dedicated to upholding the highest ethical standards of objectivity in research by identifying and evaluating financial conflicts of interest (FCOI) that may affect an investigator's actions or an individuals' decision to participate in the research based on any perceived or actual risks associated with the FCOI.

The NYU Office of conflict of interest (OCI) coordinates COI review. Related financial interests disclosed through the IRB process will either have already been reviewed by the NYU COI Committee or will be referred to the COI Director for assessment. The OCI makes a determination regarding COI and, if applicable, management plan. The determination and management plan shared with the IRB.

The IRB determines if the protocol should include information and/or procedures relating to the COI, such as:

- disclosing the COI in the informed consent language; or
- prohibiting the investigator(s) with the conflict from recruiting participants, obtaining consent, or accessing identifiable data.

3.8.2 SIGNIFICANT NEW FINDINGS

During the research, significant new knowledge or findings of the topic under study may develop. The PI must report any significant new findings to the IRB, and the IRB will review them concerning the impact on the participants' rights and welfare. Since the new knowledge or findings may affect the risks or benefits to participants or participants' willingness to continue in the research, the IRB may require, during the ongoing review process, that the PI contact the currently enrolled participants to inform

them of the new information. The IRB will communicate this to the PI. The informed consent should be updated, and the IRB may require that the currently enrolled participants be re-consented, acknowledging receipt of this new information and for affirming their continued participation.

3.8.3 PAYMENT TO RESEARCH PARTICIPANTS

Payment to research participants may be an incentive for participation or a way to reimburse a participant for travel and other experiences incurred due to participation. However, payment for participation is not a research benefit. Regardless of the form of remuneration, investigators must take care to avoid the undue influence payment may have for participants.

Payments should reflect the degree of risk, inconvenience, or discomfort associated with participation. The amount of compensation must be proportional to the risks and inconveniences posed by participation in the study.

Investigators who wish to pay research participants must indicate in their research application the justification for such payment. Such justification should:

- substantiate that proposed payments are reasonable and commensurate with the expected contributions of the participant;
- state the terms of the participation agreement and the amount of payment in the informed consent form; and
- substantiate that payments are fair and appropriate and that they do not constitute (or appear to constitute) undue pressure on the participant to volunteer for the research study.

The IRB must review both the amount of payment and the proposed method of disbursement to assure that neither raises issues of coercion or undue influence.

Credit for payment should accrue and not be contingent upon the participant completing the entire study. Whenever possible, the IRB does not allow the entire payment to be contingent upon completion of the entire study. Any amount paid as a bonus for completion of the entire study should not be so significant that it becomes coercive.

The consent form must describe the terms of payment and the conditions under which participants would receive partial payment (e.g., if they withdraw from the study before their participation is completed).

3.8.4 CERTIFICATES OF CONFIDENTIALITY (COC)

The NIH, the Centers for Disease Control and Prevention (CDC), the FDA, and other agencies (for example, HRSA and SAMHSA) issue Certificates of Confidentiality (CoCs) to protect the confidentiality of research subjects information that could be used to directly or indirectly identify them as participating in a research project.

CoCs are issued to institutions or universities where the research is conducted, and enable the Investigator and others who have access to research records to refuse to disclose identifying information in any civil, criminal, administrative, legislative, or other proceeding, whether at the federal, state, or local level.

As of October 1, 2017, NIH funded researchers will no longer have to apply for a CoC. A CoC will be issued automatically to NIH funded grants, cooperative agreements, and contracts, funded wholly or in part by the NIH if the research collects or uses identifiable, sensitive information. Compliance with the requirements of the CoC is a term and condition of award. All research that was started or ongoing on or after December 13, 2016, and is within the scope of the policy, is automatically issued a CoC through this policy.

NIH will continue to consider applications for CoCs for non-federally funded research submitted to NIH institutes and centers through the existing online CoC application system.

A study may receive protection under a CoC even if the project is not sponsored or funded by NIH, as long as, in NIH's view, the subject matter of the study falls within a mission area of the NIH. The CDC only issues CoCs for research sponsored by the CDC or for the Agency for Toxic Substances and Disease Registry. Investigators may opt to apply for a CoC in these circumstances following approval by the NYU IRB. The IRB may also request that an investigator apply for a CoC if it determines that the data collected from participants should have the protections provided by a CoC.

Generally, any research project that collects personally identifiable, sensitive information and that has been approved by an IRB operating under either an approved FWA issued by the OHRP, or the approval of the FDA, is eligible for a CoC. Information is considered sensitive if disclosing it could have adverse consequences for subjects or damage their financial standing, employability, insurability, or reputation.

All recipients of a CoC shall not:

- Disclose or provide, in any Federal, State, or local civil, criminal, administrative, legislative, or other proceeding, the name of such individual or any such

information, document, or biospecimen that contains identifiable, sensitive information about the individual and that was created or compiled for purposes of the research, unless such disclosure or use is made with the consent of the individual to whom the information, document, or biospecimen pertains; or

- Disclose or provide to any other person not connected with the research the name of such an individual or any information, document, or biospecimen that contains identifiable, sensitive information about such an individual and that was created or compiled for purposes of the research.

Certain disclosures are permitted even when a CoC has been issued. These include:

- Required by Federal, State, or local laws (e.g., as required by the Federal Food, Drug, and Cosmetic Act, or state laws requiring the reporting of communicable diseases to State and local health departments), excluding instances of disclosure in any Federal, State, or local civil, criminal, administrative, legislative, or other proceeding;
- Necessary for the medical treatment of the individual to whom the information, document, or biospecimen pertains and made with the consent of such individual;
- Made with the consent of the individual to whom the information, document, or biospecimen pertains; or
- Made for the purposes of other scientific research that is in compliance with applicable Federal regulations governing the protection of human subjects in research.

The existence of a CoC, the protection it provides, and any limitations on that protection should be described in the informed consent form. [See *the NIH Suggested Consent Language Describing the CoC Protections*.]

3.8.5 COMPLIANCE WITH ALL APPLICABLE STATE AND LOCAL LAWS

The IRB follows and must adhere to all applicable state and local laws in the jurisdictions where the research is taking place. The HRPP and the IRB rely on the University's General Counsel for the interpretation and application of State law and the laws of any other jurisdiction where research is conducted as they apply to human research.

All consent forms must be consistent with applicable state and local laws.

3.9 POSSIBLE IRB ACTIONS

The following are possible actions the IRB can take after reviewing a research application.

Approved: An IRB action taken when the required determinations are made that allows research involving human subjects to proceed consistent with federal regulations, state and local laws, and University policy.

Approved with conditions: An IRB action taken when the required determinations are made that allows research involving human subjects to proceed consistent with federal regulations, state and local laws, and University policy and the IRB specifies conditions under which research can be approved, pending the following:

- Confirmation of specific understandings by the IRB about how the research will be conducted, submission of additional documentation, precise language changes to the protocol and/or informed consent document(s), and/or substantive changes to documents with specific parameters the changes must satisfy.
- Verification that the Investigator's response(s) satisfies the conditions for approval set by the IRB. The verification may be performed by the IRB Chair and/or other designated individual(s), including experienced HRCO staff.

Requires modifications to secure approval: An IRB action taken when the convened IRB cannot fully evaluate the research under review and make the determinations required for approval without modifications to the protocol and/or informed consent document, or submission of clarifications or additional materials prior to reconsideration of the research. Convened IRB review of the Investigator's response(s) is required.

Deferred: An action taken when the convened IRB determines that certain critical information or significant changes are necessary before it can properly discuss the details of the protocol. Convened IRB review of the Investigator's response(s) is required.

Disapproved: An IRB action taken when the determinations required for approval of research cannot be made, even with substantive clarifications or modifications to the protocol and/or informed consent process/document. Research cannot be disapproved by expedited review.

Tabled: An IRB “action” that indicates that review was not initiated or was not completed, resulting in postponement of IRB review, usually due to loss of quorum or other administrative issue. Research tabled at a convened meeting will be reviewed at a future convened meeting.

3.10 RESEARCH SUSPENSION AND TERMINATION

The NYU IRB may suspend or terminate some or all human subjects research activities if events are identified that represent serious or continuing noncompliance or unanticipated problems involving risk to subjects or others.

This action is most often determined by a convened board; however, the IRB Chair has the authority to suspend some or all research activities if exceptional human subject safety issues are identified. This authority is only exercised if an action is required prior to a convened meeting and it is not feasible to assemble an emergency meeting. When this authority if exercised, it will be reported at the next convened NYU IRB meeting. Research may be terminated only by the convened IRB. Terminations of research approved under expedited review must be made by the convened IRB.

The IRB shall notify the PI in writing of such suspensions or terminations and shall include a statement of the reasons for the IRB's actions. The terms and conditions of the suspension must be explicit. The Investigator shall be provided with an opportunity to respond in person or in writing.

When study approval is suspended or terminated by the convened IRB or IRB Chair, in addition to stopping all research activities, the convened IRB or IRB Chair suspension will consider notification of any participants currently enrolled in the study. The convened IRB or IRB Chair will consider whether procedures for withdrawal of enrolled participants are necessary to protect the rights and welfare of participants, such as: transferring participants to another investigator; making arrangements for care or follow-up outside the research; allowing continuation of some research activities under the supervision of an independent monitor, or requiring or permitting follow-up of participants for safety reasons.

If follow-up of participants for safety reasons is permitted/required by the convened IRB or IRB Chair, the participants should be informed and any adverse outcomes will be reported to the IRB and the sponsor.

3.11 CONTINUING REVIEW

Continuing review of approved research is not required for:

1. Research that is eligible for expedited review;
2. Exempt research conditioned on limited IRB review;
3. Research that has completed all interventions and now only includes analyzing data, even if the information or biospecimens are identifiable;
4. Research that has completed all interventions and now only includes accessing follow-up clinical data from clinical care procedures.

The NYU IRB can choose to require continuing review for the above-referenced research, as long as the IRB documents the decision and the rationale for this decision.

Unless it meets the criteria stipulated above, research that has undergone convened board review and approval is subject to continuing review.

Lapse in Approval

Investigators must allow sufficient time for IRB review before the expiration date.

The regulations permit no grace period or approval extension after approval expiration. Research that continues after the approval period has expired is research conducted without IRB approval. All research activities must stop, including recruitment, enrollment, consent, interventions, interactions, and data collection, unless the IRB finds that it is in the best interests of individual participants to continue participating in the research interventions or interactions.

Investigators receive renewal reminder notifications via Cayuse Human Ethics (IRB) at periodic prior to expiration as well as notification of study expiration.

The HRPP via Cayuse Human Ethics (IRB) promptly notifies the Investigator of the expiration of approval and that all research activities must stop. If research participants are currently enrolled in the research project and their participation is ongoing, once notified of the expiration of approval the PI must immediately submit to the IRB Chair a list of research participants for whom suspension of the research would cause harm. Enrollment of new participants cannot occur and continuation of research interventions or interactions for already enrolled participants should only continue when the IRB or IRB Chair finds that it is in the best interest of the individual participants to do so.

Conducting human subjects research activities after IRB approval is expired is considered non-compliance and will be handled under the procedures for reviewing instances of non-compliance.

3.12 AMENDMENTS TO AN APPROVED PROTOCOL

Investigators may wish to modify or amend their approved protocols. Investigators must seek IRB approval before making any changes to approved research - unless the change is necessary to eliminate an immediate hazard to the participant (in which case the IRB must then be notified promptly).

In order to obtain approval, investigators must submit a modification to the HRPP via Cayuse Human Ethics (IRB).

HRCO staff will determine the appropriate level of review for the proposed changes. The reviewer(s) using the expedited procedure has the ultimate responsibility to determine that the proposed changes may be approved through the expedited review procedure and, if not, must refer the amendment for convened board review.

The requested changes must not be implemented until IRB approval has been granted, which will be communicated to the Principal Investigator in writing.

3.13 REPORTING IRB ACTIONS

All IRB actions are communicated to the PI, and/or designated primary contact person for the protocol, in writing by the HRCO staff via Cayuse Human Ethics (IRB). For an approval, written notification of approval will be sent. For a deferral, the notification will include the modifications required for approval along with the basis for requiring those modifications. For a disapproval, termination, or suspension, the notification will include the basis for making that decision. The IRB reports its findings and actions to the University in the form of its minutes that are stored permanently and securely in Cayuse Human Ethics (IRB). Copies of minutes are accessible to the New York University Institutional Official (IO) via Cayuse Human Ethics (IRB) and can also be sent to the IO electronically.

3.14 APPEAL OF IRB DECISIONS

When research presented at a convened meeting of the IRB is disapproved, deferred, or requires modifications, the IRB will notify the PI in writing about the specific deficiencies and the modifications that are necessary for IRB approval. The IRB 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.

In cases where there is disagreement between the IRB and the PI regarding the nature and extent of the requested changes and these disagreements cannot be resolved amicably in an informal manner, the PI and/or the IRB may make an appeal to the IO

for a resolution of the matter. The IO may organize a meeting to help facilitate discussion between the IRB and the PI. While the IO may provide input and make recommendations to the IRB for expeditious resolution of the matter, final recommendations for approval remain under the purview of the IRB.

4. DOCUMENTATION AND RECORDS

4.1 IRB RECORDS

The IRB must prepare and maintain adequate documentation of the IRB's activities including copies of all items reviewed, including, but not limited to:

- research applications
- recruitment materials
- scientific evaluations (if any) that accompany the proposals
- approved consent documents
- records of continuing review activities, including progress reports submitted by investigators
- any proposed amendments and the IRB action on each amendment
- reports of injuries to participants and serious and unexpected adverse events
- documentation of protocol violations
- documentation of noncompliance with applicable regulations
- statements of significant new findings provided to participants
- IRB membership roster(s)
- IRB meeting minutes
- Copies of all correspondence between the IRB and the investigator

IRB records must also document any determinations required by the regulations and protocol-specific findings supporting those determinations, including:

- waiver or alteration of the consent process
- research involving pregnant women, fetuses, and neonates
- research involving prisoners
- research involving children

4.2 IRB MEMBERSHIP ROSTER